

TOTAL PRICE LIST

2025 / 2026

1 GRASSLAND TECHNOLOGY

2 SOIL CULTIVATION

3 TOOLS

4 SILAGE TECHNOLOGY

5 MUNICIPAL TECHNOLOGY

6 FARM AND PASTURE TECHNOLOGY

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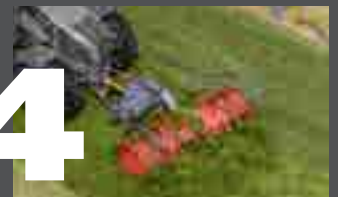
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The SAPHIR brand

The SAPHIR brand stands for practical, robust and proven technology in the fields of grassland technology, soil cultivation, implements, silage, municipal and farmyard technology. This principle is consistently followed in the design and manufacture. All statutory certifications and standards are complied with. Regular quality checks by our SAPHIR engineering team guarantee high product quality.

Appliances and components are prefabricated at various production sites in Central Europe. The final assembly of the appliances is carried out according to customer-specific requirements and specifications. The construction of individual items and small series from prefabricated components is carried out by experienced metalworkers and agricultural machinery mechanics at the Bockel site. Over 2,500 different devices and components are always in stock.

The SAPHIR programme is distributed via specialist dealers throughout Europe. Our specialist retail customers are supported by the SAPHIR field and office sales team.

SAPHIR Maschinenbau **OUR MACHINES - FOR YOUR SUCCESS!**

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SAPHIR



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THE **SAPHIR**WORLD BRIEFLY EXPLAINED

1. From practice for practice:
Our sales, service and development teams work closely with our customers to find the best solutions and continuously develop the product range.

2. Our experienced mechanical engineers realise the requirements and tasks constructively. The design is carried out using modern 3D CAD software.



10. Spare parts are supplied throughout Europe by our sister company GRANIT Parts.

9. Our sales and service staff can use the machines at the customer's premises on request.



8. Experienced metalworkers carry out the final assembly to order.

3. Our test team builds the prototype and analyses the design specifications in close cooperation with the engineering team.



4. Test and engineering team test the machines together with practitioners



5. CAD drawings are sent to selected production partners with parts lists and assembly instructions



6. Saphir's own employees monitor the production process and carry out quality checks at the production partners.

7. The prefabricated components are stored at Saphir's headquarters in Bockel.

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GRASSLAND TECHNOLOGY

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01



PROFESSIONAL GRASSLAND MAINTENANCE IS KEY

There's more to grassland than meets the eye!

- Largest economic area in Germany with 4.7 million hectares
- Over a third of all native ferns and flowering plants - more than 1000 species - are mainly found in grassland
- Grassland is an important habitat for insects as well as field and meadow breeders
- Carbon dioxide is bound by the high humus content, which otherwise contributes to global warming as a greenhouse gas

Why high-quality basic feed is important

- High crude protein content / high energy concentration
- Concentrated feed costs are reduced
- No shaded forage areas are required due to soya and cereal cultivation
- Very palatable and rumen-friendly for animals due to high sugar content
Improvement in animal welfare



Levelling out land damage

Mounds of soil such as molehills or damage caused by wild boar increase the amount of dirt in the forage, reduce the energy concentration and cause incorrect fermentation in the silage due to coliforms and clostridia.

It is also important to level out damage to fields in order to reduce damage to harvesting machinery and to be able to carry out further targeted maintenance measures.



Remove unwanted organic matter

Moss and matted areas should be removed from the stand to allow air, light and capillarity to reach the sward. In addition, the population of weeds and grass weeds, such as common bentgrass, should be thinned out. A weed such as common bentgrass can completely devalue the forage-growing potential over the course of the vegetation. However, it has very shallow roots and is not very drought tolerant. Such weeds must be deposited on the surface for rotting.



Closing gaps in the portfolio

Gaps in grassland can be filled by reseeding with highly competitive cultivated grasses, which increases and stabilises yields and prevents weeds from spreading. In addition, depending on the mixture, drought tolerance can be increased and nitrogen can be bound if legumes are included.

Sowing by 15 September after the last cut is ideal. Sunny days allow weeds to be controlled beforehand and periods of rain can be better utilised. In addition, the old turf is then less competitive, so that robust young plants have a good start to the winter.



Improve nutrient supply

A decisive aspect is the supply of nutrients with fertiliser from the farm's own economic cycle. Solid manure and slurry provide essential nutrients for grassland growth. Nitrogen promotes long-term growth through slow mineralisation, phosphorus strengthens roots and energy balance, potassium increases drought resistance and frost hardiness. Solid manure also improves the soil structure and soil life, while slurry provides quickly available nutrients, ideal for spring. In addition, a targeted distribution of organic fertiliser helps to keep wild boar away, as numerous insects settle there and the fertiliser would otherwise be thrown up and cause damage to the fields.

The device systems



Grassland harrow

- Unbeatable in forced levelling & solid manure distribution
- Interesting e.g. for contract nature conservation areas



Grassland harrow with following harrow & small seed spreader

- Best reseeded on intensive grazing sites
- 3 in 1 system (forced levelling, organic fertiliser distribution & reseeded)



Grassland harrow

- Best results in mechanical weed control
- High proportion of fine soil / best seedbed due to rotating tines



Grassland harrow with roller

- Year-round use in grassland & arable farming as a dissolved system
- Optimum emergence in reseeded & reseeded

When is the right time for maintenance?

	March	April	May	June	July	August	September	October
Harrowing	In case of need		Recommended maintenance measures					
Rollers	In case of need		Recommended maintenance measures					
Re-mowing	Recommended maintenance measures							
Re-seeding	In case of need		Recommended maintenance measures					
Reseeding	In case of need		Recommended maintenance measures					
Towing	In case of need		Recommended maintenance measures					

In case of need
 Recommended maintenance measures

- Generally, reseeded in late summer after the last cut is recommended: The old sward is less competitive and periods of rain are easier to predict. The young plants can also go into the winter robust.
- Observe forestry bans on grassland to protect ground-nesting birds and insects



GREENLAND HARROW PERFECT W

200 W | 300 W | 400 W | 502 W | 602 W HYDRO

The SAPHIR Perfect W grassland harrow with its three-row cast star net is ideal for smooth levelling of molehills and spreading cow dung, straw manure and slurry. The W-casting stars provide additional aeration of the sward by combing out dead grass.



Model Perfekt 200 W with rigid frame



Perfekt 502 W model with optional hydraulic folding device


1

The three-row net with the approx. 2.5 kg W-cast stars guarantees intensive processing in just one pass. The heavy W-cast stars can be used from both sides: Sharp harrowing and aeration with the tine side, Simple dragging for levelling cow pats and molehills with the smooth side.


2

The closed base frame in combination with the high dead weight guarantees a particularly long service life even under the heaviest loads due to high soil content.


3

The standard front bars (on Perfekt 300 W, 400 W, 502 W, 602 W Hydro) protect the frame from getting caught on external obstacles such as fence posts or trees.


4

For particularly user-friendly changing in transport position position, the appliances from 5-mtr. Working width with a hydraulic folding device as an option (standard on Perfekt 602 W Hydro). For road safety, an optional lighting system including warning signs is available for all models. warning signs available for all models.


5

An extra harrow can easily be retrofitted.

The grassland harrow levels molehills and distributes organic fertiliser, the following harrow removes moss and weeds from the grassland and the sward is aerated.

GREENLAND HARROW PERFECT W

200 W | 300 W | 400 W | 502 W | 602 W HYDRO

TECHNICAL DATA

Technical data	Perfect 200 W	Perfect 300 W	Perfect 400 W	Perfect 502 W	Perfect 602 W Hydro
Working width approx. (m)	2,00	3,00	4,00	5,00	6,00
Transport width approx. (m)	2,15	2,10	2,10	2,75	2,75
Hydraulic folding device	Not possible	Not possible	Not possible	Optional	Series
Number of casting stars	20	29	40	49	61
Operating speed (km/h)	5-10	5-10	5-10	5-10	5-10
Power requirement approx. (kW/hp)	11/15	14/20	22/30	29/40	36/50
UL spigot	Cat. I	Cat. I	Cat. I	Cat. II	Cat. II
Weight approx. (kg)	175	240	315	410	530

STANDARD EQUIPMENT

- Cast spiders with 26 mm material thickness in the main wear zone for particularly long service life
- Sturdy harrow nets with 14 mm thick net rings for robust applications
- W-casting elements arranged in three rows for combing and aerating the grain
- Reduced wear of the connecting rings due to deburred cast spiders
- Small transport width thanks to folding frame for safe road travel (except Perfekt 200 W)
- Front bars protect the frame from getting caught on obstacles (except Perfekt 200 W)
- Two-sided use of the casting elements to adapt the labour intensity of the casting stars to the specific location
- Reinforced folding hinges for maximum frame stability (from model 502 W)
- Perfekt 602 W Hydro with two single-acting hydraulic cylinders, hose package and stopcock as standard
- Forced levelling with rigid angle irons for maximum exploitation of grassland potential
- Powder coating

MODELS

Modell	Order no.	€/piece
Perfect 200 W	921.00733.200W-3	
Perfect 300 W	921.00732.300W-3	
Perfect 400 W	921.00734.400W-3	
Perfect 502 W	921.00735.502W-3	
Perfekt 602 W Hydro	921.00736.602W-3	

NOTE:

Three-point tower and connecting struts must be installed. Hydraulic folding device, if necessary as a kit in individual parts.

EQUIPMENT OPTIONS

Harrow (loose accessory pack)



To the product video



Special equipment	Order no.	€/piece
Tined harrow (2 m) (rigid) for Perfekt 200 W, 33 cranked tines	921007806	
Tined harrow (3 m) (rigid) for Perfekt 300 W, 45 cranked tines	921007807	
Tined weeder (5 m) (folding, 3-part) for Perfekt 502 W, 78 cranked tines	921007809	
Tined weeder (6 m) (folding, 3-part) for Perfekt 602 W Hydro, 90 offset tines	921006428	
Lighting system for following harrow incl. warning signs & lighting supports Execution: LED	921006956	

Assembly time: approx. 2 hours (tines pre-assembled)

Skids (loose accessory pack)



Special equipment	Order no.	€/piece
Gleitkufen Recommended quantity: - Perfect 200 W = 2 - Perfect 300 W = 2 - Perfect 400 W = 4 - Perfect 502 W = 4 - Perfect 602 W Hydro = 4	921001911-2	

Hydraulic folding device (loose accessory pack)



Special equipment	Order no.	€/piece
Hydr. Klappvorrichtung Suitable for: - Perfect 502 W	921140848-2	

Lighting system incl. warning signs



Special equipment	Order no.	€/piece
Lighting system incl. warning signs suitable for: - Perfect W Execution: LED Hinweis: Fully assembled as original equipment	921001153-2	

Note: Replacement nets for grassland harrows can be found on [page 24-25](#)



GREENLAND HARROW PERFECT W4

402 W4 | 502 W4 | 602 W4 HYDRO



The SAPHIR Perfect W4 grassland harrow with a four-row cast star net is suitable for the particularly intensive cultivation of grassland. Rough unevenness such as molehills or tread damage are levelled in just one pass. The W-casting stars provide additional aeration of the sward by combing out dead grass.


1

The W-cast elements arranged in four rows guarantee optimum performance. The cast elements can be used on both sides: Tine side for sharp harrowing and aeration of the sward, smooth side for spreading cow dung and levelling molehills. The Perfekt W4 grassland harrows have two harrows in a row arranged angle irons in the front of the machine, these ensure a forced levelling effect of molehills and Unevenness.


2

The net is secured at the front and sides with shackles. This prevents unintentional unhooking of the net. prevented.


3

Optional hydraulic folding mechanism for folding the appliances into the transport position. The Perfekt 602 W4 model includes the hydr. folding device is included as standard.


4

An extra harrow can easily be retrofitted.

The grassland harrow levels molehills and distributes organic fertiliser, the following harrow removes moss and weeds from the grassland and the sward is aerated.

GREENLAND HARROW PERFECT W4

402 W4 | 502 W4 | 602 W4 HYDRO

TECHNICAL DATA

Technical data	Perfect 402 W4	Perfect 502 W4	Perfect 602 W4 Hydro
Working width approx. (m)	4,00	5,00	6,00
Transport width approx. (m)	2,75	2,75	2,75
Hydraulic folding device	Accessories	Accessories	Series
Number of casting stars	54	66	82
Operating speed (km/h)	5-10	5-10	5-10
Power requirement approx. (kW/hp)	29/40	36/50	44/60
UL spigot	Cat. II	Cat. II	Cat. II
Weight approx. (kg)	400	490	660

STANDARD EQUIPMENT

- Cast iron stars with 26 mm material thickness in the main wear zone for particularly long service life
- Sturdy harrow nets with 14 mm thick net rings for robust applications
- W-cast elements arranged in four rows for intensive combing and aeration of the grain
- Reduced wear on the connecting rings thanks to deburred cast stars
- Small transport width thanks to foldable frame for safe road transport
- Two-sided use of the casting elements to adapt the labour intensity of the casting stars to the specific location
- Shackle suspension at the front and sides for a secure fit of the harrow net
- Reinforced folding hinges for maximum frame stability
- Two single-acting hydraulic cylinders (standard on Perfekt 602 W4 Hydro), hose package and stopcock to fold the machine from working to transport position.
- working position to transport position
- Forced levelling with rigid angle irons for maximum utilisation of the grassland potential
- Front bars protect the frame from getting caught on obstacles
- Powder coating

MODELS

Modell	Order no.	€/piece
Perfect 402 W4	921.00841.402W4-3	
Perfect 502 W4	921.00842.502W4-3	
Perfekt 602 W4 Hydro	921.00843.602W4-3	

Note:

Three-point tower and connecting struts must be installed.
Hydraulic folding device, if necessary as a kit in individual parts

EQUIPMENT OPTIONS

Harrow (loose accessory pack)



To the product video



Special equipment	Order no.	€/piece
Tined weeder (4 m) (folding, 3-part) for Perfekt 402 W4, 60 cranked tines	921007808	
Tined weeder (5 m) (folding, 3-part) for Perfekt 502 W4, 78 cranked tines	921007809	
Tined weeder (6 m) (folding, 3-part) for Perfekt 602 W4 Hydro, 90 offset tines	921006428	
Lighting system for following harrow incl. warning signs & lighting supports Execution: LED	921006956	

Assembly time: approx. 2 hours (tines pre-assembled)

Skids (loose accessory pack)



Special equipment	Order no.	€/piece
Skids	921001911-2	
Recommended quantity:		
Perfect 402 W4 = 4		
Perfect 502 W4 = 4		
Perfect 602 W4 Hydro = 4		

Hydraulic folding device (loose accessory pack)



Special equipment	Order no.	€/piece
Hydr. Klappvorrichtung Suitable for: - Perfect 402 W4 - Perfect 502 W4	921140848-2	

Lighting system incl. warning signs



Special equipment	Order no.	€/piece
Lighting system incl. warning signs Version: LED Hinweis: Fully assembled as original equipment	921001153-2	

Note: Replacement nets for grassland harrows can be found on [page 24-25](#)



GREENLAND HARROW PERFECT S4

503 S4 HYDRO | 603 S4 HYDRO | 804 S4 HYDRO

The SAPHIR Perfekt S4 grassland harrow guarantees maximum stability thanks to its particularly robust headstock and frame.
 maximum stability. The raised support frame with its free-hanging net enables very good floor and therefore optimum working quality. The raised support frame allows combed material or solid waste to pass through the machine without any problems.



The Perfekt S4 grassland harrows have two angle irons arranged one behind the other in the front of the machine, which ensure complete forced levelling of uneven ground and molehills. This reduces wear on the subsequent harvesting technology and minimises forage contamination.



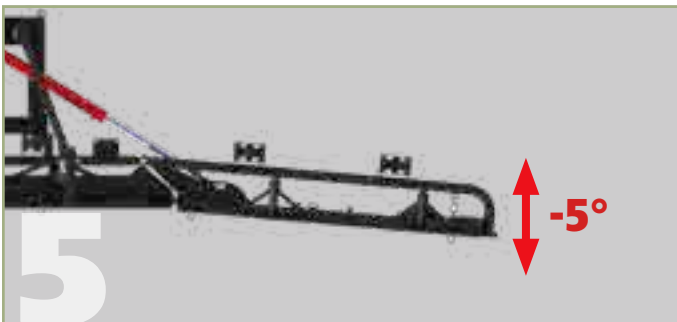
The raised support frame ensures great freedom of movement for the harrow net. The four-row S-cast elements guarantee a high working performance. The S-cast elements can be used from both sides: Sharp harrowing and aeration with the tine side, simple dragging for levelling molehills with the smooth side.



The particularly robust frame structure consists of a heavy-duty three-point tower and reinforced broadband folding hinges. The lower and upper link pins sit in sturdy mounting pockets.



Supplied as standard with hydraulic folding device and safety lock for user-friendly securing of the machine during road transport. The machines are always delivered fully assembled.



An adjustment in the negative range of up to -5° is possible for all models. Limitation or adjustment is possible via two adjusting screws on each side. This enables improved work in hilly terrain.



An extra harrow can be retrofitted to the Perfekt S4 harrows from model year 2025. The grassland harrow levels molehills and distributes organic fertiliser, the following harrow removes moss and weeds from the grassland and the sward is aerated. If required, the following harrow can also be raised completely to create a full passage. The 8 mm tines are very vibration-friendly even at low speeds.



The SAPHIR Perfekt S4 grassland harrow with following harrow and small seed spreader is an ideal combination implement for supplementing crops on intensive grazing sites or in areas with high levels of crop damage. The rigid composite frame ensures an optimum forced levelling effect, while the net intensively distributes soil or organic fertiliser. Finally, the following harrow provides weed control and produces fine soil for reseeding.

GREENLAND HARROW PERFECT S4

503 S4 HYDRO | 603 S4 HYDRO | 804 S4 HYDRO

01

GRASSLAND TECHNOLOGY

TECHNICAL DATA

Technical data	Perfect 503 S4 Hydro	Perfect 603 S4 Hydro	Perfect 804 S4 Hydro
Working width approx. (m)	5,00	6,00	8,00
Transport width approx. (m)	2.40	2,40	2,95
Hydraulic folding device	Series (1 x dw)	Series (1 x dw)	Series (1 x dw)
Number of casting stars	62	78	102
Operating speed (km/h)	5-10	5-10	5-10
Power requirement approx. (kW/hp)	44/60	44/60	58/80
UL spigot	Kat. II	Cat. II	Cat. II
Weight approx. (kg)	830	946	1,100

STANDARD EQUIPMENT

- Cast iron stars with 26 mm material thickness in the main wear zone for particularly long service life
- Sturdy harrow nets with 14 mm thick net rings for robust applications
- S-cast elements arranged in four rows for intensive combing and aeration of the grain
- Raised support frame to prevent combed material and solid manure from rolling up
- Small transport width thanks to folding frame for safe road transport (1 x dw required)
- Two-sided use of the casting elements to adapt the labour intensity of the casting stars to the specific location of the casting stars
- Extra heavy three-point tower for maximum stability
- Reinforced shackle suspension of the net for a long service life
- Broadband folding hinges for ideal power transmission from side to centre section
- Hydraulic transport lock with pull rope to prevent unintentional unfolding during road transport
- Pronounced A-folding for safe road transport
- Forced levelling with rigid angle irons for maximum utilisation of the grassland potential
- Front bars protect the frame from getting caught on obstacles
- Powder-coated
- Kennfixx hydraulic couplings for ergonomic coupling and uncoupling
- Reinforced headstock, higher rigidity due to closed frame & adaptable and retrofittable at any time following harrow
- Level levelling -5 % for better ground adaptation, improved frame construction

MODELS

Modell	Order no.	€/piece
Perfekt 503 S4 Hydro	921-00852.503S4	
Perfekt 603 S4 Hydro	921-00860.603S4	
Perfekt 804 S4 Hydro	921-00862.804S4	

Note: Device is supplied fully assembled.

EQUIPMENT OPTIONS

Harrow (loose accessory pack)

NEW


Special equipment	Order no.	€/piece
Tined weeder (5 m) (folding, 3-part) for Perfekt 503 W4, 78 cranked tines	921-010148	
Tined weeder (6 m) (folding, 3-part) for Perfekt 603 S4 Hydro, 90 offset tines	921-010149	
Tined weeder (8 m) (folding, 3-part) for Perfekt 804 S4 Hydro, 123 offset tines	921-009130	
Lighting system for following harrow incl. warning signs & lighting supports Execution: LED	921-008999	

Assembly time: approx. 1 hours (tines pre-assembled)

Skids (loose accessory pack)



Special equipment	Order no.	€/piece
Skids	921001911-2	
Recommended quantity: Perfect 503 S4 Hydro = 4 Perfect 603 S4 Hydro = 4 Perfect 804 S4 Hydro = 4		

Lighting system incl. warning signs



Special equipment	Order no.	€/piece
Lighting system incl. warning signs Suitable for: - Perfect 503 S4 Hydro - Perfect 603 S4 Hydro Version: LED Note: Fully assembled as original equipment	• Perfekt 803S4 Hydro Type:	
Lighting system incl. warning signs Suitable for: • Perfekt 803S4 Hydro Type: LED Note: Fully assembled as original equipment	921001377-2	

Construction platform for SAPHIR DrillStar



Special equipment	Order no.	€/piece
Construction platform for SAPHIR DrillStar seeders incl. assembly (assembly kit without small seed dispenser - for DrillStar models, see pages 42-45)	921-009009	

Note: Replacement nets for grassland harrows can be found on [page 24-25](#)

SPARE NETS



Cast iron star W
Combi star with aggressive tine
Weight: approx. 2,460 g
Item no: 69500156

Replacement net W with cast star W, 3-row harrow net for closed frames, depth 90 cm (hook suspension)

Spare nets	Width approx. (m)	Weight (kg)	Number of casting stars	Order no.	€/piece
Replacement mains 200 W	2,00	65	20 (7+6+7)	921140716	
Replacement mains 300 W	3,00	100	28 (9+10+9)	921140715	
Replacement mains 400 W	4,00	130	40 (13+14+13)	921140717	
Replacement mains 500 W	5,00	160	49 (16+17+16)	921140718	
Replacement mains 600 W	6,00	200	61 (20+21+20)	921140719	

Replacement net W with cast star W, 3-row harrow net for closed frame, depth 90 cm (shackle suspension)

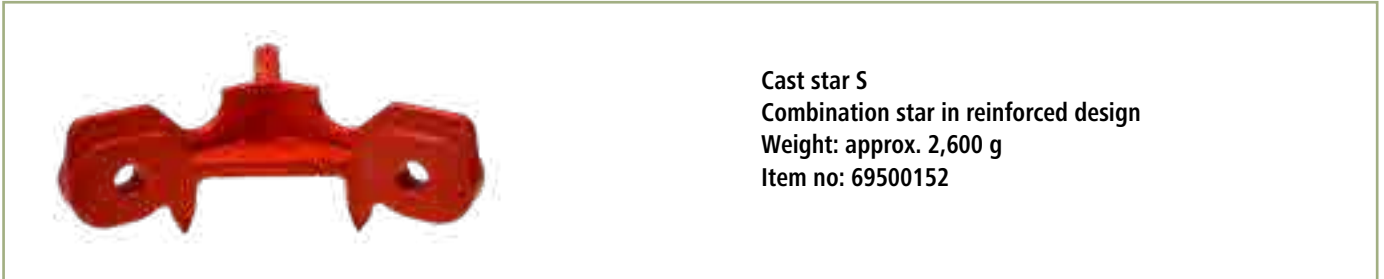
Spare nets	Width approx. (m)	Weight approx. (kg)	Number of casting stars	Order no.	€/piece
Replacement net 502 W	5,00	160	49 (16+17+16)	921140718-2	
Replacement mains 602 W	6,00	200	61 (20+21+20)	921140719-2	

Replacement net W4 with cast star W, 4-row harrow net for closed frames, depth 110 cm (hook suspension)

Spare nets	Width approx. (m)	Weight approx. (kg)	Number of casting stars	Order no.	€/piece
Spare net 400 W4	4,00	170	54 (13+14+13+14)	921140871	
Spare net 500 W4	5,00	210	66 (17+16+17+16)	921140872	
Spare net 600 W4	6,00	260	82 (21+20+21+20)	921140873	

Replacement net W4 with cast star W, 4-row harrow net for closed frames, depth 110 cm (shackle suspension)

Spare nets	Width approx. (m)	Weight approx. (kg)	Number of casting stars	Order no.	€/piece
Replacement net 402 W4	4,00	170	54 (13+14+13+14)	921140871-2	
Spare net 501 / 502 W4	5,00	210	66 (17+16+17+16)	921140872-2	
Spare net 601 / 602 W4	6,00	260	82 (21+20+21+20)	921140873-2	



Replacement net S4 with cast star S, 4-row harrow net with angle rail for open frames, depth 120 cm

Spare nets	Width approx. (m)	Weight approx. (kg)	Number of casting stars	Order no.	€/piece
Spare net 503 S4	5,00	230	62 (16+15+16+15)	921140856	
Spare net 603 S4	6,00	290	78 (20+19+20+19)	921-140859	
Spare net 803 S4	8,00	370	102 (26+25+26+25)	921-140860	



GRASSLAND HARROW PERFECT GS

GS 303 | GS 603 | GS 803

Our many years of experience in the manufacture and sale of grassland harrows have resulted in the Perfekt GS grassland harrow, which is also characterised by a closed composite frame and a high dead weight, making it the toughest opponent for crops with frequent damage to the land, such as molehills, wild boar damage or mice, and ensuring the most intensive forced levelling. This device is also the ideal companion for wet or badly damaged swards thanks to the 12 skids supplied as standard.



Model Perfekt GS 303 with rigid frame



The angle irons of the frame and the high dead weight of the complete machine ensure very intensive forced levelling, especially in areas with frequent surface damage. The light setting of the irons means that no smear layers are created on the sward. At the same time, cow dung and organic residues are distributed. The angle iron also creates a buckling stimulus on the main shoot, which promotes replanting.



The standard, mechanical, infinitely variable tine pressure adjustment can be carried out easily via two spindles per tine field. The selected intensity can be read off via lasered-in scales.



The four-bar structure ensures intensive combing out of weeds and grass weeds. The installed 10 mm tines with triple winding have a high inherent vibration capacity and, thanks to their roundabout motion, ensure a wide-area operation and produce high quantities of fine soil for reseeding.



12 skids fitted as standard prevent the frame from rubbing on wet turf, ensure improved height control and thus prevent the angle iron frame from being pulled into the ground excessively.



The device can be optionally equipped with a SAPHIR DrillStar. This enables very precise and wind-resistant reseeding of forage grasses in damaged stands.

GRASSLAND HARROW PERFECT GS

GS 303 | GS 603 | GS 803

01

GRASSLAND TECHNOLOGY

TECHNICAL DATA

Technical data	GS 303	GS 603	GS 803
Working width approx. (m)	3.00	6,00	8,00
Transport width approx. (m)	3.00	2,60	3,00
Hydraulic folding device	-	Series (1x dw)	Series (1x dw)
Number of tines	40	88	114
Number of skids	4	12	12
Operating speed (km/h)	8-12	8-12	8-12
Power requirement approx. (kW/hp)	44/60	59/80	73/100
UL connection	Cat. II	Cat. II	Cat. II
Weight approx. (kg)	590	1.500	1.800

STANDARD EQUIPMENT

- Sturdy frame made of angle iron for robust applications
- Skids for floor-friendly use on damp surfaces
- Harrow tines 10 mm, triple winding with high vibration capacity and optimum harrowing effect
- Four rows of tines for intensive tillage of the sward
- High resistance of the paintwork to mechanical stresses and weathering through powder coating
- Extra heavy three-point tower for maximum stability
- Forced levelling due to rigid drag rail
- Kennfix hydraulic coupling for ergonomic coupling and uncoupling
- Tine loss protection
- LED lighting with warning signs

MODELS

Model	Order no.	€/piece
GS 303	921.00807.GS303-3	
GS 603	921.00806.GS603-3	
GS 803	921.00805.GS803-3	

Note: Device is supplied fully assembled.

EQUIPMENT OPTIONS

Hydraulic tine adjustment



Special equipment	Order no.	€/piece
GS 303	921007305	
GS 603	921007306	
GS 803	921007307	

Construction platform for SAPHIR DrillStar



Special equipment	Order no.	€/piece
Assembly platform for SAPHIR DrillStar incl. assembly costs (Kit without small seed spreader - DrillStar models see page 42-45)	921002773	

Skid



Special equipment	Order no.	€/piece
Gleitkufe GS303-3 Gleitkufe GS603-3	921003621	
Gleitkufe GS803-3	921003622	

Harrow tines



Special equipment	Order no.	€/piece
Tine tines Ø10mm with 3-fach Windung	695921003328	available from Granit Parts



PERFECT ES HARROW

ES 301 | ES 601 | ES 801

If the sward is very weedy, matted or mossy, then the Perfect ES exact harrow is the right choice. An open frame concept in conjunction with precisely adjustable working tools makes it possible to react flexibly to different operating conditions. The mould height is regulated via the rear support wheels, while the tine angle is adjusted via a hole pattern.

The low weight of the device also means that it can be operated with smaller tractors without any problems.



The machine has a low dead weight, which means that the 8 m version can be operated with an 80 hp tractor. The four-bar, open frame structure ensures intensive combing out of weeds and grass weeds. The built-in 10 mm tines with triple winding have a high inherent vibration capacity and, thanks to their roundabout motion, ensure a wide-area operation and produce large quantities of fine soil for reseeding or new sowing.



The spring-loaded impulse rail, which is guided on the parallelogram, can be used to level floor damage in a particularly hub-friendly manner. In addition, the angle iron of the pre-tool creates a buckling stimulus on the main shoot to encourage tillering. The impulse rail can also be raised if necessary to create more passage or to prevent levelling.



The Perfect ES extra coverage following harrow has rotating tine carriers. The tine aggressiveness is adjusted mechanically using a hole pattern. With the optional hydraulic tine adjustment, the tine aggressiveness can be adjusted centrally from the tractor cab in order to be able to react dynamically to changing operating conditions.



The rear-mounted support wheels ensure optimum adaptation to the ground. The angle-adjustable height of the support wheels makes this particularly convenient. The support wheels can also be rotated (30°), which prevents scar damage and ensures that the appliance runs smoothly.



The device can be optionally equipped with a SAPHIR DrillStar. This enables very precise and wind-resistant reseeding of forage grasses in damaged stands.



PERFECT ES HARROW

ES 301 | ES 601 | ES 801

01

GRASSLAND TECHNOLOGY

TECHNICAL DATA

Technical data	ES 301 	ES 601 	ES 801
Working width approx. (m)	2.85	6.00	8.00
Transport width approx. (m)	3.00	3.00	3.00
Hydraulic folding	-	Series (1 x dw)	Series (1 x dw)
Number of tines	44	88	116
Support wheels	2	4	6
Tyre size	13x5.00-6	16x6.50-8	16x6.50-8
Operating speed (km/h)	8 - 12	8 - 12	8 - 12
Power requirement approx. (kW/hp)	44/60	48/65	59/80
UL connection	Cat. II	Cat. II	Cat. II
Weight approx. (kg)	400	920	1300

STANDARD EQUIPMENT

- Scar-friendly processing thanks to precisely adjustable working tools
- Highly manoeuvrable and safe handling even on slopes thanks to low tare weight
- Harrow tines 10mm with triple winding with high vibration capacity and best harrowing effect
- Four-row tine field for intensive cultivation of the grassland sward
- High resistance of the paintwork to mechanical stress and weathering weathering due to powder coating
- Precise harrow setting:
 - Mechanically adjustable tine aggressiveness via hole pattern
 - Mechanically adjustable tine depth via pneumatic tyred support wheels
- Levelling of earth mounds with spring-loaded impulse rail
- Can also be used for sowing catch crops or green cover on the field
- Tine loss protection as standard
- LED lighting with warning signs

MODELS

Modell	Order no.	€/piece
ES 301	921-00811.ES301	
ES 601	921-00809.ES601	
ES 801	921-00810.ES801	

Note: Device is supplied fully assembled.

EQUIPMENT OPTIONS

Hydraulic tine adjustment



Special equipment	Order no.	€/piece
ES 301	921007540	
ES 601	921007541	
ES 801	921007542	

Support feet



Special equipment	Order no.	€/piece
Support leg set (2 pieces, screwable) for relieving the support wheels during longer downtimes	921-010228	

Construction platform for SAPHIR DrillStar



Special equipment	Order no.	€/piece
Assembly platform for SAPHIR DrillStar incl. assembly costs (Kit without small seed spreader - DrillStar models see page 42-45)	921-008741	

Harrow tines



Special equipment	Order no.	€/piece
Tine tines Ø10mm with 3-fach Windung	695921003328	available from Granit Parts



PERFEKT KS CONTOUR HARROW KS 601

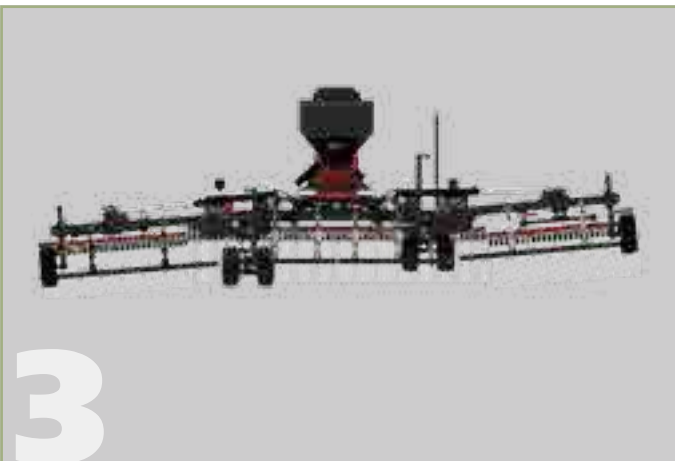
The KS contour harrow adapts perfectly to the ground contours thanks to the parallelogram-guided harrow sections and freely movable extension arms, even on very hilly terrain. The 4-row harrow field with small line spacing ensures a high processing density with high material throughput at the same time. The angle of the tines can be adjusted to 40°, and the angle of the two rear rows can be set even flatter. The stable frame design allows the coupling of a trailed roller and expands the possibilities of the device.


1

With the spring-loaded and on the parallelogram guided impulse rail is particularly suitable for levelling without scarring. In addition, the angle iron of the pre-tool a buckling stimulus on the main drive in order to promote tillering. The impulse rail can also be used for or should not be levelled.


2

The parallel-guided, four-row harrow section allows a height levelling of 100 mm. The vibration-friendly 10 mm tines with their high-frequency movements ensure the best results when clearing the crop of unwanted organic matter and producing fine soil for reseeding.


3

The standard slotted hole in the cylinder holder enables an adjustment of up to 5° in the positive and negative range. The side panels can also be adjusted using two adjustment screws on each side.


4

The two rear tool bars can be flattened mechanically separately. This results in a higher passage of the harrow field, especially with high quantities of unwanted organic matter or large quantities of solid manure or slurry.

KONTURSTRIEGEL PERFEKT KS

KS 601

01

GRASSLAND TECHNOLOGY



Access to the body platform is easy via a step on the rear support wheel. A handrail is provided for additional safety. The tine field does not have to be climbed over - a clear advantage for safe access, for example when carrying seed bags.



For an additional charge, the implement combination of the Perfect KS contour harrow and the trailed roller is available with an individual TÜV approval of 40 km/h (see [page 41](#)).



In spring, a solo application is recommended first so that problem grasses and unwanted organic residues are deposited on the soil surface and then left to rot or dry out. At the same time, harmful compaction is reduced on soils with high residual moisture. It also prevents any remaining weed seed potential from being rolled into gaps in the crop and causing it to grow back.



In order to achieve improved soil contact of the seed and an optimum seedbed structure during reseeding or new sowing, it is advantageous to operate the implement with a trailed roller using the optional linkage. The rolling rings also aerate the sward and stimulate tillering.



To use the implement combination of harrow and trailed roller to be utilised almost all year round, it is also possible to use on the field - for example for sowing catch crops, for breaking up encrusted soils or in the Post-harvest management, for example after rape or maize.

TECHNICAL DATA

Technical data	KS 601
Working width approx. (m)	6.00
Transport width approx. (m)	2.99
Hydraulic folding	Series (1 x dw)
Number of tines	112
Number of harrow sections	4
Front / rear support wheels	2 / 4
Tyre size	16.0/6,5-8"
Operating speed (km/h)	8 - 12
Power requirement approx. (kW/hp) without (with roller)	88/120 (117/160)
UL connection	Cat. II / III
Weight approx. (kg)	1,380

STANDARD EQUIPMENT

- Optimum ground tracking thanks to parallel harrow sections
- Harrow tines 10mm with triple winding with high vibration capacity and best harrowing effect
- Four-row tine array with 112 harrow tines for intensive cultivation of the grassland sward
- High resistance of the paintwork to mechanical stress and weathering weathering due to powder coating
- Mechanically adjustable tine aggressiveness via hole pattern
- Front support wheels for smooth running
- Rear support wheels to minimise the support rest and improve guidance
- Three-point linkage Cat. II/III
- Prepared for mounting a trailed roller
- 53.5 mm tine spacing
- Support leg set to relieve the rear support wheels during longer downtimes
- LED lighting with warning signs

MODELS

Modell	Order no.	€/piece
KS 601	921-00808.KS601	

Note: Device is supplied fully assembled.

KONTURSTRIEGEL PERFEKT KS

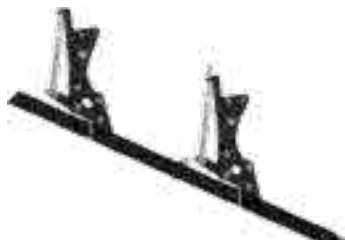
KS 601

01

GRASSLAND TECHNOLOGY

EQUIPMENT OPTIONS

Levelling



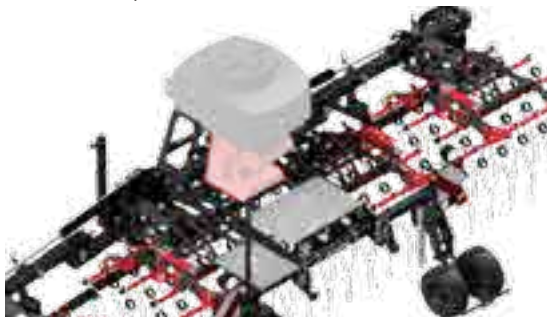
Special equipment	Order no.	€/piece
Impulse rail (4-part)	921-008166	

Hydraulic tine adjustment



Special equipment	Order no.	€/piece
Hydraulic tine adjustment	921-008169	

Construction platform for SAPHIR DrillStar



Special equipment	Order no.	€/piece
Assembly platform for SAPHIR DrillStar incl. assembly costs (Kit without small seed spreader - DrillStar models see pages 42-45)	921-008167	

Coupling set



Special equipment	Order no.	€/piece
Koppelsatz Kat. II with hydraulic Drive through / tubing for Air brake system	921-008168	
Koppelsatz Kat. III with hydraulic Drive through / tubing for Air brake system	921-008522	





TRAILING ROLLERS

TOOTHED RING ROLLER ZR 620 | CAMBRID ROLLER CB 620

The use of SAPHIR arable rollers as a grassland maintenance measure, especially in overseeding and reseeded, ensures improved water and heat conduction of the soil, stimulates tillering, establishes soil contact between the seeds and significantly improves the load-bearing capacity of the sward. Depending on the application requirements, we offer the roller either as a ZR toothed ring roller with 450/500 mm toothed rings or as a hybrid roller with 450/470 mm hybrid rings.

We offer a dual-circuit pneumatic brake and corresponding TÜV approval for the complete combination so that the field rollers can be used optimally in conjunction with our Perfekt KS grassland harrow.



Toothed ring roller ZR in folded state



Contour harrow KS 600 with toothed ring roller ZR

TECHNICAL DATA

Technical data	Toothed ring roller ZR 620	Toothed ring roller ZR 620 DL	Cambridge roller CB 620	Cambridge roller CB 620 DL
Working width approx. (m)	6.20	6.20	6.20	6.20
Transport width approx. (m)	2.55	2.55	2.55	2.55
Ring type	Toothed rings	Toothed rings	Cambridge rings	Cambridge rings
Number of rings	116	116	117	117
Ring diameter approx. (mm)	450/500	450/500	450/470	450/470
Brake	unbraked	2-circuit air brake	unbraked	2-circuit air brake
Tyre size	15,0/55-17	15,0/55-17	15,0/55-17	15,0/55-17
Cultivation	Cat. II	Cat. II	Cat. II	Cat. II
Power requirement approx. (kW/hp)	88/120	88/120	88/120	88/120
Hydraulic folding	2 x dw	2 x dw	2 x dw	2 x dw
Weight approx. (kg)	3,175	3,270	2,910	3,005

STANDARD EQUIPMENT

- Operating licence (TÜV approval) up to 25 km/h (for ZR 620 DL & CB 620 DL)
- LED lighting system incl. warning signs
- Chassis with wheels 15.0/55-17
- Drawbar with lower link hitch Cat. II



TOOTHED RING ROLLER

- Ideally suited for loamy soil, coarse crumbling
crumbling on the soil surface fine crumbling in the seed horizon
- Self-cleaning effect - no smearing of the turf possible
turf possible
- Very good aeration of the floor surface



CAMBRIDGE ROLLER

- Fine-crumbled, uniform seedbed
- Good compaction, crumbling and promotion of capillaries
capillaries in the upper soil layers
- Uniform reconsolidation

MODELS

Modell	Order no.	€/piece
Toothed ring roller ZR 620	921-00256.ZR620	
Toothed ring roller ZR 620 DL	921-00257.ZR620DL	
Cambrid roller CB 620	593.00252.CB620	
Cambrid roller CB 620 DL	593-00253.CB620DL	

Note: Device is supplied fully assembled.

EQUIPMENT OPTIONS

Equipment	Order no.	€/piece
Upgrade 40 km/h - operating licence (TÜV approval) up to 40 km/h (only for CB 620 DL & ZR 620 DL)	921-ZRDL40	


 NOW ALSO ISOBUS CAPABLE!

DRILLSTAR SMALL SEED SPREADER

200 E | 300 E | 300 EP-ISO | 500 E | 300 H | 500 H

With the pneumatic SAPHIR DrillStar small seed spreader and a SAPHIR grassland harrow / soil tillage implement, the soil can be cultivated and sown at the same time in a time-saving operation. Wind-independent and precise seed distribution for more targeted and better success. Thanks to its electrically controlled The electrically controlled seeding shaft, which continuously regulates the seed flow, makes it possible to spread the desired quantity of any type of seed.

Do you need a DrillStar with an electric or hydraulic blower?

To do this, you should first calculate the required application rate per minute.

You can calculate the value using the formula below. Please compare this value with the technical data from [page 43](#).

Please note the conformity of the working widths and the type of seed.

1. General:

a. FORMULA General

$$\frac{\text{Seeding rate kg/ha} \times \text{working width m} \times \text{speed km/h}}{600} = \text{kg/min}$$

2. Fallbeispiel 1

a. Given key figures:

- i. Seeds: Grass seed
- ii. Seeding rate = 10kg/ha
- iii. Working width = 6.0mtr.
- iv. Working speed = 12km/h

b. Calculation:

$$\frac{(10\text{kg/ha} \times 6,0\text{mtr.} \times 12\text{km/h})}{600} = 1.2\text{kg/min}$$

c. Result

- i. Output quantity per minute = 1.2 kg/min > Device recommendation DrillStar with electric fan and 8 outlets
(e.g. DrillStar 200E / DrillStar 300E etc.)

3. Fallbeispiel 2

a. Given key figures:

- i. Seeds: Grass seed
- ii. Seeding rate = 10kg/ha
- iii. Working width = 8.0mtr.
- iv. Working speed = 12km/h

b. Calculation:

$$\frac{(10\text{kg/ha} \times 8,0\text{mtr.} \times 12\text{km/h})}{600} = 1.6\text{kg/min}$$

c. Result

- i. Application rate per minute = 1.6kg/min > DrillStar recommended with hydraulic fan and 16 outlets (e.g. DrillStar 300H16 / DrillStar 500H16 etc.)
Explanation: The lateral distribution with 8 outlets is not sufficient for a working width of 8.0 mtr. sufficient (max. 750 mm baffle plate spacing), therefore we recommend 16 outlets.

4. Fallbeispiel 3

a. Given key figures:

- i. Seeds: Intercropping with beans
- ii. Seeding rate = 40kg/ha
- iii. Working width = 6.0mtr.
- iv. Working speed = 12km/h

b. Calculation:

$$\frac{(40\text{kg/ha} \times 6,0\text{mtr.} \times 12\text{km/h})}{600} = 4.8\text{kg/min}$$

c. Result:

- i. Output quantity per minute = 4.8 kg/min > Device recommendation DrillStar with hydraulic fan and 8 outlets
(e.g. DrillStar 300H / DrillStar 500H)
Suitable DrillStar seeders: 300H / 500H

DRILLSTAR SMALL SEED SPREADER

200 E | 300 E | 300 EP-ISO | 500 E | 300 H | 500 H

01

GRASSLAND TECHNOLOGY

TECHNICAL DATA

Technical data	NEW					
	DrillStar 200 E	DrillStar 300 E	DrillStar 300 EP-ISO	DrillStar 300 H	DrillStar 500 E	DrillStar 500 H
Tank capacity approx. (litres)	200	300	300	300	500	500
Control module version	1.2	5.2	ISOBUS	5.2	5.2	5.2
Working width approx. (m)	up to 6	up to 6	up to 6	up to 6	up to 6	up to 6
Blower	Electric.	Electric.	Electr. PLUS	Hydr.	Electric.	Hydr.
Outlets	8	8	8	8	8	8
Application rate max. kg / minute	0 - 3,5	0 - 3,5	0 - 8	0 - 14	0 - 3,5	0 - 14
Hydraulic connection	-	-	-	1 x ew	-	1 x ew
Max. required pressure (bar)	-	-	-	180	-	180
Max. required oil quantity (l/min)	-	-	-	38	-	38
Height approx. (cm)	100	110	110	110	125	125
Width approx. (cm)	70	77	77	80	80	80
Depth approx. (cm)	88	100	100	115	122	125
Weight approx. (kg)	60	70	70	93	93	116
Order no.	594PS200E	594PS300E	594-PS300EP-ISO	594PS300H	594PS500E	594PS500H
€/piece						

CONFIGURATION TIP: DrillStar 300 E + 7-pin signalling cable for speed-dependent application*

* The signal socket must be designed and assigned on the tractor side in accordance with the standard.



STANDARD EQUIPMENT

- Electrical control module with bracket for mounting in the cab
 - Control module 1.2 for DrillStar 200 E
 - ISOBUS interface for DrillStar 300 EP-ISO **NEW!**
 - Control module 5.2 for all other DrillStar models
- 2 seeding shafts for grass or mustard/phacelia
- Additional agitator for grasses
- Complete cabling
- Calibration plate
- 8 outlets incl. hoses and baffle plates
- For the models with hydraulic fan you need a single-acting control unit (size 3) and an unpressurised return flow without reduction Reduction with size 4 coupling

Additional functions of the control module 5.2

(standard with DrillStar 300 + 500)

- Total hour counter and daily hour counter
- Total hectare counter and daily hectare counter
- Display kg/ha
- Various implement sensors can be connected
- Speed-dependent regulation of the application rate via sensors

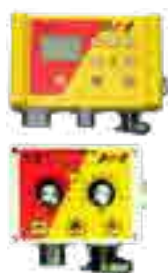
Additional ISOBUS functions for control module 5.2 **NEW!**

- Seed library: Save your current seed and change the application at the touch of a button (without a new calibration test).
- Remaining quantity display (area & route)
- Automatic pre-dosing
- Only one cable from the spreader to the tractor (ISOBUS cable) - no additional cables required
- Section Control: automatic seeding shaft switch-off depending on the GPS position*
- Variable Rate Control: Application rate is regulated depending on an application map*
- Individual naming of seeds in the seed library
- 50 % more blower power with the combination of ISOBUS and electric blower
- AEF certification: APV ISOBUS is listed in the AEF database

* Depending on the equipment of the tractor

ATTENTION! The maximum total current carrying capacity of the ISOBUS system must be of 55 A must be observed!

EQUIPMENT OPTIONS



Equipment	Order no.	€/piece
Extension cable 5 m	59404102015	
Abdrehtaster (magnetisch) For module 5.2	59404102094	
Säwelle feinblind (fb-f-fb-fb) For mustard, phacelia (Standard on all DrillStar models)	59440012127	
Seeding shaft coarse (G-G-G) For grass (Standard on all DrillStar models)	59440012110	
Säwelle fein (f-f-f-f) For grass, mustard, cress (fine seeds up to max. 5 kg per ha)	59440012130	
Seeding shaft Flex 20 For seed mixtures, cereals, peas, beans, lupins, vetch	59440002138	
Füllstandssensor For control module 1.2 and 5.2	594040002269	
Radar- und Hubwerksensor For module 5.2 - regulates the application rate in relation to the speed Automatic switching of the seeding shaft at the headland.	59403002007	
GPSa sensor and top linkage sensor The GPSa sensor transmits the current vehicle speed to the control module. The current speed is measured using a combination of a GPS and a 3D acceleration sensor. Attention: The sensor does not work with complete GPS shadowing.	594003002007	
Sensor linkage top link (accessory kit) For control module 5.2	59404102169	
Hose coupler attachment kit 1 x plug + 1x coupling with lock (per piece)	59403002215	
Additional module for hose coupler 1x coupling with lock (per piece)	59403002216	
7 poliges Signalkabel For module 5.2	59404102006	
Device 8 baffle plates, 8 baffle plate holders for trailing rollers, hose etc.	59440002310	
Conversion kit 16 outlets for DrillStar H (incl. seeding shafts and baffle plates etc.) Not suitable for large and heavy seeds (e.g. intercrop mixtures with beans, peas etc.) NEW!	59440002457	
Control module 5.2 (control module 1.2 not applicable)	59402023218	Surcharge for DrillStar 200 E
Steuermodul 5.2 Single purchase price, please note the standard equipment	59402023218	
Steuermodul 1.2 Single purchase price, please note the standard equipment	59403002201	
Accessory kit ISOBUS for DrillStar H NEW! Hydraulic blower	59403002231	Surcharge for control module 5.2
ISOBUS accessory kit for DrillStar E NEW! Electric fan 50 % more blower power with the combination of ISOBUS and electric blower	59403002201	Surcharge for control module 5.2



SMALL SEED SPREADER UNISEED MDP

(AVAILABLE FOR WORKING WIDTHS UP TO 4.5 M)

The MDP100M1 multi-metering unit is similar in application and function to the pneumatic seeders in the DrillStar series. The MDP is ideal for spreading all common small seeds, seed mixtures and slug pellets, as well as for establishing or reseeding grassland. The MDP can be used several times a year for a wide range of applications thanks to its versatile mounting options and easy attachment and conversion to various soil tillage implements.

The multi-metering unit is not suitable for large seeds such as field beans, spelt, etc. For this case we recommend the DrillStar series in combination with a Flex seeding shaft ([page 42-45](#)).



Control module 1.2 as standard

TECHNICAL DATA

Technical data	MDP 100 M1
Tank capacity approx. (litres)	105
Control module version	1.2
Working width approx. (m)	1-4.5
Blower	Electric.
Outlets	6
Application rate max. kg/min.	0-4
Height approx. (cm)	105
Width approx. (cm)	55
Depth approx. (cm)	55
Weight approx. (kg)	30

STANDARD EQUIPMENT

- Electrical control module 1.2 with bracket for mounting in the cab
- Complete appliance with container, dosing unit, frame and blower
- Top link attachment and counter plate
- Calibration bag
- 6 baffle plates, 3 hexagonal rods 1.2 m each & 25 m hose
- Seeding wheel set for 2 seeding shafts (flex, fine and fine-blind seeding wheels)
- 6 m cable from the spreader to the control box

MODELS

Model	Order no.	€/piece
UniSeed MDP 100 M1 with control module 1.2	594MDP100M1	

EQUIPMENT OPTIONS



Equipment	Order no.	€/piece
Control module 1.2	59403002201	Series
Control module 1.2	59403002201	Single purchase price



Equipment	Order no.	€/piece
Control module 5.2 (control module 1.2 not applicable)	59402023218	Surcharge for UniSeed MDP 100 M1
Control module 5.2	59402023218	Single purchase price



SMALL SEED SPREADER UNISEED ES ES 100 M1

The SAPHIR UniSeed universal spreader is ideal for spreading catch crops, grass seed, undersown crops, slug pellets and similar granulates. The working width can be infinitely adjusted to the respective requirements. The seed rate can also be adjusted on the metering slide according to the plant cultivation objectives.

STANDARD EQUIPMENT

- Electrical control module 2.10 with bracket for mounting in the cab
- Adjustable throwing blades
- Clamping sleeves for extending the agitator for grasses
- Top link attachment and counter plate
- 3 m cable to the battery
- 6 m cable from spreader to spreader module
- Metering slide for setting on the device
- Plastic container with low tare weight
- Electrically driven spreading disc

FUNCTIONS OF THE CONTROL MODULE

- Speed monitoring, speed measurement and Speed regulation
- Monitoring of the spreading disc
- Automatic start with firmly vibrated spreading material
- Simple adjustment of the spreading width from the driver's seat through speed regulation



Control module 2.10 as standard

TECHNICAL DATA

Technical data	ES 100 M1
Working width approx. (m)	2 - 24
Height approx. (cm)	90
Width approx. (cm)	52
Depth approx. (cm)	60
Tank capacity approx. (litres)	105
Weight approx. (kg)	30

MODELS

Model	Order no.	€/piece
ES 100 M1	59420081000	

ACCESSORIES

Equipment	Order no.	Weight approx. (kg)	€/piece
Extension cable 5 m From spreader to control module	59404102035	2	



Equipment	Order no.	€/piece
Control module 2.10	59404202047	Series
Control module 2.10	59404202047	

Single purchase price



LAWN ROLLER ROBUST K

100 K | 150 K | 200 K

The SAPHIR turf rollers are particularly suitable for use with small tractors in local authorities, service centres and public buildings, companies, gardening and landscaping, private green spaces and parks, paddocks, sports fields, etc. The round drum edges prevent damage to the turf when cornering. To increase the weight the roller body can be filled with water to increase the weight.



- Sturdy frame made of angle steel with greasable Ball bearings
- Parking support for safe standing when parked
- Condition and safe coupling and uncoupling
- Water filler neck for additional ballasting
- Spring-loaded scraper for cleaning the roller body

TECHNICAL DATA

Technical data	Robust 100 K	Robust 150 K	Robust 200 K
Working width approx. (m)	1,00	1,50	2,00
Transport width approx. (m)	1,18	1,68	2,18
Cylinder / Body	1	1	1
Drum Ø (cm)	81	81	81
Unladen weight approx. (kg)	300	410	500
Weight filled approx. (kg)	780	1.140	1.500

STANDARD EQUIPMENT

- Frame made of angle steel
- Continuous shaft
- Parking support
- Greasable ball bearings
- Spring-loaded scraper
- Water filler neck
- Round drum edges
- Tread wall 8 mm
- Drum diameter 81 cm

MODELS

Modell	Order no.	€/piece
Robust 100 K	927.00808.ROBUST100K-2	
Robust 150 K	927.00809.ROBUST150K-2	
Robust 200 K	927.00815.ROBUST200K-2	

Note: Device is supplied fully assembled.

EQUIPMENT OPTIONS

Lighting system incl. warning signs



Special equipment	Order no.	€/piece
Lighting system incl. warning signs	927005455	
Version: LED		
Hinweis: Fully assembled as original equipment		



SOIL CULTIVATION



The CleanField system	54-55
Rotary grinder GrindStar ^{NEW!}	56-61
ClearStar straw harrow ^{NEW!}	62-65
SinusCut blade roller ^{NEW!}	66-71
AllStar Profi large spring tine harrow ^{NEW!}	72-79
AllStar Longline large spring tine harrow ^{NEW!}	80-85
DiscStar Profi compact disc harrow	86-89
TerraStar 3-300 universal cultivator ^{NEW!}	90-95
DeepStar Ecoline subsoiler ^{NEW!}	96-99
Deep loosener DeepStar Combi ^{NEW!}	100-103
PlowStar subsoiler	104-105
WeedStar harrow ^{NEW!}	106-109
Trailing rollers	110

02



SAPHIR CLEANFIELD

With CleanField, SAPHIR provides a soil management system from post-harvest management to sowing. CleanField combines effectiveness and efficiency for the sustainable preservation of yield potential and soil fertility.

TECHNICAL DATA

Hardly any other industry is influenced by as many unpredictable factors as agriculture. Increasing climatic extremes such as drought and heavy rainfall, a shift in the distribution of precipitation, increasingly resistant weeds and grass weeds and constantly changing conditions are constantly presenting farms with new challenges. That's why CleanField starts at the base: the floor. The cycle of the year, from harvest to post-harvest management and basic soil cultivation to seedbed preparation and the ploughing of catch crops, requires well thought-out, adaptable concepts now more than ever. With CleanField, Saphir supports you from ultra-shallow post-harvest management with the GrindStar® rotary grinder and the ClearStar straw harrow, through shallow and medium-depth tillage with the AllStar Profi and AllStar Longline large spring tine harrows, to basic tillage with the new TerraStar 3-300 universal cultivator. The SinusCut knife roller also provides you with a unique tool for shredding maize stubble, catch crops and rapeseed stubble. Our new DeepStar Combi subsoiler is perfect for removing deeper compaction! CleanField helps you to achieve your goals more effectively and efficiently and to respond to existing and new challenges.



POWERFUL TECHNOLOGY
1. HARVEST
2. POST-HARVEST MANAGEMENT


ClearStar straw harrow



GrindStar® rotary sander



AllStar Profi and AllStar Longline large spring tine harrow



SinusCut blade roller

3. TILLAGE


TerraStar 3-300 universal cultivator



AllStar Profi and AllStar Longline large spring tine harrow

4. SEEDBED PREPARATION


AllStar Profi large spring tine harrow



Rotary grinder GrindStar®

5. SEEDING
6. WEED CONTROL


WeedStar harrow

Information video



ROTARY GRINDER GRINDSTAR®

GRINDSTAR 300® | GRINDSTAR 600®

The careful use of soil water, the prevention of wind and water erosion and increasing restrictions on the use of synthetic chemical pesticides pose new challenges for arable and crop farming. At the same time, resistance to herbicides, fungicides and insecticides is increasing and problem weeds such as foxtail, windthale and ryegrass are becoming more common.

To meet these challenges and problems, we have developed the GrindStar® rotary grinder - the machine for ultra-flat post-harvest management.

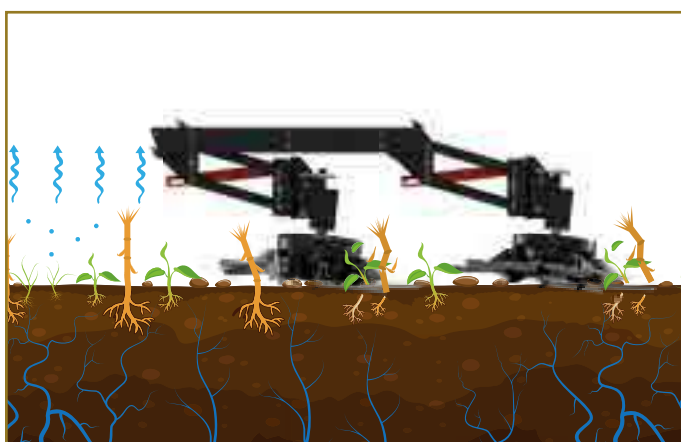


Further information is available at:

www.grindstar.de



Seven tools are installed on each of the passively driven rotors. Due to the inclination transverse and longitudinal to the direction of travel, three tools are always working in the ground. The front rotors rotate in the opposite direction to the rear rotors. This arrangement and the symmetrical design of the rotors result in a full-surface working pattern.



Thanks to the ingenious pressure equalisation system in the rotor, the tools are guided along the ground contour and can therefore compensate for unevenness at right angles to the direction of travel.



The uniformly ultra-flat machining ensures the parallelogram-guided suspension of the rotors on the frame. In combination with the pressure equalisation system in the rotors, optimum horizontal and vertical guidance of the working tools is achieved. This is what makes the significantly improved ground adaptation possible compared to conventional concepts.



The rotors are driven solely by the forward speed. The low tractive power requirement and the high forward speed of 12 to 18 km/h result in high area outputs and low processing costs.

ROTARY GRINDER GRINDSTAR®

GRINDSTAR 300® | GRINDSTAR 600®

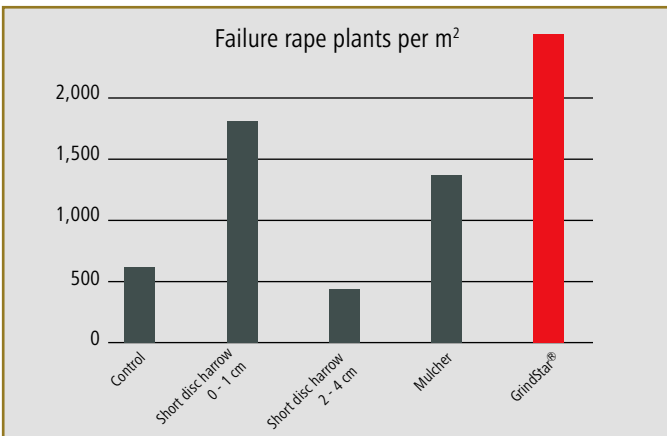


volunteer oilseed rape in a frozen catch crop

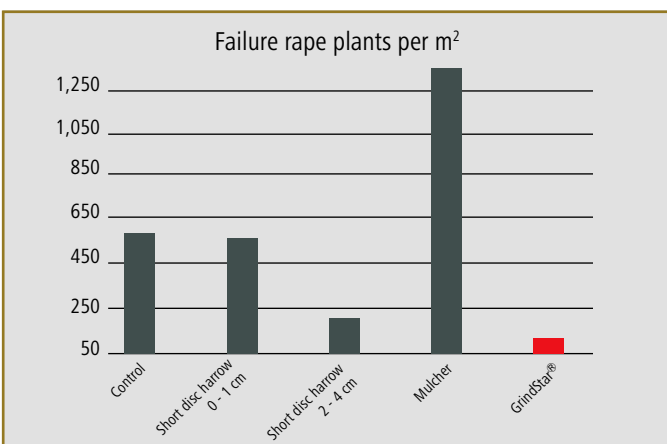
Failure and volunteer rape leads to yield and quality losses within a crop rotation. Diseases such as cabbage blight (*Plasmodiophora brassicae*) and Phoma (*Phoma lingam*) as well as pests such as rape-seed flea beetle (*Psylliodes chrysocephalus*) and beet cyst nematodes (*Heterodera schachtii*) use oilseed rape as a host plant in autumn. In autumn, oilseed rape fleas in particular fly from old oilseed rape fields into freshly sown winter oilseed rape, where they cause great damage. Within the crop rotation, volunteer rape also leads to yield losses in cereals, legumes and root crops. It is also difficult to control chemically in sugar beet. Yield losses of up to 30 %, however, are caused by volunteer oilseed rape the next time winter oilseed rape is grown in the next crop rotation. It is therefore important to combat volunteer rape as effectively as possible.



Independent trials carried out by the TH Cologne from 2021 to 2023 and a practical trial by the LLH from 2024 prove the advantage of ultra-shallow, maximum 2 cm deep stubble cultivation in post-harvest management after winter oilseed rape. This does not bury volunteer rape, but encourages it to germinate.



Compared to the untreated control and also to plots that were shallow (0 to 1 cm) and medium-deep (2 to 4 cm) treated with a short disc harrow, significantly more volunteer oilseed rape was found in the GrindStar® harrow, significantly more volunteer oilseed rape was stimulated to germinate in the GrindStar® plots.



The GrindStar® also impresses in the control of emerged volunteer oilseed rape with a control success rate of over 95 %.



Foxtail in winter oilseed rape

Similar to volunteer rape, the germination rate of foxtail decreases with increasing seed depth in the soil. Buried field foxtail seeds enter dormancy and do not germinate immediately after harvest, but in one of the following main crops.



With ultra-shallow tillage, no seed is buried in post-harvest management. Field foxtail and other weed seeds germinate on the surface and can be controlled mechanically. Drying out, seed damage and soil fungi cause the germination capacity of the remaining seeds to drop sharply within a few weeks and the seed potential is reduced.



By working the tools above ground in crop stubble and straw, intensive conditioning of the harvest residues takes place. By increasing the specific surface area, soil microorganisms can colonise the crop residues and gradually break them down. The combination of mechanical straw conditioning with the GrindStar[®], soil biological activity and changing weather conditions gradually leads to a reduction in the volume of crop residues. Mulch seed cultivator or large spring tine harrow can therefore also be used for clog-free tillage on sites with high straw volumes.



Phytopathogenic pathogens and pests can survive and multiply on crop residues. Fusarium fungi are relevant after the silage maize harvest with subsequent cultivation of winter wheat. In addition to seedling and root rot, they can also cause ear rot and partial dew rot in winter wheat and thus the formation of mycotoxins.

As the Fusarium fungi survive on the harvest residues, these should first be shredded as well as possible.

For pests such as the European corn borer, 80 % of whose larvae are found in the 0 to 30 cm range, shredding above ground also helps. At the same time, however, the area up to 2 cm below the soil surface should also be treated, as the larvae of the European corn borer gradually migrate down the shoot axis and overwinter in the root area.

With the GrindStar[®], you can carry out post-harvest management effectively and also very efficiently thanks to the low tractive power requirement and high area output.

ROTARY GRINDER GRINDSTAR®

GRINDSTAR 300® | GRINDSTAR 600®

TECHNICAL DATA

Technical data	GrindStar® 300	GrindStar® 600
Working width approx. (m)	2.95 (Rahmenbreite: 3.50 m)	5.85
Transport width approx. (m)	2.90	2.90
Frame design	Hydraulic folding	Hydraulic folding
Operating speed (km/h)	12-18	12-18
Number of rotors	8	16
Number of blades	56	112
Working depth (cm)	1-3	1-3
Approx. power requirement (kW/hp)	60/80	88/120
Attachment category	Cat. II / Cat. III	Cat. II / Cat. III
Weight approx. (kg)	1,280	1,820

STANDARD EQUIPMENT

- Rotors with 7 tools each
- Parallelogram suspension
- LED lighting system incl. warning signs
- Two-part frame structure incl. hydr. folding device
- Kennfixx hydraulic connector
- Integrated support feet for space-saving machine storage
- Power transmission-orientated frame construction for high durability
- Highest emergence rates with surface cultivation for ultra-shallow mechanical weed control and stubble cultivation
- Optimised post-harvest management through straw conditioning and ultra-shallow tillage without risk of spillage

MODELS

Model	Order no.	€/piece
GrindStar® 300	593-00303.GRS301H	
GrindStar® 600	593.00306.GRS600	

Installation effort: The equipment is supplied partially assembled. Allow approx. 2 hours for final assembly.

EQUIPMENT OPTIONS

1. Blade roller



Special equipment	Order no.	Weight approx. (kg)	€/piece
Blade roller (not possible in combination with front feeler wheels and impulse rail) NEW!			
GrindStar® 600 (2-teilig)	593-135810	860	

2. Impulse bar



Special equipment	Order no.	Weight approx. (kg)	€/piece
Pulse rail (cannot be combined with cutter roller)			
GrindStar® 300 (2-teilig)	593-135800	180	
GrindStar® 600 (2-teilig)	593-135801	220	

3. Depth control



Special equipment	Quantity	Order no.	Weight approx. (kg)	€/set
Front-mounted feeler wheels Ø 450 mm (cannot be combined with cutter roller)				
GrindStar® 300 / 600	2	593-135802	50	

4. After harrow



Special equipment	Order no.	Weight approx. (kg)	€/piece
Two-row following harrow			
GrindStar® 300 (2-teilig)	593-135803	160	
GrindStar® 600 (2-teilig)	593-135804	280	
Hydraulic double harrow adjustment NEW!			
GrindStar® 300 / 600	593-135211	40	

5. Outer deflectors



Special equipment	Order no.	Weight approx. (kg)	€/set
Outer deflectors NEW!			
GrindStar® 600 (right and left)	593-135811	74	

6. Hydraulic transport lock



Special equipment	Order no.	Weight approx. (kg)	€/piece
Hydraulic transport lock - ex works NEW!			
1x dw required	593-135200	35	

7. Mounting platform for SAPHIR DrillStar - ex works



Special equipment	Order no.	€/piece
DrillStar kit (platform and access ladder) ex works		
GrindStar® 300	593-008987	
GrindStar® 600	593-008988	

Note: The kit does not contain a sowing unit - the SAPHIR DrillStar models can be found in the price list on [pages 42 - 45](#).

To the
Product videoTo the
Testimonial

CLEARSTAR STRAW HARROW

CLEARSTAR 301 | CLEARSTAR 481 | CLEARSTAR 601 | CLEARSTAR 731 | CLEARSTAR 901

RETHINKING STUBBLE CULTIVATION

The SAPHIR ClearStar straw harrow enables efficient and cost-effective minimum tillage directly after combine harvesting. The sturdy, vibration-friendly 16 mm tines efficiently disperse straw nests, produce fine soil, ensure soil contact with the seed and encourage germination. On request, we also offer a knife roller for shredding harvest residues and the impulse bar as a cost-effective and stable alternative. The impulse rail breaks stems close to the ground in order to support rapid drying. This deprives diseases and pests of their habitat. As an option, we offer tines with a carbide coating ex works to ensure a longer service life.

In combination with the SAPHIR AllStar large spring tine harrow in the second pass, a highly efficient system for controlling volunteer cereals and weeds is possible, which is an effective alternative to the use of herbicides.

The SAPHIR ClearStar straw harrow is an essential component in the SAPHIR CleanField system to enable sustainable and efficient farming.



In addition to common bentgrass, common bentgrass and ryegrass, common foxtail has become the lead grass on many sites. These weeds can often no longer be controlled with herbicides alone due to resistance to active ingredients. In addition to expanding the crop rotation to include summer crops and catch crops, an important component of weed management is the adaptation of soil cultivation. Ultra-flat post-harvest management prevents the burial of volunteer and weed seeds and thus prevents the spread of black foxtail.



As the working width of the combine harvester increases, so do the requirements for straw distribution. The SAPHIR ClearStar straw harrow is the ideal tool for improving straw distribution after the harvest in a cost-effective and efficient manner.



The narrow line spacing of 60 mm distributes crop residues and shakes seeds out of ears, pods and husks. These can germinate under a protective layer of straw and can be removed a few days later in a further operation.



The SAPHIR FleX 16 mm diameter straw harrow tine is divided into three zones. The winding ensures a strong vibration of the tines. The high flexibility of the zinc prevents breakage in the event of collision with stones and foreign bodies. The tip is hardened to maximise service life and minimise wear costs. Advantage: the tine produces fine soil on the soil surface due to the strong vibration of the hardened tip, so that volunteer, weed and weed seeds find ideal germination conditions.



A wide range of accessories extends the ClearStar's range of applications: organic material is perfectly shredded with the knife roller and then redistributed with the straw harrow.

The parallelogram-guided impulse bar, which shears and shreds rapeseed stubble, is ideal for rapeseed stubble cultivation. The soil is thus covered by crop and plant residues and protected from drying out and wind and water erosion.

CLEARSTAR STRAW HARROW

CLEARSTAR 301 | CLEARSTAR 481 | CLEARSTAR 601 | CLEARSTAR 731 | CLEARSTAR 901

02

SOIL CULTIVATION

TECHNICAL DATA

Technical data	ClearStar 301	ClearStar 481	ClearStar 601	ClearStar 731	ClearStar 901
Working width approx. (m)	3,00	4,85	6,00	7,30	9,00
Transport width approx. (m)	3,00	2,90	2,90	2,90	3,00
Hydraulic folding	No	Yes	Yes	Yes	Yes
Required hydraulic connections	1 x dw	2 x dw	2 x da	2 x da	2 x dw
Number of tines (= double tines x 2) and thickness approx. (mm)	50 / 16	80 / 16	100 / 16	120 / 16	150 / 16
Line spacing approx. (mm)	60	60	60	60	60
Approx. working depth (cm)	0-4	0-4	0-4	0-4	0-4
Operating speed (km/h)	12-25	12-25	12-25	12-25	12-25
Power requirement approx. (kW/hp)	60 / 80	88 / 120	110 / 150	132 / 180	155 / 210
Attachment category	Cat. II /Cat. III	Cat. II /Cat. III	Cat. II /Cat. III	Cat. II /Cat. III	Cat. II /Cat. III
Weight approx. (kg)	770	1,520	1.710	1.910	2.450

STANDARD EQUIPMENT

- Lighting system incl. warning signs for safe road transport
- Hydraulic tine adjustment for setting the straw storage volume and harrow aggressiveness
- Spindle adjustment of the two rear rows of tines to the front rows for a homogeneous working pattern
- 16 mm thick, durable double tines for maximum service life
- 760 mm long Flex straw harrow tines with 3 zones for extremely high throughput during stubble cultivation
- 60 mm line spacing for full-surface soil crumbling
- Anti-rotation bolts in relevant pivot points for maximum strength and durability
- Kennfixx hydraulic couplings for ergonomic coupling and uncoupling
- Highest seed emergence rates for optimum utilisation in the CleanField system

MODELS

Model	Order no.	€/piece
ClearStar 301	593-00630.CS301	
ClearStar 481	593-00634.CS481	
ClearStar 601	593-00636.CS601	
ClearStar 731	593-00628.CS731	
ClearStar 901	593-00629.CS901	* with gear flow* divider

Installation effort: approx. 2 hours

EQUIPMENT OPTIONS

1. Tine options



Equipment	Order no.	€/set
Carbide-coated tines CS 301 (surcharge for standard equipment)	593-135460	
Carbide-coated tines CS 481 (surcharge for standard equipment)	593-135461	
Carbide-coated tines CS 601 (surcharge for standard equipment)	593-135462	
Carbide-coated tines CS 731 (surcharge for standard equipment)	593-135463	
Carbide-coated tines CS 901 (surcharge on standard equipment)	593-135464	

2. Pre-tools



Equipment	Order no.	Weight approx. (kg)	€/piece
Blade roller NEW!			
Knife roller CS 301, CS 481			On request
Blade roller set CS 601 with hydraulic lifting, 1 x DW required	593-008173	1,050	
Blade roller set CS 731 with hydraulic lifting, 1 x DW required	593-009012	1,200	
Impulse bar			
Pulse rail CS 301	593-010013	75	
Pulse rail CS 481	593-004001	140	
Pulse rail CS 601	593-004002	155	
Pulse rail CS 731	593-004003	170	

Note: The impulse bar and knife roller are not possible for the ClearStar CS 901 straw harrow due to its design.

3. Mounting platform for SAPHIR DrillStar - ex works



Equipment	Order no.	Weight approx. (kg)	€/piece
Mounting platform for ClearStar CS481, CS601 and CS731 - ex works	593004657	130	

Note: The kit does not contain a sowing unit - the SAPHIR DrillStar models can be found in the price list on [pages 42 - 45](#).



Blade roller combination SinusCut 300 for the front and SinusCut 860 for the rear

KNIFE ROLLER SINUSCUT

SINUSCUT 301 | SINUSCUT 400 | SINUSCUT 501 | SINUSCUT 601 | SINUSCUT 860

KNIFE ROLLER WITH UNIQUE SINUSOIDAL GRID!

Our SAPHIR SinusCut knife roller is characterised by its unique coiled double knife rollers. This achieves a rolling and cutting behaviour that has never been achieved before.

The roller runs particularly smoothly even at high working speeds and therefore maintains the working depth very precisely.

the working depth. The knife roller is therefore ideal for shredding catch crops and for rape and maize stubble cultivation. It splits up the stubble to stimulate the rotting process and prevent insect pests a place of refuge.



SinusCut 300



SinusCut 501



SinusCut 601


1

State Farm of Hesse (LLH)

Processing maize stubble with the SAPHIR SinusCut knife roller is an important phytosanitary measure. On the one hand, it helps to deprive the European corn borer of its winter habitat and, on the other, it accelerates the decomposition of the organic residue by effectively shredding it, which reduces the risk of fungal diseases such as Fusarium and Rhizoctonia. These can lead to considerable yield and quality losses, including in subsequent crops such as winter wheat.


2

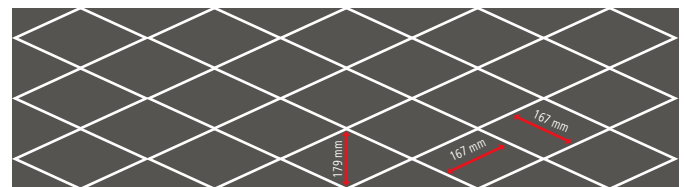
In addition to the classic field of application for corn borer control, our knife rollers cover a wide range of shredding applications, e.g. for rape seed stubble, winter-hardy catch crops or special crops. The device also produces some fine soil through minimum tillage, thus ensuring better emergence conditions for volunteer rape.


3

Our knife rollers can also be used in combination with other soil tillage implements, such as a disc harrow or a large spring tine harrow, in order to combine several operations and use the implements even more efficiently.


4

The two counter-rotating blade rollers result in the unique sinusoidal grid, creating a close-meshed cutting grid. Organic residues are efficiently shredded in this way.



Pattern

KNIFE ROLLER SINUSCUT

SINUSCUT 301 | SINUSCUT 400 | SINUSCUT 501 | SINUSCUT 601 | SINUSCUT 860

02

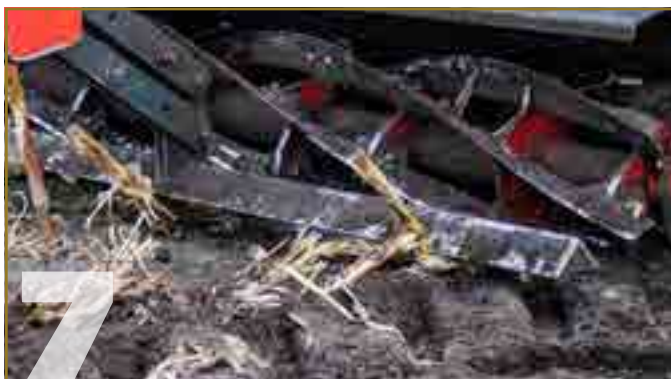
SOIL CULTIVATION



Compared to the 3 m model, our SAPHIR SinusCut 400, 501 & 601 cutter rollers have a hydraulic folding mechanism and a front-rear headstock. The standard steering support ensures optimum driving characteristics when front-mounted.



The SinusCut 301 at the front and the SinusCut 860 at the rear together offer a total working width of 8.55 metres. As an option, the SinusCut 860 can be equipped with a following harrow, which encourages sprouting seeds to germinate, produces fine soil, levels the surface and evenly distributes harvest residues. In addition, the following harrow enables the installation of a SAPHIR small seed spreader, with which catch crops can be sown in a single pass.



The optional impulse bar shears stubble, splits the root neck area and aligns the stubble for the close-meshed cut in a sinusoidal grid.



The optional additional weights on the SinusCut 301 increase the weight of the machine, enabling it to cut effectively even in hard ground conditions.

TECHNICAL DATA

Technical data	NEW!			NEW!	
	SinusCut 301	SinusCut 400	SinusCut 501	SinusCut 601	SinusCut 860
Working width approx. (m)	2.90	3.90	4.90	5.90	8.55*
Transport width approx. (m)	2.99	2.85	2.85	2.85	2.90
Frame design	Rigid	Hydr. folding	Hydr. folding	Hydr. folding	Hydr. folding
Number of rollers	2	4	4	4	4
Approx. roller diameter (mm)	360	360	360	360	360
Knife shape	spiral	spiral	spiral	spiral	spiral
Approx. working depth (cm)	1-3	1-3	1-3	1-3	1-3
Attachment category	Cat. II	Cat. II / III	Cat. II / III	Cat. II / III	Cat. III
Cultivation	Front	Front / Rear	Front / Rear	Front / Rear	Tail
Approx. working speed (km/h)	5-25	5-25	5-25	5-25	5-25
Power requirement approx. (kW/hp)	from 44/60	from 81/110	from 96/130	from 110/150	from 155/210
Weight in standard version approx (kg)	1,000	2,100	2,250	2,600	2,900

***Note on the SinusCut 860:** The working width refers to the combination with a SinusCut 300 in the front.

STANDARD EQUIPMENT

- Lighting system incl. warning signs (all working widths)
 - Reversible lighting system (front / rear) (SinusCut 400, 501 & 601)
- Stone protection plates
- Rubber splash guard
- Sharpened, coiled and hardened blade elements
- Roller elements with rubber bearings
- Parking supports (can be folded away) (SinusCut 400, 501, 601 & 860)
- For front-mounted road transport, observe the general STVZO

MODELS

Model	Order no.	€/piece
SinusCut 301	593-00253.SC301	
SinusCut 400	593-00254.SC400	
SinusCut 501	593-00255.SC501	
SinusCut 601	593-00256.SC601	
SinusCut 860**	593.00251.SC860	

****ATTENTION:** The price quoted applies only to the rear cutter roller SinusCut 860. The price of the SinusCut 300 must be added for a price calculation of a complete knife roller combination.

Installation time for SinusCut 860: approx. 4 hours

You will find optional extras on the following page

KNIFE ROLLER SINUSCUT

SINUSCUT 301 | SINUSCUT 400 | SINUSCUT 501 | SINUSCUT 601 | SINUSCUT 860

EQUIPMENT OPTIONS

1. Impulse bar



Special equipment	Order no.	Weight approx. (kg)	€/piece
Impulsschiene			
SinusCut 301	593005126	80	
SinusCut 400 (2-piece)	593-135504	190	
SinusCut 501 (2-piece)	593-135505	200	
SinusCut 601 (2-piece)	593005127	210	
SinusCut 860 (2-piece)	593-135508	210	

2. Additional weights



Special equipment	Order no.	Weight approx. (kg)	€/piece
Additional weights 400 KG			
SinusCut 301	593005125	410	

3. After harrow



Special equipment	Order no.	Weight approx. (kg)	€/piece
Post-strike NEW!			
SinusCut 860	593-009464	900	

4. Mounting platform for SAPHIR DrillStar - ex works



Special equipment	Order no.	Weight approx. (kg)	€/piece
DrillStar kit (platform and access ladder) ex works NEW!			
SinusCut 860	593-009465	50	

Note: Only possible with a following harrow!

Note: The kit does not contain a sowing unit - the SAPHIR DrillStar models can be found in the price list on [page 42 - 45](#).



To the
Product video

LARGE SPRING TINE HARROW ALLSTAR PROFI

ALLSTAR 301 PROFI | ALLSTAR 401 PROFI | ALLSTAR 501 PROFI | ALLSTAR 601 PROFI

FLEXIBLE, LIGHTWEIGHT, COST-EFFICIENT

With the SAPHIR AllStar Profi large spring tine harrow in 3, 4, 5 and 6 m working widths, you get a real all-rounder on your farm. Stubble cultivation, the incorporation of organic fertilisers and seedbed preparation are just as possible with the AllStar Profi as the ploughing of frozen catch crops.

The smooth-running AllStar Profi large spring tine harrow scores with its high area coverage, even with smaller and lighter tractors.



Large spring tines 45 x 12 with double spring

Equipment with double springs is recommended in heavy soil conditions, especially in loamy to clayey soils.



Large spring tines 45 x 12

Standard tines for slurry incorporation and seedbed preparation on light and medium soils.



Mammoth ham 60 x 12 x 690 with a flock of geese

The mammoth tines are designed for universal use in seedbed preparation, slurry incorporation and stubble cultivation.



Mammoth ham 60 x 12 x 690

Equipped with narrow shares, working depths of up to 15 cm can be realised with the mammoth tine. This allows organic fertilisers and crop residues can be cleanly incorporated into the soil.



Hercules prong 70 x 12 x 755 (SERIES)

For particularly heavy-duty operating conditions in the 1st gear. Hercules tines are designed for the second pass of stubble cultivation.



Hercules prong 70 x 12 x 755 with geese flock

The geese flock share has a working width of 180 mm. It is intended for full-surface and shallow stubble cultivation and for mechanical weed removal.

EXKLUSIV

SAPHIR Endurance Carbide Goosefoot blade 200 mm for the 70 x 12 Hercules tine



The in-house SAPHIR geese flock coulters offer a long service life with a flat angle of attack. The integrated carbide discs ensure significantly fewer coulters changes during the season.



For high efficiency and minimal nutrient losses, organic fertilisers should be worked into the soil as quickly as possible before sowing. The SAPHIR AllStar Profi impresses when incorporating organic fertiliser with its high impact power and intensive mixing of slurry, solid manure and compost with the soil.



The SAPHIR AllStar Profi impresses in stubble cultivation after GPS cereals and threshing crops with its shallow working method and intensive mixing of the harvest residues into the soil. Sprouted grain is reliably stimulated to germinate and can be removed cost-effectively with a further pass using the AllStar Profi.

LARGE SPRING TINE HARROW ALLSTAR PROFI

ALLSTAR 301 PROFI | ALLSTAR 401 PROFI | ALLSTAR 501 PROFI | ALLSTAR 601 PROFI

02

SOIL CULTIVATION



The SAPHIR AllStar Profi can be equipped with a slotted hole and front support wheels for additional depth guidance for the best results and full-surface processing even at shallow working depths. In addition to improved ground tracking, this ensures that the machine runs even more smoothly during work.



Small seed spreaders with a hopper capacity of 200 - 500 litres are available for sowing catch crops. The seed is evenly distributed directly in front of the rear roller with 8 baffle discs. The seed is worked into the top 2-3 cm. This ensures that the field emerges evenly.



Thanks to the new optional hydraulic depth adjustment, the AllStar Profi can now react even faster to changing conditions.



The tube bar roller is ideal for depth control on all sites. The working pattern is characterised by high fine soil production, good levelling effect and low reconsolidation.



On medium and heavy soils, the roof ring roller is used for stubble cultivation to reconsolidate the soil in strips. This provides optimum conditions for even emergence of volunteer cereals and weed seeds and also protects the soil from erosion. During seedbed preparation, a high degree of reconsolidation is achieved for the best possible field emergence of the following crop. The roof ring roller is suitable for all soil conditions.



The U-profile ring roller with a diameter of \varnothing 540 mm offers a wide range of applications and can be used in many ways. The U-profile ring absorbs soil and thus consolidates using the "soil to soil" method. This leaves an open-pored floor surface.



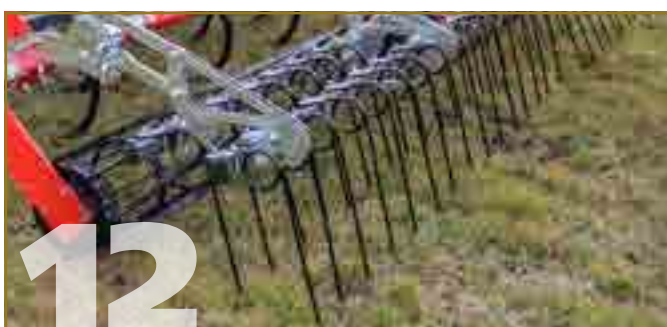
The double crumbler roller consists of two crumbler rollers with \varnothing 350 mm. They are used for seedbed preparation and mech. Weed control on medium to heavy soils. The root balls are freed from soil by means of the root strips. As the reconsolidation of this roller is low, the weeds can be brought to the surface by a subsequent harrow. The ground pressure of the rear roller can be set using adjustable spindles (optimum approx. 40 % at the front / 60 % at the rear)


NEU

A new double roller is available for the SAPHIR AllStar Profi large spring tine harrow, which has been specially developed for seedbed preparation. It combines a tube bar roller with a diameter of 500 mm and a crumbler roller with a diameter of 350 mm. This combination ensures particularly intensive crumbling of the soil and thus creates optimum conditions for sowing.



For the perfect finish after the trailing harrow, single-row or double-row trailing harrows are available. The soil surface is also levelled and plant and crop residues are redistributed.



To remove weeds and grass weeds from the soil surface and shake the soil from the roots, we have developed an optional hydraulically angle-adjustable double-row following harrow. Thanks to the generous adjustment range, it is easy to react to any application situation from the cab - for optimum weed control.

LARGE SPRING TINE HARROW ALLSTAR PROFI

ALLSTAR 301 PROFI | ALLSTAR 401 PROFI | ALLSTAR 501 PROFI | ALLSTAR 601 PROFI

TECHNICAL DATA

Technical data	AllStar 301 Profi	AllStar 401 Profi	AllStar 501 Profi	AllStar 601 Profi
Working width approx. (m)	3,00	4,00	5,00	6,00
Transport width approx. (m)	3,00	2,55	2,55	2,55
Frame design	Rigid	Hydraulic folding	Hydraulic folding	Hydraulic folding
Total number of tines	21	27	33	41
Number of tines 1. Series	5	6	8	10
Number of tines 2. Series	6	7	9	11
Number of tines 3. Series	5	7	8	10
Number of tines 4. Series	5	7	8	10
Line spacing approx. (mm)	143	143	143	143
Working depth with narrow share approx. (cm)	2 - 15	2 - 15	2 - 15	2 - 15
Operating speed (km/h)	8 - 18	8 - 18	8 - 18	8 - 18
Power requirement approx. (kW/hp)	44/60	59/80	75/100	90/120
UL connection	Cat. II/III	Cat. II /III	Cat. II / III	Cat. II /III
Weight without tracking roller (kg)	580	900	1.000	1,100

STANDARD EQUIPMENT

- Hercules tine 70 x 12 x 755
- 4-beam frame structure
- Lighting system incl. warning signs
- AllStar 401, 501, 601: two-part frame structure with hydraulic folding (1 x dw required)
- KENNFIXX couplings for ergonomic coupling and uncoupling
- Frame made of thick-walled profile tube 60 x 60 mm for particularly long service life
- Different beam spacings (510 mm - 600 mm - 510 mm) for optimised soil flow
- High emergence rates and 100% undercut for mechanical weed control for optimum use in the optimised use in the CleanField system

Note: The basic price does not include a tracking roller. The appliances are supplied fully assembled. The castor rollers may be dismantled for transport reasons.

MODELS

Modell	Order no.	€/piece
AllStar 301 Profi	593.00625.GE301-3ZM	
AllStar 401 Profi	593.00624.GE401-3ZM	
AllStar 501 Profi	593.00626.GE501-3ZM	
AllStar 601 Profi	593.00627.GE601-3ZM	

EQUIPMENT OPTIONS

1. Track eradicator tines



Special equipment	Order no.	Weight approx. (kg)	€/piece
For all working widths	593135675	20	

2. Tine assembly

The SAPHIR large spring tine harrows can be equipped with different tines per row of tines. Please refer to the technical details for the number of tines and state the row + tine name in the order in the order.

Note: In the following table, all tines are listed in surcharge / piece.



Equipment	Order no.	Weight approx. (kg)	€/piece
Hercules tine 70 x 12 x 755			
with reinforced narrow share 50 mm	593135276	12	Series
with goose foot shares 180 mm (surcharge for standard version)	593135277	13	
with heavy-duty narrow share 55mm (surcharge for standard version)	593004049	13	
with heavy-duty goose foot share 200mm (surcharge for standard version)	593004050	14	
Double spring with holder 70 x 12 mm (surcharge for standard version) For Hercules tines	593-135289		
Enclosed with the Hercules tine of your choice			
SAPHIR Endurance Carbide goosefoot blade 200mm Without screws, loose accessory pack (without assembly)	11481067		
Large spring tines 45 x 12			
with reinforced share (instead of the standard version)	5931208381	6	
Double spring (surcharge for standard version) for large spring tines 45 x 12	593135629	9	
Mammoth tine 60 x 12 x 690			
with reinforced share (instead of the standard version)	593135274	9	
with goose foot share 180 mm (instead of the standard version)	593135275	9	

3. Levelling



Equipment	Order no.	Weight approx. (kg)	€/piece
AllStar drag tine pairs			
AllStar 301 Profi drag tine set with 5 pairs of drag tines	593135640-2	28	
AllStar 401 Profi drag tine set with 6 pairs of drag tines	593135620-2	35	
AllStar 501 Profi drag tine set with 8 pairs of drag tines	593135630-2	49	
AllStar 601 Profi drag tine set with 10 pairs of drag tines	593135631-2	63	



Equipment	Order no.	Weight approx. (kg)	€/piece
AllStar levelling bar			
AllStar 301 Profi levelling bar One-piece	593003887	70	
AllStar 401 Profi levelling bar, three-part	593003888	180	
AllStar 501 Profi levelling bar three-part	593003889	190	
AllStar 601 Professional levelling bar, three-part	593003890	200	



Equipment	Order no.	€/set
AllStar edge guide plates (set, right & left)	593003438	80

LARGE SPRING TINE HARROW ALLSTAR PROFI

ALLSTAR 301 PROFI | ALLSTAR 401 PROFI | ALLSTAR 501 PROFI | ALLSTAR 601 PROFI

4. Depth control



Equipment	Order no.	Weight approx. (kg)	€/set
Front-mounted feeler wheels ø 450 mm (slotted hole required) <small>NEW!</small>			
AllStar Profi front jockey wheel set (2 pieces) incl. slotted hole adapter	593-135116	60	

Equipment	Order no.	Weight approx. (kg)	€/set
Rear support wheels with pneumatic tyres (23x8.50-12 / Ø 575 mm; incl. wheel mark eradicator tines)			
AllStar 301 Profi: 2 pieces	593003883	150	
AllStar 401 Profi: 4 pieces	593003884	270	
AllStar 501 Profi: 4 pieces	593003885	280	
AllStar 601 Profi: 4 pieces	593003886	290	

5. Hydraulic depth adjustment



Equipment	Order no.	Weight approx. (kg)	€/set
Hydraulic depth adjustment (incl. slotted hole adapter) <small>NEW!</small>			
AllStar 301 Profi (1x dw required)	593-135114	70	
AllStar 401-601 Profi (1x dw required)	593-135113	140	

6. Trailing rollers



Equipment	Order no.	Weight approx. (kg)	€/piece
Crumbler roller Ø 350 mm			
AllStar 301 Profi	593135624-2	158	
AllStar 401 Profi	593135621-2	250	
AllStar 501 Profi	593135625-2	276	
AllStar 601 Profi	593135626-2	316	
Double crumbler roller Ø 350 mm			
AllStar 301 Profi	593135668-2	366	
AllStar 401 Profi	593135669-2	600	
AllStar 501 Profi	593135670-2	652	
AllStar 601 Profi	593135671-2	732	
Tube packer roller Ø 500 mm			
AllStar 301 Profi	593135623-2	210	
AllStar 401 Profi	593135622-2	320	
AllStar 501 Profi	593135627-2	360	
AllStar 601 Profi	593135628-2	420	
Double roller pipe packer roller Ø 500 mm & crumbler roller Ø 350 mm combined <small>NEW!</small>			
AllStar 301 Profi	593-135690	398	
AllStar 401 Profi	593-135691	630	
AllStar 501 Profi	593-135692	696	
AllStar 601 Profi	593-135693	796	
Roof ring roller Ø 600 mm			
AllStar 301 Profi	593000516-2	345	
AllStar 401 Profi	593135679-2	510	
AllStar 501 Profi	593135680-2	600	
AllStar 601 Profi	593135681-2	690	
U-profile ring roller Ø 540 mm			
AllStar 301 Profi	593001992-3	445	
AllStar 401 Profi	593002175-2	650	
AllStar 501 Profi	593002176-2	770	
AllStar 601 Profi	593002177-2	890	

7. Harrow


Equipment	Order no.	Weight approx. (kg)	€/piece
Follow harrow for crumbler roller/double crumbler roller			
AllStar 301 Profi	593135641-2	68	
AllStar 401 Profi	593135652-2	86	
AllStar 501 Profi	593135636-2	128	
AllStar 601 Profi	593135637-2	134	
Follow harrow for other trailing rollers			
AllStar 301 Profi	593135642-2	76	
AllStar 401 Profi	593135653-2	94	
AllStar 501 Profi	593135638-2	144	
AllStar 601 Profi	593135639-2	150	
Two-row following harrow for all following rollers NEW!			
AllStar 301 Profi	593-135660-2	150	
AllStar 401 Profi	593-135661-2	252	
AllStar 501 Profi	593-135662-2	275	
AllStar 601 Profi	593-135663-2	298	
Hydraulic double harrow adjustment NEW!			
AllStar 301 Profi (1x dw required)	593-135210	20	
AllStar 401, 501, 601 Profi (1x dw required)	593-135211	40	

8. Hydraulic transport lock


Special equipment	Order no.	Weight approx. (kg)	€/piece
Hydraulic transport lock - ex works NEW! 1x dw required	593-135200	35	

9. Mounting platform for SAPHIR DrillStar - ex works


Equipment	Order no.	Weight approx. (kg)	€/piece
Mounting platform for SAPHIR DrillStar - ex works			
AllStar 301 Profi	593003140	120	
AllStar 401, 501, 601 Profi	593-002570-2	120	

Note: The kit does not contain a sowing unit - the SAPHIR DrillStar models can be found on [pages 42 - 45](#)

To the product
video
AllStar
Longline 751



To the product
video
AllStar
Longline 401



ALLSTAR LONGLINE LARGE SPRING TINE HARROW

ALLSTAR LONGLINE 301 | ALLSTAR LONGLINE 401 | ALLSTAR LONGLINE 501 | ALLSTAR LONGLINE 601 | ALLSTAR LONGLINE 701 | ALLSTAR LONGLINE 751

The SAPHIR AllStar Longline combines a narrow line spacing of 130 mm with 8 tool bars for the most intensive processing with maximum throughput. Equipped with goose foot shares, the overcut of 140 % enables full-surface processing. This makes the Saphir AllStar Longline large spring tine harrow ideal for shallow stubble and soil cultivation.

The Saphir AllStar Longline can be used universally thanks to the wide range of accessories with various tines, shares, following rollers and following harrows as well as numerous options for depth control. The wide range of applications also includes seedbed preparation, the incorporation of organic fertilisers, the ploughing of catch crops and clover grass and the control of root weeds.

Thanks to the power flow-optimised design and the absence of heavy rollers, the series is easy to pull and allows a maximum working width of 7.5 m in the three-point position.



Hercules prong 70 x 12 x 755

For particularly heavy-duty operating conditions in the 1st gear. Hercules tines are designed for the second pass of stubble cultivation.



Hercules prong 70 x 12 x 755 With goosefoot share

The goosefoot share has a working width of 180 mm. It is intended for full-surface and shallow stubble cultivation and for mechanical weed removal.

EXKLUSIV



SAPHIR Endurance Carbide Goosefoot blade 200 mm for the 70 x 12 Hercules tine

The in-house SAPHIR goosefoot coulters offer a high degree of Service life at a flat angle of attack.

The integrated carbide discs ensure significantly fewer Change of flock during the season.



Hydraulic adjustment of the working depth is available as an option in order to be able to respond to changing conditions at any time. The angle of the two-row following harrow can also be adjusted hydraulically as an option, for example to conveniently adjust the working quality while travelling when working with large quantities of organic material.



Perfect depth control thanks to front feeler wheels, trailing roller and slotted hole - so no stalk is left standing! The Saphir AllStar Longline can be adapted to any location thanks to the large selection of trailing rollers.



Cutting flat over the entire surface and thus saving water - no problem for the SAPHIR AllStar Longline with 8 tool bars and goosefoot shares. Due to the shallow working depth of 3 cm in the first stubble cultivation, the mulch layer is largely retained, while the crop stubble is separated from the root. Spilt grain is mixed in shallowly and encouraged to germinate.



Catch crops, undersown crops and perennial clover-grass are valuable components in any crop rotation to promote soil fertility. However, the mechanical changeover poses a challenge. By minimising the impact on the soil, the soil structure is preserved. At the same time, the full-surface cultivation in combination with the optional double-row following harrow ensures effective weed control. The combination with our SinusCut knife roller in the front attachment results in a powerful and efficient combination for ploughing catch crops.

ALLSTAR LONGLINE LARGE SPRING TINE HARROW

ALLSTAR LONGLINE 301 | ALLSTAR LONGLINE 401 | ALLSTAR LONGLINE 501 | ALLSTAR LONGLINE 601 | ALLSTAR LONGLINE 701 | ALLSTAR LONGLINE 751

TECHNICAL DATA

Technical data	AllStar Longline 301	AllStar Longline 401	AllStar Longline 501	AllStar Longline 601	AllStar Longline 701	AllStar Longline 751
Working width approx. (m)	3.00	4,00	5,00	6,00	7.00	7.50
Transport width approx. (m)	3.00	2.90	2.90	2.90	2.90	2.90
Frame design	Rigid	Hydraulic folding	Hydraulic folding	Hydraulic folding	Hydraulic folding	Hydraulic folding
Theoretical line spacing approx. (mm)	130	130	130	130	130	130
Number of tines	23	31	39	45	53	57
Tine type	70x12 tines	70x12 tines	70x12 tines	70x12 tines	70x12 tines	70x12 tines
Working depth with narrow share approx. (cm)	2-15	2-15	2-15	2-15	2-15	2-15
Operating speed (km/h)	5-15	5-15	5-15	5-15	5-15	5-15
Power requirement approx. (kW/hp)	44/60	59/80	75/100	90/120	117/160	117/160
UL connection	Cat. II/III	Cat. II/III	Cat. II/III	Cat. II/III	Cat. II/III	Cat. II/III
Weight without tracking roller approx. (kg)	1,000	1,400	1,600	1,800	2,320	2,420

STANDARD EQUIPMENT

- Hercules tine 70 x 12 x 755 with reinforced narrow share
- 8-beam frame structure
- Lighting system incl. warning signs
- AllStar Longline 401, 501, 601, 701, 751: two-part frame structure with hydraulic folding device (1xdw required)
- Force flow-orientated frame construction for particularly long service life
- Beam spacing 400 mm each between the zinc support tubes

MODELS

Model	Order no.	€/piece
AllStar Longline 301	593.00627.LL301	
AllStar Longline 401	593.00627.LL401	
AllStar Longline 501	593.00627.LL501	
AllStar Longline 601	593.00627.LL601	
AllStar Longline 701	593-00627.LL701	
AllStar Longline 751	593.00627.LL751	

1. Duck foot shares



Special equipment	Quantity	Order no.	€/set
Additional price for goosefoot shares 180 mm		56050 504027	
AllStar Longline 301	23	593135282	
AllStar Longline 401	31	593135283	
AllStar Longline 501	39	593135284	
AllStar Longline 601	45	593135285	
AllStar Longline 701	53	593-135293	
AllStar Longline 751	57	593135286	

Special equipment	Order no.	€/piece
Goosefoot share 200 x 5 mm Without screws, supplied loose (no assembly)	56050 504032	

Special equipment	Order no.	€/piece
Double spring with holder 70 x 12 mm For Hercules tines	593-135289	

Special equipment	Order no.	€/piece
SAPHIR Endurance Carbide goosefoot blade 200 mm Without screws, supplied loose (no assembly)	11481067	

2. Depth control

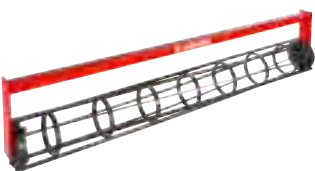


Special equipment	Quantity	Order no.	Weight approx. (kg)	€/set
Slotted hole required, please check!				
AllStar Longline 301	2	593004203-1	50	
AllStar Longline 401 - 751	4	593004204-1	100	
AllStar Longline 401 - 751		593-135112	320	
AllStar Longline 401 - 751 (retrofit kit incl. packer arms)		593-1352111	400	

*Cannot be combined with the superstructure platform

Special equipment	Quantity	Order no.	Weight approx. (kg)	€/set
Rear-mounted support wheels Ø 575 mm				
AllStar Longline 301	2	593003883	150	
AllStar Longline 401	4	593003884	270	
AllStar Longline 501	4	593003885	280	
AllStar Longline 601	4	593003886	290	
AllStar Longline 701	4	593-135705	300	
AllStar Longline 751	4	593004201-1	320	

3. Trailing rollers



Special equipment	Order no.	Weight approx. (kg)	€/piece
Crumbler roller Ø 350 mm			
AllStar Longline 301	593135624-2	158	
AllStar Longline 401	593135621-2	250	
AllStar Longline 501	593135625-2	276	
AllStar Longline 601	593135626-2	316	
AllStar Longline 701	593-135702	500	
AllStar Longline 751	593005140	390	
Pipe packer roller Ø 500 mm			
AllStar Longline 301	593135623-2	210	
AllStar Longline 401	593135622-2	320	
AllStar Longline 501	593135627-2	360	
AllStar Longline 601	593135628-2	420	
AllStar Longline 701	593-135704	540	
AllStar Longline 751	593005141	500	

All prices are in € plus freight costs and statutory VAT. Reproduction, even in part, only with written authorisation.
The entire price list is subject to change. Technical changes and errors excepted. Goods only available while stocks last.

ALLSTAR LONGLINE LARGE SPRING TINE HARROW

ALLSTAR LONGLINE 301 | ALLSTAR LONGLINE 401 | ALLSTAR LONGLINE 501 | ALLSTAR

LONGLINE 751

ALLSTAR LONGLINE 601 | ALLSTAR LONGLINE 701 | ALLSTAR LONGLINE 751

4. After harrow



Special equipment	Order no.	Weight approx. (kg)	€/piece
Single-row harrow for crumbler rollers			
AllStar Longline 301	593135641-2	68	
AllStar Longline 401	593135652-2	86	
AllStar Longline 501	593135636-2	128	
AllStar Longline 601	593135637-2	134	
AllStar Longline 701	593-135701	148	
AllStar Longline 751	593135656-2	154	
Single-row following harrow for other following rollers			
AllStar Longline 301	593135642-2	76	
AllStar Longline 401	593135653-2	94	
AllStar Longline 501	593135638-2	144	
AllStar Longline 601	593135639-2	150	
AllStar Longline 701	593-135703	164	
AllStar Longline 751	593135657-2	170	
Double-row following harrow for pipe packer and crumbler roller			
AllStar Longline 301	593135660	148	
AllStar Longline 401	593135661	250	
AllStar Longline 501	593135662	270	
AllStar Longline 601	593135663	296	
AllStar Longline 701	593135664	340	
Hydraulic double harrow adjustment NEW!			
AllStar Longline 301	593-135210	20	
AllStar Longline 401 - 751 (1x dw required)	593-135211	40	

5. Hydraulic transport lock



Special equipment	Order no.	Weight approx. (kg)	€/piece
Hydraulic transport lock - ex works NEW! 1x dw required	593-135200	35	

6. Mounting platform for SAPHIR DrillStar - ex works



Equipment	Order no.	Weight approx. (kg)	€/piece
DrillStar kit (platform and access ladder) ex works*			
AllStar Longline 301	593135287	120	
AllStar Longline 401, 501, 601, 701, 751	593135288	120	

*Cannot be combined with hydraulic depth control.

Note: The kit does not contain a sowing unit - the SAPHIR DrillStar models can be found in the price list on [page 42 - 45](#).





DISCSTAR PROFI COMPACT DISC HARROW

DISCSTAR 305 PROFI | DISCSTAR 405 PROFI | DISCSTAR 505 PROFI | DISCSTAR 605 PROFI

THE NON-ANGLE DISC POSITION FOR AN UNRIVALLED WORK RESULT!

The SAPHIR DiscStar Profi is the ideal machine for shallow and intensive stubble cultivation. The incorporation of solid manure and high proportions of organic residues are among the strengths of this machine. Other applications include shallow ploughing of catch crops, slurry incorporation and shallow ploughing of fallow land. In seedbed preparation, the DiscStar Profi is characterised by its high fine soil production both in mulch sowing and on ploughed land. The particularly low fuel consumption and minimal material wear are unique. The SAPHIR DiscStar Profi compact disc harrows are characterised by their stone protection with polyurethane rubber elements. The versatile equipment variants allow the machine to be optimally configured for every application.


1

Thanks to the proven SAPHIR non-angle disc position (no undercutting of the disc), the machine is easy to adjust and guarantees smooth, side-pull-free and blockage-free work. clogging-free working.

- Low lateral forces on the disc, therefore no lateral pull of the machine.
 - Important for steering systems (RTK/GPS).
- No swinging up of the machine possible.


2

- Ground-level soil throw from the first to the second row of discs. This results in an intensive mixing effect and minimised fuel consumption.
- Uniform working pattern, as the second row of discs allows the soil to pass through pass through.
- Due to the trouble-free passage of the soil mulch, high organic residues can be worked in evenly. No straw nests are created.
- Seamless connecting journeys thanks to low soil throw and edge guide plates.
- Compact design


3

The high clearance of the discs enables a very compact design of the machine. This means that three-point mounted short disc harrows with large working widths can be driven by tractors in lower power classes. The front axle relief is low. This increases the efficiency of the tractor enormously.


4

To increase operational capacity utilisation, a hydraulic three-point linkage is available for the DiscStar 305 Profi for additional mounting of a mechanical seed drill. This means that the seedbed can be prepared and catch or main crops sown in mulch sowing in a single pass. Even on ploughed areas, the DiscStar discs achieve a high crumbling and levelling effect.


5

Low wear on the discs due to small contact surfaces with the ground and complete self-propulsion of the disc. There is no friction between the back of the disc between the back of the disc and the floor, which minimises wear on the disc. The serrated concave discs with a diameter of Ø 560 mm are individually mounted with dust-tight and maintenance-free quality bearings. The disc spacing is 250 mm.

DISCSTAR PROFI COMPACT DISC HARROW

DISCSTAR 305 PROFI | DISCSTAR 405 PROFI | DISCSTAR 505 PROFI | DISCSTAR 605 PROFI

TECHNICAL DATA

Technical data	DiscStar 305 Profi	DiscStar 405 Profi	DiscStar 505 Profi	DiscStar 605 Profi
Working width approx. (m)	3,00	4,00	5,00	6,00
Transport width approx. (m)	3,00	3,00	3,00	3,00
Frame design	Rigid	Hydraulic folding	Hydraulic folding	Hydraulic folding
Folding	Einteilig	Three-part	Three-part	Three-part
Number of discs	24	32	40	48
Disc diameter approx. (mm)	560	560	560	560
Approx. working depth (cm)	3 - 15	3 - 15	3 - 15	3 - 15
Operating speed (km/h)	8 - 20	8 - 20	8 - 20	8 - 20
Power requirement approx. (kW/hp)	56/80	88/120	110/150	125/170
UL connection	Cat. II/III	Cat. III	Cat. III	Cat. III
Weight, standard version	1,350	2.450	2.840	3.200

STANDARD EQUIPMENT

- Lighting system incl. warning signs

- Maintenance-free quality bearings
- Hydraulic folding from DiscStar 405 Profi (1 x DW)
- Kennfixx hydraulic clutches

MODELS

Modell	Order no.	€/piece
DiscStar 305 Profi	593.00683.DS305	
DiscStar 405 Profi	593.00684.DS405	
DiscStar 505 Profi	593.00685.DS505	
DiscStar 605 Profi	593.00686.DS605	

Note: The machine is supplied fully assembled. Trailing roller is dismantled for transport reasons if necessary.

EQUIPMENT OPTIONS

1. Depth control



Equipment	Order no.	Weight approx. (kg)	€/piece
Hydric depth adjustment (on block via clip adjustment)			
DiscStar 305 Profi (1 x dw required)	593003099	20	
DiscStar 405 Profi (1 x dw required)	593003067	40	
DiscStar 505 Profi (1 x dw required)	593003107	40	
DiscStar 605 Profi (1 x dw required)	593003090	40	

2. Harrow


Equipment	Order no.	Weight approx. (kg)	€/piece
Nachstriegel			
DiscStar 305 Profi	593002822	90	
DiscStar 405 Profi	593002823	120	
DiscStar 505 Profi	593002824	150	
DiscStar 605 Profi	593002825	180	

3. Trailing rollers


Equipment	Order no.	Weight approx. (kg)	€/piece
Tube packer roller Ø 500 mm			
DiscStar 305 Profi	593002892	210	Series
DiscStar 405 Profi	593002893	280	Series
DiscStar 505 Profi	593002894	350	Series
DiscStar 605 Profi	593002895	420	Series
Roof ring roller with traction bars Ø 600 mm (surcharge for standard version with tube packer roller)			
DiscStar 305 Profi	593002826	360	
DiscStar 405 Profi	593002827	480	
DiscStar 505 Profi	593002828	600	
DiscStar 605 Profi	593002829	720	
U-profile ring roller Ø 540 mm (surcharge for standard version with tube packer roller)			
DiscStar 305 Profi	593002830	400	
DiscStar 405 Profi	593002831	530	
DiscStar 505 Profi	593002832	670	
DiscStar 605 Profi	593002833	800	

4. Hydraulic three-point linkage for seed drill (only for DiscStar 305 Profi)


Equipment	Order no.	Weight approx. (kg)	€/piece
Three-point linkage for seed drill			
	593002838	200	

5. Mounting platform for SAPHIR DrillStar - ex works


Different illustration, side access

Equipment	Order no.	Weight approx. (kg)	€/piece
Mounting platform for SAPHIR DrillStar - ex works			
DiscStar Profi Not possible in combination with the additional weights.	593003141	120	

Note: The kit does not contain a sowing unit - the SAPHIR DrillStar models can be found on page 42-45

6. Additional weights


Equipment	Order no.	€/piece
Additional weight set 160 kg	593003586	
Additional weight set 320 kg	593003587	

Additional weights not possible in combination with the assembly platform.

NEW!

02

SOIL CULTIVATION



TERRASTAR 3-300 UNIVERSAL CULTIVATOR

TERRASTAR 3-300 | TERRASTAR 3-300 H | TERRASTAR 3-300 S | TERRASTAR 3-300 SH

YOUR PROFESSIONAL FOR ALL TASKS

After harvesting cereals, oilseed rape or grain legumes, targeted post-harvest management is crucial in order to reliably control volunteer seeds, weeds and root weeds. The three-bar TerraStar 3-300 achieves a flat, full-surface cut that encourages volunteer crops to germinate and removes existing vegetation. Perennial weeds such as creeping thistle can also be effectively weakened by repeated cutting.



Thanks to the 800 mm frame height and the generous passageway, the TerraStar 3-300 effortlessly processes large quantities of straw, catch crops or organic fertilisers. Residues are evenly incorporated and composting is encouraged.



The TerraStar 3-300 reliably removes compaction and ruts. Damaged, compacted zones can be broken up and deeply loosened - for healthy root growth and better water supply. Thanks to the standard hydraulic working depth adjustment, the working depth can be conveniently adjusted to changing conditions at any time.



The large bar spacing and high frame clearance ensure optimum material flow - even when incorporating frozen catch crops or large quantities of organic matter.



The TerraStar 3-300 has a three-beam design. A line spacing of 293 mm and the high frame clearance ensure excellent passage even under difficult conditions.

The round tube frame reduces the build-up of soil and plant residues, makes cleaning easier and minimises the spread of weed and weed seeds to other fields.

The attachment is carried out in a three-point system with coupling points for categories 2 and 3.



The adjustable share angle enables either a flat, full-surface cut or safe penetration into the soil, even in dry conditions.

For maximum flexibility, numerous share variants are available that are suitable for shallow, medium-deep or deep cultivation.

TERRASTAR 3-300 UNIVERSAL CULTIVATOR

TERRASTAR 3-300 | TERRASTAR 3-300 H | TERRASTAR 3-300 S | TERRASTAR 3-300 SH

02

SOIL CULTIVATION



The levelling discs adjust automatically when the working depth changes. The distance to the last row of tines is also adjusted so that the soil comes to rest sufficiently in front of the levelling tools.

The outer edge discs are rubber-mounted and adjustable in angle - for a uniform working pattern in all conditions.



Saphir offers a wide range of proven tracking rollers for reconsolidation. The depth is conveniently set hydraulically from the cab.

The working depth remains stable thanks to the parallelogram guide - there is no need to readjust the levelling.



The optional double-spring-based stone safety catch with a release force of 550 kg and a release travel of 300 mm ensures operational safety in stony conditions.



Triggering distance for stone fuse

TECHNICAL DATA

Technical data	TerraStar 3-300	TerraStar 3-300 H	TerraStar 3-300 S	TerraStar 3-300 SH
Working width (m)	2.99	2.99	2.99	2.99
Transport width (m)	2.99	2.99	2.99	2.99
Frame design	Rigid	Rigid	Rigid	Rigid
Frame height (mm)	800	800	800	800
Number of tines	10	10	10	10
Number of tines 1. row	3	3	3	3
Number of tines 2. row	3	3	3	3
Number of tines 3. row	4	4	4	4
Line spacing (cm)	29.3	29.3	29.3	29.3
Working depth (cm)	2-30	2-30	2-30	2-30
Operating speed (km/h)	5-15	5-15	5-15	5-15
Power requirement (kW/hp)	80/110	80/110	80/110	80/110
UL connection	Cat. II / III	Cat. II / III	Cat. II / III	Cat. II / III
Marginal disc flap	mechanical	Hydraulic	mechanical	Hydraulic
Stone protection	Shear bolt	Shear bolt	Double spring	Double spring
Weight (without roller) (kg)	1,300	1,330	1,665	1,650

STANDARD EQUIPMENT

- Hydraulic depth adjustment
- Narrow share with 80 mm guide plate, 350 mm wing share
- Stone protection by means of shear bolt (TerraStar 3-300 / TerraStar 3-300 H)
- Stone protection by means of double spring (TerraStar 3-300 S / TerraStar 3-300 SH)
- Levelling hollow discs
- Mechanical edge disc folding (TerraStar 3-300 / TerraStar 3-300 S)
- Hydraulic edge disc folding (TerraStar 3-300 H / TerraStar 3-300 SH)
- Lighting system incl. warning signs

MODELS

Model (without roller)	Order no.	€/piece
TerraStar 3-300	593-00800.MSG308	
TerraStar 3-300 H with hydraulic edge discs	593-00800.MSG308-H	
TerraStar 3-300 S with double-spring-based stone safety catch	593-00800.MSG308S	
TerraStar 3-300 SH with hydraulic edge discs and double-spring-based stone protection	593-00800.MSG308S-H	

Installation effort: approx. 2 hours

You will find optional extras on the following page

TERRASTAR 3-300 UNIVERSAL CULTIVATOR

TERRASTAR 3-300 | TERRASTAR 3-300 H | TERRASTAR 3-300 S | TERRASTAR 3-300 SH

02

SOIL CULTIVATION

EQUIPMENT OPTIONS

1. Tine assembly



Equipment	Order no.	€/set
Narrow share (45 mm) for greater working depth		
TerrStar 3-300/H/S/SH 10 pieces	593-135299	
Heavy Duty Scharspitze		
TerrStar 3-300/H/S/SH 10 pieces	593-135398	

2. Trailing rollers



Equipment	Order no.	Gewicht ca. (kg)	€/piece
Pipe packer roller Ø 500 mm			
TerrStar 3-300/H/S/SH	593-008711	210	
Roof ring roller Ø 600 mm			
TerrStar 3-300/H/S/SH	593-008697	345	
U-profile ring roller Ø 540 mm			
TerrStar 3-300/H/S/SH	593001992-3	445	





DEEP LOOSENER DEEPSTAR ECOLINE

DEEPSTAR 1/80 ECOLINE | DEEPSTAR 2/80/160 ECOLINE | DEEPSTAR 2/80/180 ECOLINE | DEEPSTAR 3/80/180 ECOLINE |
 DEEPSTAR 3/80/200 ECOLINE | DEEPSTAR 3/80/225 ECOLINE | DEEPSTAR 4/80/300 ECOLINE |
 DEEPSTAR 5/80/300 ECOLINE

GET TO THE BOTTOM OF THE PROBLEMS

The SAPHIR DeepStar Ecoline subsoilers are the ideal machines for removing soil compaction and loosening tramlines. Up to a maximum working depth of 80 cm, the water and air balance can be regulated much better. Deep loosening increases the permeability of the soil and optimises the sowing conditions. Loosening improves drainage and faster gas exchange. This promotes rapid germination and nutrient uptake from the soil. Deeply loosened soils dry out more quickly and can therefore be worked earlier.



Robust square frame for optimum force absorption.



Optional followers for depth control and reconsolidation.



The standard stone protection by means of shear bolts guarantees a particularly long service life for the handle and frame.



Optional drainage cone for creating drainage channels for improved water drainage.



The stabilisers ensure that the machine stands securely.



DeepStar 1/80 Ecoline



DeepStar 2/80/160 Ecoline



DeepStar 4/80/300 Ecoline

DEEP LOOSENER DEEPSTAR ECOLINE

DEEPSTAR 1/80 ECOLINE | DEEPSTAR 2/80/160 ECOLINE | DEEPSTAR 2/80/180 ECOLINE | DEEPSTAR 3/80/180 ECOLINE | DEEPSTAR 3/80/200 ECOLINE | DEEPSTAR 3/80/225 ECOLINE | DEEPSTAR 4/80/300 ECOLINE | DEEPSTAR 5/80/300 ECOLINE

TECHNICAL DATA

Technical data	DeepStar 1/80 Ecoline	DeepStar 2/80/160 Ecoline	DeepStar 2/80/180 Ecoline	DeepStar 3/80/180 Ecoline
Working width approx. (m)	-	1,60	1,80	1,80
Number of tines	1	2	2	3
Tine spacing approx. (cm)	-	160	180	90
Approx. working depth (cm)	80	80	80	80
Operating speed (km/h)	3 - 10	3 - 10	3 - 10	3 - 10
Power requirement approx. (kW/hp)	50/70	60/80	60/80	75/100
UL connection	Cat. II	Cat. II/III	Cat. II/III	Cat. II/III
Weight approx. (kg)	230	415	425	555

Technical data	DeepStar 3/80/200 Ecoline	DeepStar 3/80/225 Ecoline	DeepStar 4/80/300 Ecoline	DeepStar 5/80/300 Ecoline
Working width approx. (m)	2,00	2,25	3,00	3,00
Number of tines	3	3	4	5
Tine spacing approx. (cm)	100	112	95	72
Approx. working depth (cm)	80	80	80	80
Operating speed (km/h)	3 - 10	3 - 10	3 - 10	3 - 10
Power requirement approx. (kW/hp)	75/100	75/100	95/130	130/175
UL connection	Cat. II/III	Cat. II/III	Cat. II/III	Cat. II/III
Weight approx. (kg)	570	590	735	850

STANDARD EQUIPMENT

- Rigid frame design
- Transport width for all models under 3.0 mtr.
- Stone protection by means of shear bolt
- Coulters individually replaceable
- Parking support
- With wide shares (11 - 19 cm) as standard
- Narrow shares (6 - 11 cm) available on request at no extra charge available at no extra charge

MODELS

Modell	Order no.	€/piece
DeepStar 1/80 Ecoline	583404875-2	
DeepStar 2/80/160 Ecoline	583404876-2	
DeepStar 2/80/180 Ecoline	583404874-2	
DeepStar 3/80/180 Ecoline	583404877-2	
DeepStar 3/80/200 Ecoline	583404881-2	
DeepStar 3/80/225 Ecoline	583404883-2	
DeepStar 4/80/300 Ecoline	583404882-2	
DeepStar 5/80/300 Ecoline	583404878-2	

Installation effort: The appliances are supplied fully assembled. Only the spindles need to be fitted to the appliance. Time required approx. 15 minutes per grindel.

EQUIPMENT OPTIONS

1. Depth control



Equipment	Order no.	Gewicht ca. (kg)	€/piece
Retrofit kit packer arms (incl. height adjustment, without roller)			

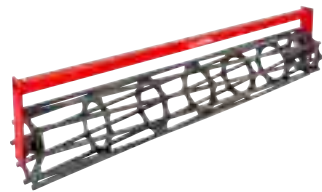
Retrofit kit packer arms (fully assembled)
for DeepStar Ecoline with frame 1.8 m - 3.0 m

583001571-2

145

Available for DeepStar Ecoline models from 2/80/180 to 5/80/300

Please select follower:



Equipment	Order no.	Gewicht ca. (kg)	€/piece
pipe packer roller Ø 500 mm (without packer arms)			

2.0 m pipe packer roller Ø 500 mm
for DeepStar Ecoline with frame 1.8 m & 2.0 m

593-008707

160

2.5 m pipe packer roller Ø 500 mm
for DeepStar Ecoline with frame 2.25 m

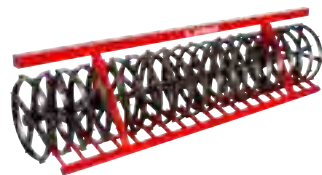
593-008709

180

3.0 m pipe packer roller Ø 500 mm
for DeepStar Ecoline with frame 3.0 m

593-008711

210



Roof ring roller Ø 600 mm (with traction bars) <small>NEW!</small> (without packer arms)	Best.-Nr.	Gewicht ca. (kg)	€/Stück
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2.0 m Roof ring roller Ø 600 mm
for DeepStar Ecoline with frame 1.8 m & 2.0 m

593-008691

255

2.5 m Roof ring roller Ø 600 mm
for DeepStar Ecoline with frame 2.25 m

593-008693

300

3.0 m Roof ring roller Ø 600 mm
for DeepStar Ecoline with frame 3.0 m

593-008697

345



Rear support wheels <small>NEW!</small> (without packer arms)	Best.-Nr.	Gewicht ca. (kg)	€/set
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Rear support wheels with 2.0 m profile tube
for DeepStar Ecoline with frame 1.8 m & 2.0 m

583-135320

110

Rear support wheels with 2.5 m profile tube
for DeepStar Ecoline with frame 2.25 m

583-135325

120

Rear support wheels with 3.0 m profile tube
for DeepStar Ecoline with frame 3.0 m

583-135330

130

2. Accessories



Equipment	Order no.	€/piece
Coulter wide (11-19 cm)	583000075	
Coulter narrow (6-11 cm)	583000074	
Grindel loose	583000124	
Drainage cone (Ø 60 mm)	583404879	
Grindel 60 cm (shortened version)	583000123	
Soil probe to determine the optimum working depth	593003832	

NEW!

02

SOIL CULTIVATION

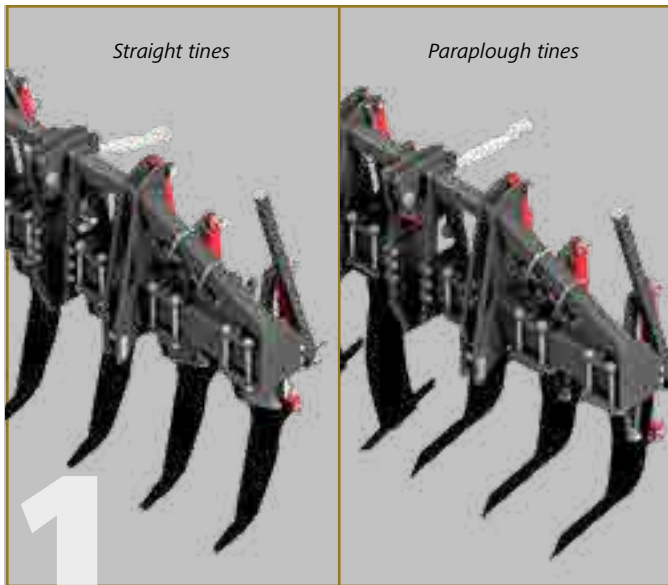


DEEP LOOSENER DEEPSTAR COMBI

DEEPSTAR COMBI | DEEPSTAR PARA COMBI

Heavy tractors, harvesters and transport vehicles are putting increasing pressure on the soil. Particularly under unfavourable conditions, this can lead to harmful compaction, which can permanently restrict the root growth of your crops.

The SAPHIR DeepStar Combi subsoiler efficiently removes this compaction and restores optimum conditions for healthy plant growth. The flexible combination with other devices makes it the specialist for professional soil loosening.



Depending on the location and requirements, the DeepStar Combi can be equipped with straight or parabolic shares.

The parabolic shares loosen the soil particularly gently without mixing it intensively. This prevents coarse clods and the floor flows through the working area like a gentle wave. Fine microcracks improve aeration and enable the subsequent crop to root deeply.

Working depths of 15 to 55 cm can be achieved with the straight tines - easily and evenly thanks to the generous 950 mm frame height.

Depending on the version, the line spacing is 500 or 750 mm, so that a working width of 3 m is covered with 4 or 6 tines.



The DeepStar Combi can be combined with a wide range of devices. In addition to passive soil tillage implements, actively driven implements such as roundabout harrows, tine rotors or tillers can also be coupled and operated. This makes the subsoiler a universal platform that efficiently combines several work processes.



The DeepStar Combi is equipped with a robust shear bolt safety device as standard. For stony ground, the optional hydraulic stone protection system with a variable release force of 850 to 1,200 kg and a release height of 36 cm ensures maximum operational safety.



For the installation and operation of additional devices, all standard pipework systems can be factory-fitted as feed-throughs. The standard hydraulic rear power lift can be flexibly adjusted to category 2 and 3 attachment dimensions.

DEEP LOOSENER DEEPSTAR COMBI

DEEPSTAR COMBI | DEEPSTAR PARA COMBI

02

SOIL CULTIVATION

TECHNICAL DATA

Technical data	DeepStar Combi	DeepStar PARA Combi
Working width (m)	3	3
Transport width (m)	2.87	2.87
Number of tines	4/6	4/6
Tine type	Straight tines	Paraploough tines
Tine spacing (cm)	75/50	75/50
Working depth (cm)	15-55	15-55
Operating speed (km/h)	3-10	3-10
Power requirement (kW/hp)	176/240	176/240
UL connection	Cat. III	Cat. III
Stone protection	Shear bolt	Shear bolt
Weight (without roller) (kg)	1,100	1,100

STANDARD EQUIPMENT

- Rigid frame design
- Three-point hitch Cat. II / III for additional attachments
- Parking supports
- Coulters and attachment individually interchangeable
- With straight tines (DeepStar Combi)
- With paraploough tines (DeepStar PARA Combi)

MODELS

Modell	Order no.	€/piece
DeepStar Combi with straight tines	583-00600.COMBI6/300	
DeepStar PARA Combi with Parapflug tines	583-00601.COMBI6/PAR	

EQUIPMENT OPTIONS

1. Hydraulic stone protection



Equipment	Order no.	€/piece
Hydraulic stone protection		
DeepStar Combi	583-135600	
DeepStar PARA Combi	583-135601	

2. PTO shaft passage



Equipment	Order no.	€/piece
PTO shaft passage		
DeepStar Combi / DeepStar PARA Combi	18524797	

3. Adapter for tracking rollers



Equipment	Order no.	€/piece
Adapter for tracking rollers		
DeepStar Combi / DeepStar PARA Combi	583-009198	

4. Trailing rollers



Equipment	Order no.	Gewicht ca. (kg)	€/piece
Tube packer roller Ø 500 mm			
DeepStar Combi / DeepStar PARA Combi	593-008711	210	
Roof ring roller Ø 600 mm			
DeepStar Combi / DeepStar PARA Combi	593-008697	345	
U-profile ring roller Ø 540 mm			
DeepStar Combi / DeepStar PARA Combi	593001992-3	445	

5. Soil probe



Equipment	Order no.	€/piece
Bodensonde for determining the optimum working depth	593003832	



PLOWSTAR SUBSOILER

PROMOTE SOIL LIFE IN JUST ONE PASS!

The specially shaped tines of the SAPHIR PlowStar subsoiler ensure particularly good loosening of the soil. The soil is loosened across the entire working width of the machine and up to a maximum working depth.

45 cm. Only a very small amount of soil is conveyed upwards and the soil surface remains relatively even. The proven design of the tine guarantees problem-free retraction of the machine in almost all ground conditions. The shares and tine systems can be replaced when worn.



Robust square frame in V-shape for optimum force absorption.



Standard double-tyred support wheel set (185/65-15) for even depth control. The working depth can be conveniently and continuously adjusted using the spindle.



Specially curved tine shape for optimum loosening over the entire working depth.

The standard stone protection by means of shear bolts guarantees a particularly long service life for the handle and frame.

TECHNICAL DATA

Technical data	PlowStar
Working width approx. (m)	3,00
Transport width approx. (m)	3,00
Number of tines	6
Stone protection	Scherbolzen
Tine spacing approx. (cm)	40
Approx. working depth (cm)	45
Operating speed (km/h)	3 - 12
Power requirement approx. (kW/hp)	117/160
UL connection	Cat. II/III
Weight approx. (kg)	1.110

STANDARD EQUIPMENT

- Shares and attachments can be replaced individually
- Stone protection by means of shear bolt
- Double support wheels 185/65-15
- Rigid frame design

MODELS

Modell	Order no.	€/piece
PlowStar	583.01514.PS6-300	

EQUIPMENT OPTIONS

1. Soil probe



Equipment	Order no.	€/piece
Bodensonde to determine the optimum working depth	593003832	



WEEDSTAR HARROW

WEEDSTAR 601 | WEEDSTAR 901 | WEEDSTAR 1201

STEEL KNOWS NO RESISTANCE!

Harrows are not only an issue in organic farming today. With increasingly strict regulations and new authorisations in the field of chemical crop protection, harrows have arrived in conventional cultivation. SAPHIR therefore already offers you a machine for mechanical weed control that can also work in young crops and is therefore an essential component of the SAPHIR CleanField system.

The WeedStar harrow enables mechanical weed control in the crop and pre-emergence of the main crop. Thanks to the high vibration capacity of the tines, which are optionally available in various thicknesses, the harrow always ensures the optimum ratio of spillage and tearing out of seedlings and weeds.

The 3D tine field adjustment is a key feature of the machine, which ensures homogeneous processing. The tine field aggressiveness is adjusted mechanically for each field individually, so that the optimum tine field setting can be found particularly quickly. This makes every operation with the SAPHIR WeedStar a success.

The high working speed in combination with large working widths guarantees enormous impact power with low diesel consumption. At the same time, operations can be combined with a SAPHIR DrillStar.



Optimum adjustment of the tine pressure is essential on all floors. The high adjustment range ensures gentle tine pressure when blind harrowing and, if required, high aggressiveness when breaking crusts and uprooting germinated weeds. At the same time, young weeds are buried. The wild herbs, weeds and grass weeds are thus permanently stimulated to germinate and consume a lot of energy in the process until the vigour dies out and the weeds die.



The load on the tine section due to its own weight ensures optimum adaptation even on heavy, encrusted soils. The bays, which are dragged in chains, are guided in the ideal position by the profile tubes.



The 3D tine array ensures that the tines adapt perfectly to the ground. The guide enables the jet effect to first engage the rear and then the front tines.



The tines reliably disentangle the roots of the weeds and grasses pulled out. This guarantees safe drying out and prevents the roots from growing again. The self-cleaning tines are also resistant to clogging due to their high vibration capacity.

WEEDSTAR HARROW

WEEDSTAR 601 | WEEDSTAR 901 | WEEDSTAR 1201

02

SOIL CULTIVATION

TECHNICAL DATA

Technical data	WeedStar 601	WeedStar 901	WeedStar 1201
Number of tines	240	360	480
Power requirement approx. (kW/hp)	44/60	51/70	59/80
Tine fastening	Lock system	Lock system	Lock system
Tine length approx. (mm)	450	450	450
Line spacing approx. (mm)	25	25	25
Zinc diameter approx. (mm)	7 / 8	7 / 8	7 / 8
Fields	4 x 1.5 m	6 x 1.5m	8 x 1.5m
3-point attachment	Cat. I / Cat. II	Cat. I / Cat. II	Cat. I / Cat. II
Support wheels	4	4	4
Hydraulic folding	Yes	Yes	Yes
Transport width approx. (m)	3.00	3.00	3.00
Transporthöhe ca. (m)	2.95	3.60	3.60
Arbeitsbreite ca. (m)	6.00	8.99	11.98
Weight approx. (kg)	1,390	1,860	2,250

STANDARD EQUIPMENT

- Different tine thicknesses (7 / 8 mm) without surcharge
- Four support wheels as standard
- Support wheels, mechanically adjustable for depth control
- Outer support wheels can be moved on the frame
- Parking supports
- Mechanically adjustable tine aggressiveness per perforated grid
- Mechanical weed control in the main crop in the CleanField system
- Lighting incl. warning signs

MODELS

Modell	Order no.	€/piece
WeedStar 601 with 7 mm tines	593.00706.WS601-7	
WeedStar 601 with 8 mm tines	593.00706.WS601-8	
WeedStar 901 with 7 mm tines	593-00709.WS901-7	
WeedStar 901 with 8 mm tines	593-00709.WS901-8	
WeedStar 1201 with 7 mm tines	593-00712.WS1201-7	
WeedStar 1201 with 8 mm tines	593-00712.WS1201-8	

EQUIPMENT OPTIONS

1. Pendulum undercarriage



Pendulum undercarriage	Order no.	Weight approx. (kg)	€/piece
WeedStar 601 - 1201	593-008785	112	

2. Winter parking supports



Winter parking supports	Order no.	Weight approx. (kg)	€/piece
WeedStar 601 - 1201	593-008786	18	

3. Mounting platform for SAPHIR DrillStar - ex works



DrillStar superstructure platform	Order no.	Weight approx. (kg)	€/piece
WeedStar 601 - 1201	593-008784	60	

Note: The kit does not contain a sowing unit - the SAPHIR DrillStar models can be found in the price list on [pages 42 - 45](#).

4. Hydraulic tine adjustment

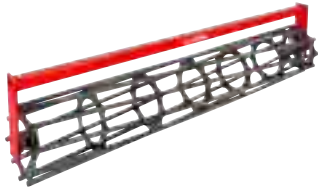


	Order no.	Weight approx. (kg)	€/piece
WeedStar 601	593-008787	30	
WeedStar 901	593-008788	45	
WeedStar 1201	593-008789	60	

THE SAPHIR TRACKING ROLLERS

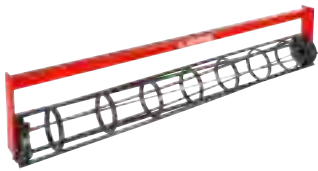
02

SOIL CULTIVATION



Modell	Order no.	Weight approx. (kg)	€/piece
Tube packer roller Ø 500 mm			
2,00m Rohrpackerwalze	593-008707	160	
2,50m Rohrpackerwalze	593-008709	180	
2,60m Rohrpackerwalze	593000513-3	185	
3,00m Rohrpackerwalze	593-008711	210	
3,50m Rohrpackerwalze	593-008713	270	
3,75m Rohrpackerwalze	593005123	250	

Other working widths are available on request



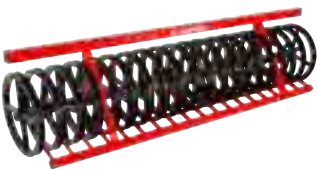
Modell	Order no.	Weight approx. (kg)	€/piece
Crumbler roller Ø 350 mm			
2.00m crumbler roller	593-008699	125	
2,50m Krümlerwalze	593-008701	138	
3,00m Krümlerwalze	593-008703	158	
3,50m Krümlerwalze	593-008705	245	
3.75m crumbler roller	593004208	195	

Other working widths are available on request



Modell	Order no.	Weight approx. (kg)	€/piece
Roof ring roller Ø 600 mm (with traction bars)			
2.00m roof ring roller 14 rings	593-008691	255	
2.50m roof ring roller 17 rings	593-008693	300	
2.60m roof ring roller 18 rings	593000514-3	315	
3.00m roof ring roller 20 rings	593-008697	345	

Other working widths are available on request



Modell	Order no.	Weight approx. (kg)	€/piece
U-profile ring roller Ø 540 mm			
2.00m U-profile ring roller	593001990-2	325	
2.50m U-profile ring roller	593003170-2	385	
2.60m U-profile ring roller	593002151-2	400	
3.00m U-profile ring roller	593001992-3	445	

Other working widths are available on request





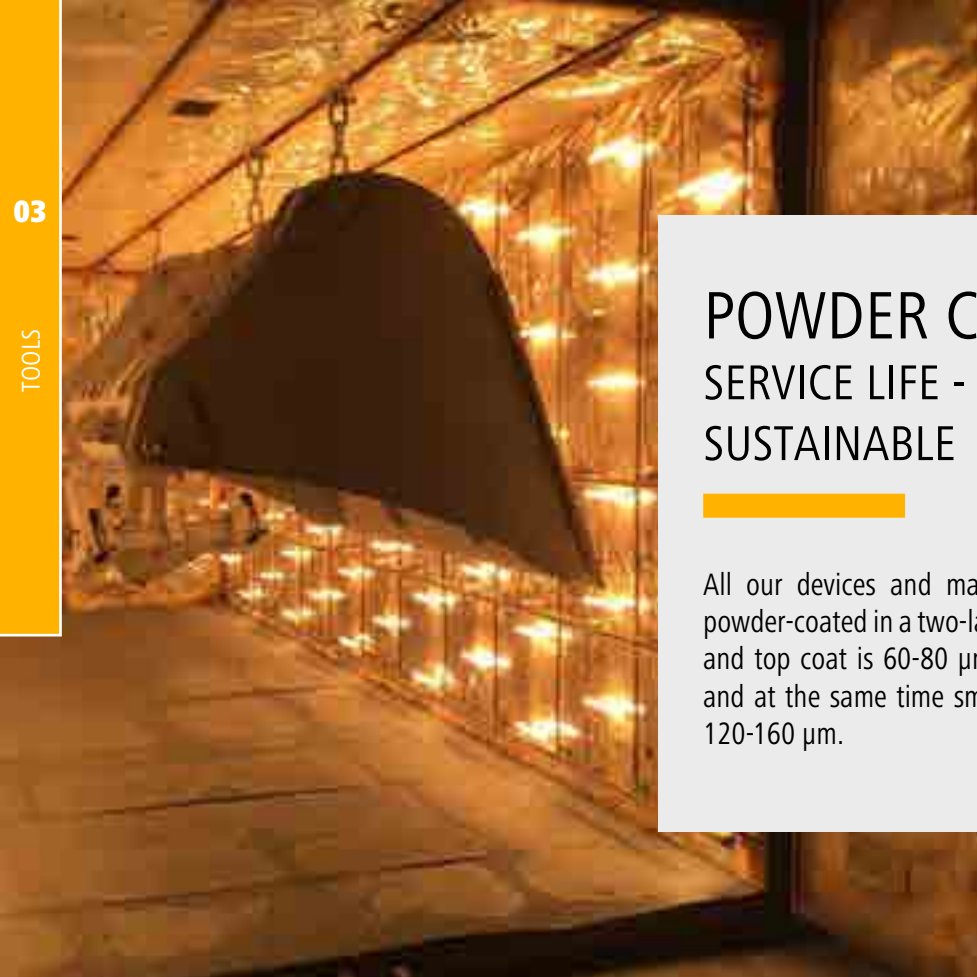
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03



POWDER COATING - LONG SERVICE LIFE - FOR EVERY APPLICATION - SUSTAINABLE

All our devices and machines are sandblasted after welding and powder-coated in a two-layer process. The layer thickness of the primer and top coat is 60-80 μm each. This creates a robust, weatherproof and at the same time smooth surface with a total layer thickness of 120-160 μm .

POWDER COATING VS. WET PAINTING

The first advantage of powder coating is its sustainability and environmental friendliness. The solvents contained in the wet paint evaporate during curing. The substances contained in the vapours released are both harmful to human health and to the environment. No solvents are required for powder coating. After sandblasting our appliances, the primer and top coat are baked and cured at approx. 180-200°C without the use of solvents.

Powder coating is also ahead in terms of resistance. As powder coating is more scratch and impact resistant than wet painting, the surfaces of the machines are significantly better protected against damage. The sandblasted surface with subsequent primer and top coat also has an increased layer thickness and therefore significantly better edge coverage. Compared to wet painting, this has a positive effect on corrosion protection, which significantly increases the service life of powder-coated appliances.

POWDER COATING VS. GALVANISING

The major disadvantage of galvanised appliances is their sensitivity to acidic and alkaline substances. The further a material deviates from pH 7 (neutral), the more sensitive a galvanised appliance will react.

In agriculture, silage and manure, for example, have a pH value well below 7. The coating of galvanised equipment used for silage removal or manure removal is therefore quickly attacked by these acidic substances, resulting in rusty spots and increased wear after a short period of use.

Materials such as lime, cement or fertiliser generally have a pH value higher than 7. They are therefore alkaline and attack the galvanising in a similar way to silage or manure. This also quickly leads to rusty spots on the appliance, which result in higher and faster wear of the appliance.

Powder coating does not have these weaknesses, which is why our powder-coated appliances can be used in the above-mentioned areas of application without any problems, are more versatile and have a much longer service life.



SAPHIR VARIABLE LOCK SYSTEM VLS - ONE ATTACHMENT, COUNTLESS CARRIER VEHICLES

The patented SAPHIR VARIABLE LOCK SYSTEM (VLS) is the ideal solution for customers with the highest demands and the desire to be able to use their tools flexibly and efficiently. A completely new form of adaptation in this area enables the mounting brackets to be changed easily within a few minutes. The baffle (shown here in white) is firmly welded to the back of the appliance. This is standardised in its connection dimensions and ensures that the VLS implements can be picked up by various carrier vehicles. All you need to do is fit the appropriate brackets (red) to the appliance.

ADVANTAGES AT A GLANCE:

- ✓ Cost reduction through the use of one device with different carrier vehicles (machine pools, vehicle exchange, rental companies/rental parks, demonstration vehicles)
- ✓ Use of the same adapter consoles for several work devices
- ✓ If a new carrier vehicle is purchased, the existing implement can continue to be used
- ✓ Cost reduction through optimised warehousing
- ✓ Shorter delivery times thanks to modular system
- ✓ Force-fit and form-fit connection, as well as force transmission across the entire back of the device
- ✓ No change in the load centre of gravity due to very compact design
- ✓ Consideration of the tipping kinematics of the respective carrier vehicle
- ✓ Adapter brackets can be changed in next to no time without special tools

Which appliances can be equipped with the Variable Lock System can be identified by this symbol on the respective catalogue pages:



Variable lock system
Recording console single

Order no.

391VARILOCK -S

€/piece



SPECIAL MACHINE CONSTRUCTION TOOLS

One of the key core competences of our innovative company is the production of our devices according to customer-specific requirements and wishes. With 40 years of experience in the construction of implements, we find the most efficient solution for every challenge. We currently employ eight experienced design engineers to meet the high demand.

Do you have any questions? Challenge us for your benefit.

Hopper bucket type TS 20

Dead weight: approx. 730 kg - Bucket width: 2,000 mm - Capacity: approx. 2,200 litres

A customer approached us with a request to develop a 2000 mm wide hopper bucket specially designed for filling big bags with wood pellets. The aim was not only to integrate an individual holder for the carrier vehicle, but also to ensure the loading of four-lane big bags and a filling volume of over 2,000 litres. Hydraulic slide opening, which can be controlled directly from the vehicle cab, ensures convenient and safe handling.



Earth trough type EM 18

Weight: approx. 350 kg - Width: 1,800 mm - Capacity: approx. 700 litres

Even seemingly simple products require professional solutions. Together with one of our customers, we developed the EM 18 earth trough specifically for use in cemeteries: It can be filled with a cemetery excavator during grave excavation, then picked up with a wheel loader and the excavated earth efficiently transported away. The customer's individual requirements for the carrier vehicle mount and all specifications regarding dimensions and volume were customised.





Potato scoop type KS 18

Own weight: 780kg - Working width: 1800 mm – Contents: 2000 l

- Use on forklift trucks for loading large quantities of potatoes.
- Very large swivelling angle in combination with 2 hydraulic cylinders with end position damping
- Protection of the load through rounded side edges of the bucket body

Forestry tongs type FZ 12

Own weight: 260kg - Working width: 1,200mm - opening width 1,045mm

- Suitable for transporting brushwood or green cuttings in forestry or in the municipal sector
- The design allows a good view through the appliance at all times, which makes handling easier. facilitates handling.



Loading unit type WH

Own weight: 230 kg – usable length: 1,800mm - Load capacity: 2700 kg

- Customised pallet fork carriage with welded forks in special dimensions
- This product is used by a well-known poultry marketing company



High-tip screening bucket type HKSS 25

Own weight: 2,800kg - Working width: 2500 mm – Contents: 4000 l

- Used by waste disposal companies to sort rubble waste according to particle size before it is handed over to recycling companies
- The material picked up is separated by rolling the bucket body in and out and then loaded
- This work step reduces disposal costs many times over



SYMBOLS BRIEFLY EXPLAINED...



Powder coating

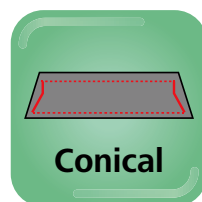
Appliances labelled with this symbol are powder-coated in a two-coat process. The layer thickness of the primer and top coat is 60-80µm each.

This creates a robust, weatherproof and smooth surface with a total layer thickness of 120-160µm.



Highly wear-resistant scraper blade

This tool has a highly wear-resistant scraper blade with a hardness of at least 500 HB (Brinell hardness). This is firmly welded to the base of the appliance and guarantees low wear in all areas of application.



Conical design

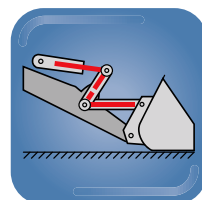
SAPHIR blades are manufactured almost exclusively in a conical design. Appliances labelled with this symbol have angled side sections that make the bucket body wider towards the front. As a result, bulk materials flow better and material residues are significantly minimised.



VARIABLE LOCK SYSTEM

The SAPHIR VARIABLE LOCK SYSTEM (VLS) makes it possible to use one implement with several carrier vehicles from different manufacturers. The respective mounting brackets are adapted to the appliance with 8 bolts. Changing the consoles only takes a few minutes. The symbol shown indicates all implements that can be equipped with this system.

can be equipped with this system. Further information can be found on page 115.



Z-kinematics

A distinction is generally made between two kinematic systems for wheel loaders. If your vehicle equipped with the so-called Z-kinematics, the reversing lever can collide with the attached implement when the quick-release coupling and lowered lift arm, the reversing lever may collide with the attached implement. To avoid this, a customised cut-out is inserted in the desired device.



SHW Friedrichstal

The devices labelled with this symbol are equipped with quality tines made in Germany by SHW Schmie-detechnik GmbH & Co.KG from Friedrichstal. The tines are characterised by high robustness and low wear even under the most extreme conditions.

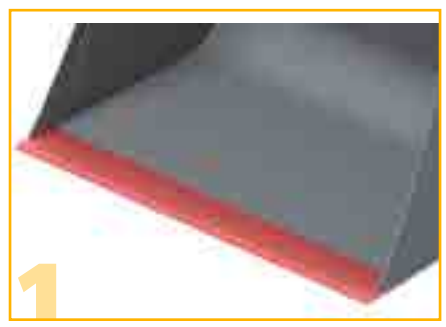




AUTOMATIC RINGER" TOOLS

EARTH SHOVEL | MANURE SCOOP | MANURE FORK

The SAPHIR implements for front loaders with automatic ratchet are equipped with ratchet hooks as standard (if model available) and are available for all size II / III ratchet loaders.



The earth bucket and manure scoop are equipped with a highly wear-resistant scraper blade 150 x 16 mm (500 HB)



All manure forks have a stable, continuous zinc support tube with welded-in cone sleeves and a wear rail on the zinc support tube. Quality tines 800 mm long from SHW (Made in Germany) as standard.



The SAPHIR manure alley shovel is an extra wide shovel (1,850 mm), which does not require the usual pockets thanks to the external mount. This prevents material from collecting and accumulating there, and the manure scoop is also ideal for mucking out.

Two damping springs are included as standard.

TECHNICAL DATA

Technical data	Earth shovel size II	Earth shovel size III	Dung duct scoop Size II / III	Manure fork Size II	Manure fork Size III	Manure fork Size III 1,40 m	Manure fork Size III 1,70 m
Width approx. (mm)	830	980	1.870	820	980	1,360	1.730
Height approx. (mm)	580	580	690	650	650	680	680
Depth approx. (mm)	770	770	770	-	-	-	-
Capacity (coated according to DIN) approx. (l)	220	260	585	-	-	-	-
Content (heaped according to SAE) approx. (l)	275	325	730	-	-	-	-
Number of tines	-	-	-	5	6	8	10
Weight approx. (kg)	65	75	195	70	80	120	135
Order no.	391ESK80	391ESK100	391KGG	391DGG80	391DGG100	391DGG140	391DGG170
€/piece							

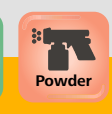
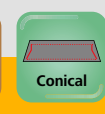
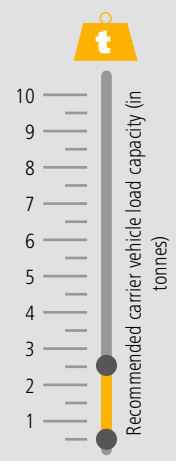
LATCH HOOK

Latch hook	Order no.	€/piece
Klinkhaken BAAS	391KLINKBAAS	Series
Klinkhaken Stoll	391KLINKSTOLL	Series

When ordering, please always state the front loader manufacturer so that the appropriate latch hook can be included.

SPECIAL EQUIPMENT

Equipment	Order no.	€/piece
Normallast-Zinken 1,000 mm long Surcharge per tine	439439016	



LIGHT GOODS BUCKET LG

LG 09 - LG 24

The SAPHIR light goods bucket is suitable for loading free-flowing bulk goods such as grain, artificial fertiliser, wood chips and other voluminous goods up to max. 950 kg/m³.



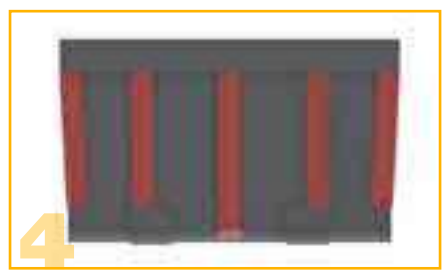
1 Highly wear-resistant scraper bar 150 x 16 mm(500 HB)



2 Side panels reinforced with beading for increased stability



3 Visual indicator on both sides as an orientation aid when loading bulk goods at ground level



4 Stable substructure of the bucket body in the direction of travel



5 Round bucket body for residue-free emptying of the bucket




6 Internal stiffeners from LG 22

TECHNICAL DATA

Technical data	LG 09	LG 11	LG 13	LG 15	LG 16
Width approx. (mm)	900	1,100	1,300	1,500	1,600
Height approx. (mm)	790	790	790	790	790
Depth approx. (mm)	850	850	850	850	850
Stiffeners	-	-	-	-	-
Capacity (coated according to DIN) approx. (l)	330	410	490	570	610
Contents (heaped according to SAE) approx. (l)	430	530	640	740	790
Weight approx. (kg)	155	175	195	210	220
Order no.	391LG09	391LG11	391LG13	391LG15	391LG16
€/piece					

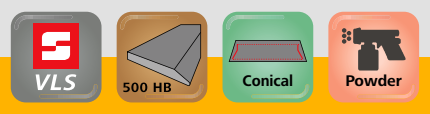
Technical data	LG 17	LG 19	LG 20	LG 22	LG 24
Width approx. (mm)	1,700	1,900	2,000	2,200	2,400
Height approx. (mm)	790	790	790	790	790
Depth approx. (mm)	850	850	850	850	850
Stiffeners	-	-	-	1	2
Capacity (coated according to DIN) approx. (l)	650	740	780	860	940
Contents (heaped according to SAE) approx. (l)	850	960	1,010	1,120	1,220
Weight approx. (kg)	230	250	260	290	310
Order no.	391LG17	391LG19	391LG20	391LG22	391LG24
€/piece					

ATTACHMENTS

	Recording	Order no.	€/piece
	Euro attachment (from 1,300 mm appliance width)	391EUR-S	Series
	Farm and wheel loaders up to 2.5 t lifting capacity	391HOFRAD	
	VLS Compact	391VARILOCK -S	
Specify carrier vehicle type when ordering			

EQUIPMENT OPTIONS

Equipment	Order no.	€/piece
1x internal bracing for LG	391AUSSTLG	



BUCKET FOR LIGHT MATERIALS LG+

LG 12+ - LG 26+

The Saphir LG+ light goods bucket is suitable for loading free-flowing bulk goods such as grain, artificial fertiliser, wood chips and other voluminous goods up to max. 950 kg/m³.



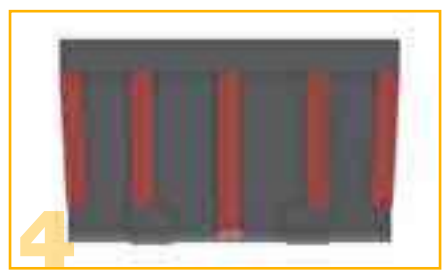
1 Highly wear-resistant scraper bar 150 x 20 mm(500 HB)



2 Side panels reinforced with beading for increased stability



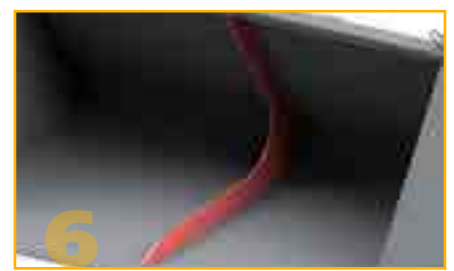
3 Visual indicator on both sides as an orientation aid when loading bulk goods at ground level



4 Stable substructure of the bucket body in the direction of travel



5 Round bucket body for residue-free emptying of the bucket






6 Internal stiffeners from LG 20 +

TECHNICAL DATA

Technical data	LG 12+	LG 13+	LG 14+	LG 15+	LG 16+	LG 17+
Width approx. (mm)	1,200	1,300	1,400	1,500	1,600	1,700
Height approx. (mm)	910	910	910	910	910	910
Depth approx. (mm)	1,100	1,100	1,100	1,100	1,100	1,100
Stiffeners	-	-	-	-	-	-
Capacity (coated according to DIN) approx. (l)	660	720	780	840	900	960
Contents (heaped according to SAE) approx. (l)	880	955	1,030	1,105	1,180	1,255
Weight approx. (kg)	225	235	255	265	275	285
Order no.	391LG12+	391LG13+	391LG14+	391LG15+	391LG16+	391LG17+
€/piece						

Technical data	LG 19+	LG 20+	LG 22+	LG 24+	LG 26+
Width approx. (mm)	1,900	2,000	2,200	2,400	2,600
Height approx. (mm)	910	910	910	910	910
Depth approx. (mm)	1,100	1,100	1,100	1,100	1,100
Stiffeners	-	1	1	2	2
Capacity (coated according to DIN) approx. (l)	1,080	1,140	1,260	1,380	1,490
Contents (heaped according to SAE) approx. (l)	1,405	1,480	1,640	1,790	1,940
Weight approx. (kg)	310	330	365	400	435
Order no.	391LG19+	391LG20+	391LG22+	391LG24+	391LG26+
€/piece					

ATTACHMENTS

	Recording	Order no.	€/piece
	Euro attachment	391EUR-S	Series
	Farm and wheel loaders up to 2.5 t lifting capacity	391HOFRAD	
	VLS Compact	391VARILOCK -S	

Specify carrier vehicle type when ordering

EQUIPMENT OPTIONS

Equipment	Order no.	€/piece
1x internal bracing for LG	391AUSSTLG	



BUCKET FOR LIGHT MATERIALS LG XL

LG XL 20 - LG XL 28

The particularly large-volume SAPHIR XL light goods bucket is suitable for loading free-flowing bulk goods such as grain, artificial fertiliser, wood chips and other voluminous materials up to max. 950 kg / m³.



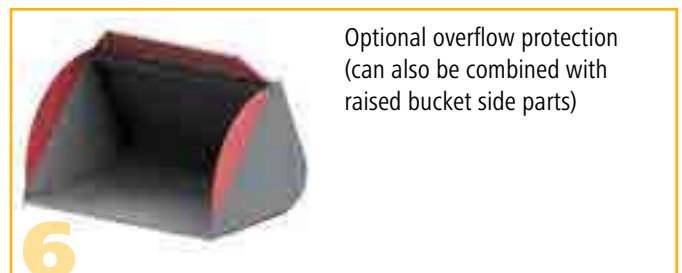
Highly wear-resistant scraper strip 200 x 20 mm (500 HB)
Optional: Scraper bar 300 x 30 mm (standard with for LG XL 26 and LG XL 28)



Optional highly wear-resistant reversible blade as a screw-on alternative to the standard scraper bar



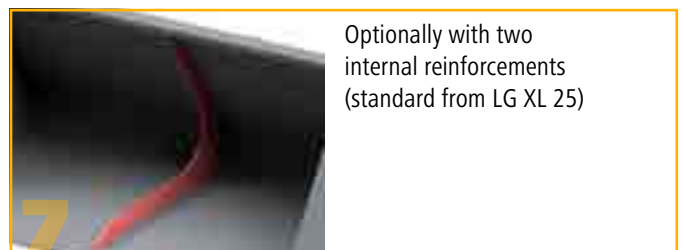
Visual indicator on both sides as an orientation aid when loading bulk goods at ground level



Optional overflow protection (can also be combined with raised bucket side parts)



Round bucket body for residue-free emptying of the bucket



Optionally with two internal reinforcements (standard from LG XL 25)



Stable substructure of the of the bucket body in direction of travel



Optional Load volume increase

TECHNICAL DATA

Technical data	LG XL 20	LG XL 22	LG XL 24	LG XL 25	LG XL 26	LG XL 28
Width approx. (mm)	2,000	2,200	2,400	2,500	2,600	2,800
Height approx. (mm)	1.200	1.200	1.200	1.200	1,300	1,300
Depth approx. (mm)	1.400	1.400	1.400	1.400	1,600	1,600
Scraper bar (mm)	200 x 20	200 x 20	200 x 20	200 x 20	300 x 30	300 x 30
Stiffeners	0	0	0	2	2	2
Capacity (coated according to DIN) approx. (l)	2.050	2,200	2.450	2.550	3,200	3,450
Contents (heaped according to SAE) approx. (l)	2.560	2750	3.060	3.180	4,000	4.300
Weight approx. (kg)	554	610	665	750	850	915
Order no.	391LGXL20	391LGXL22	391LGXL24	391LGXL25	391LGXL26	391LGXL28
€/piece						

ATTACHMENTS



Recording	Order no.	€/piece
Euro attachment From LG XL 20 to LG XL 25 possible	391EUR-S	Series



Wheel and telescopic loaders from 2.5 t lifting capacity	391RADTELE-S	Series
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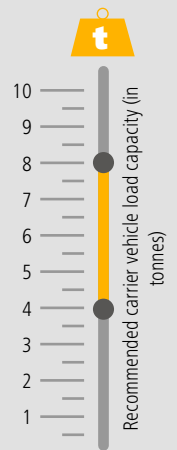


Variable lock system	391VARILOCK -S	
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Specify carrier vehicle type when ordering

EQUIPMENT OPTIONS

Equipment	Order no.	€/piece
Überlaufschutz Height approx. 200 mm (firmly welded to the back of the bucket) Price per metre	391UEBERLAUFS	
Raised shovel side parts (set consisting of 2 pieces)	391EHSCHAUFELS	
2 internal stiffeners (standard from LG XL 25 and larger)	391INNAUSST	
Highly wear-resistant scraper bar (300x30 mm, 500 HB) (standard with LG XL 26 & LG XL 28) Price per metre	391HOCHV300X30	
Highly wear-resistant reversible blade (200x20 mm, 500 HB) Price per metre	391HIGHVWENDE	
Highly wear-resistant reversible blade (300x30 mm, 500 HB) Price per metre	391HOCHVWENDE300	
Plastic scraper strip 200 x 30 mm, price per metre	391KUNSCHUERF	
Ladevolumenerhöhung approx. 600 - 800 litres	391LOAD VOLUME	



LIGHT GOODS BUCKET LGR

LGR 20 - LGR 30

The large-volume SAPHIR LGR light goods bucket is suitable for loading free-flowing bulk goods such as grain, artificial fertiliser, wood chips and other voluminous materials up to a maximum of 1,300 kg/m³. Thanks to the particularly stable design of the bucket back and optimum power transmission via the vehicle mount, this bucket model is particularly suitable for use on larger wheel loaders and telehandlers.



Round bucket body with reinforcements in the corners of the bucket for easy emptying of the bucket.



Optionally with internal Stiffeners (2 internal stiffeners are standard from LGR 25)



Highly wear-resistant scraper strip 200x20 mm (500 HB)

Optional: Scraper bar 300x30 mm (from LGR 25 as standard)



Optional Load volume increase



Stable substructure of the of the bucket body in direction of travel



Optional highly wear-resistant fixed reversible knife as screwable alternative to the standard scraper bar



Visual display on both sides as orientation aid for ground level loading of bulk goods



Optional overflow protection (also with raised bucket side parts can be combined)

TECHNICAL DATA

Technical data	LGR 20	LGR 22	LGR 24	LGR 25	LGR 26.1	LGR 26.2	LGR 28.1	LGR 28.2	LGR 30
Width approx. (mm)	2,000	2,200	2,400	2,500	2,600	2,600	2,800	2,800	3,000
Height approx. (mm)	900	900	900	1,100	1,300	1,600	1,300	1,600	1,600
Depth approx. (mm)	1.200	1.200	1.200	1.400	1,600	1.800	1,600	1.800	1.800
Scraper bar (mm)	200 x 20	200 x 20	200 x 20	300 x 30	300 x 30	300 x 30	300 x 30	300 x 30	300 x 30
Stiffeners	0	0	0	2	2	2	2	2	2
Capacity (coated according to DIN) approx. (l)	1.400	1.550	1.700	2.500	3.300	4.450	3.500	4.800	5.150
Content (heaped according to SAE) approx. (l)	1,750	1,930	2,100	3,100	4,100	5,500	4,350	6,000	6,400
Weight approx. (kg)	510	545	580	860	995	1,160	1,050	1,235	1,310
Order no.	391LGR20	391LGR22	391LGR24	391LGR25	391LGR26.1	391LGR26.2	391LGR28.1	391LGR28.2	391LGR30
€/piece									

ATTACHMENTS



Recording	Order no.	€/piece
Wheel and telescopic loaders from 2.5 t lifting capacity	391RAD-S	Series



Variable Lock System	391VARIABLELOCK
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Specify carrier vehicle type when ordering

EQUIPMENT OPTIONS

Equipment	Order no.	€/piece
Überlaufschutz Height approx. 200 mm (firmly welded to the back of the bucket) Price per metre	391UEBERLAUFS	
Erhöhte Schaufelseitenteile schraubbar (set consisting of 2 pieces)	391EH SHOVEL-R	
Ladevolumenerhöhung approx. 600 - 800 litres	391LOAD VOLUME-R	
Kantenschutz on the blade side parts	391EDGE PROTECTION-R	
2 innenliegende Aussteifungen	391INTERIOR	
Highly wear-resistant scraper strip (300x30 mm, 500 HB) Price per metre	391HOCHV300X30	
Highly wear-resistant reversible blade (200x20 mm, 500 HB) Price per metre	391HIGHWENDE	
Highly wear-resistant reversible blade (300x30 mm, 500 HB) Price per metre	391HOCHWENDE300	
Kunststoffschrüfleiste Price per metre, 200x30mm	391KUNSCHUERF	

Quality tines from SHW Friedrichstal (MADE IN GERMANY)



BUCKET FOR LIGHT MATERIALS WITH HYDRAULIC HOLD-DOWN DEVICE LGN

LGN 09 - LGN 21

The SAPHIR light material bucket with hydraulic hold-down device type LGN is used to transport loose manure, straw, green material, shrubbery, etc. A particular advantage of the devices is the very large opening width of approx. 1200 mm. The hold-down device is opened and closed by two double-acting hydraulic cylinders as standard. With this appliance, you can choose whether the light material bucket with hold-down device is to be supplied in tine or sickle form. The hold-down device is not suitable for tearing work.

1 Highly wear-resistant scraper bar 150 x 16 mm(500 HB)

4 Tine hold-down device with a very large opening width of approx. 1,200 mm

2 From LGN 17 as standard with an internal Bracing

5 Sickle hold-down device with a very large opening width of approx. 1,200 mm

3 With two double-acting hydraulic cylinders as standard to optimise the opening and closing of the hold-down device

6 Wall removal function is optionally available ex works

TECHNICAL DATA

Technical data	LGN 09	LGN 11	LGN 13	LGN 15	LGN 17	LGN 19	LGN 21
Width approx. (mm)	900	1,100	1,300	1.500	1.700	1.900	2,100
Height approx. (mm)	700	700	700	700	700	700	700
Depth approx. (mm)	850	850	850	850	850	850	850
Number of sickles / number of tines	5	6	7	8	9	10	11
Stiffeners	-	-	-	-	1	1	1
Volume approx. (l)	570	690	810	930	1,050	1.170	1.290
Weight approx. (kg)	275	305	330	365	405	445	485
Order no. Sickle version	391LGN09S	391LGN11S	391LGN13S	391LGN15S	391LGN17S	391LGN19S	391LGN21S
€/piece							
Order no. Fork version	391LGN09Z	391LGN11Z	391LGN13Z	391LGN15Z	391LGN17Z	391LGN19Z	391LGN21Z
€/piece							

ATTACHMENTS



Recording

Order no.

€/piece

Euro attachment

From 1,300 mm appliance width

391EURO-S

Series



Farm and wheel loaders up to 2.5 t lifting capacity

391HOFRAD



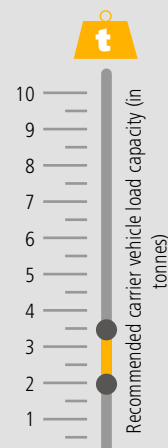
VLS Compact

391VARIABLELOCK

Specify carrier vehicle type when ordering

EQUIPMENT OPTIONS

Equipment	Order no.	€/piece
Screw-on bucket side parts (set consisting of 2 pieces)	391002251	
Wall removal (only possible with original equipment ex works)	391WANDENT	
Split hold-down device (additional 1x dw required)	391GETNIED	
Pressure relief valve adjustable (required from 200 bar working pressure)	391001154-2	
Pressure relief valve recommended for Merlo, Bobcat, Dieci	391001416	
Electrohydraulic changeover Optional with "Split hold-down device" equipment (6/2 way valve 12V 90 ltr./min, ATTENTION: Without electrical kit)	526001622	



LIGHT GOODS BUCKET WITH PUSH-OFF WALL LGA

LGA 16 - LGA 26

The Saphir light goods bucket LGA wall is particularly suitable for metered emptying in confined spaces. The push-off wall allows bulk materials to be pushed out easily and without leaving any residue. In addition, a discharge height gain, for example at the mixing wagon, can be achieved by the discharge wall. The standard flow divider and pressure relief valve ensure that the bulk material is discharged evenly. The buckets are suitable for bulk materials up to max. 950 kg/m³.



1 With hydraulically extendable wall (2-part with plastic scraper strip on the lower edge)



2 Highly wear-resistant scraper blade (200 x 20 mm, 500HB)







3 The hydraulic cylinders are positioned on the back of the bucket. They ensure direct power transmission to the push-off wall inside the bucket body.

TECHNICAL DATA

Technical data	LGA 16	LGA 18	LGA 20	LGA 22	LGA 24	LGA 25	LGA 26
Width approx. (mm)	1,600	1,800	2,000	2,200	2,400	2,500	2,600
Height approx. (mm)	950	950	950	950	950	950	950
Depth approx. (mm)	1.120	1.120	1.120	1.120	1.120	1.120	1.120
Capacity (coated according to DIN) approx. (l)	800	950	1,100	1.250	1.400	1.475	1.550
Content (heaped according to SAE) approx. (l)	1.000	1.190	1.380	1.560	1,750	1850	1.940
Weight approx. (kg)	550	600	650	700	750	780	800
Order no.	391LGA16	391LGA18	391LGA20	391LGA22	391LGA24	391LGA25	391LGA26
€/piece							

Equipped as standard with size 3 hydraulic plug-in couplings

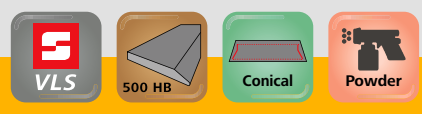
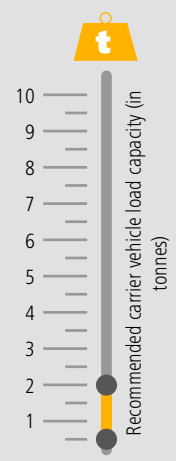
ATTACHMENTS

Recording	Order no.	€/piece
 Euro attachment	391EURO-S	Series
 Farm and wheel loaders up to 2.5 t lifting capacity	391HOFRAD	
 Wheel and telescopic loaders from 2.5 t lifting capacity	391RADTELE	
 VLS Compact	391VARIABLELOCK	

Specify carrier vehicle type when ordering

EQUIPMENT OPTIONS

Equipment	Order no.	€/piece
Rapeseed kit Enables the loading of fine-grained bulk goods	391003971	
Adjustable pressure relief valve (Required from 200 bar working pressure)	391001154	
Pressure retention valve Recommended for Merlo, Bobcat, Dieci	391001416	



BUCKET FOR HEAVY MATERIALS SG

SG 09 - SG 23




The SAPHIR SG heavy-duty bucket is used for loading heavy goods and for earthworks. The bucket is suitable for bulk weights up to max. 1,300 kg/m³



TECHNICAL DATA

Technical data	SG 09	SG 11	SG 13	SG 15	SG 17	SG 19	SG 21	SG 23
Width approx. (mm)	900	1,100	1,300	1,500	1,700	1,900	2,100	2,300
Height approx. (mm)	660	660	660	660	660	660	660	660
Depth approx. (mm)	650	650	650	650	650	650	650	650
Stiffeners	0	0	0	0	0	0	1	1
Capacity (coated according to DIN) approx. (l)	200	250	300	350	400	450	500	550
Content (heaped according to SAE) approx. (l)	250	310	370	430	500	560	620	680
Weight approx. (kg)	108	155	165	175	195	210	240	250
Order no.	391SG09	391SG11	391SG13	391SG15	391SG17	391SG19	391SG21	391SG23
€/piece								

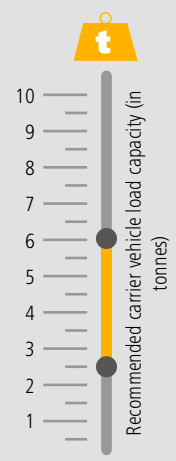
ATTACHMENTS

	Recording	Order no.	€/piece
	Euro attachment From 1,100 mm appliance width	391EURO-S	Series
	Farm and wheel loaders up to 2.5 t lifting capacity	391HOFRAD	
	VLS Compact	391VARIABLELOCK	

Specify carrier vehicle type when ordering

EQUIPMENT OPTIONS

Equipment	Order no.	€/piece
Road protection for heavy-duty bucket with ballast teeth Price per metre	391STRSCHUTZSG	
Glätteschiene Price per metre	391GLAETTES	
1x internal bracing	391AUSSTSG	
Schotterzahn - steckbar Recommended quantity SG 09 - 3 pcs. SG 11 - 4 pcs. SG 13 - 5 pcs. SG 15 - 6 pcs. SG 17 - 7 pcs. SG 19 - 8 pcs. SG 21 - 9 pcs. SG 23 - 10 pcs	391001616	



HEAVY GOODS BUCKET SG XL

SG XL 16 - SG XL 28

The SAPHIR SG XL heavy-duty bucket is particularly suitable for loading heavy goods and for earthworks. The large-volume bucket body enables maximum impact force. The standard overflow protection on the back of the bucket protects the vehicle console from soiling. The bucket is suitable for bulk weights up to max. 1,300 kg/m³

1 Highly wear-resistant scraper strip 200 x 20 mm (500 HB)

4 Optional levelling bar for even levelling of floors when reversing

2 With internal stiffeners as standard (1 stiffener up to SG XL 20, 2 from SG XL 22)

5 Optional highly wear-resistant knife 200 x 20 mm (500 HB)

3 Round bucket body and reinforced corners for particularly high stability

6 Optional gravel teeth for easy ripping of gravel soils and compacted ground

TECHNICAL DATA

Technical data	SG XL 16	SG XL 18	SG XL 20	SG XL 22	SG XL 24	SG XL 26	SG XL 28
Width approx. (mm)	1,600	1.800	2,000	2,200	2,400	2,600	2,800
Height approx. (mm)	900	900	900	900	900	900	900
Depth approx. (mm)	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Stiffeners	1	1	1	2	2	2	2
Capacity (coated according to DIN) approx. (l)	900	1,020	1,140	1,260	1,380	1,500	1,620
Contents (heaped according to SAE) approx. (l)	1,150	1,310	1,470	1,630	1,790	1,945	2,105
Weight approx. (kg)	430	470	510	580	630	680	740
Order no.	391SGXL16	391SGXL18	391SGXL20	391SGXL22	391SGXL24	391SGXL26	391SGXL28
€/piece							

ATTACHMENTS



Recording	Order no.	€/piece
Euro attachment	391EURO-S	Series



Wheel and telescopic loaders from 2.5 t lifting capacity	391RADTELE-S	Series
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Variable lock system	391VARILOCK -S	
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If your carrier vehicle is equipped with Z-kinematics, please contact us!

EQUIPMENT OPTIONS

Equipment	Order no.	€/piece
Schotterzahn - steckbar Recommended quantity: SG XL 16 - 7 pcs. SG XL 18 - 8 pcs. SG XL 20 - 9 pcs. SG XL 22 - 10 pcs. SG XL 24 - 11 pcs. SG XL 26 - 12 pcs. SG XL 28 - 13 pcs.	391001616	
Road protection For heavy goods bucket with ballast teeth Price per metre	391STPROTECTIONSGXL	
Highly wear-resistant scraper strip (300x30 mm, 500 HB) Price per metre	391HOCHV300X30	
Highly wear-resistant reversible blade (200x20 mm, 500 HB) Price per metre	391HIGHWENDE	
Highly wear-resistant reversible blade (300x30 mm, 500 HB) Price per metre	391HOCHWENDE300	
Glätteschiene (permanently welded to the back of the bucket for original equipment), price per metre	391GLAETTES	



HEAVY LIFT BUCKET SGR

SGR 20 - SGR 28.2

The SAPHIR SGR heavy-duty bucket is particularly suitable for loading heavy goods and for earthworks. The large-volume bucket body enables maximum impact force. The bucket is suitable for bulk weights up to max. 1,800 kg/m³

1 Round bucket body and reinforced corners for high stability

5 Optional highly wear resistant reversible blade as screwable alternative to the standard scraper bar

2 Highly wear-resistant scraper strip 200 x 20 mm (500 HB)
Optional: Highly wear-resistant scraper blade 300x30 mm (500 HB) (standard from SGR 26)

6 Optional gravel teeth for better ripping of gravel soils and compacted ground

3 With reinforced shovel back

7 Optional smoothing bar for even levelling of floors in reverse

4 Visual indicator on both sides as an orientation aid for ground level loading of bulk goods

TECHNICAL DATA

Technical data	SGR 20	SGR 22.1	SGR 22.2	SGR 24.1	SGR 24.2	SGR 26	SGR 26.1	SGR 26.2	SGR 28.1	SGR 28.2
Width approx. (mm)	2,000	2,200	2,200	2,400	2,400	2,600	2,600	2,600	2,800	2,800
Height approx. (mm)	800	800	1,100	1,100	1.250	1,100	1.250	1.450	1.250	1.450
Depth approx. (mm)	800	800	1.200	1.200	1.400	1.200	1.400	1.600	1.400	1.600
Scraper bar (mm)	200 x 20	200 x 20	200 x 20	200 x 20	200 x 20	300 x 30	300 x 30	300 x 30	300 x 30	300 x 30
Capacity (coated according to DIN) approx. (l)	840	930	1.800	2,100	2,600	2,400	2,900	3.750	3.200	4.050
Content (heaped according to SAE) approx. (l)	1,050	1.160	2,250	2,600	3,250	3,000	3.600	4.650	4.000	5.050
Weight approx. (kg)	470	510	700	760	920	860	1.000	1,150	1.080	1.250
Order no.	391SGR20	391SGR22.1	391SGR22.2	391SGR24.1	391SGR24.2	391SGR26	391SGR26.1	391SGR26.2	391SGR28.1	391SGR28.2
€/piece										

ATTACHMENTS



Recording	Order no.	€/piece
Wheel and telescopic loaders from 2.5 t lifting capacity	391RADTELE	Series

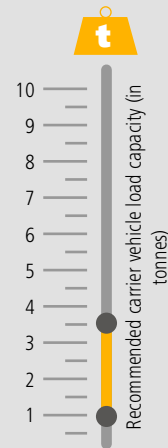


Variable lock system	391VARIABLELOCK	
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Please specify carrier vehicle when ordering.

EQUIPMENT OPTIONS

Equipment	Order no.	€/piece
Highly wear-resistant scraper strip (300x30 mm, 500 HB) (standard from SGR 26), price per metre	391HOCHV300X30	
Highly wear-resistant reversible blade (200x20 mm, 500 HB) Price per metre	391HIGHVWENDE	
Highly wear-resistant reversible blade (300x30 mm, 500 HB) Price per metre	391HOCHVWENDE300	
Glätteschiene Price per metre	391GLAETTES	
Road protection Price per metre	391PROTECTION GR	
Schotterzahn - steckbar Recommended quantity: SGR 20 - 9 pcs. SGR 22 - 10 pcs. SGR 24 - 11 pcs. SGR 26 - 12 pcs. SGR 28 - 13 pcs. Price per piece.	391SCHOTTERSGR	



HIGH TIP BUCKET HK

HK 12 - HK 24

With the SAPHIR HK high-tipping bucket, the dumping height of the carrier vehicle can be increased by approx. 1,000 mm. The tipping angle is approx. 110 degrees. The bucket is suitable for bulk weights up to max. 950 kg/m³

1 Thanks to their compact dimensions, the HK 12 and HK 15 models are particularly suitable for small tractors and farm loaders.

4 Sturdy support frame with a small front dimension

2 Highly wear-resistant scraper 150x16 (500 HB)

5 Tipping angle is 110°

3 Lifting height gain of 1,000 mm





6 Two protected hydraulic cylinders in external pockets

TECHNICAL DATA

Technical data	HK 12	HK 15	HK 16	HK 18	HK 20	HK 22	HK 24
Width approx. (mm)	1.250	1.500	1.600	1.800	2.000	2.200	2.400
Height approx. (mm)	860	860	900	900	900	900	900
Depth approx. (mm)	1.000	1.000	1.200	1.200	1.200	1.200	1.200
Capacity (coated according to DIN) approx. (l)	515	660	890	1,020	1,150	1,280	1,410
Contents (heaped according to SAE) approx. (l)	585	760	1,040	1,205	1,370	1,535	1,700
Weight approx. (kg)	355	385	580	605	650	680	700
Order no.	391HK12	391HK15	391HK16	391HK18	391HK20	391HK22	391HK24
€/piece							

Equipped as standard with size 3 hydraulic plug-in couplings

ATTACHMENTS

	Recording	Order no.	€/piece
	Euro attachment	391EURO-S	Series
	Farm and wheel loaders up to 2.5 t lifting capacity	391HOFRAD	
	Wheel and telescopic loaders from 2.5 t lifting capacity	391RADTELE	
	VLS Compact	391VARILOCK -S	

Specify carrier vehicle type when ordering

EQUIPMENT OPTIONS

Equipment	Order no.	€/piece
Plastic scraper strip 150x20mm, price per metre	391KUNSCHUERF	
Pressure relief valve recommended for Merlo, Bobcat, Dieci	391001416	
Pressure relief valve adjustable (required from 200 bar working pressure)	391001154	

Customised products available on request - please contact us!



HIGH TIP BUCKET HKR

HKR 20 - HKR 30.2

The SAPHIR HKR high-tipping bucket increases the dumping height of the wheel loader by approx. 1,000 mm. The tipping angle is approx. 110 degrees. The bucket is suitable for bulk weights up to max. 1,100 kg/m³.

1 Tipping angle 110 degrees
Lifting height gain of 1,000 mm

5 Robust support frame with best possible force transmission to the bucket body

2 Highly wear-resistant scraper 200x20 mm (500 HB)
Optional: Scraper bar 300x30 mm (500 HB) (from HKR 25.1 series)

6 Optional highly wear-resistant reversible blade as a screw-on alternative to the standard scraper bar

3 Stable substructure of the of the bucket body in direction of travel

7 Optional load volume increase by approx. 600-800 litres

4 Two protected hydraulic cylinders in external pockets with end position damping on both sides

8 Optional overflow protection (can also be combined with raised bucket side parts)

TECHNICAL DATA

Technical data	HKR 20	HKR 22	HKR 24	HKR 25.1	HKR 25.2	HKR 26	HKR 28.1	HKR 28.2	HKR 30.1	HKR 30.2
Width approx. (mm)	2,000	2,200	2,400	2,500	2,500	2,600	2,800	2,800	3,000	3,000
Height approx. (mm)	1,100	1,100	1,100	1,200	1,450	1,100	1,200	1,450	1,450	1,800
Depth of bucket body (mm)	1,300	1,300	1,300	1,500	1,800	1,300	1,500	1,800	1,800	1,800
Total depth (mm)	1,550	1,550	1,550	1,800	2,100	1,550	1,800	2,100	2,100	2,100
Scraper bar (mm)	200 x 20	200 x 20	200 x 20	300 x 30	300 x 30	300 x 30	300 x 30	300 x 30	300 x 30	300 x 30
Capacity (coated according to DIN approx. (l))	1,500	1,685	1,870	2,435	3,340	2,055	2,780	3,805	4,120	6,000
Contents (heaped according to SAE approx. (l))	1,825	2,050	2,275	2,930	4,050	2,500	3,340	4,625	5,015	7,500
Weight approx. (kg)	1,260	1,315	1,370	1,885	2,280	1,545	1,975	2,470	2,540	2,600
Order no.	391HKR20	391HKR22	391HKR24	391HKR25.1	391HKR25.2	391HKR26	391HKR28.1	391HKR28.2	391HKR30.1	391HKR30.2
€/piece										

Equipped as standard with size 3. hydraulic plug-in couplings

ATTACHMENTS



Recording	Order no.	€/piece
Wheel and telescopic loaders from 2.5 t lifting capacity	391RAD-S	Series



Variable Lock System	391VARIABLELOCK	
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Please specify carrier vehicle when ordering.

EQUIPMENT OPTIONS

Equipment	Order no.	€/piece
Highly wear-resistant scraper strip (300x30 mm, 500 HB) Price per metre	391HOCHV300X30	
Highly wear-resistant reversible blade (200x20 mm, 500 HB) Price per metre	391HIGHWENDE	
Highly wear-resistant reversible blade (300x30 mm, 500 HB) Price per metre	391HOCHWENDE300	
Kunststoffschrüfleiste 200 x 30 mm, price per metre	391KUNTSCHUERF	
Erhöhte Schaufelseitenteile schraubbar screwable, set consisting of 2 pieces	391EH SHOVEL-R	
Überlaufschutz Price per metre	391UEBERLAUFS	
Ladevolumenerhöhung approx. 600 - 800 litres	391LOAD VOLUME-R	
Pressure relief valve adjustable (required from 200 bar working pressure)	391001154	



FORKLIFT BUCKET - GSSZ FORK CARRIAGE

GSSZ 12 - GSSZ 21

The SAPHIR forklift bucket GSSZ is picked up via the forks of the forklift truck (please pay attention to the fork cross-section). It is used for the transport and loading of free-flowing bulk goods (e.g. grain (e.g. grain, fertiliser, potatoes, onions, carrots, etc.). The bucket side sections are fitted with rounded edge protection as standard. A particular advantage is the adjustability of the tilt angle via a screw segment. The load centre of gravity is approx. 680 mm, with a front boom dimension of approx. 540 mm.



1
Scraper bar 150 x 16 mm made of highly wear-resistant steel (500 HB)



3
The bucket is picked up via a fork tine holder and fixed in place with tommy screws.



2
Tilt angle adjustment via screw segment





4
Double spherical plain bearing with greasable plain bearings

TECHNICAL DATA

Technical data	GSSZ 12	GSSZ 15	GSSZ 18	GSSZ 21
Width approx. (mm)	1.200	1.500	1.800	2.100
Height approx. (mm)	860	860	860	860
Depth approx. (mm)	1,350	1,350	1,350	1,350
Capacity (coated according to DIN) approx. (l)	750	900	1.200	1.500
Content (heaped according to SAE) approx. (litres)	940	1.120	1.500	1.870
Internal fork pocket dimensions approx. (mm)	110 x 50	130 x 60	130 x 60	130 x 60
Centre of gravity approx. (mm)	630	660	700	730
Weight approx. (kg)	305	370	395	430
Order no.	391GSSZ12	391GSSZ15	391GSSZ18	391GSSZ21
€/piece				

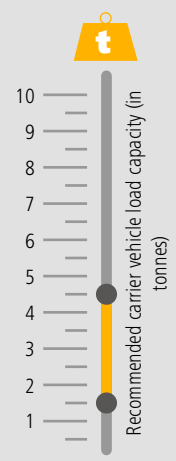
Equipped as standard with size 3 hydraulic plug-in couplings

ATTACHMENTS

	Recording	Order no.	€/piece
	Gabelzinkenaufnahme Inner pocket size 110x50 mm (for GSSZ 12)	391GSSZGABEL110	Series
	Gabelzinkenaufnahme Inner pocket size 130x60 mm (for GSSZ 15 - GSSZ 21)	391GSSZGABEL130	Series

EQUIPMENT OPTIONS

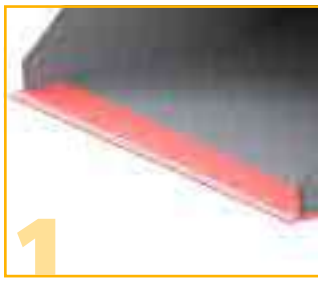
Equipment	Order no.	€/piece
Pressure relief valve adjustable (required from 200 bar working pressure)	391001154	



FORKLIFT BUCKET GSST

GSST 16 - GSST 23

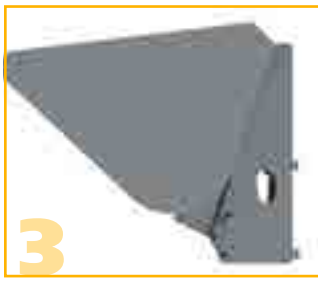
The SAPHIR forklift bucket GSST is a bucket firmly connected to the forklift truck via the fork carriage. bulk material bucket. The particularly sturdy design enables use even under high loads.



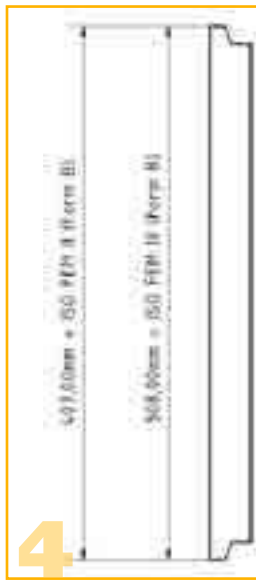
1
Scraper bar 200 x 20 mm made of highly wear-resistant steel (500 HB)



2
Two hydraulic cylinders with end position damping



3
Particularly small stem dimension of 250 mm



4
Ready to fit for the fork carriage mount ISO FEM II (407mm) or ISO FEM III (508mm)
Please specify the fork carriage standard when ordering.



5
Optional edge protection to prevent damage to loads such as potatoes or beets

TECHNICAL DATA

Technical data	GSST 16	GSST 20	GSST 23
Width approx. (mm)	1,600	2,000	2,300
Height approx. (mm)	1,050	1,050	1,050
Depth approx. (mm)	1,300	1,300	1,300
Capacity (coated according to DIN) approx. (l)	1,280	1,650	1,940
Content (heaped according to SAE) approx. (litres)	1,600	2,000	2,400
Weight approx. (kg)	775	855	900
Order no.	391GSST16	391GSST20	391GSST23
€/piece			

ATTACHMENTS

	Recording	Order no.	€/piece
	Fork beam standard ISO FEM II	391GSSTIS02	Series
	Fork beam standard ISO FEM III	391GSSTIS03	Series

Please state the fork carriage standard of your forklift truck when ordering!

EQUIPMENT OPTIONS

Equipment	Order no.	€/piece
Kantenschutz Welded tube on the blade side parts Price per set	391GSSTKANTE	
Seitenteile konvex screwable, price per set	391GSLATERAL CONVEX	
Adjustable pressure relief valve (Required from 200 bar working pressure)	391001154	



Quality tines from SHW Friedrichstal (MADE IN GERMANY)




GRAB BUCKET GS

GS 16 - GS 24

The SAPHIR grab bucket GS is a universally applicable grabbing tool for the agricultural sector. The main area of application is the removal of silage from the silage stack. The tine version of the upper pliers with forged quality tines ensures a clean cutting edge. In the sickle version, the hardened sickles ensure that no load is impaled during manure removal or loading of compost, etc. The appliances can also be supplied for wall removal as an option.




1 Highly wear-resistant scraper bar 150 x 20 mm(500 HB)



5 Optimally shaped upper tongs with hardened sickles to prevent the load from being impaled




2 Optional highly wear-resistant knife 200 x 20 mm(500 HB)




6 Top tine pliers for professional removal from the feed stick with a clean cutting edge



3 Top gripper with centre bearings and replaceable plain bearings. An optional top tong recess is possible for loaders with Z-kinematics



7 Optional wall removal is available as original equipment available ex works



4 Large hydraulic cylinder cylinders with end position damping for gentle opening and closing of the top clamp.







8

TECHNICAL DATA

Technical data	GS 16	GS 18	GS 20	GS 22	GS 24
Width approx. (mm)	1,600	1,800	2,000	2,200	2,400
Height approx. (mm)	750	750	750	750	750
Depth approx. (mm)	900	900	900	900	900
Bearings	2	3	3	4	4
Volume approx. (l)	880	980	1,080	1,180	1,280
Opening width approx. (mm)	1,450	1,450	1,450	1,450	1,450
Scraper bar (mm)	150 x 20	150 x 20	150 x 20	150 x 20	150 x 20
Stiffeners	1	1	1	2	2
Number of sickles / number of tines	4 / 8	4 / 9	6 / 10	6 / 11	6 / 12
Weight approx. (kg)	600	635	700	750	780
Order no. Sickle version	391GS16	391GS18	391GS20	391GS22	391GS24
€/piece					
Order no. Fork version	391GS16Z	391GS18Z	391GS20Z	391GS22Z	391GS24Z
€/piece					

Equipped as standard with size 3 hydraulic plug-in couplings

ATTACHMENTS

	Recording	Order no.	€/piece
	(central locking in the centre)	391EURO-S	Series
	Farm and wheel loaders up to 2.5 t lifting capacity	391HOFRAD	
	Wheel and telescopic loaders from 2.5 t lifting capacity	391RADTELE	
	VLS Compact	391VARILOCK -S	

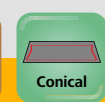
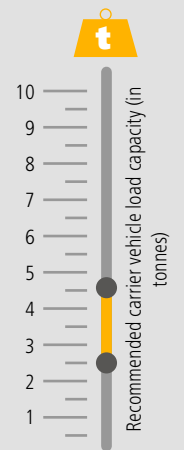
Specify carrier vehicle type when ordering

EQUIPMENT OPTIONS

Equipment	Order no.	€/piece
Removable side panels (set) Set consisting of 2 side panels	391HERSEITENGS	
Higher sideparts (Set of 2)	391EHGREIFGS	
Wall removal (only possible with original equipment ex works)	391WANDENT	
Highly wear-resistant reversible blade (200x20 mm, 500 HB) Price per metre, screwable	391HIGHWVENDE	
High tipping device (1 x dw required), reduces the bucket capacity by approx. 120 litres	391HOCHKIPPGS	
Electrohydraulic changeover (6/2 way valve 12V 90ltr./min, ATTENTION: Without electrical kit)	526001622	
Pressure relief valve, adjustable (required from 200 bar working pressure)	391001154	
Pressure relief valve recommended for Merlo, Bobcat, Dieci	391001416	



Quality tines from SHW Friedrichstal (MADE IN GERMANY)



GRAB BUCKET GS L

GS L 20 - GS L 28

The SAPHIR grab bucket GS L is a universally applicable grabbing tool for the agricultural sector. The L stands for an increased volume compared to the standard grab bucket. The main area of application for this grab bucket is the removal of silage from the silage stack. The tine version of the upper pliers with forged quality tines ensures a clean cutting edge. In the sickle version, the hardened sickles ensure that no load is impaled during manure removal or loading of compost, etc. A wall removal function is optionally available ex works.



Highly wear-resistant scraper bar 150x20 mm(500 HB)

1



Optimally shaped upper tongs with hardened sickles to prevent the load from being impaled

5



Optional highly wear-resistant knife 200 x 20 mm(500 HB)

2



Top tine pliers for professional removal from the feed stick with a clean cutting edge

6



Top gripper with centre bearings and replaceable plain bearings. An optional top tong recess is possible for loaders with Z-kinematics

3



Optional wall removal is available ex works with original equipment

7



Large hydraulic cylinders with end position damping for gentle opening and closing of the top clamp.

4



Optional tilt-up device (1 x dw required) Lift height gain approx. 1,000 mm



8

TECHNICAL DATA

Technical data	GS L 20	GS L 22	GS L 24	GS L 26	GS L 28
Width approx. (mm)	2,000	2,200	2,400	2,600	2,800
Height approx. (mm)	850	850	850	850	850
Depth approx. (mm)	1.000	1.000	1.000	1.000	1.000
Bearings	4	4	4	4	4
Volume approx. (l)	1,750	1850	1.950	2.050	2.150
Opening width approx. (mm)	1.540	1.540	1.540	1.540	1.540
Scraper bar (mm)	150 x 20	150 x 20	150 x 20	150 x 20	150 x 20
Stiffeners	1	2	2	2	2
Number of sickles / number of tines	6 / 10	6 / 11	6 / 12	6 / 13	8 / 14
Weight approx. (kg)	810	880	910	1.030	1.080
Order no. Sickle version	391GSL20	391GSL22	391GSL24	391GSL26	391GSL28
€/piece					
Order no. Fork version	391GSL20Z	391GSL22Z	391GSL24Z	391GSL26Z	391GSL28Z
€/piece					

Equipped as standard with size 3. hydraulic plug-in couplings

ATTACHMENTS

	Recording	Order no.	€/piece
	Euro attachment	391EURO-S	Series
	Wheel and telescopic loaders from 2.5 t lifting capacity	391RADTELE-S	Series
	Variable Lock System	391VARILOCK -S	

Specify carrier vehicle type when ordering

EQUIPMENT OPTIONS

Equipment	Order no.	€/piece
Removable side panels (set) Set consisting of 2 side panels	391HERSEITENGSL	
Raised shovel side parts ((set consisting of 2 pieces)	391EHGREIFGSL	
Wall removal (only possible with original equipment ex works)	391WANDENT	
Highly wear-resistant reversible blade (200x20 mm, 500 HB) Price per metre	391HIGHWENDE	
High tipping device (1 x dw required), reduces the bucket capacity by approx. 200 litres	391HOCHKIPPGSL	
Electrohydraulic changeover (6/2 way valve 12V 90ltr./min.) ATTENTION: Without electrical kit)	526001622	
Pressure relief valve adjustable (required from 200 bar working pressure)	391001154	
Pressure relief valve recommended for Merlo, Bobcat, Dieci	391001416	



GRAB BUCKET GS XL

GS XL 20 - GS XL 28

The SAPHIR grab bucket XL is a universally applicable grab tool for the agricultural sector. The XL stands for a further increase in volume compared to the L grab bucket. The main area of application for this grab bucket is silage removal from the silage stockpile. The tine version of the upper pliers with forged quality tines ensures a clean cutting edge. In the sickle version, the hardened sickles ensure that no load is impaled during manure removal or loading of compost, etc. A wall removal function is optionally available.

1 Highly wear-resistant scraper strip 200 x 20 mm (HB 500)

5 Optimally shaped upper tongs with hardened sickles to prevent the load from being impaled

2 Large hydraulic cylinders cylinders with end position damping for gentle closing of the upper gripper

6 Top tine pliers for professional removal from the feed stick with a clean cutting edge

3 With 2 internal stiffeners as standard internal stiffeners as standard

7 Optional wall removal is available ex works with original equipment

4 Top gripper with centre bearings and replaceable plain bearings. An optional top tong recess is possible for loaders with Z-kinematics

8 Optional tilt-up device (1 x dw required) for a lifting height gain of 1,000 mm

TECHNICAL DATA

Technical data	GS XL 20	GS XL 22	GS XL 24	GS XL 26	GS XL 28
Width approx. (mm)	2,000	2,200	2,400	2,600	2,800
Height approx. (mm)	950	950	950	950	950
Depth approx. (mm)	1,100	1,100	1,100	1,100	1,100
Bearings	3	4	4	4	4
Volume approx. (l)	1.950	2.150	2.350	2.550	2750
Opening width approx. (mm)	1.630	1.630	1.630	1.630	1.630
Scraper bar (mm)	200 x 20	200 x 20	200 x 20	200 x 20	200 x 20
Stiffeners	2	2	2	2	2
Number of sickles / number of tines	6 / 10	6 / 11	6 / 12	6 / 13	8 / 14
Weight approx. (kg)	1,055	1,105	1,140	1,175	1,265
Order no. Sickle version	391GSXL20	391GSXL22	391GSXL24	391GSXL26	391GSXL28
€/piece					
Order no. Fork version	391GSXL20Z	391GSXL22Z	391GSXL24Z	391GSXL26Z	391GSXL28Z
€/piece					

Equipped as standard with size 3 hydraulic plug-in couplings

ATTACHMENTS



Recording	Order no.	€/piece
Wheel and telescopic loaders from 2.5 t lifting capacity	391RADTELE-S	Series



Variable Lock System	391VARILOCK -S
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Specify carrier vehicle type when ordering

EQUIPMENT OPTIONS

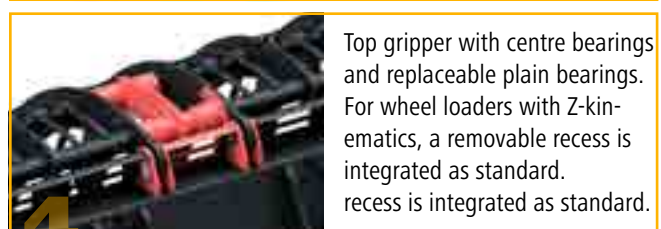
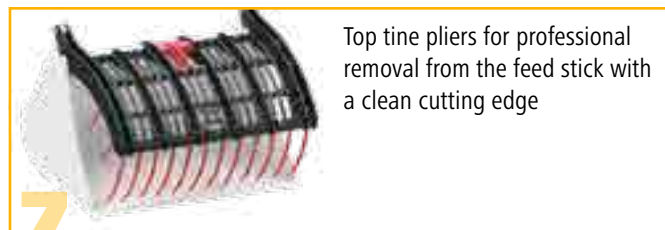
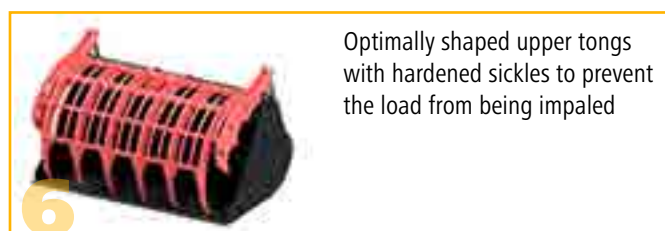
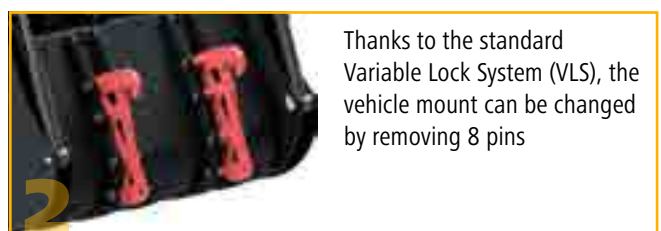
Equipment	Order no.	€/piece
Removable side panels (set) Set consisting of 2 side panels	391HERSEITENGSL	
Higher sideparts (Set of 2)	391EHGREIFGSL	
Wall removal (only possible with original equipment ex works)	391WANDENT	
Highly wear-resistant scraper strip (300x30 mm, 500 HB) Price per metre	391HOCHV300X30	
Highly wear-resistant reversible blade (200x20 mm, 500 HB) Price per metre	391HIGHVWENDE	
High tipping device Dead weight approx. 700 kg, 1 x dw required, reduces the bucket capacity by approx. 250 l	391HIGH-TILTGSXL	
Electrohydraulic changeover (6/2 way valve 12V 90ltr./min, ATTENTION: Without electrical kit)	526001622	
Pressure relief valve adjustable (required from 200 bar pressure)	391001154	
Pressure relief valve recommended for Merlo, Bobcat, Dieci	391001416	



GRAB BUCKET GSR

GSR 24 - GSR 30

The SAPHIR grab bucket GSR is a universally applicable grabbing tool for the agricultural sector. The R stands for the special use on wheel loaders with operating weights of over 10 tonnes. The construction is designed to meet the highest requirements and offers even larger loading volumes compared to the XL grab bucket. The areas of application are diverse and range from the typical silage removal at the silage stockpile to mucking out stables and loading compost, for example. The carrier vehicle mount is shown as standard using the Variable Lock System and can be changed using the 8 locking pins. All appliances are equipped with an adjustable pressure relief valve ex works.



TECHNICAL DATA

Technical data	GSR 24	GSR 26	GSR 28	GSR 30
Width approx. (mm)	2,400	2,600	2,800	3,000
Height approx. (mm)	1,100	1,100	1,100	1,100
Depth approx. (mm)	1,350	1,350	1,350	1,350
Bearings	4	4	4	4
Opening width approx. (mm)	1.950	1.950	1.950	1.950
Scraper bar (mm)	300 x 30	300 x 30	300 x 30	300 x 30
Stiffeners	2	2	2	2
Number of sickles / number of tines	6 / 12	6 / 13	8 / 14	8 / 15
Volume approx. (l)	3.200	3.500	3.800	4.100
Weight approx. (kg)	1,780	1,850	2,015	2,080
Order no. Sickle version	391GSR24	391GSR26	391GSR28	391GSR30
€/piece				
Order no. Fork version	391GSR24Z	391GSR26Z	391GSR28Z	391GSR30Z
€/piece				

Equipped as standard with size 3 hydraulic plug-in couplings

ATTACHMENTS



Recording	Order no.	€/piece
Variable Lock System	391VARILOCK-S	Series

Specify carrier vehicle type when ordering

EQUIPMENT OPTIONS

Equipment	Order no.	€/piece
Higher sideparts (Set of 2)	391EHGREIFGSR	
Wall removal (only possible with original equipment ex works)	391WANDENT	
Highly wear-resistant reversible blade (300x30 mm, 500 HB) Price per metre	391HOCHVWENDE300	
High tipping device Dead weight approx. 700 kg 1x dw required, reduces the bucket capacity by approx. 320 litres	391HOCHKIPPGSR	
Electrohydraulic changeover	526001622	
Pressure relief valve recommended for Merlo, Bobcat, Dieci	391001416	



FOLDING SHOVEL KS (4 IN 1)

KS 13 - KS 25

The SAPHIR folding shovel KS is an efficient multi-purpose shovel with a wide range of applications. The front part of the bucket can be opened using two hydraulic cylinders. This enables, for example, the transport of logs, dosed filling and emptying of the contents, the levelling of paths and the loading of soil or gravel, for example. All appliances are equipped with an adjustable pressure relief valve ex works.

1 Bolted scraper bar 150 x 20 mm (500 HB) in the back of the bucket

5 II. Levelling work with open bucket body

2 Two large-dimensioned hydraulic cylinders, with end damping and pre-installed flow divider

6 III. Gripping of loads with a very large opening width of approx. 1020 mm

3 Reinforced substructure with highly wear-resistant scraper 150 x 16 mm (500 HB)





7 IV. Folding function for dosed filling and emptying of the bucket

4 I. Earthworks and transport work with closed bucket body

TECHNICAL DATA

Technical data	KS 13	KS 16	KS 19	KS 21	KS 23	KS 25
Width approx. (mm)	1,300	1,600	1,900	2,100	2,300	2,500
Height approx. (mm)	780	780	780	780	780	780
Depth approx. (mm)	700	700	700	700	700	700
Opening width approx. (mm)	1.020	1.020	1.020	1.020	1.020	1.020
Capacity (coated according to DIN) approx. (l)	360	445	520	580	640	700
Contents (heaped according to SAE) approx. (l)	460	575	690	765	845	920
Weight approx. (kg)	340	380	420	440	460	490
Order no.	391KS13	391KS16	391KS19	391KS21	391KS23	391KS25
€/piece						

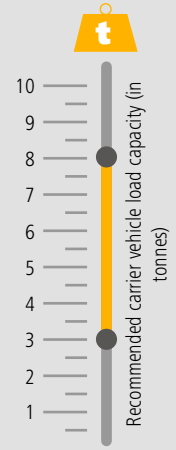
ATTACHMENTS

	Recording	Order no.	€/piece
	Euro attachment possible from KS 16	391EURO-S	Series
	Farm and wheel loaders up to 2.5 t lifting capacity	391HOFRAD	
	Wheel and telescopic loaders from 2.5 t lifting capacity	391RADTELE	
	VLS Compact	391VARILOCK -S	

Specify carrier vehicle type when ordering. If your quick-change device is equipped with a side tool locking system, please contact us!

EQUIPMENT OPTIONS

Equipment	Order no.	€/piece
Schotterzahn - steckbar Recommended quantity: KS 13 - 5 pcs. KS 16 - 7 pcs. KS 19 - 8 pcs. KS 21 - 9 pcs. KS 23 - 10 pcs. KS 25 - 11 pcs.	391001616	
Road protection required for gravel teeth Price per metre	391STRSCHUTZKS	
Pressure relief valve recommended for Merlo, Bobcat, Dieci	391001416	
Highly wear-resistant reversible blade (200x20 mm, 500 HB) Price per metre, screwable	391HOCHWENDE	



FOLDING SHOVEL KS L (4 IN 1)

KS L 16 - KS L 26

The SAPHIR folding shovel KS L is an efficient multi-purpose shovel with a wide range of applications. The front part of the bucket can be opened using two hydraulic cylinders. This enables, for example, the transport of logs, the metered filling and emptying of bulk materials, the levelling of paths and the loading of soil or gravel, for example. The standard mounting via the SAPHIR Variable Lock System (VLS) and the screwable recess for the Z-kinematics mean that the KS L can be customised for every type of carrier vehicle. All appliances are equipped with an adjustable pressure relief valve ex works.

1 Bolted scraper bar 150 x 20 mm (500 HB) in the back of the bucket

5 I. Earthworks and transport work with closed bucket body

2 Two large-dimensioned hydraulic cylinders, with end damping and pre-installed flow divider

6 II. Levelling work with open bucket body

3 Reinforced substructure with highly wear-resistant scraper 200 x 16 mm (500 HB)

7 III. Gripping of loads with a very large opening width of approx. 1,290 mm

4 With screw-on recess for carrier vehicles with Z-kinematics

8 IV. Folding function for dosed filling and emptying of the bucket

TECHNICAL DATA

Technical data	KS L 16	KS L 18	KS L 20	KS L 22	KS L 24	KS L 26
Width approx. (mm)	1,600	1,800	2,000	2,200	2,400	2,600
Height approx. (mm)	970	970	970	970	970	970
Depth approx. (mm)	980	980	980	980	980	980
Opening width approx. (mm)	1,290	1,290	1,290	1,290	1,290	1,290
Capacity (coated according to DIN) approx. (l)	725	820	910	1,000	1,100	1,200
Contents (heaped according to SAE) approx. (l)	915	1,040	1,170	1,300	1,430	1,560
Weight approx. (kg)	680	725	765	810	850	960
Order no.	391KSL16	391KSL18	391KSL20	391KSL22	391KSL24	391KSL26
€/piece						

ATTACHMENTS

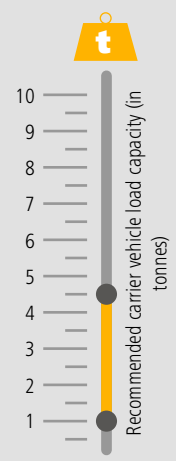


Recording	Order no.	€/piece
Variable Lock System	391VARILOCK -S	Series

Specify carrier vehicle type when ordering

EQUIPMENT OPTIONS

Equipment	Order no.	€/piece
Schotterzahn - steckbar Recommended quantity: KS L 16 - 7 pcs. KS L 18 - 8 pcs. KS L 20 - 9 pcs. KS L 22 - 10 pcs. KS L 24 - 11 pcs. KS L 26 - 12 pcs.	391001616	
Road protection required for gravel teeth Price per metre	391STRSCHUTZKSL	
Pressure relief valve recommended for Merlo, Bobcat, Dieci	391001416	
Highly wear-resistant reversible blade (200x20 mm, 500 HB) Price per metre, screwable	391HOCHWENDE	



SIDE TIPPING BUCKET SKS

SKS 18 - SKS 22

The SAPHIR SKS side tipping bucket is a specialised working tool and is mainly used in road construction and civil engineering. To backfill the side of the road, for example, the bucket body can be tilted sideways to the right in the direction of travel. This means that the carrier vehicle has to manoeuvre less and is positioned at a 90° angle to the unloading point. The bucket is suitable for bulk weights up to max. 1,300 kg/m³.

1 Highly wear-resistant scraper bar 200 x 20 mm(500 HB)

3 Massive, large-dimensioned bearing point

2 Reinforced substructure in travelling direction





4 One-sided funnel-shaped bucket body for easy emptying of bulk materials

TECHNICAL DATA

Technical data	SKS 18	SKS 20	SKS 22
Width (mm)	1.800	2,000	2,200
Height (mm):	800	800	800
Depth (mm):	1.000	1,000	1.000
Scraper bar (mm)	200 x 20	200 x 20	200 x 20
Capacity (coated according to DIN) approx. (l)	945	1,070	1,195
Contents (heaped according to SAE) approx. (l)	1,150	1,305	1,460
Weight (kg)	620	670	715
Order no.	391SKS18	391SKS20	391SKS22
€/piece			

Equipped as standard with size 3 hydraulic plug-in couplings

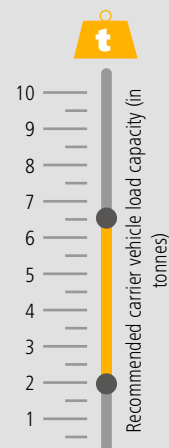
ATTACHMENTS

	Recording	Order no.	€/piece
	Euro attachment	391EURO-S	Series
	Farm and wheel loaders up to 2.5 t lifting capacity	391HOFRAD	
	Wheel and telescopic loaders from 2.5 t lifting capacity	391RADTELE	
	VLS Compact	391VARILOCK -S	

Please specify carrier vehicle when ordering. Please note that the centre of gravity of the load shifts when the bucket is tilted sideways. The operating weight of the carrier vehicle should therefore be sufficiently high.

EQUIPMENT OPTIONS

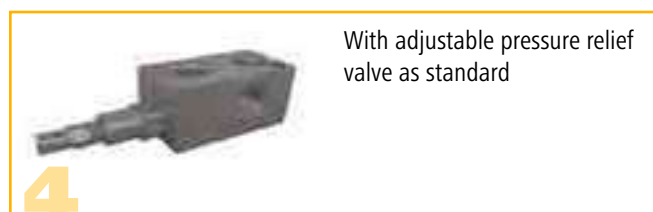
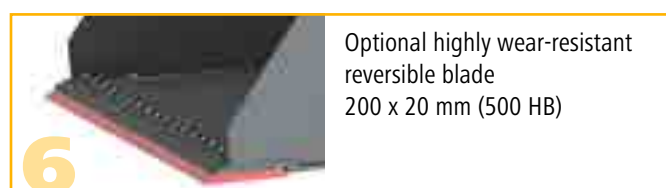
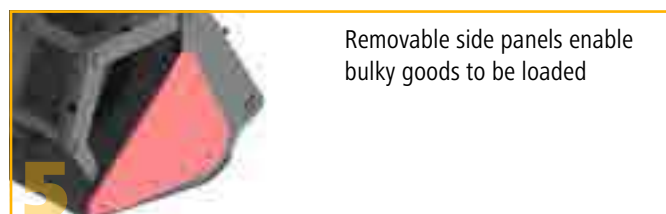
Equipment	Order no.	€/piece
Ballast tooth - pluggable Empfohlene Anzahl: SKS 18 = 8 pcs. SKS 20 = 9 pcs. SKS 22 = 10 pcs.	391001616	
Road protection required for gravel teeth Price per metre	391PROTECTION SKS	
Pressure relief valve adjustable (required from 200 pressure)	391001154	
Pressure relief valve recommended for Merlo, Bobcat, Dieci	391001416	



DISPOSAL BUCKET ES

ES 16 - ES 26

The SAPHIR waste disposal bucket is a particularly sturdy bucket with top tongs. The range of applications for this bucket extends from loading brushwood and green waste to building rubble and waste at disposal yards. The hydraulic cylinders positioned on the back of the bucket are optimally protected against external influences and associated damage. The standard removable side panels as standard also enable the safe loading of particularly bulky goods.







TECHNICAL DATA

Technical data	NEW!					
	ES 16	ES 18	ES 20	ES 22	ES 24	ES 26
Width approx. (mm)	1,600	1.800	2,000	2,200	2,400	2,600
Height approx. (mm)	850	850	850	850	850	850
Depth approx. (mm)	1,050	1,050	1,050	1,050	1,050	1,050
Number of tines	4	4	4	5	5	5
Stiffeners	1	1	1	2	2	2
Volume approx. (l)	1,300	1.500	1.700	1.900	2,100	2,300
Weight approx. (kg)	720	755	800	885	915	945
Order no.	391ES16	391ES18	391ES20	391ES22	391ES24	391ES26
€/piece						

Equipped as standard with size 3 hydraulic plug-in couplings

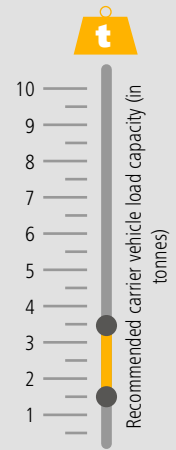
ATTACHMENTS

	Recording	Order no.	€/piece
	Euro attachment	391EURO-S	Series
	Farm and wheel loaders up to 2.5 t lifting capacity	391HOFRAD	
	Wheel and telescopic loaders from 2.5 t lifting capacity	391RADTELE	
	Variable Lock System	391VARILOCK -S	

Specify carrier vehicle type when ordering

EQUIPMENT OPTIONS

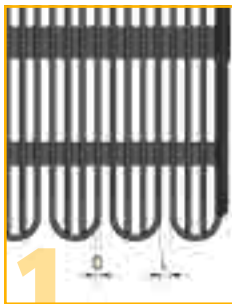
Equipment	Order no.	€/piece
Schotterzahn - steckbar Recommended quantity: ES 16 - 7 pcs. ES 18 - 8 pcs. ES 20 - 9 pcs. ES 22 - 10 pcs. ES 24 - 11 pcs.	391001616	
Highly wear-resistant reversible blade (200x20 mm, 500 HB) Price per metre screwable	391HIGHWENDE	
Querrohr mit Zackenleiste Price per metre	391QUERZ	
Road protection for disposal buckets with ballast teeth Price per metre	391STRSPROTECTION	
Pressure relief valve recommended for Merlo, Bobcat, Dieci	391001416	



POTATO AND TURNIP BASKET KK / RK

KK 20 - KK 25 / RK 20 - RK 25

The SAPHIR potato baskets KK and the SAPHIR beet baskets RK enable you to safely pick up the relevant crops. Edge protection prevents damage to the fruit, while the bottom of the basket allows sand and stones to be sieved out. The baskets are also very suitable for loading logs.



Potato basket with 14 mm round bars and 26 mm clear bar width.
Beet basket with 33.5 mm round bars and 66.5 mm clear bar width



Round bracket, recommended for working on unpaved surfaces



Highly wear-resistant scraper 150 x 16 mm (500 HB), recommended for work on solid ground



Standard with crop guard to prevent damage to the crops







KK and RK are very suitable for loading logs

TECHNICAL DATA

Technical data	KK 20 with round bracket	KK 20S with scraper	KK 22 with round bracket	KK 22S with scraper	KK 25 with round bracket	KK 25S with scraper
Width approx. (mm)	2,000	2,000	2,250	2,250	2,500	2,500
Height approx. (mm)	1,050	1,050	1,050	1,050	1,050	1,050
Depth approx. (mm)	1,150	1,150	1,150	1,150	1,150	1,150
Capacity (coated according to DIN) approx. (l)	1,200	1,200	1,400	1,400	1,600	1,600
Content (heaped according to SAE) approx. (l)	1,500	1,500	1,750	1,750	2,000	2,000
Weight approx. (kg)	370	370	385	385	422	422
Order no.	391KK20	391KK20S	391KK22	391KK22S	391KK25	391KK25S
€/piece						

Technical data	RK 20 with round bracket	RK 20S with scraper	RK 22 with round bracket	RK 22S with scraper	RK 25 with round bracket	RK 25S with scraper
Width approx. (mm)	2,000	2,000	2,250	2,250	2,500	2,500
Height approx. (mm)	1,050	1,050	1,050	1,050	1,050	1,050
Depth approx. (mm)	1,150	1,150	1,150	1,150	1,150	1,150
Capacity (coated according to DIN) approx. (l)	1,060	1,060	1,170	1,170	1,320	1,320
Contents (heaped according to SAE) approx. (l)	1,270	1,270	1,400	1,400	1,590	1,590
Weight approx. (kg)	445	445	460	460	495	495
Order no.	391RK20	391RK20S	391RK22	391RK22S	391RK25	391RK25S
€/piece						

ATTACHMENTS

	Recording	Order no.	€/piece
	Euro attachment	391EURO-S	Series
	Farm and wheel loaders up to 2.5 t lifting capacity	391HOFRAD	
	Wheel and telescopic loaders from 2.5 t lifting capacity	391RADTELE	
	VLS Compact	391VARILOCK -S	

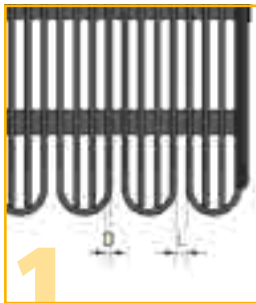
Specify carrier vehicle type when ordering



POTATO AND TURNIP BASKET KK L / RK L

KK L 25 - KK L 28 | RK L 25 - RK L 28

The SAPHIR potato baskets KK and the SAPHIR beet baskets RK enable you to safely pick up the relevant crops. Edge protection prevents damage to the fruit, while the bottom of the basket allows sand and stones to be sieved out. The baskets are also very suitable for loading logs.



Potato basket with 16 mm round bars and 26 mm clear bar width.
Beet basket with 33.5 mm round bars and 66.5 mm clear bar width



Round bracket, recommended for working on unpaved surfaces



Highly wear-resistant scraper 150 x 16 mm (500 HB), recommended for work on solid ground



Standard with crop guard to prevent damage to the crops





KK and RK are very suitable for loading logs

TECHNICAL DATA

Technical data	KK L 25 with Round bracket	KK L 25S with Scraper bar	KK L 28 with round bracket	KK L 28S with Scraper bar
Approx. width (mm):	2,500	2,500	2,800	2,800
Approx. height (mm)	1,200	1,200	1,200	1,200
Depth approx. (mm)	1,400	1,400	1,400	1,400
Capacity (coated according to DIN) approx. (l)	2,300	2,300	2,600	2,600
Contents (heaped according to SAE) approx. (l)	2,800	2,800	3,200	3,200
Weight approx. (kg)	805	845	865	910
Order no.	391KKL25	391KKL25S	391KKL28	391KKL28S
€/piece				

Technical data	RK L 25 with round bracket	RK L 25S with Scraper bar	RK L 28 with round bracket	RK L 28S with Scraper bar
Approx. width (mm):	2,500	2,500	2,800	2,800
Approx. height (mm)	1,200	1,200	1,200	1,200
Depth approx. (mm)	1,400	1,400	1,400	1,400
Capacity (coated according to DIN) approx. (l)	2,150	2,150	2,350	2,350
Contents (heaped according to SAE) approx. (l)	2,650	2,650	2,900	2,900
Weight approx. (kg)	710	745	740	775
Order no.	391RKL25	391RKL25S	391RKL28	391RKL28S
€/piece				

ATTACHMENTS

	Recording	Order no.	€/piece
	Variable lock system	391VARILOCK-S	series
	Extra cost for wheel loaders with Z-kinematics	391Z-KINE	

Specify carrier vehicle type when ordering



Stone basket with roll-back protection and overflow protection



STONE BASKET STK

STK 15 - STK 25

The SAPHIR stone basket STK enables stones to be loaded or picked up. The particularly robust construction of the basket and the material thickness enable universal use. Due to the round steel construction, sand and small stones can fall out, among other things. The stone basket is optionally available with a permanently welded roll-back protection on the round steel bars.

1 Round bars with a diameter of 30 mm and a clear bar width of 60 mm

3 Pointed round steel, recommended for work on unpaved surfaces





2 Highly wear-resistant Scraper blade 150 x 16 mm (500 HB), recommended for work on paved surfaces

4 Optional roll-back protection, recommended when loading stones in the field to prevent stones from rolling out

TECHNICAL DATA

Technical data	NEW	NEW	NEW			
	STK 15/S	STK 17/S	STK 19/S	STK 21/S	STK 23/S	STK 25/S
Approx. width (mm)	1,490	1,760	1,940	2,120	2,300	2,480
Approx. height (mm)	1,100	1,100	1,100	1,100	1,100	1,100
Depth approx. (mm)	1,040	1,040	1,040	1,040	1,040	1,040
Internal bucket height approx. (mm)	900	900	900	900	900	900
Scraper bar (mm) for version S	150 x 16	150 x 16	150 x 16	150 x 16	150 x 16	150 x 16
Capacity (coated according to DIN approx. (l))	640	750	830	910	990	1,070
Contents (heaped according to SAE approx. (l))	820	960	1,070	1,180	1,290	1,400
Weight approx. (kg)	410	450	485	515	540	570
Order no. Version Scraper bar	391STK15S	391STK17S	391STK19S	391STK21S	391STK23S	391STK25S
Order no. Version tapered	391STK15	391STK17	391STK19	391STK21	391STK23	391STK25
€/piece						

ATTACHMENTS

	Recording	Order no.	€/piece
	Euro attachment	391EURO-S	Series
	Farm and wheel loaders up to 2.5 t lifting capacity	391HOFRAD	
	Wheel and telescopic loaders from 2.5 t lifting capacity	391RADTELE	
	Variable Lock System	391VARILOCK -S	

Specify carrier vehicle type when ordering

EQUIPMENT OPTIONS

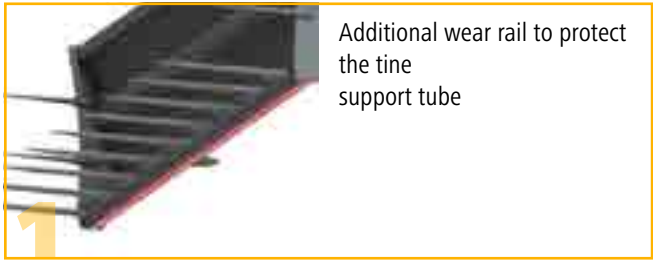
Equipment	Order no.	€
Rückrollsicherung Preis pro Meter	391RÜCKROLL	



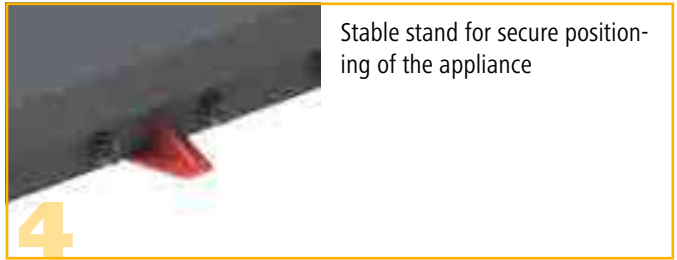
MANURE FORK DG

DG 09 - DG 23

The SAPHIR manure fork DG is used for loading and transporting loose manure, straw, green waste, shrubs, etc. The manure forks are supplied ex works with quality tines from SHW Friedrichstal. The standard tine length is 800 mm.



Additional wear rail to protect the tine support tube



Stable stand for secure positioning of the appliance



Overlapping of the rear wall over the zinc support tube for particularly high stability



Optional side tines to minimise losses during transport






Thick-walled zinc support tube with welded-in conical sleeves

TECHNICAL DATA

Technical data	DG 09	DG 11	DG 12	DG 13	DG 15	DG 17	DG 19	DG 21	DG 23
Width approx. (mm)	900	1,100	1,200	1,300	1,500	1,700	1,900	2,100	2,300
Height approx. (mm)	800	800	800	800	800	800	800	800	800
Number of tines	5	6	6	7	8	9	10	11	12
Weight approx. (kg)	84	109	130	140	155	170	185	200	215
Order no.	391DG09	391DG11	391DG12	391DG13	391DG15	391DG17	391DG19	391DG21	391DG23
€/piece									

ATTACHMENTS

	Recording	Order no.	€/piece
	Euro attachment (from 1,200 mm width)	391EURO-S	Series
	Farm and wheel loaders up to 2.5 t lifting capacity	391HOFRAD	
	VLS Compact	391VARILOCK -S	

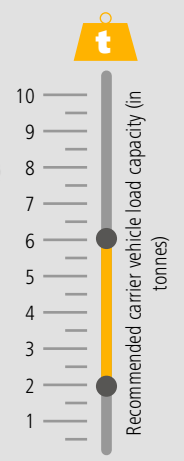
Specify carrier vehicle type when ordering

EQUIPMENT OPTIONS

Equipment	Order no.	€/piece
Normallast-Zinken 1,000 mm long Surcharge per tine	439439016	
Normallast-Zinken 1,100 mm long Surcharge per tine	391003079	
Seitliche Zinken 600 mm long Price per tine	391002956	
Road protection For DG09 - DG13	391004370	
Road protection For DG15 - DG19	391004371	
Road protection For DG21 - DG23	391004372	



Quality tines from SHW Friedrichstal (MADE IN GERMANY)



MANURE FORK DG XL

DG XL 17 - DG XL 25

The SAPHIR manure fork XL is used to remove and transport loose manure, straw, green waste, shrubbery, etc. Only heavy-duty quality tines from SHW Friedrichstal with a length of 800 mm are used on the SAPHIR manure fork XL. Longer heavy-duty tines can also be installed on request.

1 Additional wear rail to protect the tine support tube

4 Optional lateral steel tines for reduced loss during transport

2 High fork back with 860 mm height




5 Solid zinc support tube with welded-in tapered sleeves and welding bushes. Vertical stiffeners to the back of the fork provide additional stability

3 Optional 350 mm return height increase from expanded metal

TECHNICAL DATA

Technical data	DG XL 17	DG XL 19	DG XL 21	DG XL 23	DG XL 25
Width approx. (mm)	1.700	1.900	2.100	2.300	2.500
Height approx. (mm)	860	860	860	860	860
Number of tines	9	10	11	12	13
Weight approx. (kg)	334	360	386	412	438
Order no.	391DGXL17	391DGXL19	391DGXL21	391DGXL23	391DGXL25
€/piece					

ATTACHMENTS

	Recording	Order no.	€/piece
	Euro attachment	391EURO	Series
	Wheel and telescopic loaders from 2.5 t lifting capacity	391RADTELE-S	Series
	Variable Lock System	391VARILOCK -S	

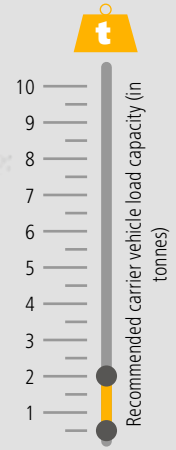
Specify carrier vehicle type when ordering

EQUIPMENT OPTIONS

Equipment	Order no.	€/piece
Schwerlastzinken 1,000 mm long, surcharge per piece	391001322	
Schwerlastzinken 1,200 mm long, surcharge per piece	391001323	
Seitliche Stahlzinken 800 mm long, price per piece	391003940	
Rückwanderhöhung 350 mm Attachment with expanded metal, price per metre	391001325	
Road protection For DG XL 17 - DG XL 19	391004371	
Road protection For DG XL 21 - DG XL 25	391004372	



Quality tines from SHW Friedrichstal (MADE IN GERMANY)



MANURE FORK WITH HYDRAULIC HOLD-DOWN DEVICE DGN

DGN 09 - DGN 21

The SAPHIR manure fork with DGN hydraulic hold-down device is used to transport loose manure, straw, green waste, shrubs, etc, green material, shrubbery, etc. A particular advantage of the equipment is the very large opening width of 1,080 mm. The hold-down device is opened and closed by two double-acting hydraulic cylinders.

1 Additional wear rail to protect the tine support tube

5 Two double-acting hydraulic cylinders.

2 Thick-walled zinc support tube with welded-in conical sleeves

6 High fork back (735 mm)

3 Large opening width of approx. 1,080 mm

7 Wall extraction as standard function

4 Quality tines (800 mm) from SHW

TECHNICAL DATA

Technical data	DGN 09	DGN 11	DGN 12	DGN 13	DGN 15	DGN 17	DGN 19	DGN 21
Width approx. (mm)	900	1,100	1.200	1,300	1.500	1.700	1.900	2,100
Height approx. (mm)	800	800	800	800	800	800	800	800
Number of tines	5	6	6	7	8	9	10	11
Volume approx. (l)	540	690	750	835	920	1,090	1.260	1.430
Weight approx. (kg)	170	203	210	225	240	260	280	305
Order no.	391DGN09	391DGN11	391DGN12	391DGN13	391DGN15	391DGN17	391DGN19	391DGN21
€/piece								

Equipped as standard with size 3 hydraulic plug-in couplings

ATTACHMENTS



Recording

Order no.

€/piece

Euro attachment
(from 1,200 mm appliance width)

391EURO-S

Series



Farm and wheel loaders up to 2.5 t lifting capacity

391HOFRAD



VLS Compact

391VARILOCK -S

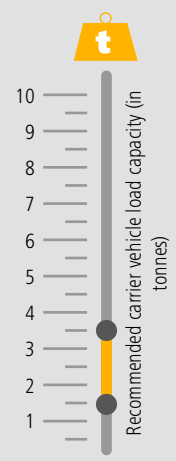
Specify carrier vehicle type when ordering

EQUIPMENT OPTIONS

Equipment	Order no.	€/piece
Seitliche Zinken 600 mm long Price per piece	391002956	
Road protection (for DGN 09 - DGN 13)	391004370	
Road protection (for DGN 15 - DGN 19)	391004371	
Road protection (for DGN 21)	391004372	
Split hold-down device (additional 1x dw required)	391GETNIED	
Pressure relief valve adjustable (required from 200 bar working pressure)	391001154-2	
Pressure relief valve recommended for Merlo, Bobcat, Dieci	391001416	
Electrohydraulic changeover Optional with "Split hold-down device" equipment (6/2 way valve 12V 90 ltr./min, ATTENTION: Without electrical kit)	526001622	



Quality tines from SHW Friedrichstal (MADE IN GERMANY)



MANURE AND SILAGE TONGS DSZ

DSZ 13 - DSZ 23

The SAPHIR manure and silage clamp is designed for the removal of grass and maize silage, the removal of manure from stables and the transport of loose manure, straw, green waste and shrubbery. A particular advantage of the appliances is the very large opening width of 1,400 mm.

The anti-twist tines in the upper tongs ensure that the goods are picked up without any problems. The side tines guarantee transport with the lowest possible losses.

1 Wear rail on the thick-walled zinc support tube

4 Low maintenance, replaceable plain bearings

2 Hydraulic top clamp with two double-acting, end position damped hydraulic cylinders

5 With pointed, curved side tines as standard (600 mm)




3 Very large opening width of 1,400 mm

TECHNICAL DATA

Technical data	DSZ 13	DSZ 15	DSZ 17	DSZ 19	DSZ 21	DSZ 23
Width approx. (mm)	1,300	1.500	1.700	1.900	2,100	2,300
Height approx. (mm)	960	960	960	960	960	960
Number of tines	7	8	9	10	11	12
Tine length approx. (mm)	800	800	800	800	800	800
Volume approx. (l)	1,060	1.200	1.340	1.490	1.640	1.790
Weight approx. (kg)	290	340	390	440	490	540
Order no.	391DSZ13	391DSZ15	391DSZ17	391DSZ19	391DSZ21	391DSZ23
€/piece						

Equipped as standard with size 3 hydraulic plug-in couplings

ATTACHMENTS

	Recording	Order no.	€/piece
	Euro attachment	391EURO-S	Series
	Farm and wheel loaders up to 2.5 t lifting capacity	391HOFRAD	
	VLS Compact	391VARILOCK -S	

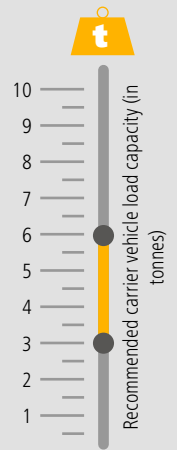
Specify carrier vehicle type when ordering

EQUIPMENT OPTIONS

Equipment	Order no.	€/piece
Pressure relief valve adjustable (required from 200 bar working pressure)	391001154	
Pressure relief valve recommended for Merlo, Bobcat, Dieci	391001416	
Road protection for DSZ 13	391004370	
Road protection for DSZ 15 - DSZ 19	391004371	
Road protection for DSZ 21	391004372	



Quality tines from
SHW Friedrichstal
(MADE IN GERMANY)



MANURE AND SILAGE TONGS DSZ L

DSZ L 19 - DSZ L 25

The SAPHIR manure and silage clamps type DSZ L are designed for the removal of grass and maize silage, for the removal of manure from stables and for the transport of loose manure, straw, green waste and shrubbery. A particular advantage of the appliances is the large capacity and the very large opening width of 1,600 mm.

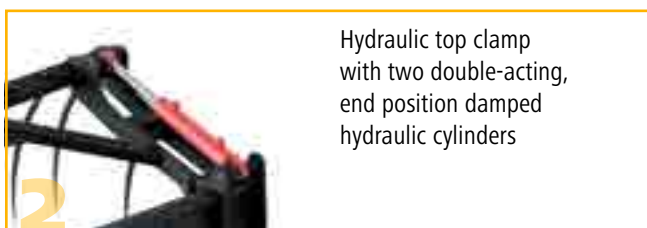
The anti-twist tines in the upper tongs ensure that the goods are picked up without any problems. The side tines guarantee transport with the lowest possible losses.



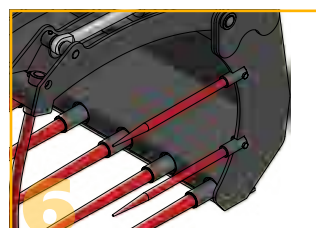
Wear rail on the
thick-walled zinc support tube



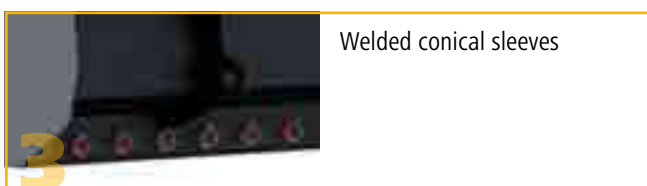
Low maintenance,
replaceable plain bearings



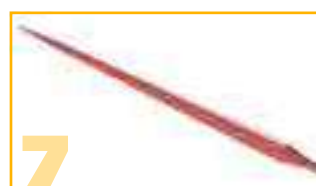
Hydraulic top clamp
with two double-acting,
end position damped
hydraulic cylinders



Equipped as standard with 2
lateral tines per side to minimise
loss minimisation



Welded conical sleeves



1,000 mm heavy-duty tines from
SHW Friedrichstal






Very large opening width of
1,600 mm

TECHNICAL DATA

Technical data	DSZ L 19	DSZ L 21	DSZ L 23	DSZ L 25
Width approx. (mm)	1.900	2.100	2.300	2.500
Height approx. (mm)	1.000	1.000	1.000	1.000
Number of tines	10	11	12	13
Tine length approx. (mm)	1.000	1.000	1.000	1.000
Volume approx. (l)	1.950	2.150	2.350	2.550
Weight approx. (kg)	590	635	670	705
Order no.	391DSZ19L	391DSZ21L	391DSZ23L	391DSZ25L
€/piece				

Equipped as standard with size 3 hydraulic plug-in couplings

ATTACHMENTS

	Recording	Order no.	€/piece
	Euro attachment	391EURO-S	Series
	Wheel and telescopic loaders from 2.5 t lifting capacity	391RADTELE	
	Variable Lock System	391VARILOCK -S	

Specify carrier vehicle type when ordering

EQUIPMENT OPTIONS

Equipment	Order no.	€/piece
Pressure relief valve adjustable (required from 200 bar working pressure)	391001154	
Pressure relief valve recommended for Merlo, Bobcat, Dieci	391001416	
Road protection For DSZ L 19	391004371	
Road protection For DSZ L 21 - DSZ L 25	391004372	



MANURE AND SILAGE TONGS DSZ XL

DSZ XL 21 - DSZ XL 27

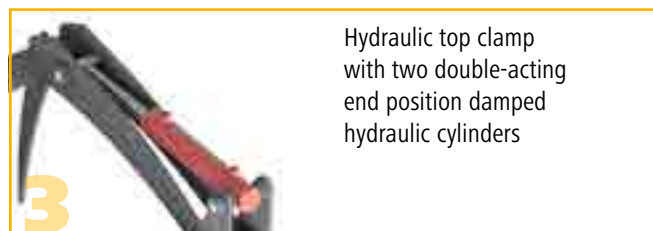
The SAPHIR DSZ XL manure and silage clamps are designed for the removal of grass and maize silage, the removal of manure from stables and the transport of loose manure, straw, green waste and shrubbery. The decisive advantage of the DSZ XL is the particularly large capacity and the very large opening width of approx. 2,000 mm. The anti-twist heavy-duty tines ensure that the goods are picked up without any problems. The side tines provide the transported goods with additional lateral support to minimise losses.



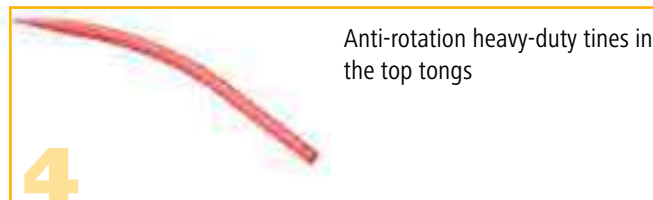
Additional wear rail to protect the tine support tube



Solid zinc support tube with welded-in conical sleeves and welding bushes. Vertical stiffeners at the back of the fork provide additional stability.



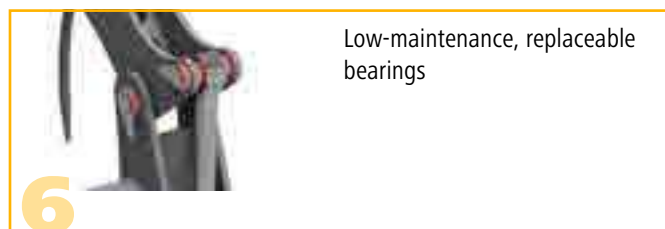
Hydraulic top clamp with two double-acting end position damped hydraulic cylinders



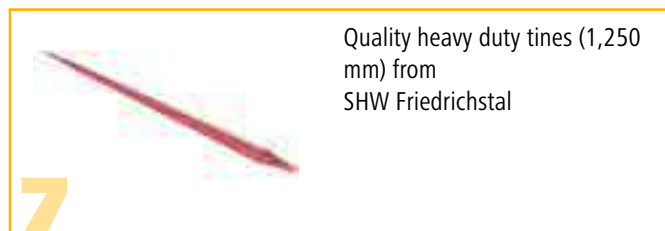
Anti-rotation heavy-duty tines in the top tongs



Very large opening width of the top clamp of 2,000 mm



Low-maintenance, replaceable bearings



Quality heavy duty tines (1,250 mm) from SHW Friedrichstal

TECHNICAL DATA

Technical data	DSZ XL 21	DSZ XL 23	DSZ XL 25	DSZ XL 27
Width approx. (mm)	2,100	2,300	2.500	2,700
Height approx. (mm)	1,100	1,100	1,100	1,100
Number of tines	11	12	13	14
Tine length approx. (mm)	1.250	1.250	1.250	1.250
Volume approx. (l)	2.850	3,100	3350	3.600
Weight approx. (kg)	890	915	970	1,020
Order no.	391DSZXL21	391DSZXL23	391DSZXL25	391DSZXL27
€/piece				

Equipped as standard with size 3 hydraulic plug-in couplings

ATTACHMENTS



Recording	Order no.	€/piece
Variable Lock System	391VARILOCK -S	Series

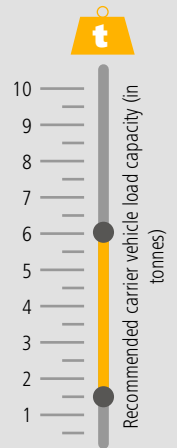
Specify carrier vehicle type when ordering

EQUIPMENT OPTIONS

Equipment	Order no.	€/piece
Pressure relief valve adjustable (required from 200 bar working pressure)	391001154	
Pressure relief valve recommended for Merlo, Bobcat, Dieci	391001416	
Road protection For DSZ XL 21 - DSZ XL 27	391004372	



Quality tines from
SHW Friedrichstal
(MADE IN GERMANY)



SILAGE CUTTING TONGS SSZ

SSZ 136 - SSZ 241

The SAPHIR SSZ silage cutting tongs are suitable for the removal and transport of all types of silage. The counter blades positioned on the right and left of the back section ensure a clean cut without the risk of material jamming. The innovative re-tensioning device allows the gap between the top clamp and the base unit to be adjusted to minimise material jamming. The back of the silage cutting tongs is closed with an expanded metal mesh. This enables a particularly good view. Another unique selling point of the SAPHIR silage cutting tongs is the double-walled upper tong design. This guarantees an optimum cutting pattern without lateral distortion.



Thick-walled zinc support tube (outer prongs in heavy-duty design) with welded-in conical sleeves



Additional wear rail on the zinc support tube minimises wear



Screwed front cutting edge with either serrated or wavy blades



The lateral, adjustable Counter blade in the back minimises material jamming.



Double-walled reinforced top clamp with very large opening width (850 mm)



Particularly large overbite of approx. 160 mm guarantees a clean cut without tearing







Tensioning device for the top clamp

TECHNICAL DATA

Technical data	SSZ 136	SSZ 157	SSZ 178	SSZ 199	SSZ 220	SSZ 241
Width approx. (mm)	1,360	1,570	1,780	1,990	2,200	2,410
Block size (mm)	1,360 x 850 x 800	1,570 x 850 x 800	1,780 x 850 x 800	1,990 x 850 x 800	2,200 x 850 x 800	2,410 x 850 x 800
Number of cylinders	2	2	2	4	4	4
Number of tines	10	12	13	16	18	18
Volume approx. (l)	920	1,050	1.200	1,350	1.500	1,650
Weight approx. (kg)	525	673	697	905	972	1,017
Order no.	391SSZ136	391SSZ157	391SSZ178	391SSZ199	391SSZ220	391SSZ241
€/piece						

Note: The device is optionally available with serrated or corrugated blades
Equipped with size 3 hydraulic plug-in couplings as standard

ATTACHMENTS

	Recording	Order no.	€/piece
	Euro attachment (possible from SSZ 157, SSZ 136 is only available for yard loaders)	391EURO-S	Series
	Farm and wheel loaders up to 2.5 t lifting capacity	391HOFRAD	
	Wheel and telescopic loaders from 2.5 t lifting capacity	391RADTELE	
	Variable Lock System	391VARILOCK -S	

Specify carrier vehicle type when ordering

EQUIPMENT OPTIONS

Equipment	Order no.	€/piece
Schwerlastzinken 800 mm Surcharge per piece Required quantity: SSZ 136 - 8 pcs. SSZ 157 - 10 pcs. SSZ 178 - 11 pcs. SSZ 199 - 12 pcs. SSZ 220 - 14 pcs. SSZ 241 - 14 pcs.	391ZINK800S	
Pressure relief valve adjustable (required from 200 bar working pressure)	391001154-2	
Pressure relief valve recommended for Merlo, Bobcat, Dieci)	391001416	
Electro-hydraulic changeover Optional when equipped with hydr. push-off wall (6/2 way valve 12V 90 ltr./min, ATTENTION: Without electrical kit)	526001622	

For more information on the hydraulic sliding wall, see page 186



Quality tines from SHW Friedrichstal (MADE IN GERMANY)



SILAGE CUTTING TONGS SSZ XL

SSZ XL 157 - SSZ XL 262

The SAPHIR SSZ XL silage clamps are suitable for removing and transporting all types of silage. A special feature of the XL series is the very large capacity and the large opening width of the top clamp of approx. 1300 mm. The counter blades on the right and left of the back section ensure a clean cut without the risk of material jamming. The innovative re-tensioning device allows the gap between the top clamp and the base unit to be adjusted, minimising material jamming. The back of the silage cutting tongs is closed with an expanded metal mesh. This enables a particularly good view. Another unique feature of the SAPHIR silage cutting tongs is the double-walled upper tong design. The particularly large over-bite (approx. 160 mm) guarantees a clean cut without tearing.

1 Thick-walled zinc support tube with welded-in conical sleeves and heavy-duty tines 1,000 mm

4 Double-walled reinforced top clamp with very large opening width 1,300 mm

2 Additional wear rail on the zinc support tube reduces wear

5 Retensioning device for top clamp

3 Screwed front cutting edge with either serrated or wavy blades

6 The lateral, adjustable counter blade in the back section minimises material jamming

TECHNICAL DATA

Technical data	SSZ XL 157	SSZ XL 178	SSZ XL 199	SSZ XL 220	SSZ XL 241	SSZ XL 262
Width approx. (mm)	1,570	1,780	1,990	2,200	2,410	2,620
Block size (mm)	1.570 x 1.260 x 900	1.780 x 1.260 x 900	1.990 x 1.260 x 900	2.200 x 1.260 x 900	2.410 x 1.260 x 900	2.620 x 1.260 x 900
Number of cylinders	2	2	2	2	4	4
Number of tines (heavy duty tines)	12	14	16	18	20	22
Volume approx. (l)	1,780	2,020	2,260	2,650	2,900	3,150
Weight approx. (kg)	1,290	1,355	1,415	1,480	1,865	1,975
Order no.	391SSZXL157	391SSZXL178	391SSZXL199	391SSZXL220	391SSZXL241	391SSZXL262
€/piece						

Note: The device is optionally available with serrated or corrugated blades
Equipped with size 3 hydraulic plug-in couplings as standard

ATTACHMENTS



Recording	Order no.	€/piece
Variable Lock System	391VARILOCK -S	Series

Specify carrier vehicle type when ordering

EQUIPMENT OPTIONS

Equipment	Order no.	€/piece
Pressure relief valve recommended for Merlo, Bobcat, Dieci	391001416	
Pressure relief valve adjustable (required from 200 bar working pressure)	391001154-2	
Electro-hydraulic changeover Optional when equipped with hydr. push-off wall (6/2 way valve 12V 90 ltr./min, ATTENTION: Without electrical kit)	526001622	

For more information on the hydraulic sliding wall, see page 186



HYDRAULIC PUSH-OFF WALL FOR THE SILAGE CUTTING PLIERS

The hydraulic push-off wall for the SAPHIR silage clamps enables the silage block to be deposited by simply pushing it out. In addition, the push-off wall can increase the discharge height of the feed mixer wagon. This special equipment is only available as original equipment ex works.

An additional double-acting control unit is required (+ 1x dw).

Model	Order no.	Quantity	€/piece or set (SSZ)	€/piece or set (SSZ XL)
SSZ 136 / XL	391SSZ136ASW	1		
SSZ 157 / XL	391SSZ157ASW	1		
SSZ 178 / XL	391SSZ178ASW	1		
SSZ 199 / XL	391SSZ199ASW	1		
SSZ 220 / XL	391SSZ220ASW	2		
SSZ 241 / XL	391SSZ241ASW	2		
SSZ 262 XL	391SSZ262XLASW	2		
Electrohydraulic switchover Without electrical kit (then only 1 x dw required)	526001622			



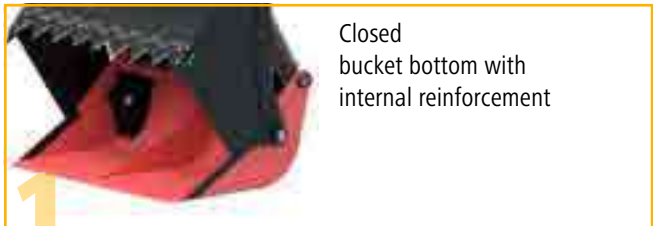


SILAGE CUTTING BUCKET SSE

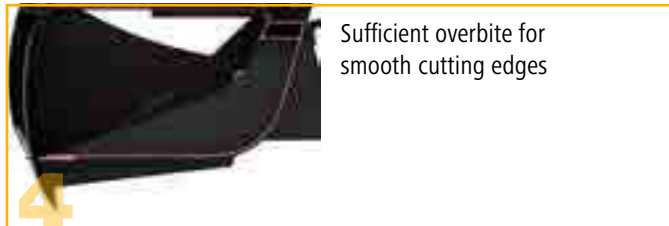
SSE 157 - SSE 241

The SAPHIR SSE silage cutting buckets are suitable for the removal and transport of all types of silage. The closed bucket floor enables the loading of loose feed components and minimises crumbling losses when removing maize silage. The side counter cuts on the back ensure a clean cut without material jamming. The innovative retensioning device allows the gap between the top clamp and the back section to be optimally adjusted. Another unique selling point is the double-walled design of the upper clamp. This guarantees a uniform cutting pattern without lateral twisting.

The counter blades positioned on the right and left of the back section ensure a clean cut without the risk of material jamming.



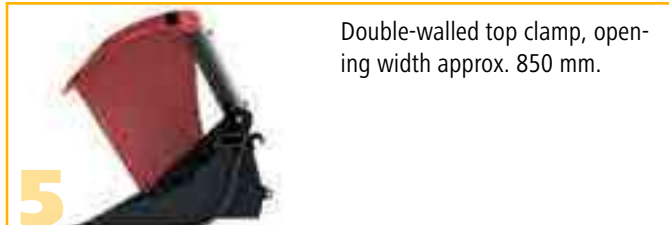
Closed bucket bottom with internal reinforcement



Sufficient overbite for smooth cutting edges



Highly wear-resistant scraper bar (150 x 20 mm, HB 500)



Double-walled top clamp, opening width approx. 850 mm.



Welded-in counter blade laterally in the upper pliers



Screwed Front cutting edge optionally serrated or wavy

TECHNICAL DATA

Technical data	SSE 157	SSE 178	SSE 199	SSE 220	SSE 241
Width (mm)	1,570	1,780	1,990	2,200	2,410
Block size (mm)	1.570 x 850 x 750	1.780 x 850 x 750	1.990 x 850 x 750	2.200 x 850 x 750	2.410 x 850 x 750
Number of cylinders	2	2	4	4	4
Opening width approx. (mm)	850	850	850	850	850
Volume approx. (l)	1,050	1.200	1,350	1.500	1,650
Weight approx. (kg)	670	740	860	930	1.000
Order no.	391SSE157	391SSE178	391SSE199	391SSE220	391SSE241
€/piece					

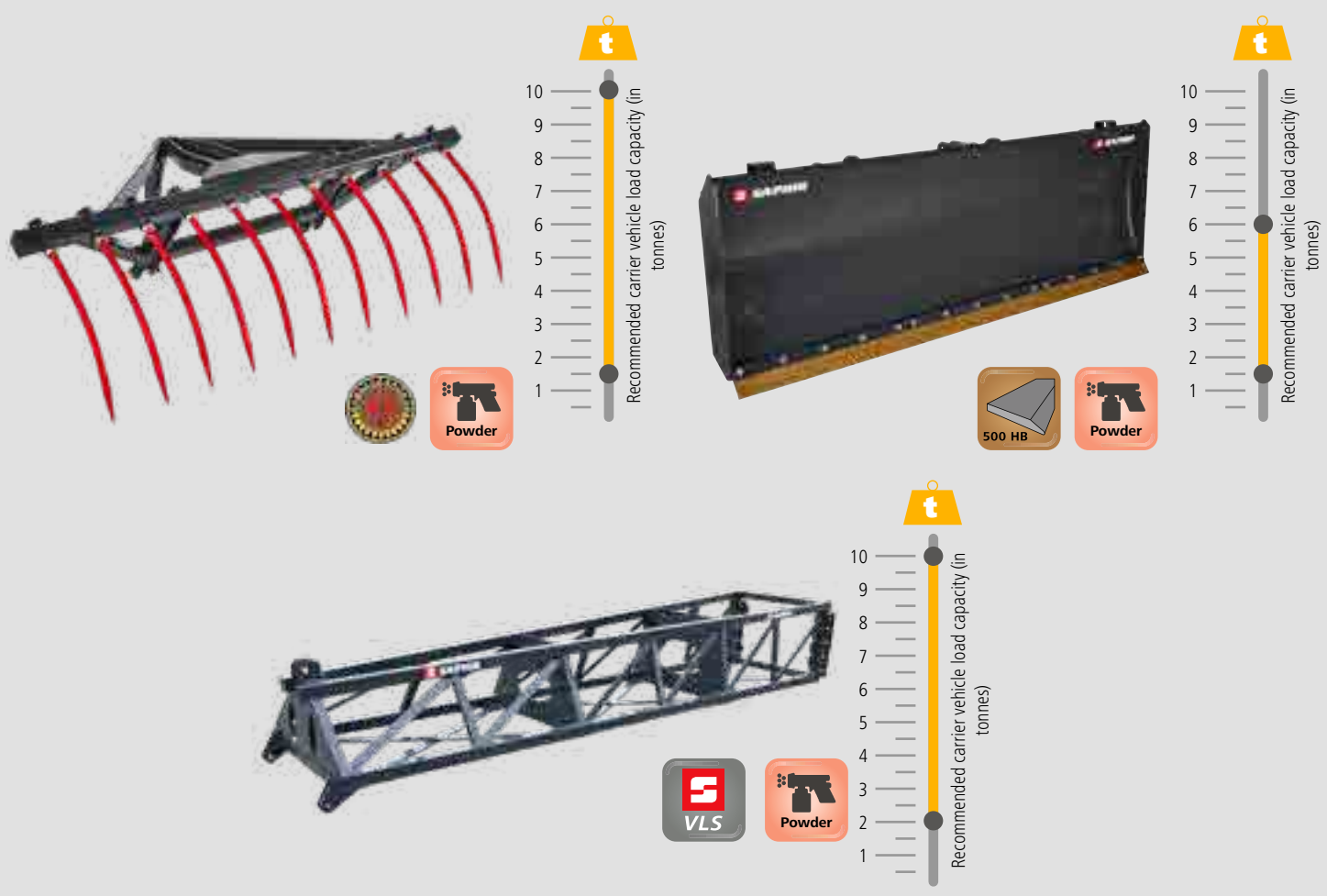
Equipped as standard with size 3. hydraulic plug-in couplings

ATTACHMENTS

	Recording	Order no.	€/piece
	Euro attachment	391EURO-S	Series
	Farm and wheel loaders up to 2.5 t lifting capacity	391HOFRAD	
	Wheel and telescopic loaders from 2.5 t lifting capacity	391RADTELE	
	Variable Lock System	391VARILOCK -S	

EQUIPMENT OPTIONS

Equipment	Order no.	€/piece
Pressure relief valve adjustable (required from 200 bar working pressure)	391001154-2	
Pressure relief valve recommended for Merlo, Bobcat, Dieci	391001416	



SILAGE COMB SK, GRAIN PUSHING BLADE GS AND EXTENSION VL

The SAPHIR silage comb SK is the ideal implement for breaking down silage from particularly high silage stacks. The adjustable foregrip ensures particularly adaptable and optimised work. The ability to safely cut silage at a height protects both the user and the machine.

The SAPHIR grain pusher blade type GS/MGS is a simple, rigid blade for mounting on the front or rear hydraulics, or on our SAPHIR extension type VL. The blade is equipped with a bolted scraper bar made of highly wear-resistant steel (500 HB).

The SAPHIR extension can be universally combined with our grain push plates and silage combs.

Attention: The VL extension increases the working range of the respective carrier vehicle enormously. The combination of extension and silage comb/grain pushing blade is only permitted for vehicles with a maximum operating weight of 10 tonnes.


1

The SK silage comb has a thick-walled zinc support tube with welded-in conical sleeves as standard


2

The silage combs are fitted as standard with anti-twist tines (diameter 28 mm, length 800 mm) from SHW as standard. Heavy-duty tines can also be optionally (diameter 35 mm, length 800 mm) can also be installed.


3

The GS grain scraper blade has a highly wear-resistant steel scraper bar 200x20 mm (500HB) as standard


4

Optional plastic scraper 150 x 20 mm


5

Round shield body
Parking support
Compact design

SILAGE COMB SK, GRAIN PUSHING BLADE GS AND EXTENSION VL

03

TOOLS

SILAGE COMB

Technical data	SK 22	SK 26
Approx. working width (mm)	2,200	2,600
Number of tines	11	13
Weight approx. (kg)	168	212
Recording	Cat. II (suitable for extension VL)	Cat. II (suitable for extension VL)
Order no.	391SK22	391SK26
€/piece		





GRAIN PANELLING

Technical data	GS 25	GS 30
Approx. width (mm):	2,500	3,000
Transport width approx. (mm)	2,500	3,000
Approx. height (mm)	1,000	1,000
Power requirement approx. (kW/hp)	50/70	58/80
Weight approx. (kg)	295	320
Cultivation	Cat. II	Cat. II
Part no.	391GS25	391GS30
€/piece		

EXTENSION

Technical data	VL 20	VL 30	VL 40	VL 50
Length approx. (mm):	2,000	3,000	4,000	5,000
Weight approx. (kg)	215	310	390	500
Order no.	391VL20	391VL30	391VL40	391VL50
€/piece				

HOLDERS FOR EXTENSION

	Recording	Order no.	€/piece
	Euro attachment	391EURO-S	Series
	Farm and wheel loaders up to 2.5 t lifting capacity	391HOFRAD	
	Wheel loaders and telescopic handlers from 2.5 t lifting capacity Approved for carrier vehicles with a maximum operating weight of 10 tonnes. Heavy-duty version for larger carrier vehicles available on request.	391RADTELE	
	Variable lock system	391VARILOCK -S	

Specify carrier vehicle type when ordering

EQUIPMENT OPTIONS

Equipment	Order no.	€/piece
Schwerlastzinken 800 mm, diameter 35 mm (suitable for silage combs SK) Surcharge per piece	391003177	
Polyurethane edging strips 2.500 x 150 x 20 mm Recommended for the GS 25 grain pan blade	391008223	
Polyurethane scraper bar 3,000 x 150 x 20 mm Recommended for the GS 30 grain scraper blade	391008222	



LOAD HOOK LH

LH 10/15 - LH 40/10

The SAPHIR load hooks LH are used for lifting, transporting and loading heavy loads. The swivel hook, which can be rotated under load, also enables the user to position the load with pinpoint accuracy.

1 The patented Variable Lock System (VLS) enables the load hook to be attached with almost any wheel loader or telescopic handler.

4 Foldable and stable parking foot for a safe stand of the device

2 Sturdy frame with Struts in Truss arrangement

5 Swivel hook with ball bearing that swivels under load. This allows the attached load to be positioned precisely.

3 Warning: The load hook increases the working area of the carrier vehicle. The user has to pay attention to the stability and load capacity of the carrier vehicle.

TECHNICAL DATA

Technical data	LH 10/15	LH 10/25	LH 10/40	LH 20/15	LH 20/25	LH 30/10	LH 40/10
Overhang (mm)	1,000	1,000	1,000	2,000	2,000	3,000	4,000
Max. load capacity (kg)	1,500	2,500	4,000	1,500	2,500	1,000	1,000
Approx. height (mm)	920	920	980	960	1,050	1,390	1,420
Approx. width (mm)	1,250	1,250	1,250	1,250	1,290	1,250	1,250
Wiring hook model	WHK 15	WHK 30	WHK 50	WHK 15	WHK 30	WHK 15	WHK 15
Jaw width of the hook approx. (mm)	24	33	44	24	33	24	24
Weight approx. (kg)	200	260	365	340	400	415	465
Order no.	391LH10/15	391LH10/25	391LH10/40	391LH20/15	391LH20/25	391LH30/10	391LH40/10
€/piece							

ATTACHMENTS



Recording	Order no.	€/piece
Variable lock system	391VARILOCK -S	Series

Specify carrier vehicle type when ordering

The maximum load capacity of the load hook LH is guaranteed by the design of the device.

The swivel hook used in the basic version of the load hook is selected so that it can optimally absorb the tensile load.

If you still require a swivel hook with a larger jaw width, you can use one of the following

Select swivel hook.

EQUIPMENT OPTIONS

Equipment	Order no.	€/piece
Swivel hook WHK 15 ball bearing mounted, rotatable under load, jaw width approx. 24 mm, max. load capacity 1,500 kg	391WHK15	
Swivel hook WHK 30 ball bearing mounted, rotatable under load, jaw width approx. 33 mm, max. load capacity 3,150 kg	391WHK30	
Swivel hook WHK 50 ball bearing mounted, rotatable under load, jaw width approx. 44 mm, max. load capacity 5,300 kg	391WHK50	
Swivel hook WHK 80 ball bearing mounted, rotatable under load, jaw width approx. 59 mm, max. load capacity 8,000 kg	391WHK80	



BIG-BAG CARRIER BBT

BBT 15/10 - BBT 23/10

The SAPHIR big bag carriers BBT are used for easy handling of big bags. The retaining bracket supports the exact positioning of the big bags. This enables easy filling of various filling containers such as spreaders, seeders or even lorries.

Robust hook with a load capacity of up to 1,000 kg

Holding bracket for stable positioning of the big bags




Appliance height of 1,500 or 2,300 mm for different requirements

Fold-out support leg for a secure stand in the parking position

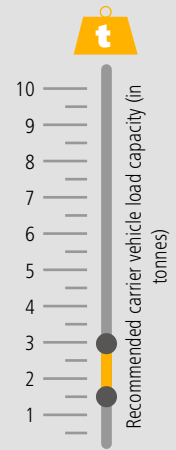
TECHNICAL DATA

Technical data	BBT 15/10	BBT 23/10
Approx. height (mm)	1,500	2,300
Approx. width (mm)	1,300	1,300
Max. load capacity (kg)	1,000	1,000
Weight approx. (kg)	140	160
Order no.	391BBT15/10	391BBT23/10
€/piece		

ATTACHMENTS

	Recording	Order no.	€/piece
	Euro attachment	391EURO-S	
	Farm and wheel loaders up to 2.5 t lifting capacity	391HOFRAD	
	VLS Compact	391VARIABLELOCK	

Specify carrier vehicle type when ordering



PALLET FORK PG ISO FEM II

PG 09/15 - PG 18/25

The SAPHIR PG pallet forks are characterised by their robustness combined with the best possible visibility. The forged quality forks (Made in Germany) are protected from abrasion by an additional wear zone in the bend area.

1 Load capacity up to max. 2,500 kg (with load centre of gravity 500 mm)

3 Tines with wear protection in the buckling area





2 Latching system for individual adjustment of the forks

4 Fork carriage width 1,200 mm as standard. Other beam widths are available on request - see optional extras.

TECHNICAL DATA

Technical data	PG 09/15	PG 11/15	PG 12/15	PG 13/15	PG 09/25	PG 11/25	PG 12/25	PG 13/25	PG 15/25	PG 18/25
Load capacity (kg):	1,500	1,500	1,500	1,500	2,500	2,500	2,500	2,500	2,500	2,500
Fork length (mm)	900	1,100	1,200	1,300	900	1,100	1,200	1,300	1,500	1,800
Fork cross-section (mm)	80 x 40	80 x 40	80 x 40	80 x 40	100 x 40	100 x 40	100 x 40	100 x 40	100 x 40	100 x 40
Weight approx. (kg)	156	164	169	174	184	196	202	208	226	244
Part no.	391PG09-15	391PG11-15	391PG12-15	391PG13-15	391PG09-25	391PG11-25	391PG12-25	391PG13-25	391PG15-25	391PG18-25
€/piece										

ATTACHMENTS

	Recording	Order no.	€/piece
	Euro attachment	391EURO-S	Series
	Farm and wheel loaders up to 2.5 t lifting capacity	391HOFRAD	
	Wheel and telescopic loaders from 2.5 t lifting capacity	391RADTELE	
	VLS Compact	391VARILOCK -S	

Specify carrier vehicle type when ordering

EQUIPMENT OPTIONS

Equipment	Order no.	€/piece
Gabelträgerbreite 1.500 mm	391GABTRAEGBR1500	
+ each additional 100 mm up to a maximum width of 2,000 mm Other fork carriage widths on request.	391GABTRAEG100	

On [page 202](#) you will find the additional hydraulic options for the PG pallet forks.

ACCESSORIES

Equipment	Order no.	€/piece
Pallet base frame ISO FEM II Without forks 2,500 kg load capacity, Euro mount	391406290	



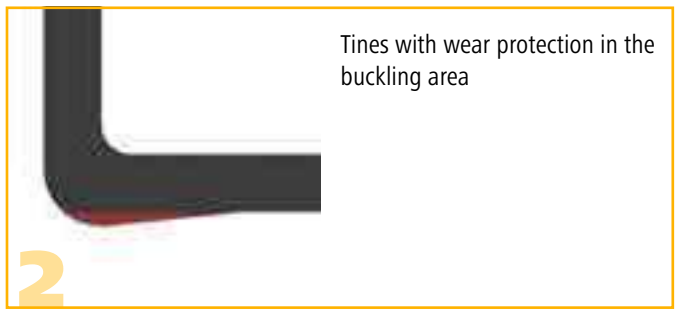
PALLET FORK PG ISO FEM III/IV

PG 10/35 - PG 15/60

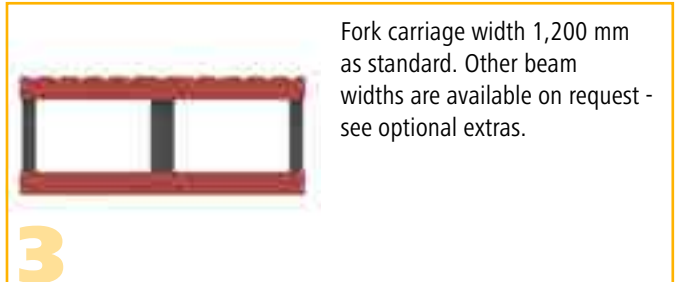
The SAPHIR PG pallet forks are characterised by their robustness combined with the best possible visibility. The forged quality forks (Made in Germany) are protected from abrasion by an additional wear zone in the bend area.



Pallet fork PG 18/45 with a fork carriage width of 2,100 mm and hydraulic tine adjustment



Tines with wear protection in the buckling area






Fork carriage width 1,200 mm as standard. Other beam widths are available on request - see optional extras.

TECHNICAL DATA

Technical data	PG 10/35	PG 12/35	PG 15/35	PG 18/35	PG 12/45	PG 15/45	PG 18/45	PG 22/45	PG 12/60	PG 15/60
Load capacity (kg):	3,500	3,500	3,500	3,500	4,500	4,500	4,500	4,500	6,000	6,000
Fork carriage standard	ISO FEM III	ISO FEM III	ISO FEM III	ISO FEM III	ISO FEM III	ISO FEM III	ISO FEM III	ISO FEM III	ISO FEM IV	ISO FEM IV
Fork length (mm)	1,000	1,200	1,500	1,800	1,200	1,500	1,800	2,200	1,200	1,500
Fork cross-section (mm)	100 x 50	100 x 50	100 x 50	100 x 50	120 x 50	120 x 50	120 x 50	120 x 50	130 x 60	130 x 60
Weight approx. (kg)	280	300	320	340	335	350	365	390	370	400
Part no.	391PG10-35	391PG12-35	391PG15-35	391PG18-35	391PG12-45	391PG15-45	391PG18-45	391PG22-45	391PG12-60	391PG15-60
€/piece										

ATTACHMENTS

	Recording	Order no.	€/piece
	Euro attachment	391EURO-S	Series
	Wheel and telescopic loaders from 2.5 t lifting capacity	391RADTELE	
	Variable lock system	391VARILOCK -S	

Specify carrier vehicle type when ordering

EQUIPMENT OPTIONS

Equipment	Order no.	€/piece
Gabelträgerbreite 1.500 mm	391GABTRAEGBR1500	
+ each additional 100 mm up to a maximum width of 2,000 mm Other fork carriage widths on request.	391GABTRAEG100	

On [page 202](#) you will find the additional hydraulic options for the PG pallet forks

ACCESSORIES

Equipment	Order no.	€/piece
Pallet base frame ISO FEM III without forks 4,500 kg load capacity, Euro mount	391406540	
Pallet base frame ISO FEM IV without forks 6,000 kg load capacity, Euro mount	391ISOFEMIV	


SPECIAL EQUIPMENT FOR FORK CARRIAGE

03

TOOLS


READY TO FIT FOR FORK CARRIAGE STANDARD ISO FEM II B OR ISO FEM III B

For special applications, we also offer our pallet fork carriers with additional hydraulic functions. These are only available as original equipment ex works. Other special technical solutions are available on request. Talk to us!



Hydr. Zinkenverstellung

Adjustment of the distance between the forks. The tine adjustment serves to simplify the pick-up a wide variety of transport pallets. The pallet fork is connected to flow divider and pressure relief valve.



The side shift facilitates handling when stacking and loading work.

Technical data	Hydraulic tine adjustment	Hydr. side shift
Total appliance width (mm)	1,650	1,450
Fork carriage width (mm)	1.200	1.200
Load capacity ISO FEM II (kg)	2.500	2.500
Load capacity ISO FEM III (kg)	3.500	3.500
Adjustment range (tine centre to tine centre) (mm)	200 - 1.200	-
Shifting (both sides) (mm)	-	100
Weight (kg)	250	310
Order no.	391004023	391004022
Surcharge €/piece		

Equipped with size 3 hydraulic plug-in couplings as standard.

Please note that the prices for the additional hydraulic option are a surcharge on the pallet forks as standard equipment. The hydraulic tine adjustment and the hydraulic side shift can also be combined with each other.

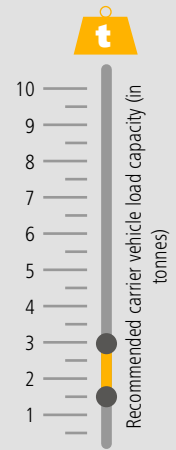
EQUIPMENT OPTIONS

Equipment	Order no.	€/piece
Pressure relief valve adjustable (required from 200 bar working pressure)	391001154-2	
Pressure relief valve recommended for Merlo, Bobcat, Dieci	391001416	
Electrohydraulic changeover (6/2 way valve 12V 90 ltr./min, ATTENTION: Without electrical kit)	526001622	



SAPHIR forks are forged solid profile forks in industrial quality.
 Determination of the fork carriage standard:
 Height of the fork carriage
 (mounting top edge to bottom edge)
 ISO FEM II = 407 mm
 ISO FEM III = 508 mm
 ISO FEM IV = 635 mm


Designation	Order no.	Fork carriage standard	Cross section (mm)	Load capacity per pair (kg), LSP 500 mm	€/piece
Gabelzinken 900mm	391080400900	ISO FEM II B	80x40	1,500	
Forks 1000 mm	391080401000	ISO FEM II B	80x40	1,500	
Forks 1100 mm	391080401100	ISO FEM II B	80x40	1,500	
Forks 1200 mm	391080401200	ISO FEM II B	80x40	1,500	
Forks 1300 mm	391080401300	ISO FEM II B	80x40	1,500	
Gabelzinken 900mm	391100400900	ISO FEM II B	100x40	2,500	
Forks 1000 mm	391100401000	ISO FEM II B	100x40	2,500	
Forks 1100 mm	391100401100	ISO FEM II B	100x40	2,500	
Forks 1200 mm	391100401200	ISO FEM II B	100x40	2,500	
Forks 1300 mm	391100401300	ISO FEM II B	100x40	2,500	
Forks 1500 mm	391100401500	ISO FEM II B	100x40	2,500	
Forks 1800 mm	391100401800	ISO FEM II B	100x40	2,500	
Forks 1000 mm	391100501000	ISO FEM III B	100x50	3,500	
Forks 1200 mm	391100501200	ISO FEM III B	100x50	3,500	
Forks 1500 mm	391100501500	ISO FEM III B	100x50	3,500	
Forks 1800 mm	391100501800-3B	ISO FEM III B	100x50	3,500	
Forks 1200 mm	391120501200	ISO FEM III B	120x50	4,500	
Forks 1500 mm	391120501500-3B	ISO FEM III B	120x50	4,500	
Forks 1800 mm	391120501800	ISO FEM III B	120x50	4,500	
Forks 2200 mm	391120502200	ISO FEM III B	120x50	4,500	
Forks 1200 mm	391130601200	ISO FEM IV B	130x60	6,000	
Forks 1500 mm	391130601500	ISO FEM IV B	130x60	6,000	




PALLET FORK KOMBI PGK


PGK 09/15 - PGK 18/25

The SAPHIR pallet fork combi comes as standard with attachment options for Euro attachment and three-point attachment Cat II for front and rear hydraulics. The holder combination is available at any time without any conversion work.

1  Load capacity up to max. 2,500 kg (load centre of gravity 500 mm)

3  Forged quality forks (Made in Germany)

2  Fork carriage ISO FEM II Form B

4  Tines with wear protection in the buckling area

TECHNICAL DATA

Technical data	PGK 09/15	PGK 11/15	PGK 12/15	PGK 13/15	PGK 09/25	PGK 11/25	PGK 12/25	PGK 13/25	PGK 15/25	PGK 18/25
Load capacity (kg)	1,500	1,500	1,500	1,500	2,500	2,500	2,500	2,500	2,500	2,500
Fork length approx. (mm)	900	1,100	1,200	1,300	900	1,100	1,200	1,300	1,500	1,800
Fork cross-section approx. (mm)	80x40	80x40	80x40	80x40	100x40	100x40	100x40	100x40	100x40	100x40
Width of fork carriage approx. (mm)	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200
Weight approx. (kg)	174	182	187	192	202	222	228	234	246	264
Order no.	391PGK09/15	391PGK11/15	391PGK12/15	391PGK13/15	391PGK09/25	391PGK11/25	391PGK12/25	391PGK13/25	391PGK15/25	391PGK18/25
€/piece										

ATTACHMENTS

	Recording	Order no.	€/piece
	Euro attachment	391EURO-S	Series
	Front and rear attachment Cat. II	391PGKKAT-S	Series

Specify carrier vehicle type when ordering

EQUIPMENT OPTIONS

Equipment	Order no.	€/piece
Pallet fork carrier combi without forks 2,500 kg load capacity, Euro mount + three-point CAT II	391406501	


FORK CARRIAGE ACCESSORIES

03

TOOLS


Ready to fit for fork carriage standard ISO FEM II B or ISO FEM III B

1




Big bag carrier with two towing eyes
Can be extended vertically by approx. 200 mm in 3 stages. (Joint towing force on both towing eyes max. 700 kg)

2




Tine holder with large bale tines 1,100 mm.
Ideal for transporting bales of straw or silage
(load capacity approx. 625 kg/each)

3



Tine holder with swivelling tubular tine (1,100 mm).
Ideal for loading wrapped round bales.
(load capacity approx. 750kg/pc.)

4



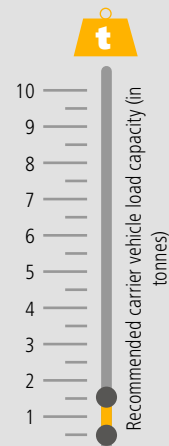
Hydraulic top clamp with a clamping range
from 450 - 1,300 mm. For the transport of logs
or shrubbery. (1x dw required, equipped as standard
equipped with hydraulic plug-in couplings of size 3)

Technical data	BIG-BAG carrier ISO FEM II	BIG-BAG carrier ISO FEM III
Load capacity kg / pc.	700	700
Tine length approx. (mm)	n/a	n/a
Clamping range (mm)	n/a	n/a
Weight approx. (kg)	60	60
Order no.	391001197	391001921
€/piece		

Technical data	Tine holder with Large bale tines ISO FEM II	Tine holder with Large bale tines ISO FEM III
Load capacity kg / pc.	625	625
Tine length approx. (mm)	1,100	1,100
Clamping range (mm)	n/a	n/a
Weight approx. (kg)	19	21
Order no.	391001198	391001195
€/piece		

Technical data	Tine holder with rotatable Tubular tine holder ISO FEM II	Tine holder with rotatable Tubular tine holder ISO FEM III
Load capacity kg / pc.	750	750
Tine length approx. (mm)	1,100	1,100
Clamping range (mm)	n/a	n/a
Weight approx. (kg)	48	50
Order no.	391001199	391002110
€/piece		

Technical data	Hydraulic top clamp ISO FEM II	Hydraulic top clamp ISO FEM III
Load capacity kg / pc.	n/a	n/a
Tine length approx. (mm)	n/a	n/a
Clamping range (mm)	450 - 1300	450 - 1300
Weight approx. (kg)	64	69
Order no.	391001196	391001284
€/piece		



PALLET FORK REAR PGH

The SAPHIR rear pallet fork is a functional, lightweight pallet fork for mounting in the three-point rear hydraulics KAT I/II.

- Adjustable attachment points for upper and lower links
- Forks made from reinforced U-profiles 100 x 45 x 1200 mm
- The forks can be folded up for road transport
- Forks width adjustable in 3 stages: 520/620/720 mm Outer width

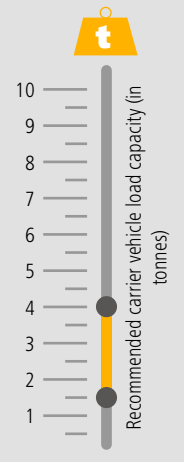
TECHNICAL DATA

Technical data	PGH
Load capacity (kg)	1.500
Weight approx. (kg)	85
Order no.	391PGH
€/piece	

ATTACHMENTS



Recording	Order no.	€/piece
Aufnahme Kat. I/II	391PGHKAT-S	Series



CRATE ROTATOR KDG

KDG 09/15 - KDG 13/25

The SAPHIR crate rotator enables crates to be picked up and emptied. The tipping angle of 180° - 220° guarantees complete emptying of every crate. The crate rotator is designed for crates with a maximum width of 1,600 mm. As standard, the boxes are tipped to the left in the direction of travel. The retaining bracket serves as a stop for the transport boxes. As an option, the appliance can also be ordered clockwise (optional extra).

Fork carriage standard ISO FEM II
Fork carriage width: 1,200 mm
Rotation angle approx. 220°





Load capacity up to max. 2,500 kg (with load centre of gravity 500 mm and depending on the forks used)

TECHNICAL DATA

Technical data	KDG 09/15	KDG 11/15	KDG 12/15	KDG 13/15	KDG 09/25	KDG 11/25	KDG 12/25	KDG 13/25
Load capacity (kg):	1,500	1,500	1,500	1,500	2,500	2,500	2,500	2,500
Fork length approx. (mm)	900	1,100	1,200	1,300	900	1,100	1,200	1,300
Fork cross section approx. (mm)	80x40	80x40	80x40	80x40	100x40	100x40	100x40	100x40
Direction of rotation	Links (in FR)	Links (in FR)	Links (in FR)	Links (in FR)	Links (in FR)	Links (in FR)	Links (in FR)	Links (in FR)
Rotation range	approx. 220°	approx. 220°	approx. 220°	approx. 220°	approx. 220°	approx. 220°	approx. 220°	approx. 220°
Weight approx. (kg)	242	252	256	262	260	272	278	284
Order no.	391KDG09/15	391KDG11/15	391KDG12/15	391KDG13/15	391KDG09/25	391KDG11/25	391KDG12/25	391KDG13/25
€/piece								

Equipped as standard with size 3 hydraulic plug-in couplings

ATTACHMENTS

	Recording	Order no.	€/piece
	Euro attachment	391EURO-S	Series
	Gabelträgeraufnahme ISO FEM II / III	391KDGFORK	Series
	Farm and wheel loaders up to 2.5 t lifting capacity	391HOFRAD	
	Wheel and telescopic loaders from 2.5 t lifting capacity	391RADTELE	

Specify carrier vehicle type when ordering

EQUIPMENT OPTIONS

Equipment	Order no.	€/piece
Rechtsdrehend in Fahrtrichtung	391KDGRECHTS	
Adjustable pressure relief valve (Required from 200 bar working pressure)	391001154	
Pressure retention valve Recommended for Merlo, Bobcat, Dieci	391001416	

ACCESSORIES


Equipment	Order no.	€/piece
Crate rotator KDG without forks 2,500 kg load capacity	391KDG	



BALE SPIKE BS


BS 3 | BS 5

The SAPHIR bale spike BS is suitable for the rapid transport of round or square bales. The height-adjustable adjustable bale support also enables the transport of 2 stacked square bales.




1

Thick-walled zinc support tube with 5 or 7 welded-in conical sleeves. Both models can be optionally equipped with 2 external heavy-duty tines 1,250 mm



2

Height-adjustable bale support (approx. 700 - 1,100 mm)






3

Standard tine length 1,100 mm
Standard load tines Ø 36 mm
Heavy duty tines Ø 44 mm

TECHNICAL DATA

Technical data	BS 3	BS 5
Width approx. (mm)	1.200	1.650
Height approx. (mm)	700 - 1.100	700 - 1.100
Number of tines	3	5
Max. load capacity (kg)	1.500	1.750
Weight approx. (kg)	91	120
Order no.	391BS3	391BS5
€/piece		

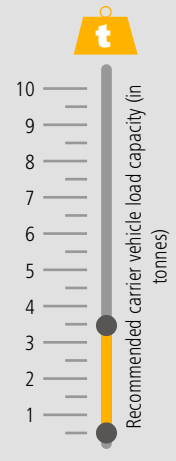
ATTACHMENTS

	Recording	Order no.	€/piece
	Euro attachment	391EURO-S	Series
	Farm and wheel loaders up to 2.5 t lifting capacity	391HOFRAD	
	VLS Compact	391VARILOCK -S	

Specify carrier vehicle type when ordering

EQUIPMENT OPTIONS

Equipment	Order no.	€/piece
Heavy duty tines 1,250 mm (2 pieces possible)	391008256	
Bale support 1,600 mm (Satz)	391005746	



BSK with support legs (optional extra)



BALE SPIKE KOMBI BSK

BSK 4

The SAPHIR Kombi BSK bale spike is suitable for loading round and square bales. The combined Cat. II and Euro attachment enables front and rear mounting. The height-adjustable bale support allows two square bales lying on top of each other to be transported. The standard mechanically folding tine support tube also ensures safe road travel.

1 Mechanically folding tine support tube for safe road transport

4 Mechanically adjustable bale supports, for example for safely loading several square bales (extendable in 3 steps from 1120 to 1520 mm)

2 1,800 mm wide tine with four 1,100 mm large bale tines to pick up two round bales at the same time.

5 Optional support feet (plug-in) for stability when parked

3 Dimension over the floor of 330 mm, so that the round bales can also be centred in the three-point linkage.

6 With 4 standard load tines 1,100 mm as standard

TECHNICAL DATA

Technical data	BSK 4
Approx. width (mm)	1,800
Approx. height (mm)	1,120 - 1,520
Number of tines	4
Max. load capacity (kg)	2,000
Weight approx. (kg)	190
Order no.	391BSK4
€/piece	

ATTACHMENTS

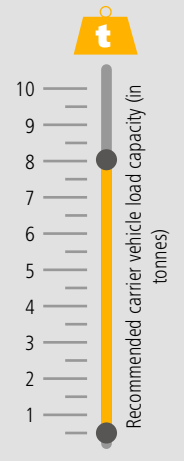
	Recording	Order no.	€/piece
	Euro attachment	391EURO-S	series
	Front/rear attachment Cat. II	391BSKKAT-S	series

EQUIPMENT OPTIONS

Equipment	Order no.	€/piece
Support feet (set)	391008856	
Raised bale support 2100 mm (set)	391005746	



Quality tines from SHW Friedrichstal (MADE IN GERMANY)




BALE SPIKE BSR

BSR 3 | BSR 5

The SAPHIR BSR bale spike is specially designed for use on wheel loaders and telescopic handlers. Thanks to the high bale support and the solid zinc support tube, round and square bales can be transported safely and quickly.

Both models have two external conical sleeves that can be optionally fitted with heavy-duty tines.



1

With 1,100 mm standard load tines with 36 mm diameter as standard
 Optionally with 1,250 mm heavy-duty tines on the outside with 44 mm diameter

TECHNICAL DATA

Technical data	BSR 3	BSR 5
Width approx. (mm)	1,200	1,650
Height approx. (mm)	1,300	1,300
Number of tines	3	5
Max. load capacity (kg)	1,800	3,000
Weight (kg)	210	240
Order no.	391BSR3	391BSR5
€/piece		

ATTACHMENTS



Recording	Order no.	€/piece
Wheel and telescopic loaders from 2.5 t lifting capacity	391RADTELE	Series



Variable Lock System	391VARILOCK	
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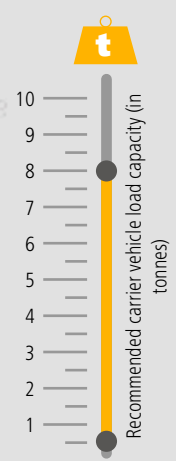
Please specify the carrier vehicle when ordering

EQUIPMENT OPTIONS

Equipment	Order no.	€/piece
Heavy duty tines 1,250 mm (2 pieces possible) Ø 44 mm	391008256	



Quality tines from SHW Friedrichstal (MADE IN GERMANY)



BSP 5 with hydraulically extendable Bale support and mechanically folding zinc support tube



BALE SPIKE PROFI BSP

BSP 3 | BSP 5

The SAPHIR Profi BSP bale spike is suitable for particularly high demands when transporting round or square bales. The various optional extras make the bale spike particularly powerful and user-friendly. The optional folding zinc support tube ensures greater safety in road traffic.

1 Thick-walled zinc support tube with 5 or 7 welded-in conical sleeves

2 Tine length 1,000 mm
Optional: 2 external heavy-duty tines 1,250 mm

3 An optional folding Zinc support tube enables a safe Road transport





4 With mechanically extendable bale supports as standard supports up to 2,500 mm total height

5 Optionally with hydraulically extendable bale supports up to max. 2,500 mm (1 x dw. required)

TECHNICAL DATA

Technical data	BSP 3	BSP 5
Width approx. (mm)	1,300	1,650
Height approx. (mm)	1.500 - 2.500	1.500 - 2.500
Number of tines	3	5
Max. load capacity (kg)	1,800	3,000
Weight approx. (kg)	305	330
Order no.	391BSP3	391BSP5
€/piece		

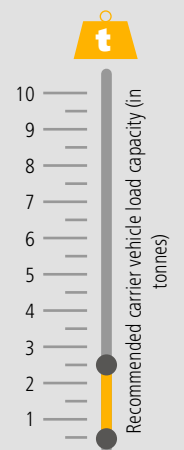
ATTACHMENTS

	Recording	Order no.	€/piece
	Euro attachment	391EUR-S	Series
	Farm and wheel loaders up to 2.5 t lifting capacity	391HOFRAD	
	Wheel and telescopic loaders from 2.5 t lifting capacity	391RADTELE	
	Variable Lock System	391VARILOCK -S	

Specify carrier vehicle type when ordering

EQUIPMENT OPTIONS

Equipment	Order no.	€/piece
Schwerlastzinken 1.250 mm (2 pieces possible)	391008256	
Mechanically folding zinc support tube	391KLAPPROHR	
Hydraulically folding zinc support tube	391HYDRKLAPP	
Hydraulically extendable bale support 2,500 mm Not possible for wheel loaders with Z-kinematics	391HYDRABSTUETZ	
Adjustable pressure relief valve (Required from 200 bar working pressure)	391001154	
Pressure retention valve Recommended for Merlo, Bobcat, Dieci	391001416	
Electro-hydraulic changeover (6/2 way valve 12V 90 ltr./min, ATTENTION: Without electrical kit)	526001622	



BALE LIFTING FORK BHG

The SAPHIR bale lifting fork is used for the gentle transport of round and silage bales in front and rear hydraulics KAT I/ II.

The tubes, which can be adjusted in width in four stages, enable bales with a diameter of 1,000 to 1,800 mm to be picked up. The cranked ends of the tubes prevent damage to the bales.

1 Support arms manually adjustable sideways in four stages

3 Suitable for round bales from 1,000 to 1,800 mm

2 Support arms removable and adjustable upwards

4 Support arms cranked outwards to prevent damage to the bales

TECHNICAL DATA

Technical data	BHG
Bale diameter (mm)	1,000 - 1,800
Max. load capacity (kg)	1,000
Length of support arms (mm)	1,200
Adjustment range of support arms (mm)	800 - 1,200
Tube diameter of support arms (mm)	108
Weight approx. (kg)	115
Order no.	391BHG
€/piece	

ATTACHMENTS



Recording	Order no.	€/piece
Kat. I/II	391BHGKAT	Series



Quality tines from SHW Friedrichstal (MADE IN GERMANY)



BALE LIFT STACKER BHS

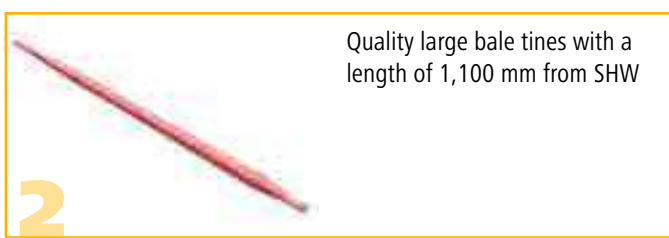
With the SAPHIR bale lift stacker, the lifting height of the carrier vehicle can be increased by 2,000 mm. The maximum lifting capacity is 1,000 kg. The externally mounted hydraulic cylinders give the driver a good view through the device. The SAPHIR bale lift stackers are designed to be particularly stable and torsion-resistant. The thick-walled zinc support tube has five welded-in conical bushes. The scope of delivery includes 3 large bale tines with a length of 1,100 mm. They can be screwed into the various cone bushes according to the bale size. The bale is held securely by the high stop bracket.



Good visibility through two externally mounted lifting cylinders



High stop bracket gives the bales a secure hold







Quality large bale tines with a length of 1,100 mm from SHW

TECHNICAL DATA

Technical data	BHS
Lifting height max. (mm)	2,000
Lifting force max. (kg)	1.000
Transport width approx. (mm)	1,150
Height retracted approx. (mm)	1.670
Weight approx. (kg)	265
Order no.	391BHS
€/piece	

Please always observe the load capacity of your front loader and the permissible axle loads of your tractor
Equipped with size 3 hydraulic plug-in couplings as standard

ATTACHMENTS

	Recording	Order no.	€/piece
	Euro attachment	391EURO-S	Series
	Farm and wheel loaders up to 2.5 t lifting capacity	391HOFRAD	
	Wheel and telescopic loaders from 2.5 t lifting capacity	391RADTELE	
	VLS Compact	391VARILOCK -S	

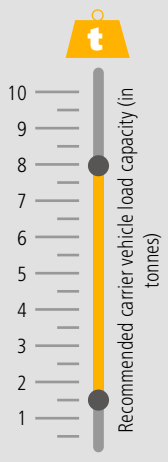
Specify carrier vehicle type when ordering

EQUIPMENT OPTIONS

Equipment	Order no.	€/piece
Pressure relief valve recommended for Merlo, Bobcat, Dieci	391001416	
Pressure relief valve adjustable (required from 200 bar working pressure)	391001154	




Quality tines from SHW Friedrichstal (MADE IN GERMANY)



BALE GRIPPING TONGS BGZ

The SAPHIR BGZ bale grab is your unique all-rounder for stacking and loading bales. The large opening angle of the gripper arms makes it possible to pick up round bales with a diameter of 90-200 cm as well as square bales of any size. The bales can be picked up from above or from the front using the pointed tines. For transporting several square bales, we recommend the optional equipment with folding heavy-duty tines in the lower section of the frame. In addition to providing the necessary stability when transporting several bales, these ensure that the stack of bales can be set down easily.




1 Synchronised opening and closing of the gripper arms, with large opening width. (1x dw required)




4 Safe storage of the heavy-duty tines




2 Optional: Folding 1,200 mm heavy-duty tines provide additional support when transporting several square bales.



5 Flat stacking of round bales



3 Pointed tines



6 Stacking square bales

TECHNICAL DATA

Technical data	BGZ
Opening width approx. (mm)	1.300 - 1.800
Height (mm):	1.160
Depth (mm):	650 - 1.100
Number of tines	6
Max. load capacity (kg)	1.500
Weight (kg)	250
Order no.	391BGZ
€/piece	

Equipped as standard with size 3. hydraulic plug-in couplings

ATTACHMENTS

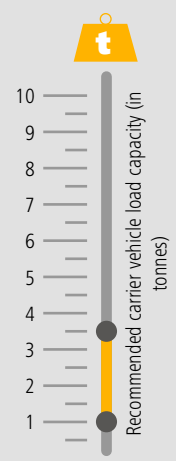


Recording	Order no.	€/piece
Variable Lock System	391VARILOCK-S	Series

Specify carrier vehicle type when ordering

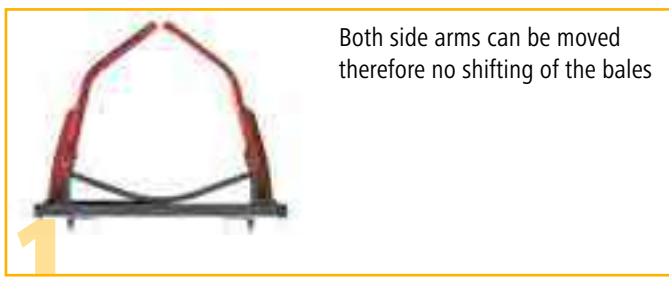
EQUIPMENT OPTIONS

Equipment	Order no.	€/piece
Schwerlastzinken 980 mm Up to 3 pieces possible	391004012	
Adjustable pressure relief valve (Required from 200 bar working pressure)	391001154	
Pressure retention valve Recommended for Merlo, Bobcat, Dieci	391001416	



WRAPPED BALE TONGS FBZ

The SAPHIR film bale tong FBZ is suitable for transporting round bales with a diameter of 900 - 1,600 mm. The two movable side arms prevent the bale from shifting during loading. Damage to the bales is also ruled out thanks to the slim design of the arms. The hydraulic cylinder ensures that the bale is held securely. The stabilisers are adjustable to prevent damage to the turf or ground during use. Thanks to its low weight and short design, the film bale tong is also suitable for small tractors.







TECHNICAL DATA

Technical data	FBZ
Ball diameter approx. (mm)	900 - 1,600
Max. load capacity (kg)	1.000
Weight approx. (kg)	215
Order no.	391FBZ
€/piece	

Installation effort: The hydraulic cylinder must still be connected to the side arms.
Equipped with size 3 hydraulic plug-in couplings as standard

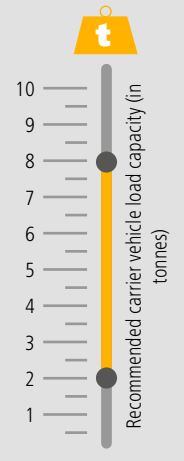
ATTACHMENTS

	Recording	Order no.	€/piece
	Euro attachment	391EURO-S	Series
	Farm and wheel loaders up to 2.5 t lifting capacity	391HOFRAD	
	Wheel and telescopic loaders from 2.5 t lifting capacity	391RADTELE	
	VLS Compact	391VARILOCK -S	

Specify carrier vehicle type when ordering

EQUIPMENT OPTIONS

Equipment	Order no.	€/piece
Pressure relief and pressure maintenance valve	391DBVDHV	



SQUARE BALE TONGS QBZ

The SAPHIR QBZ square bale tongs are suitable for transporting square and silage bales. The clamping bracket and device are designed to prevent damage to film bales.

Thanks to the two double-acting hydraulic cylinders, both side arms work independently. The side arm that is not in contact with the bale is always moved so that the bales do not shift on the floor. This also makes it possible to stack the bales tightly. Thanks to the long clamping brackets, square bales can also be picked up lengthways.

Two double-acting hydraulic cylinders

1

Adjustable pressure maintenance and limiting valve

3

Folding guard for 2. Bale

2

Clamping range from 750 to 2,110 mm





4

TECHNICAL DATA

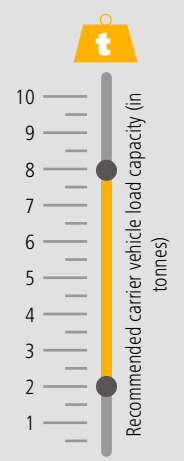
Technical data	QBZ
Span approx. (mm)	750 - 2.110
Clamp length approx. (mm)	1,100
Transport width approx. (mm)	1,150
Max. load capacity (kg)	1.500
Contact pressure	22 kN at 130 bar / 32 kN at 180 bar
Weight approx. (kg)	360
Order no.	391QBZ
€/piece	

Equipped as standard with size 3. hydraulic plug-in couplings

ATTACHMENTS

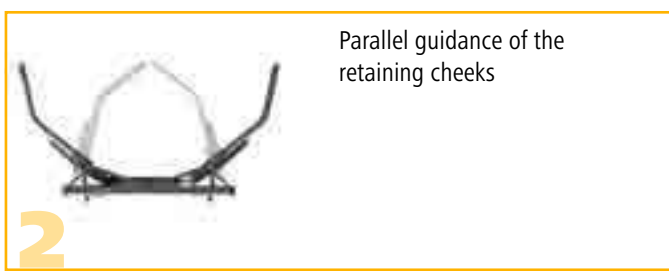
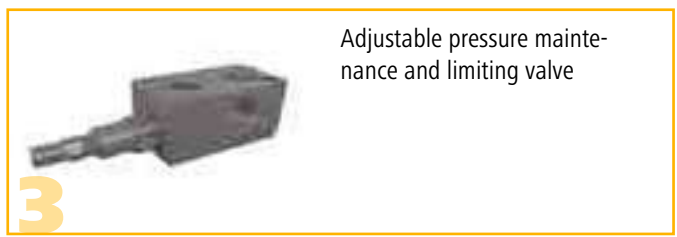
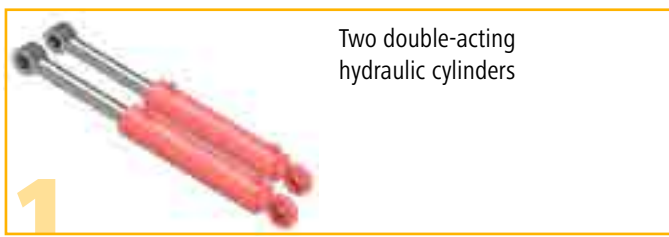
	Recording	Order no.	€/piece
	Euro attachment	391EURO-S	Series
	Farm and wheel loaders up to 2.5 t lifting capacity	391HOFRAD	
	Wheel and telescopic loaders from 2.5 t lifting capacity	391RADTELE	
	VLS Compact	391VARILOCK -S	

Specify carrier vehicle type when ordering



ROUND AND SQUARE BALE TONGS RQZ

The SAPHIR RQZ round and square bale tongs are suitable for transporting round, square and silage bales. The holding cheeks and device are designed to prevent damage to film bales. Thanks to the two double-acting hydraulic cylinders, both side arms work independently. The side arm that is not in contact with the bale is always moved so that the bales do not shift on the floor. This also makes it possible to stack the bales tightly. The retaining cheeks are movable and lie firmly against the ball of the foot.



TECHNICAL DATA

Technical data	RQZ
Span approx. (mm)	500 - 1.900
Transport width approx. (mm)	1.660
Contact pressure	13 - 16 kN
Max. load capacity (kg)	1.500
Weight approx. (kg)	290
Order no.	391RQZ
€/piece	

Equipped with size 3 hydraulic plug-in couplings as standard

ATTACHMENTS

	Recording	Order no.	€/piece
	Euro attachment	391EURO-S	Series
	Farm and wheel loaders up to 2.5 t lifting capacity	391HOFRAD	
	Wheel and telescopic loaders from 2.5 t lifting capacity	391RADTELE	
	VLS Compact	391VARIOLock -S	

Specify carrier vehicle type when ordering



BRUSHWOOD FORK RG / RGO

RG 20 / RG 22 | RGO 20 / RGO 22

The SAPHIR brushwood forks RG and RGO are suitable for transporting brushwood and green cuttings in forestry. In addition to simple loading work, the particularly robust design also allows the user to push together or collect brushwood in rough terrain or forests.

The bolted tines allow variable adjustment of the number of tines in the device and therefore the distance between the tines can be adjusted. The standard equipment includes 3 1,050 mm tubular tines. The SAPHIR brushwood forks are available with or without hydraulic top grapple. In the version with a top grapple (RGO), the brushwood fork has two hydraulic cylinders arranged on the back of the grapple. This protects the cylinders from external influences and the associated damage.



Robust tubular tines 1,050 mm (standard equipment 3 pcs.) Additional tubular tines can be added as an option. (max. number 7 pcs.)



The RGO models have two protected hydraulic cylinders







Very large opening width 1,550 mm (for version with top clamp)

TECHNICAL DATA

Technical data	RG 20	RG 22	RGO 20	RGO 22
Width approx. (mm)	2,000	2,200	2,000	2,200
Height approx. (mm)	1,100	1,100	1,040	1,040
Depth approx. (mm)	1,050	1,050	1,050	1,050
Opening width approx. (mm)	-	-	1.550	1.550
Number of cylinders	-	-	2	2
Number of tines	3	3	3	3
Volume approx. (l)	-	-	1.700	1.900
Weight approx. (kg)	410	440	610	640
Order no.	391RG20	391RG22	391RGO20	391RGO22
€/piece				

Equipped as standard with size 3 hydraulic plug-in couplings

ATTACHMENTS

	Recording	Order no.	€/piece
	Euro attachment	391EUR-S	Series
	Farm and wheel loaders up to 2.5 t lifting capacity	391HOFRAD	
	Wheel and telescopic loaders from 2.5 t lifting capacity	391RADTELE	
	VLS Compact	391VARILOCK -S	

Specify carrier vehicle type when ordering

EQUIPMENT OPTIONS


Equipment	Order no.	€/piece
Zusätzlicher Rohrzinken A maximum of 7 pipe tines are possible Price per piece	391001749	
Pressure relief valve recommended for Merlo, Bobcat, Dieci	391001416	
Pressure relief valve adjustable (required from 200 bar working pressure)	391001154	



GREEN WASTE AND BRUSHWOOD TONGS GRZ

GRZ 17 - GRZ 25

The SAPHIR green waste and brushwood tongs are suitable for transporting brushwood and green waste in forestry and municipal applications. In addition to simple loading work, the particularly robust design also allows the user to push together or collect brushwood in rough terrain or forests. Jamming of branches is minimised by the round shape of the upper pliers.



1

With heavy-duty tines 800 mm square profile 44 mm as standard.
Heavy-duty tines XL S 800 mm round profile 50 mm can also be installed as an option. (see illustration above)



2

Very large opening width of approx. 1,550 mm

TECHNICAL DATA

Technical data	GRZ 17	GRZ 19	GRZ 21	GRZ 23	GRZ 25
Width approx. (mm)	1.700	1.900	2.100	2.300	2.500
Number of gripper tines (top)	4	4	5	5	6
Number of tines (bottom)	9	10	11	12	13
Volume approx. (l)	1,300	1.450	1,600	1,750	1.900
Weight approx. (kg)	460	490	550	580	640
Order no.	391GRZ17	391GRZ19	391GRZ21	391GRZ23	391GRZ25
€/piece					

Equipped as standard with size 3 hydraulic plug-in couplings

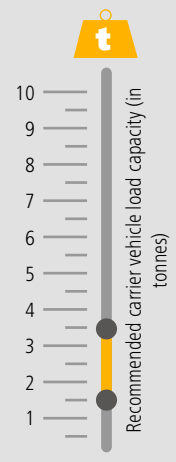
ATTACHMENTS

	Recording	Order no.	€/piece
	Euro attachment	391EURO-S	Series
	Farm and wheel loaders up to 2.5 t lifting capacity	391HOFRAD	
	Wheel and telescopic loaders from 2.5 t lifting capacity	391RADTELE	
	Variable Lock System	391VARILOCK -S	

Specify carrier vehicle type when ordering

EQUIPMENT OPTIONS

Equipment	Order no.	€/piece
Heavy duty tine XLS Ø 50 mm 800 mm long Price per piece	43008202801	
Pressure relief valve adjustable (required from 200 bar working pressure)	391001154	
Pressure relief valve recommended for Merlo, Bobcat, Dieci	391001416	



WORK PLATFORM ABB WITHOUT EC PRE-CERTIFICATION

FIG 1 | FIG 2

The work platform without EC pre-certification is suitable for use in private applications. The standing surface is covered by a closed base plate. This prevents equipment or tools from falling. The load capacity of the work platform is 250 kg. A maximum of two people may be on the work platform at the same time. The high-quality hardwood edge protector is weather-resistant and protects the user from injuries when working with chainsaws. (Legal requirement)

1 Optional: Screwable Elevation 1,200 mm (for mounting under the work platform)

4 Self-closing and locking access door

2 Optional protective roof for using the work platform in enclosed spaces

5 With fork carriage as standard. Please specify when ordering.



3 With all-round hardwood edge protection for sawing work as standard

6 Equipped with screw-on tool tray as standard

TECHNICAL DATA

Technical data	FIG 1	FIG 2
Width approx. (mm)	1,240	2,040
Height approx. (mm)	1,100	1,100
Depth approx. (mm)	790	1,040
Load capacity (kg)	250	250
Weight approx. (kg)	180	320
Order no.	391ABOEG1	391ABOEG4
€/piece		

ATTACHMENTS

Recording	Order no.	€/piece
 Gabelzinkenaufnahme 120 x 50 mm	391000619	Series
 Gabelzinkenaufnahme 170 x 90 mm	391000621	Series

Please specify the required fork carriage when ordering.

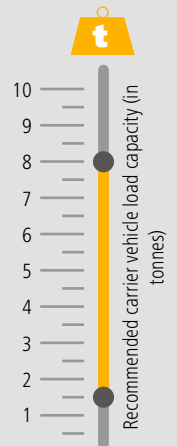
EQUIPMENT OPTIONS

Equipment	Order no.	€/piece
Erhöhung 1.200 mm for ABB1	391000581-2	
Erhöhung 1.200 mm for ABB2	391406999	
Schutzdach for ABB1	391000620	
Schutzdach for ABB2	391003681	
Shunting wheel set ABB 1 / 2 (consisting of 4 castors)	391003212	

Safety note:

A safety inspection in conjunction with the carrier vehicle is required before commissioning. The following requirements apply to the carrier vehicle: Stability, automatic parallel guidance, hose rupture protection and throttle valves must be installed.

The tilt cylinders must be deactivated.



WORK PLATFORM EG

FIG EG 1 | FIG EG 2

The use of work platforms in the public and commercial sectors has been strictly regulated by law since 2006. The resulting requirements for the use of a work platform can be found in the Machinery Directive 2006/42/EC. Thanks to EC pre-certification, the SAPHIR work platform fulfils all the necessary requirements to be able to carry out the prescribed type examination in conjunction with the individual carrier vehicle.

REQUIRED INSPECTIONS AND APPROVALS FOR FORM-FIT MOUNTING







e.g. quick-change attachment on carrier vehicles such as tractors, wheel loaders and telehandlers, ...

- up to a fall height of 3.0 m: Safety-related acceptance
- for fall heights of 3.0 m - 10.0 m: EC type examination in conjunction with the respective carrier vehicle

REQUIREMENTS FOR THE CARRIER VEHICLE

- Tested stability
- Automatic parallel guidance
- Lockable tilt function
- Lifting cylinder with pipe rupture protection
- Throttleable lifting and lowering speed
- From 7.5m lifting height: Emergency lowering and radio communication
- EC type examination for untested unit
- Expert examination for already tested units
- Information on already tested combinations can be obtained directly from SAPHIR
- The prescribed hydraulic safety components for e.g. front loaders can be ordered from SAPHIR on request.

The EC type examination is carried out in accordance with the regulations of the Machinery Directive 2006/42/EC.

	<p>With integrated circular spirit level in the basket as standard.</p>		<p>Optional lifting device with a lifting height gain of 2,000 mm (only approved for ABB EG 1 approved)</p>
	<p>Equipped with screw-on tool tray as standard</p>		<p>Optional screw-on 1,200 mm height extension.</p>
	<p>With all-round hardwood edge protection for sawing work as standard</p>		<p>Optional protective roof for working in enclosed spaces</p>
	<p>With self-closing and locking access door</p>		

WORK PLATFORM EG

03

TOOLS

TECHNICAL DATA

Technical data	ABB EG1	ABB EG2
Width approx. (mm)	1,240	2,040
Height approx. (mm)	1,100	1,100
Depth approx. (mm)	790	1,040
Load capacity (kg)	250	250
Weight approx. (kg)	180	320
Order no.	391ABBEG1	391ABBEG2
€/piece		

ATTACHMENTS



Recording	Order no.	€/piece
Euro attachment	391EUR-S	Series



Farm and wheel loaders up to 2.5 t lifting capacity 391HOFRAD



Wheel and telescopic loaders from 2.5 t lifting capacity 391RADTELE

Specify carrier vehicle type when ordering

EQUIPMENT OPTIONS

Equipment	Order no.	€/piece
Elevation 1,200 mm for ABB EG1	391000581-2	
Elevation 1,200 mm for ABB EG2	391406999	
Hubvorrichtung HV 20 Lifting height gain approx. 2,000 mm, only approved for ABB EG 1.	391406989	
Protective roof for ABB EG1	391000620	
Protective roof for ABB EG2	391003681	
Shunting wheel set ABB 1 / 2 (consisting of 4 castors)	391003212	
Sicherheitspaket hydr. components for retrofitting e.g. front loaders for EC type examination	391001885	On request





ADAP E with Schäffer vehicle mount



ADAP KV with Manitou vehicle mount



ADAPTER FRAME ADAP

A wide variety of adapters can be manufactured for tractors, farm, wheel and telescopic loaders. This optimises the front boom dimension and tilt angle. On the attachment side, the adapter frames are equipped with a mechanical locking mechanism. The adapter can also be equipped with an optional tool lock.

To configure an adapter, first select the attachment mounting of the adapter frame from the table below.

Then select the carrier vehicle mount for the adapter frame from the overview on the right-hand side of the catalogue.

SELECT ATTACHMENT MOUNTS

(coloured red here)



Technical data	ADAP K	ADAP KV	ADAP E	ADAP H	ADAP T
Attachment holder	Cat. II	Cat. II/III adjustable	Euro intake	Farm and wheel loaders up to 2.5 t lifting capacity	Wheel and telescopic loaders from 2.5 t lifting capacity
Order no.	391ADAPK	391ADAPKV	391ADAPE	391ADAPH	391ADAPT
€/piece					





Customised quick-change devices for wheel loaders and telescopic handlers or implement carriers for fixed attachment to the carrier vehicle are available on request.

On this page you can select the carrier vehicle side of the adapter. When ordering, please always state as precisely as possible which carrier vehicle (manufacturer and model) is involved.

SELECT CARRIER VEHICLE MOUNT

(coloured red here)



	Recording	Order no.	€/piece
	Kat. II	391ADAPKATII	
	Euro attachment	391ADAPEUR	
	Farm and wheel loaders up to 2.5 t lifting capacity	391ADAPHOFRAD	
	Wheel and telescopic loaders from 2.5 t lifting capacity	391ADAPTELERAD	

Specify carrier vehicle type when ordering

EQUIPMENT OPTIONS

Equipment	Order no.	€/piece
Hydraulische Verriegelung Available on request for ADAP E/H/T	391001329	
Slide for pulling jaw / K80 Available for ADAP K and ADAP KV (Please specify the desired dimensions when ordering)	391SCHLITTEN	
Perforated plate for pull jaw / K80 Available for ADAP K and ADAP KV, hole pattern 140x80 mm Mandatory when equipped with K80 and/or towing jaws	391LOCHPLATTE	
Ball head coupling K80 - drawbar load 3,000 kg Screwable, hole pattern 140x80 mm	391008033	
Towing jaw with automatic locking - drawbar load 2,500 kg Bolt diameter 38 mm, screwable, hole pattern 140x80 mm	391008034	
Towing jaw with manual locking - drawbar load 2,500 kg Bolt diameter 31 mm, screwable, hole pattern 140x80 mm	391008035	



SWE QUICK-CHANGE SYSTEMS

Thanks to our many years of experience in the telescopic handler and wheel loader sector, we are able to manufacture complete quick-change systems for your carrier vehicle. These replace the factory-fitted mounts in all their functions without changing the load centre of gravity and the roll-out and roll-in kinematics. Depending on the manufacturer, the connection to the carrier vehicle is made via several bolted pins. This gives you complete flexibility when purchasing a new wheel loader or telehandler and you do not have to take into account the attachments already available in your business when choosing a manufacturer.

Quick-change device SWE fork carriage/Euro

The SAPHIR quick-change device SWE fork carriage/Euro enables you to use attachments with Euro mountings on your forklift truck. The total swivelling range of the roll-in and tipping angle is 92°, which ensures easy loading and unloading of buckets, for example. The tools are locked via a mechanical central locking system. The quick-change device is ready to fit for fork carriage standard ISO FEM II and ISO FEM III.

Technical data	SWE Fork carriage/Euro
Carrier vehicle mount	Fork carriage ISO FEM II / III
Width (mm)	1,180
Height (mm):	1.020
Depth (mm):	450
Load capacity (kg)	2.500
Tilt angle (°)	87
Hydraulic oil pressure (bar)	180
Weight (kg)	300
Order no.	391SWEGT
€/piece	

TWO EXAMPLES OF OTHER QUICK-CHANGE DEVICES

SWE Caterpillar TH 407C on Volvo L70



SWE Claas Torion 535/639 on Euro



Available for all common vehicle types. Prices and delivery times are available on request. Feel free to contact us!

LOOSE WELD-ON PARTS FOR CONVERTING EXISTING TOOLS

03

TOOLS

Typ	Preiskategorie	Typ	Preiskategorie
Ahlmann AL 70, 150 3		Komatsu WA200-320 4	
Ahlmann AS7 - AS18 4		Komatsu WA65-85 2	
Ahlmann AX series 2		Kramer 180, 250, 350 1	
Atlas AR 95 4		Kramer 312-850 2	
Atlas E-series up to 86E 2		Kramer 880 3	
Avant yard loader 1		Kramer telescopic handler 3	
Bobcat skid steer loaders / DIN 24410 2		Kubota R410-R520 2	
Bobcat telescopic handler 4		Liebherr L506P - 509P 3	
Case 21-321 3		Liebherr L506Z-509Z 2	
Case 521-721 4		Liebherr L512-538 4	
Caterpillar 902G-908H 1		Manitou telescopic handler 4	
Caterpillar 902H-908H 2		Massey Ferguson telescopic handler 4	
Caterpillar 928-938 4		Matbro telehandler 3	
Caterpillar telehandler 3		Merlo telehandler 3	
Claas telescopic handler 3		MultiOne yard loader 1	
Deutz Agrovector 2		New Holland telehandler 3	
Dieci telehandler 3		Paus wheel loader 3	
Doosan wheel loader 4		Schaeff SKL 821-832 2	
Faresin telehandler 4		Schaeff SKL 833-871 3	
Fuchs farm loader 1		Schäffer 9380T 4	
Gehl farm loader 2		Schäffer hydraulic 2	
Genie telescopic handler 3		Schäffer mechanical 1	
Giant yard loader 2		Terex telescopic handler 3	
Hydrema WL470-830 3		Terex TL 160 - 360 4	
JCB 2 CX, 3CX, 4CX 2		Terex TL 65 2	
JCB 403 1		Terex TL 80 - 120 3	
JCB 406-409B 2		Thaler yard loader 1	
JCB 410-456 4		Volvo L 50 - 70 4	
JCB 520-40 - 527-55 2		Volvo L20-L45 Z 2	
JCB 526S 3		Wacker WL 18 - WL 50 2	
JCB 530-70 - 541-70 3		Wacker WL 55, 57 3	
JCB Robot 1		Weidemann 4070, 4204, 8080 3	
JLG Telehandler 2		Weidemann hydraulic 2	
John Deere telehandler 3		Weidemann mechanical 1	
Kioti CK series 1		Zeppelin ZL 80 - 110 3	
Komatsu telehandler 3		Zettelmeyer 302-602 1	

Category	Order no.	€/set
Preiskategorie 1	391ANSCHWPK1	
Preiskategorie 2	391ANSCHWPK2	
Preiskategorie 3	391ANSCHWPK3	
Preiskategorie 4	391ANSCHWPK4	

Please tell us the manufacturer and model of your carrier vehicle when you place your order.



SILAGE TECHNOLOGY

Corn labels MGS	250-251
Compact corn shield	252-253
Corn shield combi	254-255
Combi Plus corn shield	256-257
Green fork GG S NEW!	258-259
Green waste fork GG	260-261
Green fork with hydraulic tipping function GGK	262-263
Silage spreader SiloRaptor	264-265
Silage roller SiloRex NEW!	266-267

04

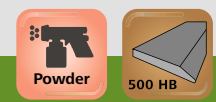
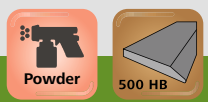




MGS 300



MGS 300S with water filling




MGS MAIZE AND GREEN MANURE SHIELD


MGS 250 - MGS 300

The SAPHIR MGS 250 and MGS 300 maize and green manure push plates are simple, rigid plates for mounting in the rear or front hydraulics. The signs are equipped with a screwed, highly wear-resistant scraper strip that can be replaced when worn.

The SAPHIR MGS 250S and MGS 300S maize and green manure sliding shields can be ballasted with water thanks to their double-walled design. Lateral guide elements are also fitted as standard to increase the feed rate.




1 Compact design with round blade body for optimum crop flow and maximum stability stability



4 Optional drag skid (MGS-S) for easier guidance of the blade on the silo frame



2 Replaceable wear rail made from highly wear-resistant steel (screwed, 500 HB)



5 Optional grid attachment (MGS-S) for even larger feed rates with good visibility



3 Heavy-duty, water-fillable version (MGS-S) for optimum ballasting of the tractor



6 Optional LED work lights and marker lights for lights for even more working comfort and safety

TECHNICAL DATA

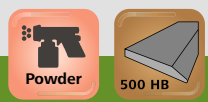
Technical data	MGS 250	MGS 300	MGS 250S	MGS 300S
Working width (mm)	2,500	3.000	2,500	3.000
Sign height without attachment approx. (mm)	1,000	1.000	1,000	1.000
Sign height with grille attachment approx. (mm)	-	-	1,400	1.400
Transport width approx. (mm)	2,500	3.000	2,500	3.000
Cultivation	Cat. II	Cat. II	Cat. II/III	Cat. II/III
Power requirement approx. (kW/hp)	65/90	80/110	95/125	110/150
Weight approx. (kg)	295	320	690	770
Weight filled approx. (kg)	-	-	1,140	1.320
Order no.	574MGS250	574MGS300	574MGS250S	574MGS300S
€/piece				

EQUIPMENT OPTIONS

Equipment	Order no.	€/piece
Grille attachment MGS 250S	574007474	
Gitteraufsatz MGS 300S	574000669	
Drag skid MGS 250S	574007475	
Schleppkufe MGS 300S	574000668	
LED marker lights (2 pieces)	574001138	
LED worklights (2 pieces)	574001139	
Polyurethane edging strips 2.500 x 150 x 20 mm Suitable for MGS 250 and MGS 250S	391008223	
Polyurethane edging strips 3.000 x 150 x 20 mm Suitable for MGS 300 and MGS 300S	391008222	



Compact 4001 with grid attachment



COMPACT MAIZE AND GREEN MANURE SHIELD

COMPACT 4001 | COMPACT 5001

The SAPHIR KOMPAKT maize and green manure push plates are characterised by a particularly powerful pushing performance thanks to their large working widths. The three-part hydraulic folding mechanism allows you to work right up to the side of the silo and guarantees safe road transport. In addition, the close attachment of the robust blade body to the carrier vehicle ensures a good overview of the blade and good manoeuvring characteristics.



1 Replaceable scraper blade made of highly wear-resistant steel (bolted, 500 HB)



4 Optional grid attachment for even larger feed quantities with good visibility.



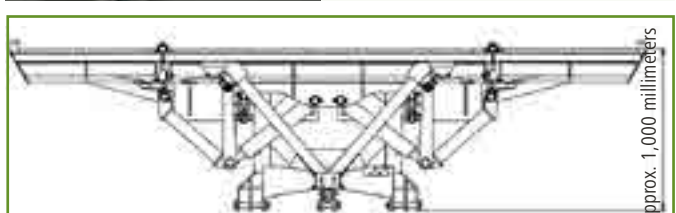
2 Three-part hydraulic folding



5 Optional LED work lights and marker lights for lights for even more working comfort and safety



3 Optional skid kit for easier guidance of the blade on the silo frame



6 Compact design for a good overview and good manoeuvrability

approx. 1,000 millimeters

TECHNICAL DATA

Technical data	Compact 4001	Compact 5001
Working width (mm):	4.000	5.000
Sign height without attachment approx. (mm)	1,100	1,100
Sign height with grille attachment approx. (mm)	1.500	1.500
Transport width approx. (mm)	2.360	3,000
Attachment	Cat. II/III	Cat. II/III
Width centre section approx. (mm)	2,000	2,600
Hydraulic connection	2 x da	2 x da
Power requirement approx. (kW/hp)	100/135	110/150
Weight approx. (kg)	910	990
Order no.	574KOMPAKT4001	574KOMPAKT5001
€/piece		

EQUIPMENT OPTIONS

Equipment	Order no.	€/piece
Gitteraufsatz Kompakt 4001	574000671-2	
Gitteraufsatz Kompakt 5001	574000673-2	
Schleppkufensatz Kompakt 4001	574000670	
Schleppkufensatz Kompakt 5001	574000672	
Polyurethane scrapers for Kompakt 4001 130x25mm Set	574004010	
Polyurethane scrapers for compact 5001 130x25mm Set	574004011	
Both side panels move synchronously	574001145	
Zusatzgewicht 280 kg Water tank for mounting on the frame	391002948	
LED marker lights (2 pieces)	574001138	
LED worklights (2 pieces)	574001139	
Pressure relief valve (Required from 200 bar working pressure)	391001154	
Pressure retention valve	391001416	
Electro-hydraulic changeover (6/2 way valve 12V 90 ltr./min, ATTENTION: Without electrical kit)	526001622	



Combi 5001 with grille attachment, work lights and marker lights



MAIZE AND GREEN MANURE SHIELD COMBI

COMBI 4501 | COMBI 5001

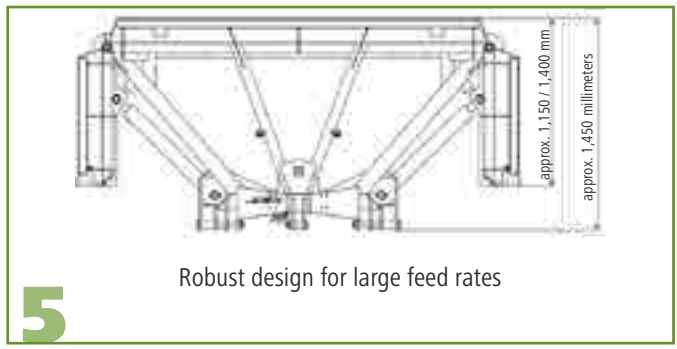
The SAPHIR KOMBI maize and green manure push plates are suitable for pulling and pushing. Replaceable, highly wear-resistant scraper blades (500 HB) are mounted on both sides of the sturdy blade body. The side sections can be folded in and out individually at the front and rear. The particularly stable and robust design of the blade also allows it to be used with system tractors up to approx. 350 hp.

1  Highly wear-resistant scraper (500 HB) on the front and back of the blade body

2  Optional grid attachment for even larger feed quantities with good visibility

3  Optional LED work lights and marker lights for lights for even more working comfort and safety

4  Side panels can be individually swivelled hydraulically, swivel range 120°

5  Robust design for large feed rates
approx. 1,150 / 1,400 mm
approx. 1,450 millimeters

TECHNICAL DATA

Technical data	Kombi 4501	Combi 5001
Working width (mm):	4.500	5.000
Sign height without attachment approx. (mm)	1.160	1.160
Sign height with grille attachment approx. (mm)	1.560	1.560
Transport width approx. (mm)	3.000	3.000
Width centre section approx. (mm)	2.600	2.600
Width side panel approx. (mm)	950	1.200
Hydraulic connection	2 x da	2 x da
Power requirement approx. (kW/hp)	147/200	183/250
Weight approx. (kg)	980	1.030
Order no.	574KOMBI4501	574KOMBI5001
€/piece		

ATTACHMENTS



Recording	Order no.	€/piece
Aufnahme Kat. II/III	574KATIII-S	Series

EQUIPMENT OPTIONS

Equipment	Order no.	€/piece
Gitteraufsatz Kombi 4501	574001317-3	
Gitteraufsatz Kombi 5001	574000674-3	
Polyurethane scraper strip (one-sided) Kombi 4501 130x25mm	574004008	
Polyurethane scraper strip (one-sided) Kombi 5001 130x25mm	574004009	
Zusatzgewicht 280 kg Water tank for mounting on the frame	391002938U	
Zusatzgewicht 550 kg (cannot be combined with the additional weight 280 kg)	574004013	
Both side panels move synchronously	574001145	
LED marker lights (2 pieces)	574001138	
LED worklights (2 pieces)	574001139	
Pressure relief valve (Required from 200 bar working pressure)	391001154	
Pressure retention valve	391001416	
Electro-hydraulic changeover (6/2 way valve 12V 90 ltr./min, ATTENTION: Without electrical kit)	526001622	

To the
Product video

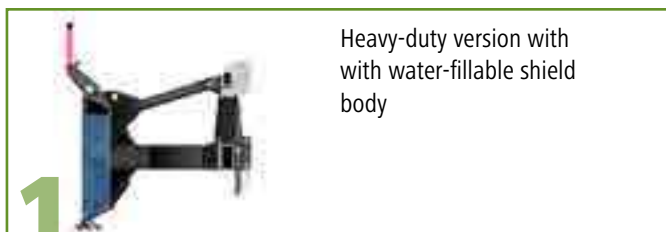


MAIZE AND GREEN MANURE SHIELD KOMBI PLUS

COMBI PLUS 4500 | COMBI PLUS 5500

The SAPHIR KOMBI PLUS maize and green manure push plates are suitable for pulling and pushing. Below the honeycomb-shaped shield body, there are replaceable wear bars (500HB) with a long service life on both sides. wear rails (500HB) with a long service life.

The side sections can be folded in and out individually by 170° to the front and rear. The water-fillable construction is designed for maximum loads and is ideally equipped for use on large tractors from 200 HP.



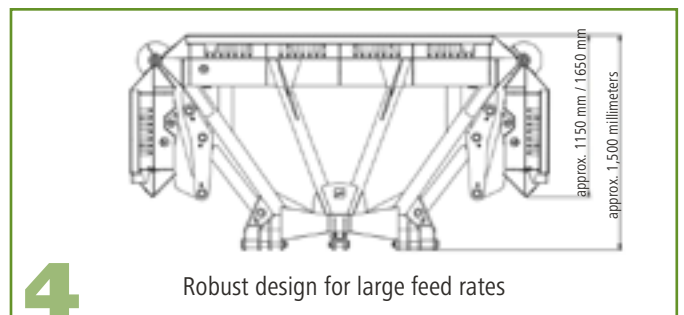
Heavy-duty version with
with water-fillable shield
body



Standard grid attachment for
even larger feed quantities with
good visibility



Highly wear-resistant scraper
blades (500 HB) on the front
and rear of the shield body



Robust design for large feed rates



170 ° swivelling range of the side panels,
Can be folded in and out individually

TECHNICAL DATA

Technical data	Combi Plus 4500	Combi Plus 5500
Approx. working width (mm)	4.500	5.500
Height approx. (mm)	1.700	1.700
Depth approx. (mm)	1.500	1.500
Transport width approx. (mm)	2.950	2.950
Width centre section approx. (mm)	2.600	2.600
Power requirement approx. (kW/hp)	147/200	183/250
Weight (kg)	1850	2.050
Weight filled approx. (kg)	2,400	2,700
Order no.	574KOMBIPLUS4500	574KOMBIPLUS5500
€/piece		€

ATTACHMENTS



Recording	Order no.	€/piece
Aufnahme Kat. II/III/IV	574KAT-S	Series

EQUIPMENT OPTIONS

Equipment	Order no.	€/piece
Polyurethane scraper bar 130x25 mm Kombi Plus 4500 on both sides	574001070	
Polyurethane scraper bar 130x25 mm Kombi Plus 5500 on both sides	574001071	
Both side panels move synchronously	574001145	
LED marker lights (2 pieces)	574001138	
LED worklights (2 pieces)	574001139	
Pressure relief valve (Required from 200 bar working pressure)	391001154	
Pressure retention valve	391001416	
Electro-hydraulic changeover (6/2 way valve 12V 90 ltr./min, ATTENTION: Without electrical kit)	526001622	

NEW!

Quality tines from
SHW Friedrichstal
(MADE IN GERMANY)



GREEN FORK GG S

GG S 21 - GG S 29

The SAPHIR GG S green fork is primarily used for pushing and spreading grass silage on the silage heap. The 1,000 mm heavy-duty quality tines from SHW Friedrichstal "Made in Germany" are designed to meet the highest demands. The narrow tine spacing of 200 mm also enables use in chopped grass silage and maize silage. Longer heavy-duty tines with a length of 1,250 mm can also be installed on request.

**1**

Solid zinc support tube with welded-in tapered sleeves and welding bushes. Vertical stiffeners at the back of the fork provide additional stability.

**4**

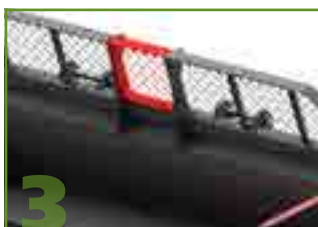
Additional wear rail to protect the zinc support tube.

**2**

1,000 mm heavy-duty tines for the highest demands. Optional heavy-duty tines with 1,250 mm length.

**5**

Upper part of the back of the appliance made of expanded metal for an optimum view of the working area.

**3**

Screwable recess for Z-kinematics for maximum flexibility when selecting the carrier vehicle.

TECHNICAL DATA

Technical data	GG S 21	GG S 23	GG S 25	GG S 27	GG S 29
Approx. width (mm)	2,100	2,300	2,500	2,700	2,900
Rear wall height approx. (mm)	1,170	1,170	1,170	1,170	1,170
Number of tines	11	12	13	14	15
Weight approx. (kg)	510	540	570	600	630
Order no.	391GGS21	391GGS23	391GGS25	391GGS27	391GGS29
€/piece					

ATTACHMENTS



Recording	Order no.	€/piece
Variable Lock System	574VARILOCK-S	Series

Specify carrier vehicle mount when ordering

EQUIPMENT OPTIONS

Equipment	Order no.	€/piece
Road protection GG S (for all working widths)	391009515	
Heavy duty tines 1,250 mm long, surcharge per piece	391008256	



GREEN WASTE FORK GG

GG 29 - GG 49

The SAPHIR GG green waste fork is a heavy-duty fork for pushing and spreading green waste. The bolted heavy-duty tines enable the transport of large quantities of silage and green cuttings. The device can be seen through at all times.

1 Solid square tubular frame for maximum stability

4 GG 38 / 49: hydraulically foldable as standard for road transport (1x dw required)

2 Zinc support tube protection with additional wear-resistant scraper 200 x 20 mm (500 HB)

5 Optional pressure relief valve (adjustable) for carrier vehicles with more than 200 bar working pressure

3 Replaceable, bolted heavy-duty tines 1,400 mm from SHW

6 Optional road protection. Mandatory for transport on public roads

TECHNICAL DATA

Technical data	GG 29	GG 38	GG 49
Working width (mm):	2.950	3.800	4.950
Transport width approx. (mm)	2.950	2.800	2.800
Folding frame	No	Yes	Yes
Rear wall height approx. (mm)	1.400	1.400	1.400
Number of tines	11	16	20
Weight approx. (kg)	940	1.450	1.670
Order no.	391GG29	391GG38	391GG49
€/piece			

ATTACHMENTS



Recording	Order no.	€/piece
Variable Lock System	574VARILOCK-S	Series

Specify carrier vehicle mount when ordering

EQUIPMENT OPTIONS

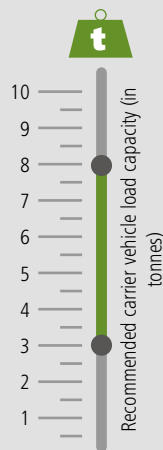
Equipment	Order no.	€/piece
Druckbegrenzungsventil (necessary from 200 bar working pressure) adjustable	85034008	
Road protection GG 29	391001861	
Road protection GG 38	391003491	
Road protection GG 49	391000617	
Pressure retention valve recommended for Merlo, Bobcat, Dieci	391001416	



To the Product video



Quality tines from SHW Friedrichstal (MADE IN GERMANY)



GREEN WASTE FORK WITH HYDRAULIC TIPPING FUNCTION GK

GK 30

The green waste fork with hydraulic tipping function is used to collect and distribute large quantities of silage. The integrated hydraulic tipping function makes it easy to tip the load. The back section closed with expanded metal closed back section prevents green cuttings from entering the pick-up area without restricting the view of the tines.

1 Solid square tubular frame for maximum stability

4 Hydraulic tipping function (1 x dw required) with rotary movement via a roller system

2 Zinc support tube protection with additional wear-resistant scraper 200 x 20 mm (500 HB)

5 Optional road protection, mandatory for transport on public roads

3 Replaceable, bolted heavy-duty tines 1,400 mm (SHW)

6 Optional base plate for chopped material. Recommended for maize silage.

TECHNICAL DATA

Technical data	GGK 30
Working width (mm):	2,700
Transport width approx. (mm)	2.970
Rear wall height approx. (mm)	1.400
Recording	Cat. II/III
Number of tines	10
Weight approx. (kg)	1.560
Order no.	391.01175.GGK30
€/piece	

EQUIPMENT OPTIONS

Equipment	Order no.	€/piece
Pressure relief valve adjustable (required from 200 bar working pressure)	391001154	
Bodenplatte Recommended for maize silage	391002605	
Road protection GGK 30	391002317	
Pressure retention valve	391001416	



SILAGE SPREADER SILORAPTOR

SILORAPTOR 22 | SILORAPTOR 28

The SAPHIR silage spreader SiloRaptor is used to distribute silage on the silage heap. The main area of application of the machine is in grass harvesting. The large drum blade with a diameter of 1,230 mm with bolted spreading tools each at a height of 150 mm ensures powerful distribution of the silage. Due to the special arrangement of the spreading tools on the drum, the distribution on the silo is particularly uniform. With the hydraulic swivelling of 20° on both sides, the silage can also be optimally deposited at the edge of the heap.

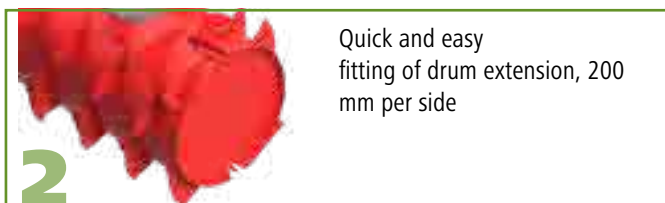
The robust design with its high dead weight also ensures a high level of smooth running of the machine when in use. The original Walterscheid cam clutch installed as standard in front of the transmission also serves as a Overload protection for the toughest requirements. In addition, outwardly positioned lubrication points, large Maintenance openings and well thought-out accessories for smooth operation of the machine.



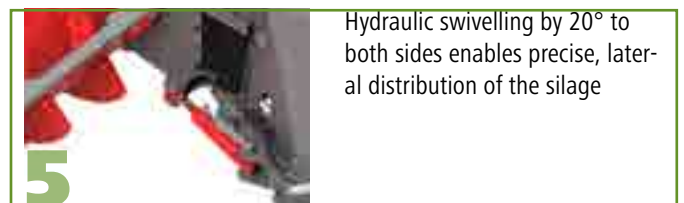
Drum diameter of 1,230 mm for a powerful distribution of silage



Bolted spreading tools at a height of 150 mm



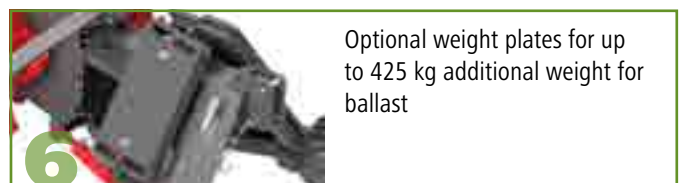
Quick and easy fitting of drum extension, 200 mm per side



Hydraulic swivelling by 20° to both sides enables precise, lateral distribution of the silage



Optional reversing gear for optional use with front or rear attachment



Optional weight plates for up to 425 kg additional weight for ballast

TECHNICAL DATA

Technical data	SiloRaptor 22	SiloRaptor 28
Approx. width (mm)	2,250	2,800
Number of spreading tools	48	64
Power requirement approx. (kW/hp)	110/150	110/150
PTO speed (1/min)	1,000	1,000
Hydraulic swivelling	20° L/R	20° L/R
Weight approx. (kg)	1,150	1,250
Order no.	391SILORAPTOR22	391SILORAPTOR28
€/piece		

NOTE: The double-sided wide-angle PTO shaft is not included in the standard scope of delivery and can be added via the optional extras. can be added.

ATTACHMENTS



Recording	Order no.	€/piece
Aufnahme Kat. II/III/IV	391KAT-S	Series

EQUIPMENT OPTIONS

Equipment	Order no.	€/piece
Double-sided Walterscheid wide-angle drive shaft	391008252	
Drum extension set (2, each with 200 mm width for left and right)	391007036	
Reverse gear unit For front and rear fitting	391007039	
Additional weights 40kg with bracket, recommended quantity: 6, up to 10 additional weights possible	391007040	
Road protection with lighting	391007037	



SiloRex 30H with silage edge compactor, SMART PULL hydraulic towing device and lighting



SILAGE ROLLER SILOREX

SILOREX 25 | SILOREX 30

The SAPHIR SiloRex silage rollers are used to increase the compaction performance of roller tractors for grass and maize silage. The welded-on rings ensure a very high point load and thus an optimum depth effect on the silo. The devices have ten or twelve welded-on rings with a height of 160 mm and a distance of 225 mm. The roller body and frame can be individually filled with water. This means that the ballasting of the implements can be adjusted depending on use and tractor power. The SiloRex 25H and SiloRex 30H models have hydraulic shifting on both sides. This means you can also work safely on edges and walls.

1 Hydraulic side shift by 640 mm (SiloRex 30H) or 390 mm (SiloRex 25H) on both sides for safe working on silo edges.

4 The frame and roller body can be filled separately with water for optimum ballasting.

2 Optional towing device (1 x dw required) for towing aid for transport vehicles for particularly high travelling silos. SMART PULL version for particularly gentle and safe lifting of the transport vehicles.

5 Optional silage edge compactor on the left, right or both sides (1x dw required in each case) for compacting the free-standing silage edges.




3 Optional scraper for cleaning the areas between the rings with particularly sticky silage.

6 Optional weight plates for additional ballasting of 455 kg

TECHNICAL DATA

Technical data	SiloRex 25	SiloRex 30	SiloRex 25H	SiloRex 30H
Approx. total width (mm)	2,500	3,000	2,500	3,000
Approx. working width (mm)	2,350	2,810	2,350	2,810
Hydraulically adjustable	-	-	390 mm on both sides	640 mm on the bed side
Weight approx. (kg)	1,825	2,080	2,030	2,290
Weight when full (kg)	2,640	3,080	2,845	3,290
Order no.	927SILOREX25	927SILOREX30	927SILOREX25H	927SILOREX30H
€/piece				

EQUIPMENT OPTIONS

Equipment	Order no.	€/piece
Silagekantenverdichter rechts (460 kg; 1x dw required) Recommended for wall-less silo spaces	927009334	
Silage edge compactor left (460 kg; 1x dw required) Recommended for wall-less silo spaces	927009335	
Hydraulic towing device STANDARD (1x dw required)	927009336	
SMART PULL hydraulic towing device  (1x dw required)	927009337	
Additional weight 455 kg  Consisting of 10x40 kg weight plates + holder	927009339	
Towing hook set for hydraulic towing device  Consisting of 2x tow hooks and 1x holder	927009341	
Abstreifer SiloRex 25/H for cleaning the areas between the rings	927009694	
Abstreifer SiloRex 30/H for cleaning the areas between the rings	927003089	
Set of side protection rollers Set consisting of 2x castors and 1x transport bracket	927009338	
Lighting incl. warning signs	927001588	
Electro-hydraulic changeover (6/2 way valve 12V 90 l/min, ATTENTION: Without electrical kit)	526001622	
Electronic operating hours counter Reliable working time recording thanks to vibration sensor	927004018	



MUNICIPAL TECHNOLOGY

Dozer blade RS	270-271
CONTOUR levelling blade	272-273
Dozer blade PROF1	274-277
Route planner WP	278-279
Sweeper ZKM	280-283
Sweeper HKM <small>NEW!</small>	284-287
Sweeper MKM <small>NEW!</small>	288-291
Sweeper PKM	292-295
Sweeper SKM	296-297
Brush KB	298-299

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LEVELLING BLADE RS

RS 2200 | RS 2500

The SAPHIR RS levelling blades are used for light levelling and clearing work. Their low weight makes them particularly interesting for smaller tractors. The signs are characterised by their robust design and simple operation.

- Sturdy support foot
- Can be mechanically swivelled through 30° by means of a locking pin
- Sliding discs can be adjusted without tools
- Front and rear attachment Cat. I/II
- Optional polyurethane scraper bar
- Blade body made from 12 mm sheet steel

TECHNICAL DATA

Technical data	RS 2200	RS 2500
Approx. working width (mm)	2,200	2.500
Sign height approx. (mm)	710	710
Attachment	Cat. I / II	Cat. I / II
Power requirement approx. (kW/hp)	18 / 25	18 / 25
Weight approx. (kg)	235	257
Order no.	574401310-2	574401311-2
€/piece		

Note: The equipment is supplied fully assembled.

EQUIPMENT OPTIONS

Equipment	Order no.	€/piece
Polyurethanschürfleiste RS 2200 (150 x 20 mm)	574001099	
Polyurethanschürfleiste RS 2500 (150 x 20 mm)	574001100	



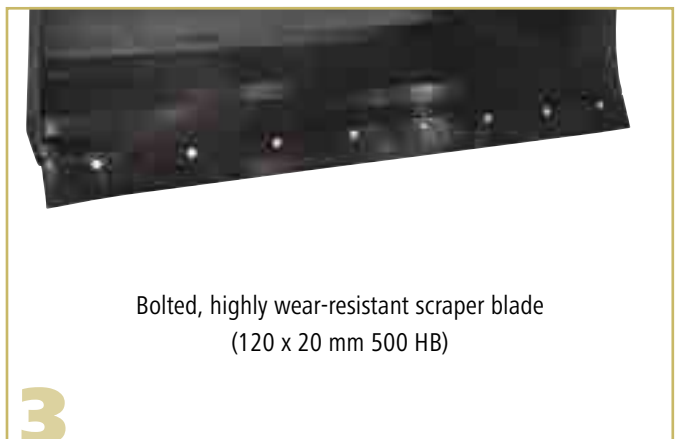
CONTOUR LEVELLING BLADE

C2000 - C3000

The SAPHIR CONTOUR levelling blades are robust, mechanically adjustable blades for light levelling and road construction work with tractors up to 73kW/100hp. They are also suitable for snow clearing. The blade body can be swivelled through 360 degrees as standard. This means that the blade can also be front attachment. It is locked in steps of 22.5 degrees using a locking pin.




1 Front and rear attachment Cat. II with stable parking support



3 Bolted, highly wear-resistant scraper blade (120 x 20 mm 500 HB)



2 Mechanically swivelling through 360 swivelling (also suitable for front mounting suitable)



4 Optional central support wheel with pneumatic tyres and spindle adjustment for optimum height control

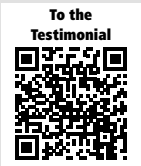
TECHNICAL DATA

Technical data	C2000	C2500	C3000
Approx. working width (mm)	2,000	2.500	3,000
Sign height approx. (mm)	550	550	550
Attachment	Cat. II	Cat. II	Cat. II
Power requirement approx. (kW/hp)	29 / 40	36 / 50	44/60
Weight approx. (kg)	450	500	550
Order no.	574401320-2	574401321-2	574401322-2
€/piece			

Note: The equipment is supplied fully assembled.

EQUIPMENT OPTIONS

Equipment	Order no.	€/piece
Ausführung S Can be swivelled laterally by 800 mm from the centre	574001089-2	
Luftbereiftes Stützräderpaar	574001064	
Central support wheel with pneumatic tyres and spindle adjustment	574001066-2	
Polyurethanschürfleiste C2000 For winter service, loose accessory pack (150 x 20 mm)	574001090	
Polyurethanschürfleiste C2500 For winter service, loose accessory pack (150 x 20 mm)	574001091	
Polyurethanschürfleiste C3000 For winter service, loose accessory pack (150 x 20 mm)	574001092	
Lighting system incl. warning signs	574001068-2	



LEVELLING BLADE PROFI

PS 2250 PROFI

The SAPHIR levelling blade Profi impresses with its extremely stable design. The wide range of adjustment options and special equipment make it an ideal machine for road construction, levelling work and winter maintenance. The working width can be customised using bolt-on blade extensions. The optional hydraulic operating components make the appliance particularly user-friendly. In the basic version, these operating components are mechanically adjustable by means of pins or turning spindles. The high dead weight also ensures a good levelling effect even in difficult conditions.

BASIC EQUIPMENT OF THE MACHINE

- For front or rear mounting Cat II/III
- Blade body can be mechanically swivelled 180 degrees (for front attachment or tractor with reversing device)
- Mechanical lateral adjustment on both sides by 800 mm
- Mechanical tilt adjustment on both sides by approx. 30 degrees
- Bolted and three-part, highly wear-resistant scraper blade (120 x 20 mm, 500 HB)
- Device for lateral blade extensions
- Blade width: 2,250 mm / sign height: 600 mm
- Hose baffle


1

The hydraulic lateral adjustment takes place via a double-acting cylinder. The swivel range is 800 mm on both sides (from the centre) and can be infinitely adjusted. The hydraulic cylinder is equipped with a locking block to protect the tractor hydraulics.


2

The hydraulic horizontal blade adjustment is carried out via a double-acting cylinder. The swivelling range is approx. 35-55 degrees on both sides. The swivelling range is infinitely variable. The hydraulic cylinder is equipped with a locking block to protect the tractor hydraulics.


3

With the hydraulic slope adjustment, roof profiles can be profiles on farm tracks. The maximum adjustment range on both sides is approx. 22 degrees. The adjustment range is infinitely variable. The hydraulic cylinder is equipped with a locking block to tractor hydraulics with a locking block.


4

With the ripper set, the substrate can first be ripped open (approx. 200 mm) during road construction. In the second pass, the levelling work is then carried out with the rippers swivelled upwards.


5

The blade extensions can be used to widen the working width of the blade to a maximum of 3,250 mm. The shield extensions can be selected individually. It is also possible to widen the sign on one side. The holders for the blade extension are fitted to the blade body as standard.


6

The side plates are bolted to the side panel or the shield extension. They are angled at 45 degrees. During levelling or road construction work, this prevents the material from slipping into the side space when the blade body is set at an angle.

LEVELLING BLADE PROFI

PS 2250 PROFI

05

MUNICIPAL TECHNOLOGY



The pneumatic tyre support wheels (16x6.50-8) are used to guide the height of the blade. The height is adjusted using mechanical rotating spindles.



The guide point of the centre support wheel (16x6.50-8) is offset far to the rear, guaranteeing even better height control of the blade. The centre wheel can be infinitely adjusted via a spindle adjustment. For transport, it is swivelled to the side of the shield body and locked in place.



With the hydraulic centre support wheel (18x8.50-10), the working depth can be infinitely adjusted hydraulically. It can be folded up completely vertically for transport.



The depth can be infinitely adjusted with the hydraulic height guide. The parallel guide ensures precise guidance. The integrated levelling system enables the creation of roof profiles.



With the optional electro-hydraulic control system, the levelling blade is adjusted using an ergonomic control lever. Several hydraulic functions can therefore be operated with just one double-acting control unit.

TECHNICAL DATA

Technical data	PS 2250 PROFI
Approx. working width (mm)	2,250
Sign height approx. (mm)	600
Attachment	Cat. II / III
Power requirement approx. (kW/hp)	58 / 80
Weight approx. (kg)	770
Order no.	574.00910.PS2250-2
€/piece	

EQUIPMENT OPTIONS

Equipment	Order no.	€/piece
Hydraulische Seitenverstellung 800 mm on both sides (1x dw. required)	574001056	
Hydraulic horizontal blade adjustment 35 - 55 degrees (1x dw. required)	574001055	
Hydraulische Neigungsverstellung max. 22 degrees on both sides (1 dw. required)	574001057	
Aufreißersatz For subsoil loosening in road construction	574001279-2	
Schildverbreiterung (250 mm)	574001058-2	
Schildverbreiterung (500 mm)	574001059-2	
Seitenblech links	574001060-2	
Seitenblech rechts	574001061-2	
Luftbereiftes Stützräderpaar (einstellbar)	574001064	
Pneumatic tyres, spindle-adjustable central support wheel (folding)	574001066-2	
Air-tyred, hydraulic central support wheel	574001066H	
Hydr. Höhenführung	574001281-2	
Polyurethane scraper 150 x 20 mm Loose accessory pack for winter service Incl. cover strip 2,250 mm for the main sign body, undrilled and without fixing material	574001067	
Elektrohydraulische Steuerung (1 x dw. , 12/24 volt connection required)	574001069	
Hydraulic changeover Manual using 2x three-way stopcock	574001585	
Lighting system incl. warning signs	574001068-2	
Adjustable pressure relief valve (Required from 200 bar working pressure)	391001154	
Pressure retention valve Recommended for Merlo, Bobcat, Dieci	391001416	



ROUTE PLANNER WP

WP20

The SAPHIR path planner WP 20 is used for the effective professional maintenance of unbound surface layers such as chippings or gravel. Thanks to its robust design, it is particularly suitable for use in forestry operations, contractors or as part of a path maintenance concept to level/straighten the upper soil layer. The numerous equipment options enable customisation to any application structure. The optional hydraulic operating components make the appliance particularly user-friendly. In the basic version, these operating components are mechanically adjustable by means of pins or turning spindles.



Screwable, highly wear-resistant scraper blade (500 HB) with a blade width of 2,000 mm



Optional hydraulic vertical adjustment of the scraper bar +/- 25°



Optional hydr. lateral adjustment left / right 800 mm each



Optional electro-hydraulic control



Optional hydr. adjustable shield body 60° on both sides

TECHNICAL DATA

Technical data	Route planner WP 20
Approx. working width (mm)	2,000
Sign height approx. (mm)	600
Attachment	Cat. II/III
Power requirement approx. (kW/hp)	50 / 68
Weight approx. (kg)	680
Order no.	574.00911.WP20
€/piece	

Note: The equipment is supplied fully assembled.

EQUIPMENT OPTIONS

Equipment	Order no.	€/piece
Hydraulische Seitenverstellung 800 mm on both sides (1 x dw. required)	574001056	
	574001055	
Hydraulische Neigungsverstellung +/- 25°, (1 x dw. required)	574001057	
Hydraulic vertical adjustment of the cutting edge +/- 25° (1x dw required)	574003893	
Centre support wheel with pneumatic tyres and spindle adjustment (foldable)	574001066-2	
Air-tyred, hydraulic central support wheel	574001066H	
Polyurethane scraper strip 150 x 20 mm two-sided	574001067	
Elektrohydraulische Steuerung (required: 1 x dw, 12/24 volt connection)	574001069	
Hydraulic changeover Manual using 2x three-way stopcock	574001585	
Lighting system incl. warning signs	574001068-2	
Adjustable pressure relief valve (Required from 200 bar working pressure)	391001154	
Pressure retention valve Recommended for Merlo, Bobcat, Dieci	391001416	



ZKM SWEEPER

ZKM 125 - ZKM 175


The SAPHIR ZKM is a sweeper with a mechanical drive designed specifically for communal use. The low dead weight allows use on very small tractors with an output of 9.5 hp or more. The honeycomb-shaped brush array made of highly wear-resistant plastic ensures an optimal sweeping performance. A PTO shaft is included in the standard scope of delivery.



1 Mechanical PTO drive at 540/1000/2000 1/min.



4 Communal cultivation in communal category with coupling triangle in series



2 Vertical adjustment of the sweeping brush



5 Mechanical two-step swivel mechanism by 10° and 20° on both sides.

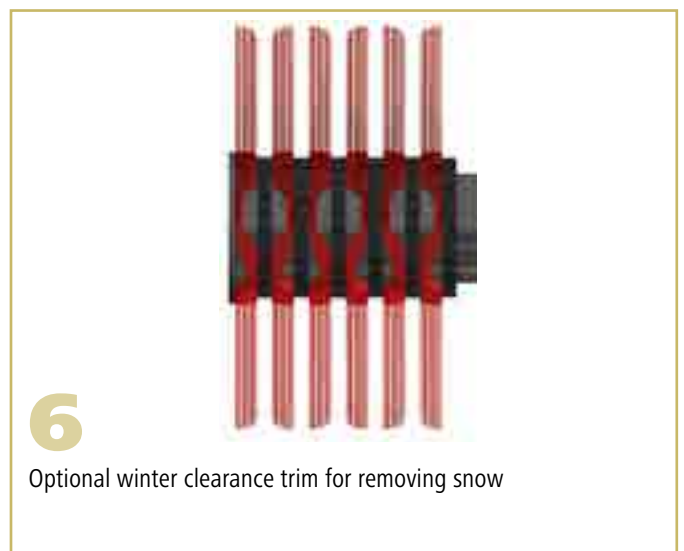
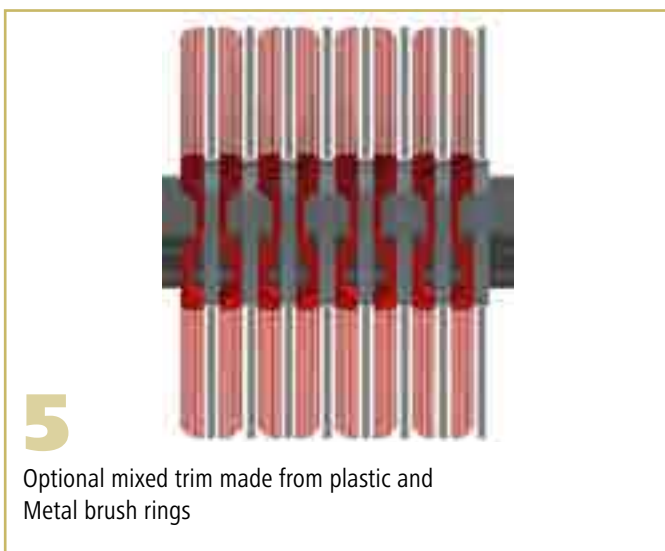


3 PU strip on the collection tray prevents stones from being thrown through and scratches on the floor covering



6 Branded jockey wheels 200 x 50 mm made of solid rubber

EQUIPMENT OPTIONS



ZKM SWEEPER

ZKM 125 - ZKM 175

05

MUNICIPAL TECHNOLOGY

TECHNICAL DATA

Technical data	Sweeper ZKM 125	Sweeper ZKM 150	Sweeper ZKM 175
Approx. working width (mm)	1250	1,500	1,750
Approx. swivelled working width (mm)	1,150	1,380	1,610
Approx. total width (mm):	1,425	1,675	1,905
Brush Ø (mm)	520	520	520
PTO rotation speed (rpm)	540 / 1000 / 2000	540 / 1000 / 2000	540 / 1000 / 2000
Power requirement	7/9.5	7/9.5	7/9.5
Weight approx. (kg)	200	215	240
Order no.	526.00541.ZKM125	526.00542.ZKM150	526.00543.ZKM175
€/piece			

WICHTIG: Please always specify **PTO shaft speed, direction of PTO shaft rotation, PTO shaft profile and mounting system** when ordering

ATTACHMENTS

Recording	Order no.	€/piece
Municipal category attachment triangle Bottom clearance in triangle 475 mm Attachment dimensions above ground level: min. 200 mm / max. 275 mm (lower edge of attachment triangle)	526KOMMUNAL-S	series
Cat. 0 Mounting triangle Bottom clearance in triangle 635 mm	526ZKMKATO	
Cat. I Three-point hitch	526ZKMKAT1	

EQUIPMENT OPTIONS

Equipment	Order no.	€/piece
Hydr. dirt collecting container with 3rd jockey wheel ZKM 125 Approx. capacity 85 l (1x da required)	526007572	
Hydr. dirt collecting container with 3rd jockey wheel ZKM 150 Approx. capacity 100 l (1x da required)	526007571	
Hydr. dirt collecting container with 3rd jockey wheel ZKM 175 Approx. capacity 115 l (1x da required)	526008423	
Hydraulic swivel mechanism Assembled with original equipment (1x da required)	526008425	
Side brush Attached on the right-hand side, also available on the left-hand side if desired (hydraulic drive, 1x da required)	526007569	
Tower extension 200 mm	526007570	
Winter clearance trim ZKM 125 (assembled with original equipment)	526008420	
Winter clearance trim ZKM 150 (assembled with original equipment)	526007393	
Winter clearance trim ZKM 175 (assembled with original equipment)	526007394	
ZKM 125 winter clearance array (retrofit kit, loose accessory)	526008421	
ZKM 150 winter clearance array (retrofit kit, loose accessory)	526007396	
ZKM 175 winter clearance array (retrofit kit, loose accessory)	526007397	
ZKM 125 mixed array (plastic and metal brush rings)	526008422	
ZKM 150 mixed array (plastic and metal brush rings)	526001135	
ZKM 175 mixed array (plastic and metal brush rings)	526001136	
ZKM 125 water spraying device Backwash 150l, Cat. I/II, 4 nozzles, 12 volt pump	526007574	
Water spray unit ZKM 150 Backwash 150l, Cat. I/II, 4 nozzles, 12 volt pump	526007573	
Water spray unit ZKM 175 Backwash 150l, Cat. I/II, 4 nozzles, 12 volt pump	526008424	
Water spraying device for side brush Only possible in connection with water spraying device for full sweeper	526007742	
Electro-hydraulic changeover 6/2 directional control valve 60 l/min, 12 V - WARNING: without electrical kit	526007596	
Hydraulic changeover Manual using 2x three-way valves	526001585	
LED marker lights (2 pieces)	526001587	

HKM 23 with three-point hitch Cat. I/II

HKM 18 with fork tine holder, side brush and 3rd brush. Support wheel



SWEeper HKM

HKM 13 - HKM 26

The SAPHIR HKM sweepers are designed for use with agricultural tractors (front loader or three-point linkage Cat. I/II), as well as for use with forklift trucks, farmyard loaders and wheel loaders. The mechanical swivelling device allows the machine to be tilted. This means that the machine can also be used for free sweeping (without a collection tray). The sweeping roller is driven by a powerful oil motor, which is driven by the tractor hydraulics.



1 With dirt collection tray with mechanical emptying, optionally hydraulic



4 Honeycomb-shaped 520 mm brush rings made of highly wear-resistant plastic



2 A PU strip on the collection tray prevents stones from being thrown through and scratches on the floor covering



5 Branded support wheels 200 x 50 mm, height-adjustable without tools



3 Can be mechanically swivelled by 30° as standard, hydraulic swivelling optional



6 Optional side brush for cleaning along roadsides or kerbs, for example (no additional control unit required), also available with optional steel trim

EQUIPMENT OPTIONS

1

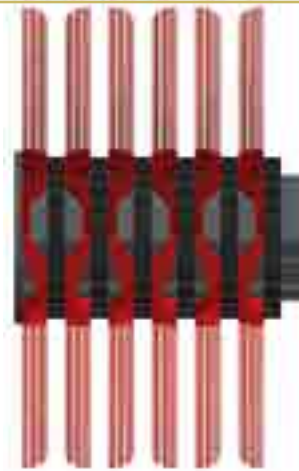

Optionally with combined vehicle mount from Cat. II, Euro mount and fork mount for maximum flexibility

2

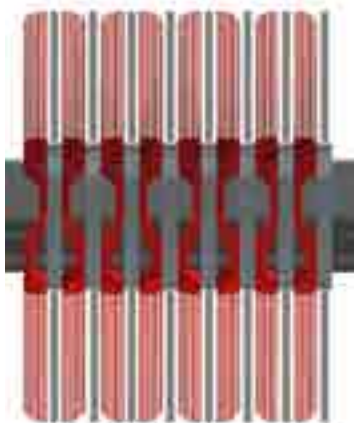

Hydraulic emptying for easy emptying of the Collecting tray (no additional control unit required)

3


Optional third support wheel for optimum guidance of the Machine in shifted operation. Optionally also with extra large wheel for the highest demands.

4


Optional winter service kit for removing snow

5


Optional mixed trim made from plastic and Metal brush rings

6


Optional water spray device to minimise the formation of dust when Reduce sweeping

SWEEPER HKM

HKM 13 - HKM 26

05

MUNICIPAL TECHNOLOGY

TECHNICAL DATA

Technical data	NEW				
	HKM 13	HKM 15	HKM 18	HKM 23	HKM 26
Approx. working width (mm)	1,300	1,500	1,800	2,300	2,600
Approx. swivelled working width (mm)	1,250	1,450	1,740	2,220	2,510
Approx. total width (mm)	1,600	1,850	2,150	2,620	2,950
Brush Ø (mm)	520	520	520	520	520
Required oil quantity approx. (litres) (170 bar)	25	25	25	25	25
Number of brush rings	26	30	36	46	52
Collection tray capacity approx. (litres)	135	155	185	240	270
Weight approx. (kg)	240	260	285	310	340
Order no.	526.00556.HKM13	526.00557.HKM15	526.00558.HKM18	526.00559.HKM23	526.00560.HKM26
€/piece					

ATTACHMENTS

Recording	Order no.	€/piece
Three-point hitch Cat. I/II	526000384	
Device triangle cat. 0 Bottom clearance in triangle 660 mm	526007403	
Device triangle Cat. 1-2-3 Bottom clearance in triangle 830 mm	526007404	
Fork attachment Inner pocket dimensions 150 x 70 mm	526HKMGABEL	
Farm and wheel loaders up to 2.5 t lifting capacity	526HKMHOFRAD	
Euro attachment	526HKMEURO	
Combined attachment Three-point Cat. II + Euro mount + fork mount	526HKMKOMBI	
VLS Compact	526VARIABLELOCK	



EQUIPMENT OPTIONS

Equipment	Order no.	€/piece
Hydraulische Entleerung (loose accessory pack)	526140482	
Hydraulische Entleerung (fitted as original equipment)	526140484	
Hydraulische Schwenkeinrichtung (1x dw. required, loose accessory pack)	526140483	
3. Support wheel made from solid rubber 200 x 50 mm (required for front attachment, incl. top link chain (loose accessory pack))	526000546	
Extra large 3.	526002182	
Seitenkehrbesen Standard (for equipment with three-point linkage) Attached on the right-hand side, also available on the left-hand side if desired	526000413-2	
Side brush with self-locking roller equaliser (for equipment with fork or quick-change adapter) Attached on the right-hand side, also available on the left-hand side if desired	526005747	
Steel trim for side brush	526007392	
Self-locking roller leveller	526000386	
Winter service kit HKM 13 Mounted with original equipment	526010150	
Winter service trim HKM 15 Mounted with original equipment	526007393	
Winter service kit HKM 18 Mounted with original equipment	526007394	
Winter service trim HKM 23 Mounted with original equipment	526007395	
Winter service trim HKM 26 Mounted with original equipment	526007969	
Winter service kit HKM 13 Retrofit kit (loose accessory pack)	526010151	
Winter service kit HKM 15 Retrofit kit (loose accessory pack)	526007396	
Winter service kit HKM 18 Retrofit kit (loose accessory pack)	526007397	
Winter service kit HKM 23 Retrofit kit (loose accessory pack)	526007398	
Winter service kit HKM 26 Retrofit kit (loose accessory pack)	526007970	
HKM 13 mixed array plastic and metal brush rings	526010152	
HKM 15 mixed array plastic and metal brush rings	526001135	
HKM 18 mixed array plastic and metal brush rings	526001136	
HKM 23 mixed array plastic and metal brush rings	526001137	
HKM 26 mixed array plastic and metal brush rings	526007971	
Water sprayer HKM 13 150 litres, 3 nozzles, 12 V pump	526010153	
Water sprayer HKM 15 150 litres, 3 nozzles, 12 V pump	526000590	
Water sprayer HKM 18 150 litres, 4 nozzles, 12 V pump	526000591	
Water sprayer HKM 23 150 litres, 5 nozzles, 12 V pump	526000592	
Water spray unit HKM 26 150 litres, 5 nozzles, 12 volt pump	526007972	
LED marker lights (2 pieces)	526001587	
Electro-hydraulic changeover (6/2 way valve 12V 90 l/min, ATTENTION: without electrical kit)	526001622	
Hydraulic changeover Manual using 2x three-way valves	526001585	



MKM 23 with hydraulic
Collecting tray and combination holder



SWEEPER MKM

MKM 15 - MKM 25

The SAPHIR MKM sweepers are designed for use on a wide variety of carrier vehicles. Whether on tractors in the agriculture sector, on wheel loaders in the construction industry or on forklifts, the MKM is the ideal solution for cleaning all surfaces. The sweeper is hydraulically driven by a powerful oil motor. The honeycomb-shaped 600 mm plastic brush rings ensure the best sweeping results.



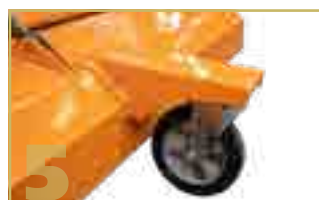
Honeycomb-shaped 600 mm brush rings made of highly wear-resistant plastic



The self-locking roller compensation ensures that the machine is lifted horizontally



Can be mechanically swivelled by 20° as standard, hydraulic swivelling optional



Branded jockey wheels 250 x 50 mm made of solid rubber

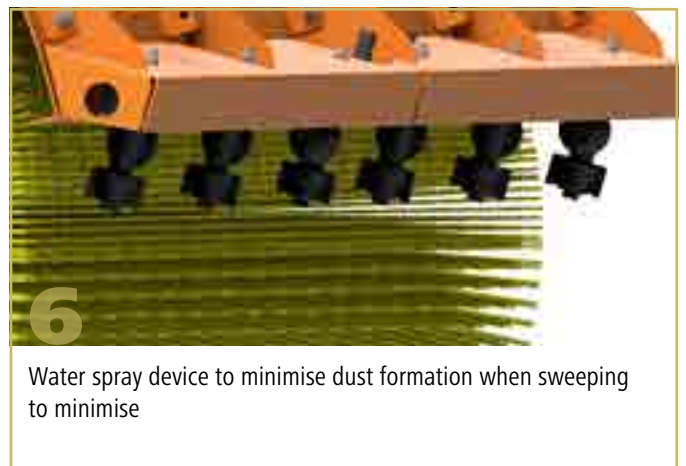
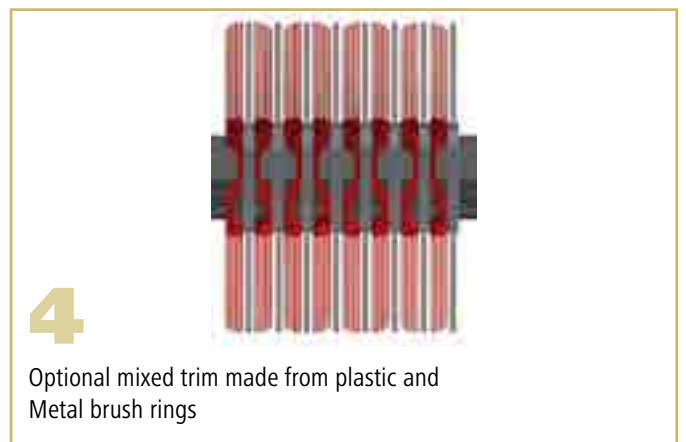
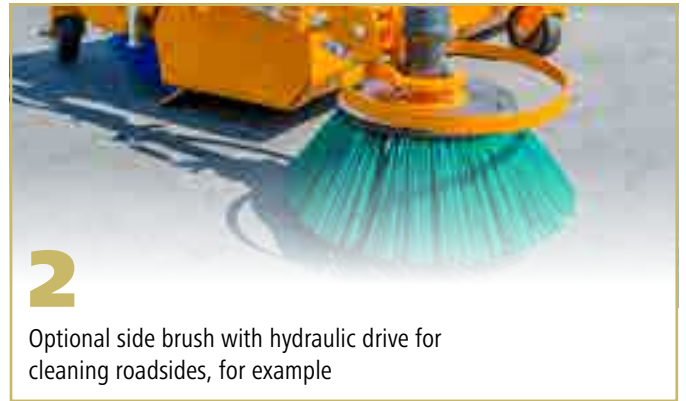


The vertical adjustment of the brush roller ensures an optimum distance between the brushes and the optional collection tray



Powerful oil motor with impact protection, recommended oil quantity 30 l

EQUIPMENT OPTIONS



SWEEPER MKM

MKM 15 - MKM 25










05

MUNICIPAL TECHNOLOGY

TECHNICAL DATA

Technical data	NEW				
	MKM 15	MKM 18	MKM 20	MKM 23	MKM 25
Approx. working width (mm)	1,430	1,730	1,930	2,240	2,450
Approx. swivelled working width (mm)	1,325	1,625	1,810	2,105	2,300
Approx. total width (mm)	1,760	2,060	2,260	2,570	2,800
Brush Ø (mm)	600	600	600	600	600
Number of brush rings (pcs.)	30	36	40	46	50
Can be swivelled mechanically	20°	20°	20°	20°	20°
Approx. required quantity of oil (l)	30	30	30	30	30
Required oil connections	1x double-acting	1x double-acting	1x double-acting	1x double-acting	1X DOUBLE-ACTING
Approx. weight (kg) without collection tray	330	360	380	410	430
Order no.	526.00470.MKM15	526.00471.MKM18	574.00472.MKM20	574.00473.MKM23	574.00474.MKM25
€/piece					

ATTACHMENTS

	Recording	Order no.	€/piece
	Three-point attachment Cat. II	526MKMKATI-S	series
	Fork attachment (pocket internal dimensions 150 x 70 mm)	526MKMGABEL	series
	Euro attachment	526MKMEUR	series
	Farm and wheel loaders up to 2.5 t lifting capacity	526MKMHOFRAD	series
	Wheel and telescopic loaders from 2.5 t lifting capacity	526MKMRADTELE	series
  	Combined attachment Three-point attachment Cat. II + Euro attachment + fork attachment (pocket internal dimensions 150 x 65 mm)	526005002	
	VLS Compact	526VLS	

Note: Please select 1 vehicle attachment for your sweeper.
For wheel and telescopic loaders, please specify the carrier vehicle type.

EQUIPMENT OPTIONS

Equipment	Order no.	€/piece
Hydraulic dirt collection tray with 3rd MKM 15 support wheel (155 l)	526008680	
Hydraulic dirt collection tray with 3rd Support wheel MKM 18 (175 l)	526008681	
Hydraulic dirt collection tray with 3rd MKM 20 support wheel (195 l)	526008682	
Hydraulic dirt collection tray with 3rd MKM 23 support wheel (225 l)	526008683	
Hydraulic dirt collection tray with 3rd MKM 25 support wheel (245 l)	526008684	
Splash guard MKM 15 only possible with equipment without dirt collection tray	526009654	
Splash guard MKM 18 only possible with equipment without dirt collection tray	526009655	
Splash guard MKM 20 only possible with equipment without dirt collection tray	526009656	
Splash guard MKM 23 only possible with equipment without dirt collection tray	526009657	
Splash guard MKM 25 only possible with equipment without dirt collection tray	526009658	
Additional 3rd Jockey wheel 250x60 mm Recommended for front attachment and sweeping without a collection tray	526008835	
Hydraulic swivel mechanism Assembled with original equipment (1x da required)	526008836	
Side brush MKM Hydraulic drive; mounted on the right-hand side	526008837	
Side brush MKM Hydraulic drive; mounted on the left side	391008838	
Winter clearance trim MKM 15 (assembled with original equipment)	526008838	
Winter clearance trim MKM 18 (assembled with original equipment)	526008839	
Winter clearance trim MKM 20 (assembled with original equipment)	526008840	
Winter clearance trim MKM 23 (assembled with original equipment)	526008841	
Winter clearance trim MKM 25 (assembled with original equipment)	526008842	
Winter clearance trim MKM 15 (retrofit kit, loose accessory)	526008843	
Winter clearance trim MKM 18 (retrofit kit, loose accessory)	526008844	
Winter clearance trim MKM 20 (retrofit kit, loose accessory)	526008845	
Winter clearance trim MKM 23 (retrofit kit, loose accessory)	526008846	
Winter clearance trim MKM 25 (retrofit kit, loose accessory)	526008847	
MKM 15 mixed array plastic and metal brush rings	526008954	
MKM 18 mixed array plastic and metal brush rings	526008955	
MKM 20 mixed array plastic and metal brush rings	526008956	
MKM 23 mixed array plastic and metal brush rings	526008957	
MKM 25 mixed array plastic and metal brush rings	526008958	
Water sprayer MKM 15 200 l tank, 3 nozzles, 12 V pump	526008848	
Water sprayer MKM 18 200 l tank, 4 nozzles, 12 V pump	526008849	
Water sprayer MKM 20 200 l tank, 4 nozzles, 12 V pump	526008850	
Water sprayer MKM 23 200 l tank, 5 nozzles, 12 V pump	526008851	
Water sprayer MKM 25 200 l tank, 5 nozzles, 12 V pump	526008852	
6/2-way directional control valve 90 l/min., 12 V, PLEASE NOTE: without electrical kit	526001622	
Hydraulic changeover manual using 2x three-way valves	526001585	
LED marker lights LED 12/24 V	526001587	



PKM 26 with hydraulic collection tray

PKM SWEEPERS

PKM 23 - PKM 29

The SAPHIR PKM sweepers are powerful and robust machines for cleaning roads, construction sites and large farms. The sweeper roller with a diameter of 650 mm is equipped as standard with a very high concentration of Beeline brush rings.



Hydraulic swivelling direction (30° degrees)



Level compensation incl. height display (lockable)



Solid rubber heavy-duty wheels



Internal oil motor(s)
Compact valve with safety valve
(shock valve protects the motor from overload by means of freewheeling)



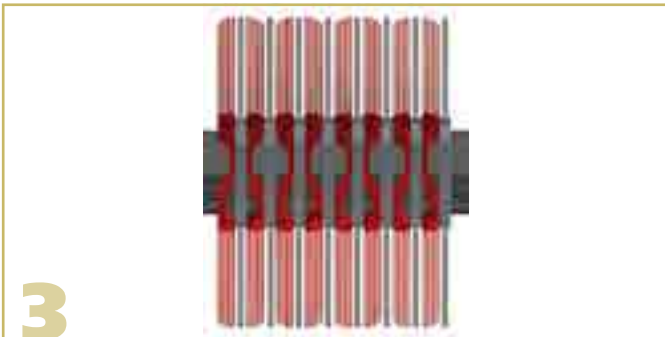
1

Hydraulic dirt collection tray with 3rd Support wheel



2

Side brush for cleaning along roadsides or kerbs, for example (no additional control unit required), optionally also with steel trim



3

Mixed array of plastic and metal brush rings



4

Winter clearance trim for removing snow



5

LED marker lights for safe road transport



6

Optional water sprayer to reduce dust formation when sweeping



7

Hydraulic lifting system for attachment to municipal Mounting plates

PKM SWEEPERS

PKM 23 - PKM 29





05

MUNICIPAL TECHNOLOGY

TECHNICAL DATA

Technical data	Sweeper PKM 23	Sweeper PKM 26	Sweeper PKM 29
Approx. working width (mm)	2,300	2,600	2,900
Approx. swivelled working width (mm)	2,220	2,510	2,800
Approx. total width (mm)	2,500	2,800	3,100
Brush Ø (mm)	650	650	650
Approx. swivelled transport width (mm)	2,300	2,560	2,820
Number of brush rings	50	58	63
Hydraulic swivelling	30°	30°	30°
Approx. required quantity of oil (l)	35-70	35-70	70-90
Inner l. Hydraulic motors (piece)	1	1	2
Required oil connections	2x double-acting	2x double-acting	2x double-acting
Weight approx. (kg)	580	610	645
Order no.	526.01225.PKM23	526.01226.PKM26	526.01227.PKM29
€/piece			

ATTACHMENTS

Recording	Order no.	€/piece
 Euro attachment	526PKMEUR	Series
 Farm and wheel loaders up to 2.5 t lifting capacity	526PKMHOFRAD	Series
 Wheel and telescopic loaders from 2.5 t lifting capacity	526PKMRADTELE	Series
 Cat. I attachment	526PKMKATII-S	Series
Gabelzinkenaufnahme	526PKMFORK	Series

EQUIPMENT OPTIONS

Equipment	Order no.	€/piece
Hydraulic dirt collection tray with 3 jockey wheel PKM 23 Capacity approx. 340 litres	526001603	
Hydraulic dirt collection tray with 3 jockey wheel PKM 26 Capacity approx. 375 litres	526001604	
Hydraulic dirt collection tray with 3 jockey wheel PKM 29 Capacity approx. 430 litres	526001605	
Side brush Attached on the right-hand side, also available on the left-hand side if desired	526001609-1	
Steel trim for side brushes	526007456	
Winter service kit PKM 23 Fitted as original equipment	526007457	
Winter service kit PKM 26 Fitted as original equipment	526007458	
Winter maintenance kit PKM 29 Fitted as original equipment	526007459	
Winter service kit PKM 23 Retrofit kit (loose accessory pack)	526007460	
Winter service kit PKM 26 Retrofit kit (loose accessory pack)	526007461	
Winter maintenance kit PKM 29 Retrofit kit (loose accessory pack)	526007462	
Mixed stocking PKM 23 Plastic and metal brush rings	526001612	
Mixed stocking PKM 26 Plastic and metal brush rings	526001613	
Mixed stocking PKM 29 Plastic and metal brush rings	526001614	
LED marker lights LED 12/24 V	526001587	
Hydraulic changeover Manual using 2x three-way valves	526001585	
Electro-hydraulic changeover Electro-hydraulic changeover (6/2-way directional valve 12V / 90 l/min.) WITHOUT electrical kit	526001622	
Water spray unit PKM 23 200 liter, 5 nozzles, 12 V pump	526001606	
Water spray unit PKM 26 200 liter, 6 nozzles, 12 V pump	526001607	
Water spray unit PKM 29 200 liter, 6 nozzles, 12 V pump	526001608	
Hydraulic lift For mounting on municipal mounting plates	526002133	
Flow control valve Required from 90 l/min. carrier vehicle delivery rate	526001623	



SWEeper SKM

SKM 25 - SKM 33

The SAPHIR SKM sweepers are powerful and robust machines for cleaning roads, construction sites and large farms. The sweeper roller with a diameter of 800 mm is equipped as standard with a very high concentration of Beeline brush rings. The large brush diameter guarantees a long service life and ensures very good sweeping performance, even under the toughest conditions. The large heavy-duty impellers ensure optimum equipment guidance, even on uneven terrain. The sweepers can be equipped with almost all common attachments for wheel and telescopic loaders, tractors (Cat. II) and also with fork attachment. Level compensation with height display is integrated as standard for all attachments. The sweeper roller is driven by two internal oil motors. The motors are thus protected against starting. The machines are equipped with a hydraulic swivel mechanism as standard.



Adjustable attachment tower for setting the front dimensions of the sweeper



Mechanically adjustable splash guard on the front of the sweeper



Internal oil motors with shock valves



Can be hydraulically swivelled by 20° as standard



Level compensation including height display (lockable)



Equipped with heavy-duty solid rubber wheels as standard

TECHNICAL DATA

Technical data	SKM 25	SKM 28	SKM 33
Approx. working width (mm)	2,500	2,800	3,300
Approx. swivelled working width (mm)	2,390	2,650	3,150
Approx. total width (mm)	2,725	2,995	3,525
Brush Ø (mm)	800	800	800
Number of brush rings (pcs.)	34	39	45
Hydraulic swivelling	20°	20°	20°
Approx. required quantity of oil (l)	70-90	70-90	70-90
Required oil connections	2x double-acting	2x double-acting	2x double-acting
Weight approx. (kg)	735	760	800
Order no.	526.01218.SKM25-2	526.01219.SKM28-2	526.01221.SKM33-2
€/piece			

ATTACHMENTS



Recording	Order no.	€/piece
Euro attachment	526MKMKATII-S	series



Wheel and telescopic loaders from 2.5 t lifting capacity	526MKMGABEL	series
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Cat. II attachment	526MKMEUR	series
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Fork attachment (Pocket internal dimensions 160 x 60 mm)	526MKMHOFRAD	series
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EQUIPMENT OPTIONS

Equipment	Order no.	€/piece
SKM 25 mixed array plastic and metal brush rings	526008973	
SKM 28 mixed array plastic and metal brush rings	526008974	
SKM 33 mixed array plastic and metal brush rings	526008975	
Water sprayer SKM 25 150 litres, 6 nozzles, 12 V pump	526-008285-2	
Water sprayer SKM 28 150 litres, 6 nozzles, 12 V pump	526002186-2	
Water sprayer SKM 33 150 litres, 8 nozzles, 12 V pump	526002187-2	
Mechanical swivel mechanism	526007452	
Hydraulic lift (for mounting on municipal mounting plates)	526002133	
Flow control valve (required from 90 l/min. carrier vehicle delivery rate)	526001623	
Hydraulic changeover (manual using 2x three-way valves)	526001585	
Electro-hydraulic changeover (6/2-way directional control valve, 12V / 90 l/min.) without electrical kit	526001622	
LED marker lights (LED 12/24 V)	526001587	



KB 20 with yard loader attachment



BRUSH KB

KB 15 - KB 28

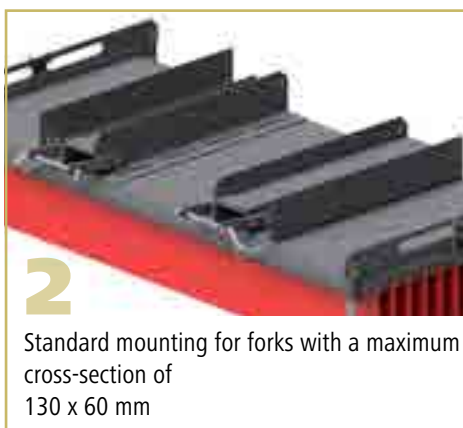
The SAPHIR sweeping brooms KB are used for the quick cleaning of silo slabs or yard facilities. The 12 rows of high-quality plastic brushes effortlessly remove silage residues, leaves, grain and much more. The sweeper brush is attached as standard via a fork tine attachment or with an optional quick-change attachment. The parking supports included as standard in the scope of delivery also allow the brush to be parked gently.



With support legs on the left and right as standard to prevent the brushes from kinking



High-quality and replaceable PP plastic brushes, 12 rows, 280 mm high



Standard mounting for forks with a maximum cross-section of 130 x 60 mm








Optional with the patented SAPHIR Variable Lock System (VLS)

TECHNICAL DATA

Technical data	Sweeping broom KB 15	Brushes KB 20	Brushes KB 25	Brushes KB 28
Approx. working width (mm)	1,495	2,000	2,495	2,830
Approx. total width (mm):	1,545	2,050	2,545	2,880
Approx. height (mm)	450	450	450	450
Depth approx. (mm)	1,165	1,165	1,165	1,165
Number of brush rows	12	12	12	12
Weight approx. (kg)	260	315	370	405
Order no.	526KB15	526KB20	526KB25	526KB28
€/piece				

ATTACHMENTS

	Recording	Order no.	€/piece
	Fork attachment	526KGBABEL	series
	Euro attachment	526KBEURO	
	Farm and wheel loaders up to 2.5 t lifting capacity	526KBHOFRAD	
	Wheel and telescopic loaders from 2.5 t lifting capacity	526KBADTELE	
	Gripper bucket holder	526006959	

Specify carrier vehicle type when ordering

EQUIPMENT OPTIONS

Equipment	Order no.	€/piece
LED marker lights	526001587	
Set of replacement brushes KB 15	526007301	
Set of replacement brushes KB 20	526007302	
Set of replacement brushes KB 25	526007303	
Set of replacement brushes KB 28	526007304	



COURT AND GRAZING TECHNOLOGY

Salt and fertiliser spreader PS / PLS	302-303
Salt spreader PES Profi	304-305
Winter service spreader WDS NEW!	306-309
Feed sweeping tires FKR NEW!	310-311
Rubber pusher MS NEW!	312-313
Rubber pusher Multi	314-315
Auger Greif NEW!	316-317
Cement mixers	318-319
Transport container TG NEW!	320-322
Transport container TL	323
Transport container TLH	324-325
TLH Plus transport container	326-327
Transport container TLH Multi	328-329
Transport box TB	330-331
Front ballast system FBS NEW!	332-333
Reinforced concrete weight ECO BOX NEW!	334
Reinforced concrete weights Standard NEW!	335
Reinforced concrete weight TOP	336
Reinforced concrete weights New Generation	337
Cast mineral weight MG	338
Cast mineral weight Solid NEW!	339
Rear weights HG NEW!	340-341





PS AND PLS SALT AND FERTILISER SPREADERS

PS 300 / PS 500 | PLS 400 / PLS 500

The SAPHIR salt and fertiliser spreaders are single-disc spreaders that are suitable for spreading granulated fertiliser and, in conjunction with the winter service set, also for spreading salt or a mixture of salt and grit. Covers are also available for all spreader sizes to protect them from the weather.

Attention: The winter service set is absolutely essential for use in winter service!



1 Steep hopper walls ensure that the spreading material slides down easily. The standard agitator head guarantees trouble-free spreading of granulated fertiliser.



4 The optional winter set consists of a narrow spreading device made of stainless steel and an agitator with chain.



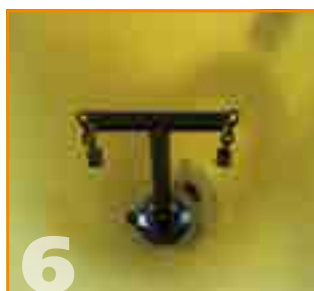
2 Volume regulation conveniently by hand using an adjustment lever (standard).



5 The optional hydraulic shutter actuation enables convenient adjustment of the spread rate from the cab.



3 The PLS 400 + PLS 500 models with plastic container in conjunction with the optional winter service set are recommended for continuous use in winter service. The tarpaulin protects the spreading material from the weather.



6 The agitator with two attached chains is part of the optional winter service set.

TECHNICAL DATA

Technical data	PS 300	PS 500	PLS 400	PLS 500
Container design	Metal	Metal	Plastic	Plastic
Tank capacity approx. (litres)	269	361	297	361
Max. payload (kg)	347	466	383	466
Filling height approx. (mm)	105	113	107	113
Power requirement approx. (kW/hp)	11/15	11/15	11/15	11/15
Spreading width fertiliser granulated max. (m)	12-14	12-14	12-14	12-14
Spreading width salt max. (m)	6-7	6-7	6-7	6-7
Attachment	Cat. I	Cat. I	Cat. I	Cat. I
Weight approx. (kg)	58	63	60	63
Order no.	581980521	581980522	581980523	581980524
€/piece				

EQUIPMENT OPTIONS

Equipment	Order no.	€/piece
Winterdienst Set Agitator with chain, narrow spreading device made of stainless steel	581000527	
Abdeckplane PS 300	581000529	
Abdeckplane PS 500 / PLS 400 / PLS 500	581-008764	
Lighting system incl. mounting bracket, socket and connection cable	581620120	
Hydraulische Schieberbetätigung (1x dw required)	581619111	
Kat. II adapter frame for salt and fertiliser spreaders PS, PLS and PES (The use of the adapter frame may require a longer PTO shaft for the spreader).	391408215	
PTO shaft long (for Cat. II adapter frame) Length 860 mm, size F21 (standard PTO shaft not applicable)	377086021912	Surcharge

Note: The equipment is supplied fully assembled.

BASIC EQUIPMENT

- PTO drive 540 rpm
- Maintenance-free gearbox
- protective grille
- PTO shaft (standard)
- Stainless steel spreading disc
- Three-point linkage Cat. I
- Spread rate regulation via one-hand lever



Adapter frame for using the spreader on tractors with attachment category Cat. II.

Salt shaker PES 300 Profi

Salt shaker PES 300 HYDRO
with hydraulic drive



SALT SHAKER PES PROFI

PES 300 PROFI | PES 300 HYDRO

The SAPHIR PES Profi salt shaker is largely made of stainless steel. Corrosion caused by salt residues is therefore ruled out.

The single disc spreader has a professional spreading width limiter made of stainless steel and can be equipped with hydraulic shutter actuation. Stainless steel components and an extensive range of accessories form the basis for professional use.



1 The professional spreading width limiter made of stainless steel (standard equipment) with 5 setting options for the spreading width.



4 Hydraulic slide actuation (optional) for convenient opening and closing of the outlets from the cab.



2 Steep hopper walls made of stainless steel ensure that the spreading material slides down easily. The agitator with chain ensures the spreading of salt or a mixture of salt and grit.



5 The manoeuvring aid (optional) enables one person to move / manoeuvre the spreader.



3 Broom and shovel holder (optional) enables the transport of the tools mentioned.



6 Lighting set with 7-pin socket and connecting cable (optional) and stainless steel licence plate holder (optional) for greater safety in road traffic.

TECHNICAL DATA

Technical data	PES 300 Professional	PES 300 HYDRO
Container design	Stainless steel	Stainless steel
Tank capacity approx. (litres)	270	270
Max. payload (kg)	320	320
Filling height approx. (mm)	107	107
Power requirement approx. (kW/hp)	15/20	15/20
Spreading width salt max. (m)	1-8	1-8
Attachment	Cat. I	Cat. I
PTO speed (rpm)	540	-
Required oil quantity approx. (litres) (50 bar)	-	25
Weight approx. (kg)	68	68
Order no.	581980527	581980528
€/piece		

EQUIPMENT OPTIONS

Equipment	Order no.	€/piece
Hydraulic slide valve actuation	581619111	
Abdeckplane	581-008764	
Beleuchtungsanlage incl. mounting bracket, socket and connection cable	581620120	
Number plate holder	581619130	
Rangierhilfe	581613301	
Besen- und Schaufelhalter	581613350	
Kat. II adapter frame for PS, PLS and PES salt and fertiliser spreaders (The use of the adapter frame may require a longer PTO shaft for the spreader).	391408215	
PTO shaft long (for Cat. II adapter frame) Length 860 mm, size F21 (standard PTO shaft not applicable)	377086021912	Surcharge

BASIC EQUIPMENT

- PTO drive 540 rpm
- Maintenance-free gearbox
- Stainless steel protective grille
- PTO shaft (standard)
- Stainless steel spreading disc
- Three-point linkage Cat. I
- Spread rate regulation via one-hand lever



Adapter frame for using the spreader on tractors with attachment category Cat. II.



Testimonial



WINTER SERVICE SPREADER WDS

WDS 751 | WDS 751 E

The SAPHIR WDS 751 winter service spreader is ideal for spreading salt, grit, a mixture of salt and grit or sand, depending on the agitator used. To prevent corrosion, the spreading disc, spreading vanes, spreading limiter and guard plate are made of high-quality stainless steel. A grid in the hopper prevents foreign bodies from entering the spreader unit. The spreading disc with its eight throwing vanes ensures even and precise distribution of the spreading material. The hydraulic operation of the scraper (1 x dw) and the steep hopper walls ensure that the spreading material slides down smoothly.

Compared to the WDS 751 model, the WDS 751 E spreader offers enhanced functions thanks to its electric control unit. The speed of the carrier vehicle is determined by GPS so that the application rate is controlled depending on the route. The electric control terminal also makes it easy to set the spreading width directly from the carrier vehicle.



1

Manually adjustable spreading width limiter left / right



2

Spread rate and spread pattern adjustment made of stainless steel lasered scales.

NEW
3


Model WDS 751 E with path-dependent control. The speed of the carrier vehicle is determined by GPS and the application rate is adjusted accordingly. The spreading width can be conveniently set from the tractor via the control terminal.

4


Optional: Various hopper extensions for 250 / 500 / 750 litres additional volume each and cover tarpaulin with folding device to protect the spreading material.

5


Optional: The tool holder 1 enables the safe transport of hand tools such as shovels or brooms.

NEW
6


Optional: Tool holder 2, with which, for example snow chains, buckets or tubs can be transported easily and safely.

7


Optional: LED work lights for optimum visibility of the work area and therefore even greater working comfort.

NEW
8


Optional: In addition to the work lights, the Plus lighting package also includes a rotating beacon and interior lighting for the container.

9


Optional: Lateral access is particularly recommended for container attachments.

10


Optional: The spray protection tarpaulin effectively protects the spreader from spray water from the rear tyres of the carrier vehicle and protects the carrier vehicle from corrosion-favouring spreading material.

WINTER SERVICE SPREADER WDS

WDS 751 | WDS 751 E

06

FARM AND PASTURE TECHNOLOGY

TECHNICAL DATA

Technical data	NEW	
	WDS 751	WDS 751 E
Control system	Open/close slider via 1x per hour Spreading width manually adjustable	Electrical path-dependent control via GPS, Spreading width electrically adjustable (terminal)
Tank capacity approx. (litres)	750 (without attachment)	750 (without attachment)
Working width approx. (m)	1-8	1-8
Approx. dimensions (cm) (L x H x W)	120 x 129 x 150	120 x 129 x 150
Approx. payload (kg)	1,800	1,800
Attachment	Cat. II	Cat. II
Approx. filling width (cm)	139	139
Weight approx. (kg)	230	230
Order no.	581-009140	581-009141
€/piece		

CONFIGURATION TIP: WDS 751 / E + agitator RW 81 + container attachment + tarpaulin + LED work lights + splash guard tarpaulin



BASIC EQUIPMENT

- LED multifunction rear lights
- Sturdy oil bath gearbox
- PTO drive 540 rpm
- Protective grille
- Reflective warning film for increased road safety
- Drive shaft
- Spreading plate with 8 stainless steel vanes
- Operating terminal (only WDS 751 E, connection via 3-pin plug, suitable for RAM C-ball holder)
- GPS antenna (WDS 751 E only)
- **WITHOUT AGITATOR, please order separately**

Setting functions

- Spread rate
- Spread pattern
- Spreading width

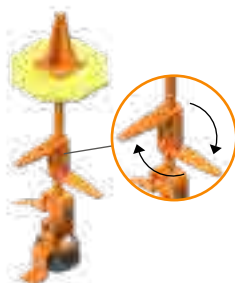
Additional functions WDS 751 E

- Speed-dependent spread rate regulation (via GPS signal)
- **Separate** adjustment of the spreading width **left** and **right** on the **operating terminal**
- Daily counter for various jobs

AGITATORS



RW 81 agitator
for sand/wet salt



RW 21 agitator
for dry salt



RW 40 agitator
for salt/grit mixture



RW 60 agitator
for grit

Equipment	Order no.		€/piece
RW 81 agitator for sand / wet salt (with bayonet lock, replaceable without tools)	581008952	assembled with original equipment	
RW 21 agitator for dry salt (with bayonet lock, replaceable without tools)	581008953	assembled with original equipment	
RW 40 agitator for sand/grit mixture (with bayonet lock, replaceable without tools)	581007629	assembled with original equipment	
RW 60 agitator for grit (with bayonet lock, replaceable without tools)	581007630	assembled with original equipment	

CONTAINER ATTACHMENTS

Equipment	Order no.		€/piece
Container attachment 250 L (height: approx. 14 cm) (screwable, with rubber seal)	581008163	not assembled	
	581008163M	assembled	
Container attachment 500 L (height: approx. 27.5 cm) (with inspection window, screwable, with rubber seal)	581007632	not assembled	
	581007632M	assembled	
Container attachment 750 L (height: approx. 42 cm) (with inspection window, screwable, with rubber seal)	581008164	not assembled	
	581008164M	assembled	

ACCESSORIES

Equipment	Order no.		€/piece
Tarpaulin with folding device	581007637	not assembled	
	581007637M	assembled	
LED worklights	581007635	not assembled	
	581007635M	assembled	
Lighting package plus (work lights, rotating beacon, interior lighting) Connection via 3-pin plug, separate switch box with magnetic base	581-009142	not assembled	
	581-009142M	assembled	
Splash guard tarpaulin (width: 175 cm)	581008379	not assembled	
Splash guard tarpaulin (width: 225 cm)	581008361	not assembled	
Tool holder 1 (for shovels or brooms)	581008358	not assembled	
Tool holder 2 (for snow chains, buckets or tubs)	581-009008	not assembled	
Lateral ascent	581008357	not assembled	
Swivel castor set	581008521	not assembled	
Parking feet	581-009144	not assembled	



FEED SWEEPER TYRES FKR

FKR-M | FKR-H

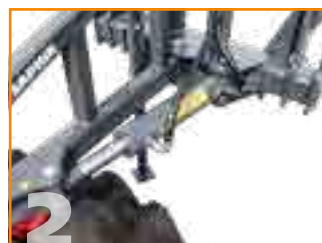
The SAPHIR FKR feed sweeper tyre is an indispensable aid for daily stable work. With the feed sweeper tyre, the feed alley can be easily pushed clean and the feed is returned to the animals' feeding area. conveyed. The stable floor cannot be damaged in the process. The sweeper tyre is mounted on a sturdy stub axle. The tyre mount can be adjusted for different tyre sizes. The clamping range extends from 770 to 1,040 mm in diameter. The Saphir forage sweeper is always supplied without tyres. Size 16.9 R34 is recommended.



Three-point linkage Cat. I/II and Euro front loader attachment combined.



Tyre holder for different tyre sizes from 770 - 1,040 mm diameter



The FKR-H forage sweeper tyre can be swivelled hydraulically by 800 mm on both sides hydraulically swivelling (1x dw required). The FKR-M forage sweeper tyre can be swivelled mechanically using a hole pattern.



Stable support foot



Bearing of the sweeper tyre via stable stub axle



Tyre rotation through floor drive

TECHNICAL DATA

Technical data	Feed sweeper tyre FKR-M	FKR-H forage sweeper tyres
Swivelling	mechanical	Hydraulic
Required oil connections	-	1x double-acting
Weight approx. (kg)	205	205
Order no.	574006650	574006649
€/piece		

Note: Goods are delivered fully assembled, but without tyres.

ATTACHMENTS



Recording	Order no.	€/piece
Combined mounting Three-point CAT I / II + Euro receptacle	574KOMBI2	Series



Farm and wheel loaders up to 2.5 t lifting capacity 574HOFRAD



Wheel and telescopic loaders from 2.5 t lifting capacity 574RADTELE

Specify carrier vehicle type when ordering



Rubber scraper MS-275-S



Rubber scraper MS-275-SLS



RUBBER PUSHER MS

MS-175-S | MS-225-S | MS-275-S

MS-175-SLS | MS-225-SLS | MS-275-SLS

The SAPHIR MS rubber scraper is suitable for use in e.g. mud, snow, manure, feed. Used rubber conveyor belts are used to produce the rubber sliders. Signs of use and wear and tear may be present. However, the functionality of the device is not impaired.

- Rubber shield with vertically vulcanised steel wires
- Rubber shield can be used on both sides

TECHNICAL DATA

Technical data	Rubber slider MS-175-S	Rubber slider MS-225-S	Rubber slider MS-275-S
Shield width approx. (mm)	1,750	2,250	2.650
Sign height approx. (mm)	400	400	400
Shield thickness approx. (mm)	35	35	35
Mounting options	Three-point attachment Cat. II, forks	Three-point attachment Cat. II, forks	Three-point attachment Cat. II, forks
Weight approx. (kg)	120	138	155
Order no.	574-009805	574-009806	574401397-2
€/piece			

Technical data	Rubber slider MS-175-SLS	Rubber slider MS-225-SLS	Rubber slider MS-275-SLS
Shield width approx. (mm)	1,750	2,250	2.650
Sign height approx. (mm)	400	400	400
Shield thickness approx. (mm)	35	35	35
Weight approx. (kg)	140	158	175
Order no.	574-009734	574006980	574007737
€/piece			

Surcharge for rubber shield with fabric insert: 250.00€ per model.

Note: The equipment is supplied fully assembled.

ATTACHMENTS



Name	Order no.	€/piece
Cat. II, fork pocket (MS-S only) (Tascheninnenmaß: 180 x 60 mm)	574KOMBI	Series



Gripper blade holder (MS-S only)	574GREIF	Series
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Euro attachment (nur MS-SLS)	574EURO	series
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Farm and wheel loaders up to 2.5 t lifting capacity (MS-SLS only)	574HOFRAD	
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Wheel loaders and telescopic handlers from 2.5 tonnes lifting capacity (MS-SLS only)	574RADTELE	
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Specify carrier vehicle type when ordering

EQUIPMENT OPTIONS



Equipment	Order no.	€/piece
Mechanically adjustable side panels (Only available as original equipment, mounting lever included in scope of delivery)	574MVS	

ACCESSORIES

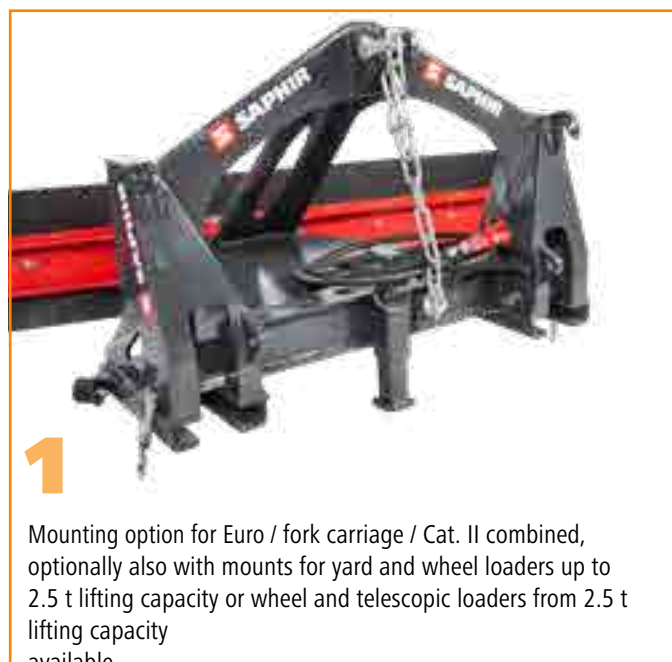
Equipment	Order no.	€/piece	Carriage costs
Ersatzgummi with vertically vulcanised steel wires for MS / Multi 175	574003346		
Ersatzgummi with vertically vulcanised steel wires for MS / Multi 225	574003347		
Ersatzgummi with vertically vulcanised steel wires for MS / Multi 275	574000439		
Ersatzgummi with fabric insert for coated feed tables for MS / Multi 175	391002879		
Ersatzgummi with fabric insert for coated feed tables for MS / Multi 225	391002880		
Ersatzgummi with fabric insert for coated feed tables for MS / Multi 275	391002881		



RUBBER PUSHER MULTI

MULTI 175 | MULTI 225 | MULTI 275 | MULTI 315

The SAPHIR MULTI rubber scraper is suitable for use in e.g. mud, snow, manure, feed. The sliding blade can be swivelled hydraulically and the side sections can be angled mechanically. The term "MULTI" stands for the different recording options on one and the same device. Used rubber bands are used to produce the rubber sliders. Traces of use and wear traces of use and wear may be present. However, the functionality of the device is not impaired.



1

Mounting option for Euro / fork carriage / Cat. II combined, optionally also with mounts for yard and wheel loaders up to 2.5 t lifting capacity or wheel and telescopic loaders from 2.5 t lifting capacity available



2

Side panels can be mechanically swivelled in a user-friendly manner using the mounting lever supplied

TECHNICAL DATA

Technical data	NEW!			
	MULTI 175	MULTI 225	MULTI 275	MULTI 315
Shield width approx. (mm)	1,750	2,250	2.650	3,150
Sign height approx. (mm)	400	400	400	400
Shield thickness approx. (mm)	35	35	35	35
Clearing width min. approx. (mm)	1,240	1.640	2.040	2,250
Swivel range	43°	43°	43°	43°
Weight approx. (kg)	270	300	315	348
Order no. Euro / Fork carriage / Cat. II	574MULTI175	574MULTI225	574MULTI275	574MULTI315
€/piece				

Surcharge for rubber shield with fabric insert: €250.00 per model (not available for Multi 315)

ATTACHMENTS



Recording	Order no.	€/piece
Combined pick-up Three-point CAT II + Euro pick-up + fork carriage	574KOMBI	Series
Farm and wheel loaders up to 2.5 t lifting capacity	574HOFRAD	
Wheel and telescopic loaders from 2.5 t lifting capacity	574RADTELE	

Specify carrier vehicle type when ordering

EQUIPMENT OPTIONS

Equipment	Order no.	€/piece
Horizontal equalisation NEW! (Only available as original equipment)	574HORIZ	

ACCESSORIES

Equipment	Order no.	€/piece	Carriage costs
Replacement rubber for Multi 175 with vertically vulcanised steel wires	574003346		
Replacement rubber for Multi 225 with vertically vulcanised steel wires	574003347		
Replacement rubber for Multi 275 with vertically vulcanised steel wires	574000439		
Replacement rubber for Multi 315 with vertically vulcanised steel wires	574000440		
Replacement rubber for Multi 175 with fabric insert for coated feed tables	391002879		
Replacement rubber for Multi 225 with fabric insert for coated feed tables	391002880		
Replacement rubber for Multi 275 with fabric insert for coated feed tables	391002881		

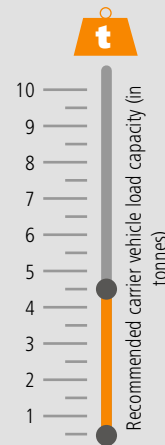
product video

GREIF 302



product video

GREIF 303H



AUGER GREIF

GRIFFIN 301 / 302 | GRIFFIN 303 H

The SAPHIR GREIF auger is suitable for digging holes up to 450 mm in diameter. For a particularly long service life of the drive, the PTO shaft is protected against overload with a shear bolt safety device. The GREIF 302 is also equipped with a hydraulic swivelling device to simplify the drilling of precise holes. The swivelling range is approx. 1,000 mm per side.

The GREIF auger is also available with an optional hydraulic drive. (GREIF 303 H)



Greif 303H with Euro mount

- Interchangeable drill cutting edges
- With a 300 mm drill body as standard, approx. 800 mm long

Equipment Greif 301/302:

- Sturdy oil bath angle gearbox
- Lower link support Cat. I/II
- Stable support feet for a secure stand
- Greif 302 with hydraulic swivelling device

Equipment Greif 303H:






- Hydraulic drive (required oil volume 40-60 litres/min.)
1x dw required
- Euro mount for front loader



TECHNICAL DATA

Technical data	Griffin 301	Griffin 302	Griffin 303H
Weight approx. (kg)	200	240	225
Drive	PTO shaft	PTO shaft	Hydraulic
Attachment	Kat. I/II	Kat. I/II	Euro intake
Order no.	586GREIF301	586GREIF302	586GREIF303H
€/piece			

ATTACHMENTS

	Name	Order no.	€/piece
	Kat. I / II (only Greif 301/302)	391GREIFKATII	Series
	Euro mount (Greif 303H only)	391GREIFEURO	Series
	Farm and wheel loaders up to 2.5 t lifting capacity (only Greif 303H)	391GREIFHOF	
	Wheel loaders and telehandlers from 2.5 tonnes lifting capacity (only Greif 303H)	391GREIFELE	
	Dredger intake MS 01 / MS 03 / MS 08 NEW! (Greif 303H only)	391BAGGER	

Specify carrier vehicle type when ordering

EQUIPMENT OPTIONS

Equipment	Order no.	€/piece
Drill body 120 mm	586BOHR120	
Drill body 200 mm	586BOHR200	
Drill body 300 mm	586BOHR300	
Drill body 450 mm	586BOHR450	
Adapter 4-hole to 6-hole flange (for earth auger Greif 300 with 4-hole flange)	586005091	
200 mm extension drill body (for Greif 303H)	586005095	
Hydraulic drive (for Greif 301 / 302) NEW! (fitted as original equipment, the PTO shaft is omitted) 1x dw required	586003712	

Installation effort: Mounting the drill body on the device and attaching the PTO shaft.



MAMMOTH CONCRETE MIXER

MAMMUT 801

The SAPHIR Mammut concrete mixer is suitable for mixing concrete, screed, mortar, grain, fertiliser, peat and soil. The four spring-loaded mixing arms guarantee fast, homogeneous mixing of all added components. **180 x 60 mm**). A hydraulic drive is available as an option.



1 Front splash guard to protect the tractor



4 Four spring-loaded and adjustable mixing coulters for the rapid production of a homogeneous mixture.



2 2 ripper tips for opening bags.



5 Adjustable side wall scraper for complete emptying of the emptying of the mixing container.



3 Rear outlet



6 3/4" connection for adding water

TECHNICAL DATA

Technical data	Mammoth 801
Container diameter approx. (mm)	1.500
Container height approx. (mm)	700
Capacity approx. (litres)	800
Power requirement approx. (kW/hp)	50/70
Weight approx. (kg)	600
Order no.	389.00926.MA800-2
€/piece	

The PTO shaft with shear bolt lock is included in the scope of delivery

Assembly effort: The support bracket, splash plate, protective bowl and outlet must be fitted.
The PTO shaft may need to be adjusted.

EQUIPMENT OPTIONS

Equipment	Order no.	€/piece
Hydraulischer Antrieb Erforderliche Ölmenge: 50-70 litres (fitted as original equipment, the PTO shaft is omitted) 1x dw required	389005384	



NEW!

06

FARM AND PASTURE TECHNOLOGY



TRANSPORT CONTAINER TG

TG 180

The SAPHIR TG transport container is versatile and enables the effortless transport of a wide variety of loads. The purely mechanical tipping device - without any hydraulics - can be used with almost any tractor with a category I or II power lift.

Whether you are a hobby user looking for a flexible alternative to a tipper, a local authority transporting green waste or a farm in need of a reliable all-round solution - the TG transport container is a real all-rounder that no farm should be without.

- Attachment KAT. I / II
- Fork pockets
- Effortless tilting via mechanical release
- Tipping point on the lower link axle
- Mechanically lockable and removable tailgate
- Bevelled scraper and drive-on edge



TG transport container with optional grid attachment


1

Standard scraper and drive-on edge, serves as wear protection and makes it easier to drive into the container, e.g. with pallet trucks, push or sack trucks.


2

Eyelets on the sides serve as lashing points to secure the load for transport.


3

Four spring latches ensure effortless and secure opening and closing of the tailgate.


4

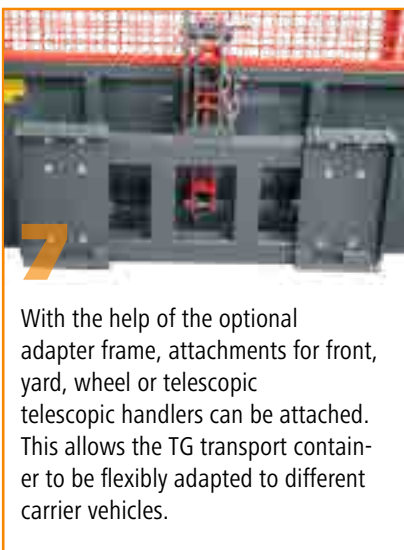
Side beading increases the stability of the tray, prevents deformation under load and enables a lighter but robust design - for greater durability and higher payloads with a low tare weight.


5

Integrated fork pockets as standard allow the transport container to be used with a pallet fork or a forklift truck - for example for placing in a high rack.


6

The optional lighting system increases safety and visibility in road traffic - particularly important for narrow tractors in special crop and municipal applications.


7

With the help of the optional adapter frame, attachments for front, yard, wheel or telescopic handlers can be attached. This allows the TG transport container to be flexibly adapted to different carrier vehicles.


8

The grid attachment also has a tailgate that can be coupled with that of the base unit and can even be folded up completely together with it if required - for a quick unloading process.


9

For improved accessibility, all parts of the tailgate can be removed without tools, both with the basic appliance and with the configured grid attachment, for improved accessibility of the load box.

TRANSPORT CONTAINER TG

TG 180




TECHNICAL DATA

Technical data	TG 180
Width approx. (mm)	1800
Depth approx. (mm)	1000
Tank wall height front (inside) approx. (mm)	700
Rear tank wall height (inside) approx. (mm)	400
Attachment	Cat. I/II / Forks
Permissible total weight approx. (kg)	650
Weight approx. (kg)	190
Order no.	589-009506
€/piece	

EQUIPMENT OPTIONS

Equipment	Order no.	€/piece
Grille attachment (not mounted)	589-009510	
Grille attachment (mounted)	589-009510M	
LED lighting set (loose accessory pack)	589-010191	
Adapter frame TG (without recording)	589-009512	

MOUNTS (ONLY POSSIBLE IN COMBINATION WITH AN ADAPTER FRAME)

	Recording	Order no.	€/piece
	Euro attachment (screw mount, only in combination with the Adapter frame TG possible)	574EURO	
	Farm and wheel loaders up to 2.5 t lifting capacity (screw mount, only in combination with the Adapter frame TG possible)	574HOFRAD	
	Wheel and telescopic loaders from 2.5 t lifting capacity (screw mount, only in combination with the Adapter frame TG possible)	574RADTELE	

Specify carrier vehicle type when ordering



TRANSPORT CONTAINER TL

TL 120 | TL 150 | TL 180 | TL 200

The SAPHIR transport container belongs on every farm and can be used, for example, for transporting wood, green waste, manure, etc. All appliances can be mechanically tilted for uncomplicated and user-friendly emptying.

- Attachment Cat. I/II
- Container can be tilted
- Effortless release, as the tipping point is on the top link pin
- Bevelled scraper and drive-on edge
- Removable tailgate
- Mechanical unlocking

TECHNICAL DATA

Technical data	TL 120	TL 150	TL 180	TL 200
Width approx. (mm)	1200	1500	1800	2000
Depth approx. (mm)	1000	1000	1000	1000
Tank wall height front (inside) approx. (mm)	700	700	700	700
Rear tank wall height (inside) approx. (mm)	400	400	400	400
Attachment	Kat. I/II	Kat. I/II	Kat. I/II	Kat. I/II
Permissible total weight approx. (kg)	390	520	650	750
Weight approx. (kg)	150	170	190	220
Order no.	589TL120	589TL150	589TL180	589TL200
€/piece				



TRANSPORT CONTAINER TLH

TLH 150 | TLH 180 | TLH 200 | TLH 220 | TLH 240

The SAPHIR TLH transport container is the ideal transport aid around the yard. The hydraulic tipping device enables the container to be emptied easily and continuously. The load volume can be doubled with the optional drop sides. The push-on stanchions are the ideal addition for transporting shrubbery etc.

- Three-point linkage Cat. I/II
- Continuously tiltable (approx. 50°)
- Bevelled scraper and drive-on edge
- Tailgate with 4 spring-loaded bolts
- Removable tailgate
- Kennfixx hydraulic couplings
- Container depth 1,100 mm
- 4 mounts for stanchions
- Holes for add-on drop sides
- Lashing eyes on the sides



1

Optional drop sides increase the load volume.



2

Optional stanchions facilitate the transport of shrubbery etc.

TECHNICAL DATA

Technical data	TLH 150	TLH 180	TLH 200	TLH 220	TLH 240
Width (outside) approx. (mm)	1.615	1.915	2.115	2.315	2.515
Width approx. (mm)	1.500	1.800	2,000	2,200	2,400
Depth approx. (mm)	1,100	1,100	1,100	1,100	1,100
Container wall height (inside) approx. (mm)	400	400	400	400	400
Attachment	Kat. I/II	Kat. I/III	Kat. I/II	Kat. I/II	Kat. I/III
Required oil connections	1 x dw	1 x dw	1 x dw	1 x dw	1 x dw
Payload approx. (kg)	1.000	1.000	1.000	1.000	1.000
Weight approx. (kg)	277	300	312	327	341
Order no.	589409954	589409955	589409956	589409957	589409958
€/piece					

Note: The goods are delivered fully assembled.

EQUIPMENT OPTIONS

Equipment	Order no.	€/piece
400mm, screwable	589409964	
Aufsatzbordwände TLH 180 Height: 400mm, screwable	589409965	
Aufsatzbordwände TLH 200 Height: 400mm, screwable	589409966	
Aufsatzbordwände TLH 220 Height: 400mm, screwable	589409967	
Aufsatzbordwände TLH 240 Height: 400mm, screwable	589409968	
600 mm / plug-in (cannot be combined with add-on shelves)	589409963	
Venting for conversion from dw to ew (loose accessory pack)	589005237	
Conversion from dw to ew (Fitted as original equipment)	589005238	



TLH PLUS TRANSPORT CONTAINER

TLH 180 PLUS | TLH 200 PLUS | TLH 220 PLUS | TLH 240 PLUS

The SAPHIR TLH PLUS transport container is the ideal transport aid for heavy-duty applications. The permissible total weight of 2,000 kg is made possible by the solid construction of the three-point tower. With a container depth of 1,250 mm and the optional add-on side panels, the TLH PLUS offers plenty of storage space. The hydraulic tipping device enables the container to be emptied easily and continuously. The push-on stanchions are the ideal addition for transporting shrubbery, brushwood, etc.

- Three-point linkage Cat. I/II
- 2,000kg permissible total weight
- Stepless tilting (approx. 50°)
- Bevelled scraper and drive-on edge
- Tailgate with 4 spring-loaded bolts
- Removable tailgate
- Kennfixx hydraulic couplings
- Container depth 1,250 mm
- 4 mounts for stanchions
- Holes for add-on drop sides



TECHNICAL DATA

Technical data	TLH 180 Plus	TLH 200 Plus	TLH 220 Plus	TLH 240 Plus
Width (outside) approx. (mm)	1.915	2.115	2.315	2.515
Width (inside) approx. (mm)	1.800	2,000	2,200	2,400
Depth (inside) approx. (mm)	1.250	1.250	1.250	1.250
Container wall height (inside) approx. (mm)	400	400	400	400
Attachment	Kat. I/II	Kat. I/II	Kat. I/II	Kat. I/II
Required oil connections	1 x dw	1 x dw	1 x dw	1 x dw
Payload approx. (kg)	2,000	2,000	2,000	2,000
Weight approx. (kg)	345	360	375	390
Order no.	589409959	589409960	589409961	589409962
€/piece				

Note: Goods are delivered fully assembled.

EQUIPMENT OPTIONS

Equipment	Order no.	€/piece
400mm, screwable	589409969	
400mm, screwable	589409970	
TLH 220 Plus add-on drop sides Height: 400mm, screwable	589409971	
TLH 240 Plus add-on drop sides Height: 400mm, screwable	589409972	
Top stanchions TLH / TLH Plus Height: 600 mm / plug-in (cannot be combined with add-on shelves)	589409963	



TLH MULTI TRANSPORT CONTAINER

TLH 180 MULTI | TLH 200 MULTI | TLH 220 MULTI | TLH 240 MULTI

The SAPHIR TLH Multi transport container is the universal helper for the home and yard. Two hydraulic cylinders enable a tilting angle of approx. 100°. The transport container offers mounting options for Euro / forks and Cat. II.

Thanks to the flat design, the scraper bar can be lowered to the ground without having to be tilted. Optimum conditions for easy loading and unloading.

- Infinitely variable tilt (approx. 100°)
- Highly wear-resistant scraper blade 150 x 15 mm (500 HB)
- Swivelling tailgate with 4 spring-loaded bolts
- Removable tailgate
- 2 lashing points on the lower edge of each side wall
- Kennfixx hydraulic couplings
- Container depth 1,250 mm
- Internal dimensions of the fork pockets approx. 105 x 55 mm




1 The solid headstock combines the mounting options for three-point Cat. II, Euro and fork tines (internal pocket dimensions approx. 105 x 55) and is suitable for front and rear mounting. The tailgate can be locked in 2 positions with spring-loaded bolts.




2 The upper cylinder lifts the container from the home position



3 Highly wear-resistant scraper bars extend the service life and enable the low-wear collection of loose bulk materials.



4 The lower cylinder takes over the tipping of the container.



5 The swivelling tailgate increases the load volume and serves as overflow protection.

TECHNICAL DATA

Technical data	TLH 180 Multi	TLH 200 Multi	TLH 220 Multi	TLH 240 Multi
Width (outside) approx. (mm)	1.895	2.095	2.295	2.495
Width (inside) approx. (mm)	1.800	2,000	2,200	2,400
Depth (inside) approx. (mm)	1.250	1.250	1.250	1.250
Container wall height (inside) approx. (mm)	450	450	450	450
Attachment	combined	combined	combined	combined
Required oil connections	1 x dw	1 x dw	1 x dw	1 x dw
Payload approx. (kg)	3,000	3,000	3,000	3,000
Weight (kg)	446	470	486	501
Order no.	589409974	589409975	589409976	589409977
€/piece				

Note: The goods are delivered fully assembled.



TRANSPORT BOX TB

TB 141 | TB 150

Whether for your chainsaw, tools or pure material transport, with the SAPHIR TB transport box you get a real all-rounder, which is characterised by numerous useful details, such as a robust tailgate, lockable lid and a durable drawbar lock, in addition to the combined mounting option for the CAT I/II three-point mount and front loader Euro mount.

- Gas struts for effortless opening of the lid (for TB 141) **NEW!**
- Cover with supports (for
- Tailgate with defined end positions using ropes
- Wall thickness 2 mm
- Stable substructure and all-round frame
- Lockable lid with handle
- Splash-proof container
- Sturdy tailgate for crossings, e.g. with a sack truck or wheelbarrow
- Draw bolt
- > 90° opening angle of the top cover



Transport box TB 141



Transport box TB 150

TECHNICAL DATA

Technical data	NEW	
	TB 141	TB 150
Width (inside) approx. (mm)	1,400	1,500
Depth (inside) approx. (mm)	700	370
Height (inside) approx. (mm)	500	800
Cultivation	Euro admission & KAT I/II	Euro admission & KAT I/III
Permissible total weight approx. (kg)	1,150	1,150
Weight approx. (kg)	165 kg	165 kg
Order no.	589-006972-TB141	589-009276
€/piece		

ACCESSORIES

Equipment	Order no.	€/piece
Rear LED lighting kit  (loose accessory pack)	589-01226	
Front LED lighting kit  (loose accessory pack)	589-01227	
Gasdruckfeder (Satz) for retrofitting TB 140	589008981	

NEU



FRONT BALLAST SYSTEM FBS

FBS 600

The SAPHIR FBS 600 front ballast system is a compact front weight with a wide range of expansion options. It impresses with its small front dimensions, integrated support legs, standard position lights and optional accessories such as additional weights, coupling plate or storage compartment lid. This means it can be flexibly adapted to different applications.



1 The standard position lights increase safety on the road by improving visibility.



2 The optional ballasting set consisting of 4 weight plates and support feet enables flexible weight distribution - tailored to the application. The support legs make it easier to attach the front ballast system.



3 The optional hinged lids provide storage space for tools, accessories or consumables. Securing with a split pin or padlock is also provided.



4 Even without a configured lid, the compartment remains intact and is closed with a screwed lid. It can be used with filling material to increase the weight.



5 The optional KAT-2 coupling plate is ideal for internal manoeuvring work with the front weight.



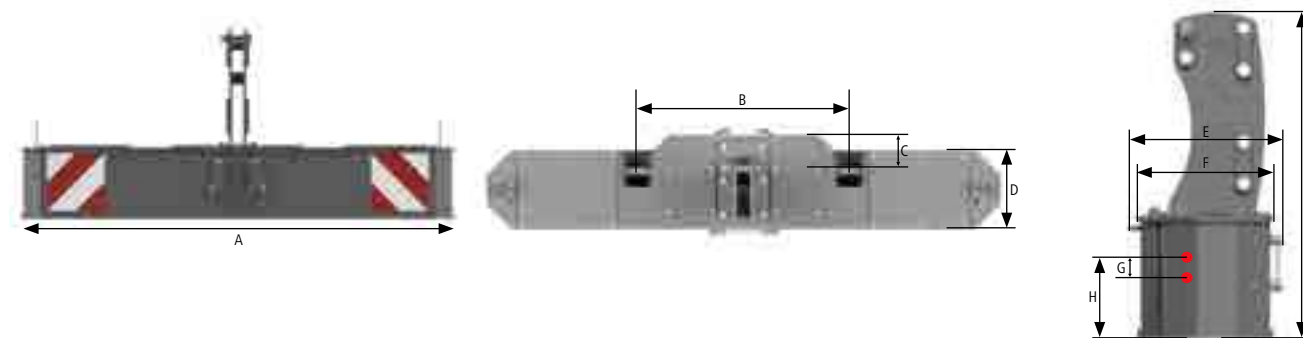
6 The optional manoeuvring coupling is used for manoeuvring trailers and vehicles with a ring drawbar eye.



7 The SAPHIR "S" sign can optionally be replaced by a customised laser-cut stainless steel sign with a logo, name or text of your choice. Two different sizes are available.

TECHNICAL DATA

Technical data	FBS 600
Cultivation	Cat. II / UL bolt Cat. III
Dimension A approx. (mm)	2120
Dimension B approx. (mm)	870
Dimension C approx. (mm)	153
Dimension D approx. (mm)	325
Dimension E approx. (mm)	440
Dimension F approx. (mm)	390
Dimension G approx. (mm)	75
Dimension H approx. (mm)	295
Dimension I approx. (mm)	892
Weight approx. (kg)	600
Order no.	391-008524
€/piece	



EQUIPMENT OPTIONS

Equipment	Order no.	€/piece
Shunting coupling Plug-in	391-010185	
Adapter plate with catch hook Cat. II	391-00556-2	
Hinged lid set (2 pieces)	391-010187	
Ballasting set (4 weight plates & support feet = 200 kg additional weight)	391-010186	
Customised laser-cut stainless steel sign (sign size: 300 mm x 170 mm) with logo, name or text of your choice (replaces the SAPHIR "S" sign) Hinweis: A vector graphic is required for logos (file formats: AI, EPS, PDF)	391-ESKLEIN	
Customised laser-cut stainless steel sign (sign size: 590 mm x 170 mm) with logo, name or text of your choice (replaces the SAPHIR "S" sign) Note: A vector graphic is required for logos (file formats: AI, EPS, PDF) Cannot be combined with the "Adapter plate with catch hook Cat. II" can be combined!	391-ESGROSS	



To the product video

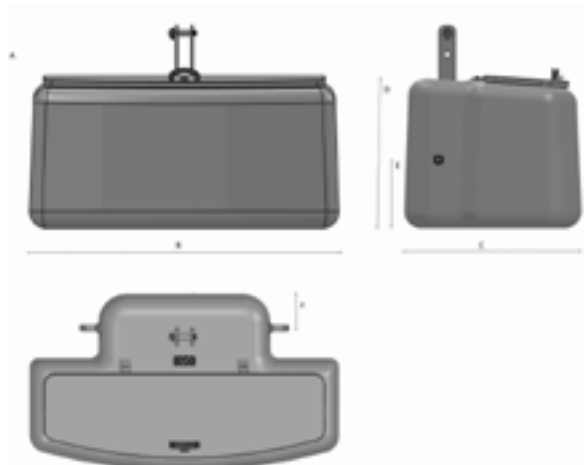


REINFORCED CONCRETE WEIGHT ECO BOX

ECO BOX 600 - 1,750 KG

- Weight and transport box
- Lockable lid made of GRP
- E.g. for wrapping film / wrapping net etc.
- Storage compartment dimensions (conical)
 - ECO BOX 600 - 1000 kg
 - Length approx. 905 mm / 855 mm
 - External width approx. 275 mm / 220 mm
 - Centre width approx. 305 mm / 265 mm
 - Height approx. 420 mm / 405 mm
 - ECO BOX 1050 - 1750 kg
 - Length approx. 1,240 mm / 1,200 mm
 - Outer width approx. 250 mm / 210 mm
 - Centre width approx. 320 mm / 285 mm
 - Height approx. 500 mm / 485 mm

Technical data	ECO BOX 600 kg	ECO BOX 700 kg	ECO BOX 800 kg	ECO BOX 900 kg	ECO BOX 1,000 kg	ECO BOX 1050 kg	ECO BOX 1250 kg	ECO BOX 1450 kg	ECO BOX 1550 kg	ECO BOX 1750 kg
Attachment	Cat. II	Cat. II	Cat. II	Cat. II	Cat. II	Cat. II	Cat. II	Cat. II	Cat. II	Cat. II
volume (l)	105	105	105	105	105	160	160	160	160	160
Dimension A (mm)	840	840	840	840	840	910	910	910	910	910
Dimension B (mm)	1,100	1,100	1,100	1,100	1,100	1,440	1,440	1,440	1,440	1,440
Dimension C (mm)	760	760	760	760	760	825	825	825	825	825
Dimension D (mm)	534	534	534	534	534	700	700	700	700	700
Dimension E (mm)	250	250	250	250	250	320	320	320	320	320
Dimension F (mm)	160	160	160	160	160	160	160	160	160	160
Order no.	391-000600BOX	391-000700BOX	391-000800BOX	391-000900BOX	391-001000BOX	391001050BOX	391001250BOX	391001450BOX	391001550BOX	391001750BOX
€/piece										





Reinforced concrete weight Standard ST KD
250 kg with communal triangle



Reinforced concrete weight Standard ST
250 kg with cat. 0/I

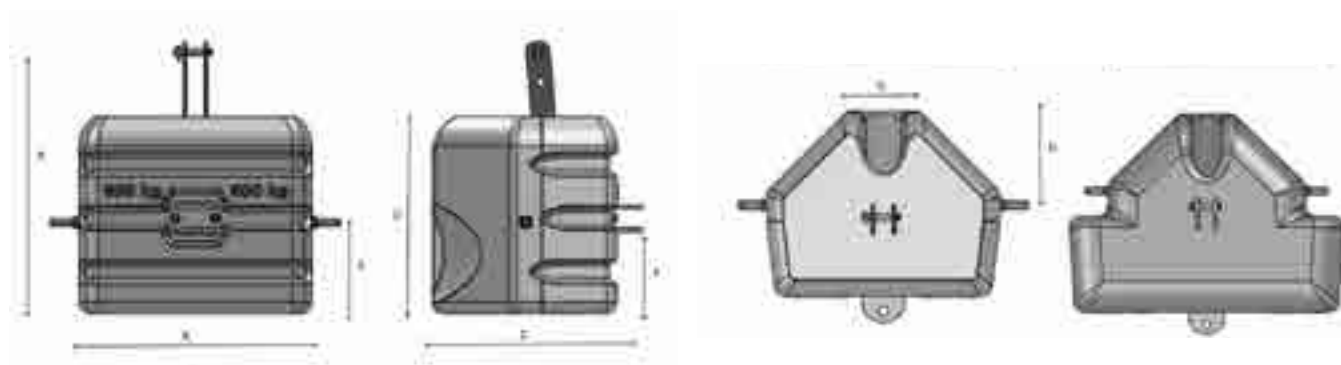


Reinforced concrete weight standard 800 kg
with cat. II

REINFORCED CONCRETE WEIGHT STANDARD ST 250 - 1,200 KG

- Made of high-quality reinforced concrete with cast-in steel cage
- Stable and safe hitching
- Manoeuvring coupling for quick coupling and uncoupling of vehicles
- For front and rear attachment

Technical data	ST KD 250 kg	ST 250 kg	ST 250 kg	ST 400 kg	ST 600 kg	ST 800 kg	ST 1000 kg	ST 1200 kg
Attachment	Municipal triangle 475 mm	Cat. 0/I	Cat. II	Cat. II	Cat. II	Cat. II	Cat. II	Cat. II
Dimension A (mm)	590	685	685	775	875	1,005	1,005	1,060
Dimension B (mm)	770	770	770	770	780	780	780	1,110
Dimension C (mm)	430	430	430	480	600	600	600	770
Dimension D (mm)	560	560	560	580	660	860	860	800
Dimension E (mm)	-	230	230	290	305	410	410	365
Dimension F (mm)	190	190	190	220	290	290	290	470
Dimension G (mm)	340	340	340	270	220	250	250	220
Dimension H (mm)	-	220	220	245	315	320	320	300
Weight approx. (kg)	250	250	250	400	600	800	1.000	1.200
Order no.	391-000250STK	391000250ST	391-000250ST-II	391000400ST	391000600ST	391000800ST	391001000ST	391001200ST
€/piece								



ALSO AVAILABLE IN OTHER COLOURS:

- JD green
- Grey

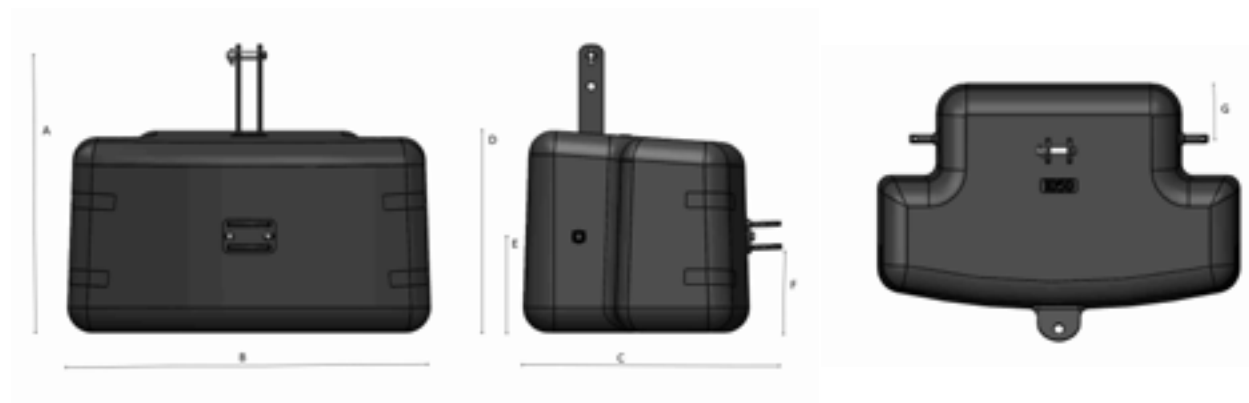


REINFORCED CONCRETE WEIGHT TOP

TOP 450 - 1,450 KG

- Made of high-quality reinforced concrete with integrated steel cage
- Three-point attachment Cat. II
- Manoeuvring coupling for quick coupling and uncoupling of vehicles
- Large ground clearance due to favourable dimensions
- The pick-up point is shifted to the rear to improve the effect of the weight on the tractor axle
- For front and rear mounting
- Reflectors (3M film) with high luminosity for greater safety

Technical data	TOP 450 kg	TOP 750 kg	TOP 1050 kg	TOP 1450 kg
Attachment	Cat. II	Cat. II	Cat. II	Cat. II
Dimension A approx. (mm)	800	890	900	910
Dimension B approx. (mm)	800	1,150	1,180	1,440
Dimension C approx. (mm)	530	600	735	825
Dimension D approx. (mm)	515	625	655	700
Dimension E approx. (mm)	210	300	310	320
Dimension F approx. (mm)	190	255	270	285
Dimension G approx. (mm)	140	150	160	160
Order no.	391000450TOP	391000750TOP	391001050TOP	391001450TOP
€/piece				



ALSO AVAILABLE IN OTHER COLOURS:

- JD green
- Grey



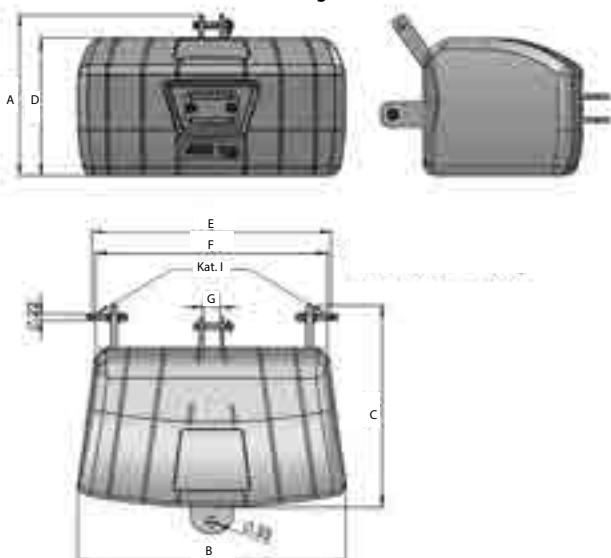
REINFORCED CONCRETE WEIGHT NEW GENERATION

NG 400 - 1,500 KG

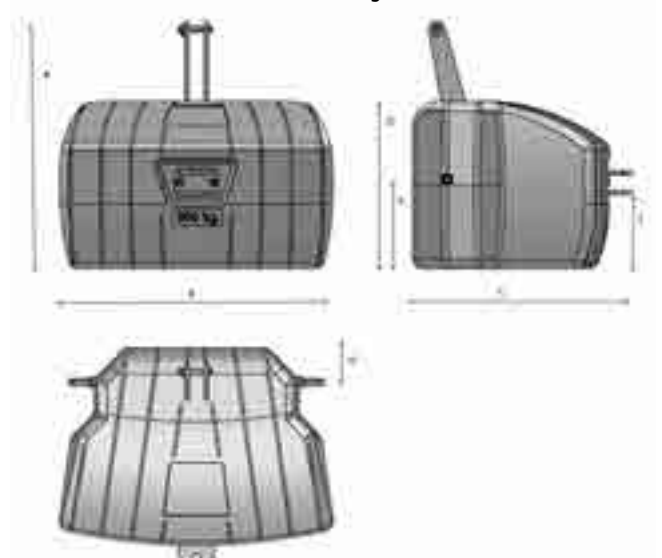
- Made of high-quality reinforced concrete with integrated steel cage
- Three-point attachment Cat. II
- NG 400 kg with Cat. I or Cat. II
- Manoeuvring coupling for quick coupling and uncoupling of vehicles
- Large ground clearance due to favourable dimensions
- The rear-mounted pick-up point ensures better weight distribution distribution of the weight on the tractor axle
- Attractive format visually adapted to the tractor bonnet
- For front and rear mounting

Technical data	NG 400 kg Cat. I	NG 700 kg Cat. I	NG 400 kg	NG 650 kg	NG 900 kg	NG 1100 kg	NG 1500 kg
Attachment	Cat. I	Cat. I	Cat. II	Cat. II	Cat. II	Cat. II	Cat. II
Dimension A (mm)	526	526	715	845	915	955	1,025
Dimension B (mm)	878	878	880	870	1,000	1,100	1,180
Dimension C (mm)	660	660	530	600	750	800	970
Dimension D (mm)	450	450	470	600	640	680	750
Dimension E (mm)	784	784	270	320	335	350	390
Dimension F (mm)	760	760	200	265	270	300	330
Dimension G (mm)	56	56	100	110	110	110	100
Weight approx. (kg)	400	400	400	650	900	1100	1500
Order no.	391000400NG-I	391000700NG-I	391000400NG	391000650NG	391000900NG	391001100NG	391001500NG
€/piece							

NG 400 kg Cat. I



NG 400 - 1,500 kg Cat. II



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ALSO AVAILABLE IN OTHER COLOURS:

JD green



Grey

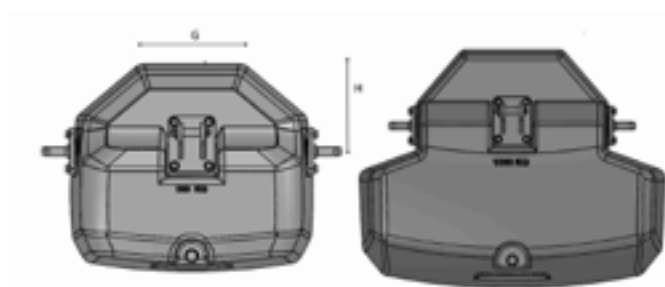
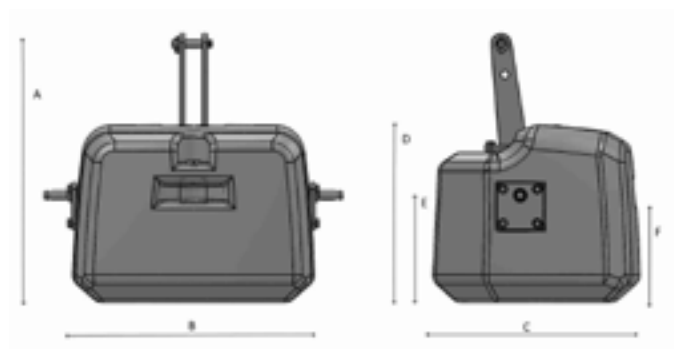


MINERAL CASTING WEIGHT MG

MG 1,600 - 2,500 KG

- Mineral cast version
- Three-point attachment Cat. II
- Manoeuvring coupling for quick coupling and uncoupling of vehicles
- Available up to 2,500 kg
- Compact design
- Screwable UL bolts Cat. II at 1,600 kg and 1,800 kg
- Screwable UL bolts Cat. III at 2,000 kg and 2,500 kg

Technical data	MG 1600 kg	MG 1800 kg	MG 2000 kg	MG 2500 kg
Dimension A approx. (mm)	930	960	960	1,180
Dimension B approx. (mm)	1,150	1,200	1,200	1,540
Dimension C approx. (mm)	800	900	900	875
Dimension D approx. (mm)	650	695	695	760
Dimension E approx. (mm)	345	345	345	375
Dimension F approx. (mm)	580	620	620	690
Dimension G approx. (mm)	380	380	380	380
Dimension H approx. (mm)	280	285	285	285
Weight approx. (kg)	1,600	1.800	2,000	2.500
Order no.	391001600MG	391001800MG	391002000MG	391002500MG
€/piece				



ALSO AVAILABLE IN OTHER COLOURS:

- JD green
- Grey

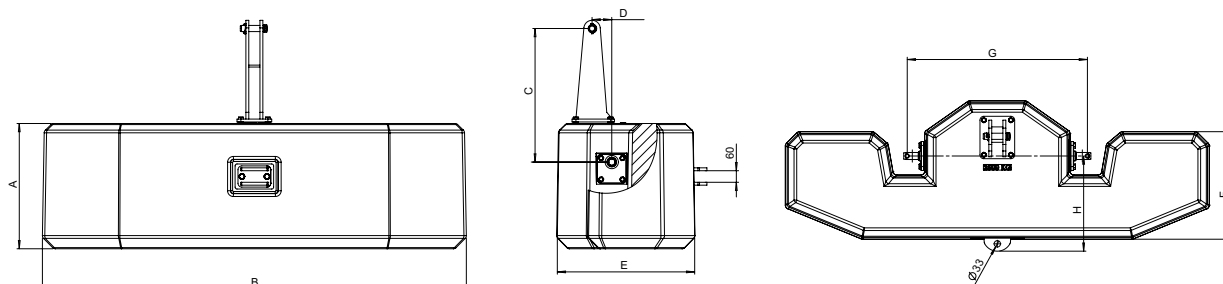


CAST MINERAL WEIGHT SOLID

SOLID 1,250 - 3,000 KG

- Mineral cast version
- Three-point linkage Cat. II
- Screwable UL bolts Cat. II at 1,250 kg and 1,800 kg
- Screwable UL bolts Cat. III at 2,500 kg and 3,000 kg
- Manoeuvring coupling for quick coupling and uncoupling of vehicles
- Compact design
- For front and rear mounting

Technical data	Solid 1250 kg	Solid 1400 kg	Solid 1800 kg	Solid 2500 kg	Solid 3000 kg
Dimension A approx. (mm)	490	490	490	650	650
Dimension B approx. (mm)	1,450	1,450	1,815	2,220	2,220
Dimension C approx. (mm)	603	603	603	693	693
Dimension D approx. (mm)	122	122	122	102	102
Dimension E approx. (mm)	685	685	685	713	713
Dimension F approx. (mm)	375	375	555	558	558
Dimension G approx. (mm)	935	935	935	935	935
Dimension H approx. (mm)	463	463	463	494	494
Weight approx. (kg)	1,250	1,400	1,800	2,500	3,000
Order no.	391-001250KO	391-001400KO	391-001800KO	391-002500KO	391-003000KO
€/piece					



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NEW!

Rear weight HG 350 kg with lower linkage attachment Cat. I



Rear weight HG 550 kg with lower linkage attachment Cat. I

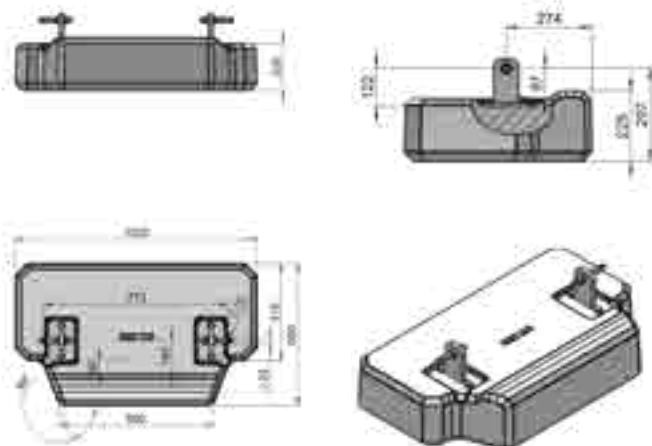


REAR WEIGHT HG LOWER LINK ATTACHMENT CAT. I

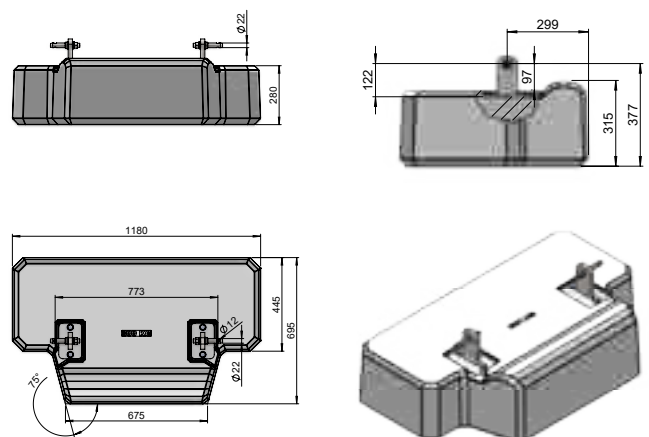
- Made of cast magnetite
- Lower link attachment Cat. I
- UL bolt Cat. I with rear weight 275 kg to 800 kg
- Very low centre of gravity in the rear hydraulics
- Free towing jaw on the tractor and, if necessary, attachment of vehicles/implements (depending on design and tractor type)
- Free electrical, compressed air and hydraulic connections on the tractor

Technical data	HG 275 kg	HG 350 kg	HG 450 kg	HG 550 kg	HG 650 kg	HG 800 kg
Weight approx. (kg)	275	350	450	550	650	800
Order no.	391-000275HECK-I	391-000350HECK-I	391-000450HECK-I	391-000550HECK-I	391-000650HECK-I	391-000800HECK-I
€/piece						

Rear weight 275 kg / 350 kg / 450 kg



Rear weight 550 kg / 650 kg / 800 kg



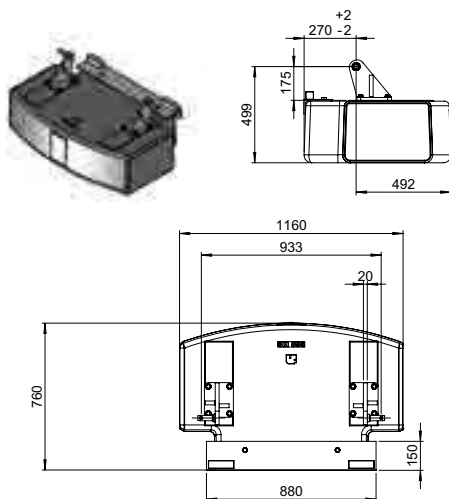


REAR WEIGHT HG LOWER LINK ATTACHMENT CAT. II

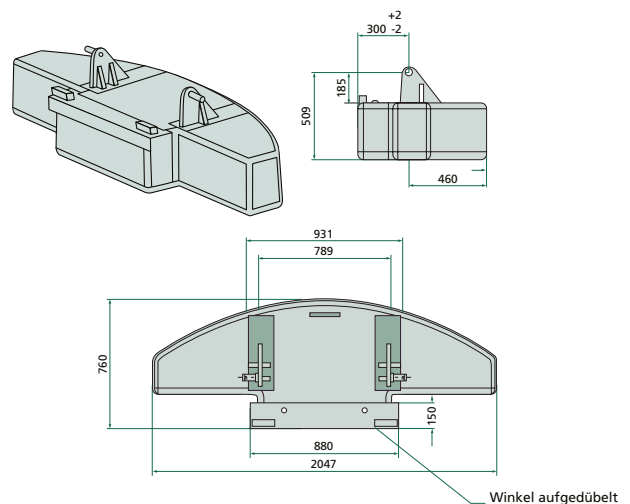
- Magnetite cast iron version
- Lower link attachment Cat. II
- UL bolt Cat. III with rear weight 1250 kg and 1450 kg
- Very low centre of gravity in the rear hydraulics
- Free towing jaw on the tractor and, if necessary, attachment of vehicles/implements (depending on the design and tractor type)
- Free electrical, compressed air and hydraulic connections on the tractor

Technical data	HG 600 kg	HG 900 kg	HG 1250 kg	HG 1450 kg
Weight approx. (kg)	600	900	1.250	1.450
Order no.	391000600HECK	391000900HECK	391001250HECK	391001450HECK
€/piece				

Rear weight 600 & 900 kg



Rear weight 1250 & 1450 kg



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