

FERTILIZATION

MINERAL
FERTILIZATION

ORGANIC
FERTILIZATION

TRANSPORT





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UNIA catalogue

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UNIA reserves the right to modify the offered range, including product withdrawal or a change to the technical specifications without prior notification.

The actual product colour may vary from the images shown.

If the machine features an additional option, the tractor's power consumption might change.

The weight of the machines is stated in KG, the power in HP.

MS / MS-SAD

FERTILIZER SPREADERS FOR FIELD AND ORCHARD WORK



TECHNICAL SPECIFICATIONS:

MODEL	MS 400	MS-SAD 400
hopper capacity [dm³]	400	400
working width [m]	10÷24	10÷18
dimensions: L/W/H of loading [m]	0,94 / 1,65 / 0,95	1,0 / 1,3 (1,4) / 1,1
net weight [kg]	223	230



SPECIAL PLATES FOR ORCHARD WORK

The strip-spreading plates enable the precise spreading of fertilizers so that the granules go directly under the plants, and not into the interrows. In addition, the plates, like the spreading device, are made of stainless steel, which significantly extends their service life.

ADVANTAGES:

- A narrow loading hopper, ideally suited for spreading fertilizers in horticulture, vineyards or hops cultivation.
- Easy access to the adjustment of the working width and the fertilizer dose allows for a quick and easy setup of the machine.
- Low power demand (40-70 HP) makes the spreader perfect for smaller tractors.
- The hydraulic system for closing the dosing openings facilitates the operation of the machine and improves the comfort of work.
- Stainless steel fertilizer discs ensure long life and corrosion resistance.
- A clear spreading and setting table allows you to quickly calibrate the spreader before starting work.
- The indicator of the angle of inclination of the spreader allows you to easily set the machine for standard or late top dressing.
- A wide range of hopper capacities from 400 to 700 liters for the MS version and from 400 to 600 liters for the MS-SAD version.
- Load hopper sieves and agitators inside the hopper facilitate spreading partially lumpy fertilizer.



TECHNICAL SPECIFICATIONS:

MODEL	MX 850	MX 1000	MX 2500
hopper capacity [dm³]	850	1000	2500
working width [m]	10÷24	10÷24	10÷36
dimensions: L/W/H of loading [m]	1,1 / 2,0 / 1,06	1,1 / 2,0 / 1,06	1,67 / 2,67 / 1,78
net weight [kg]	273	280	595



ROBUST SPREADING DEVICE

The spreading device, discs and vanes made of stainless steel ensure a long service life and simple adjustment of the working width and reduce the time of setting the machine to a minimum.

ADVANTAGES:

- The hydraulic system for closing the dosing openings facilitates the operation of the machine and improves the comfort of work.
- The plate for boundary spreading means that the fertilizer is applied exactly where you want it.
- Stainless steel spreading discs ensure durability for many seasons.
- Easy setting of the working width by means of adjustable vanes allows for efficient adjustment of working parameters for a given field.
- The sieves of the hopper and agitators enable crumbling of lumpy fertilizer and ensure smooth spreading.
- A clear spreading table allows you to quickly calibrate the spreader before starting work.
- Easy adjustment of the spreader settings thanks to the easy accessibility of all key components.
- The indicator of the angle of inclination of the spreader allows you to easily set the machine for standard or late top dressing.
- A wide range of hopper capacities from 850 up to 3,000 liters depending on the needs of the farm and tractor power.

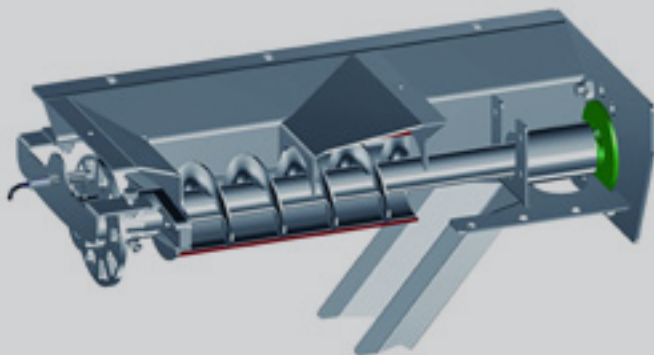
MXL

SPREADER WITH SCREW DISTRIBUTION SYSTEM (SDS)



TECHNICAL SPECIFICATIONS:

MODEL	MXL 1200	MXL 2100
hopper capacity [dm³]	1200	2100
working width [m]	10÷36	10÷36
dimensions: L/W/H of loading [m]	1,5 / 2,2 / 1,25	1,67 / 2,67 / 1,42
net weight [kg]	382	580



PRECISE DOSING THANKS TO THE SDS SYSTEM

The Screw Distribution System (SDS) is a unique system for the dosing of fertilizer to the spreading discs, used exclusively in UNIA spreaders. Its main advantages are: precise control of the fertilizer spread, no disturbances caused by shocks and work on slopes, maintaining a fixed dose regardless of fertilizer moisture and driving speed.

ADVANTAGES:

- The unique Screw Distribution System (SDS) ensuring the highest precision of fertilizing.
- Hydraulic control of the spreading system guarantees simple and comfortable operation and full control over dosing.
- The PILOT JOY controller allows you to maintain a fixed spreading dose, spreading over half of the width and changing the dosing while driving.
- Stainless steel fertilizer discs ensure durability and peace of mind for many seasons.
- The rear beam with an LED lighting system improves the operator's safety while driving and the visibility of the machine at night.
- The working width from 10 to 36 m makes the spreader ideally suited to work both on small and narrow fields, as well as on large areas.
- Large fertilizer hoppers from 1,200 to 3,000 liters allow the machine parameters to be adjusted to the needs of the farm.
- The spreading and setting table, the granule meter and 3 sets of vanes as standard help in accurate and efficient calibration of the spreader.

MXL PREMIUM

A SPREADER COMPATIBLE WITH THE **ISOBUS** SYSTEM



TECHNICAL SPECIFICATIONS:

MODEL	MXL 1200 PREMIUM	MXL 2100 PREMIUM
hopper capacity [dm³]	1200	2100
working width [m]	10÷36	10÷36
dimensions: L/W/H of loading [m]	1,5 / 2,2 / 1,25	1,67 / 2,67 / 1,42
net weight [kg]	382	580



EVEN MORE ACCURACY WITH THE UTS COMPUTER

The UTS computer works with various machines compatible with the ISOBUS standard, so it can also be used with other machines from UNIA and competing manufacturers. It supports i.a. the function of variable dosing of fertilizers based on application maps.

ADVANTAGES:

- The machine works with the ISOBUS system and precision farming functions, thanks to which it guarantees even greater precision of spreading.
- The Screw Distribution System (SDS) driven by two independent hydraulic motors, allows you to set different doses for the left and right disc.
- Maintaining a fixed dosing rate regardless of the driving speed thanks to the UTS computer (optional TOUCH 800 terminal).
- The spreading device and discs made of stainless steel extend the machine's service life.
- The standard LED lighting system improves the visibility of the machine on the road and the operator's safety.
- Fertilizer hoppers with a capacity of 1,200 to 3,000 liters for small and large farms.
- Three sets of spreading vanes enable the adjustment of the working width from 10 up to 36 m.
- A number of additional equipment options facilitate the configuration of the machine to the needs of a given farm.



ADVANTAGES:

- A robust, hydraulically operated telescopic boom.
- The possibility of simultaneous aggregation with a tractor and a spreader or spreader chassis.
- A certified hook providing the operator with comfortable and safe work.
- The RBS hydraulic distributor that allows you to operate the loader with only one pair of hydraulic sockets.

TECHNICAL SPECIFICATIONS:

MODEL	BYK
max. lifting capacity [kg]	1200
max. lifting height with raised tpl arms of the tractor [m]	5,05
range in horizontal position [m]	1,5÷2,85
net weight [kg]	380

CHASSIS FOR THE SPREADER

COMPATIBLE WITH THE MX AND MXL SERIES SPREADERS



ADVANTAGES:

- It allows for the operation of large-capacity spreaders with low-power tractors.
- It makes the lifting capacity of the tractor's rear TPL arms irrelevant during work.
- It stabilises the spreader, the machine does not „jump“, which improves the comfort and safety of the operator.
- The chassis can be easily aggregated with a tractor and spreader, as well as with the BYK loader.

TECHNICAL SPECIFICATIONS:

MODEL	CHASSIS FOR THE SPREADER
permitted transport speed [km/h]	25
wheel track (min./max.) [mm]	1750 / 1910
standard tires	400/60-15,5
net weight [kg]	320

RCW (new version 2022)

FOR LIME AND GRANULATED FERTILIZERS



THE MACHINE IS AVAILABLE
IN THE EU APPROVED VERSION 167/2013!



TECHNICAL SPECIFICATIONS:

MODEL		RCW 45	RCW 60	RCW 85
hopper capacity [dm ³]		4500	6000	8500
working width [m]	granulated fertilizers	10÷36	10÷36	10÷36
	lime	8÷16	8÷16	8÷16
net weight [kg]		2 430	2 840	3 120
standard tires		500/60-22,5	550/60-22,5	550/60-22,5

MODEL		RCW 60 H	RCW 85 H
hopper capacity [dm ³]		6000	8500
working width [m]	granulated fertilizers	10÷36	10÷36
	lime	8÷16	8÷16
net weight [kg]		3 230	3 630
standard tires		18.4 R38	520/85 R38

MODEL		RCW 90 TD	RCW 110 TD	RCW 130 TD
hopper capacity [dm ³]		9000	11000	13000
working width [m]	granulated fertilizers	10÷36	10÷36	10÷36
	lime	8÷16	8÷16	8÷16
net weight [kg]		4 200	4 400	5 600
standard tires		500/60-22,5	550/60-22,5	600/55-22,5

ADVANTAGES:

- Steeper walls of the fertilizer box and reinforced frame structure.
- A proven system of dosing the fertilizer to the discs by means of a belt conveyor.
- Compatible with the ISOBUS system (option).
- Drive of the conveyor from the star wheel or hydraulic.
- The sowing device and discs made of stainless steel, driven by the tractor's PTO.
- Additional discs for spreading lime as standard.
- The RCW 45–110 TD models with a top or bottom hitch, and the RCW 130 TD model with a sprung bottom hitch.
- Mechanical support of the drawbar facilitating the aggregation of the machine with the tractor.
- Spreaders are available on a single-axle chassis (RCW 45–85 H) or on a sprung tandem (RCW 90–130 TD).
- Standard dual-circuit air brakes improving driving safety.
- The capacity of the fertilizer hoppers from 4,000 to 12,000 liters allows you to adjust the spreader performance to the needs and structure of your farm.

RCW PLUS (new version 2022)

SINGLE-AXLE TRAILED SPREADERS



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TECHNICAL SPECIFICATIONS:

MODEL	RCW 100 PLUS	RCW 100 PLUS H
hopper capacity [dm ³]	10000	10000
working width [m]	granulated fertilizers	10÷36
	lime	8÷16
height of discs from the ground [cm]	80	120
net weight [kg]	4 400	4 450
standard tires	580/70 R38	580/70 R38

MODEL	RCW 120 PLUS	RCW 120 PLUS H
hopper capacity [dm ³]	12000	12000
working width [m]	granulated fertilizers	10÷36
	lime	8÷16
height of discs from the ground [cm]	80	120
net weight [kg]	4 600	4 750
standard tires	650/75 R32	650/75 R32



2 DISC SETS AND A BOUNDARY DISC AS STANDARD

The RCW Plus spreaders are standard equipped with 2 sets of discs – for granulated fertilizers and for lime. In addition, the machine has a special disc for boundary spreading, which facilitates precise spreading at field boundaries, roads, etc.

ADVANTAGES:

- Steeper walls of the fertilizer box and reinforced frame structure.
- Compatible with the ISOBUS system (option).
- A system of dosing the fertilizer to the discs by means of a hydraulically driven belt conveyor.
- Discs for fertilizer and lime made of stainless steel, mechanically driven by the tractor's PTO.
- The boundary spreading disc that comes as standard facilitates the application of fertilizer at the field border.
- All RCW Plus / Plus H models are equipped with a sprung bottom hitch.
- PILOT JOY controller allows to maintain the desired seeding dose regardless of the driving speed.
- Standard dual-circuit air brakes improving driving safety.
- Road lighting ensuring the visibility of the machine while driving on public roads.
- Extensive standard equipment including a drawbar support, wheel fenders, loading hopper sieves and wide-angle shaft.
- The spreading discs placed at a height of 80 cm (Plus version) or 120 cm (Plus H version) allow obtaining a working width of up to 36 m.

RCW HELIX (new version 2022)

FOR DUSTY LIME



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TECHNICAL SPECIFICATIONS:

MODEL	RCW 150 HELIX
hopper capacity [dm ³]	15000
working width [m]	12
power demand [HP]	>200
net weight [kg]	7 100
standard tires	600/55-22,5



FULL SPREADING CONTROL

An independent shutter control (left/right) allows fertilizer to be applied at half the working width to reduce overlaps. During a single-sided spreading, the inactive spreading beam can be folded into transport position.

ADVANTAGES:

- The dusty fertilizer beam enables a very precise application and eliminates the drift of lime by the wind.
- Steeper walls of the fertilizer box and reinforced frame structure.
- The SUPERIOR computer is responsible for maintaining a fixed spreading dose and allows you to operate all hydraulic functions.
- Compatible with the ISOBUS system (option).
- The floor conveyor and the spreading beam are hydraulically driven, which enables the machine to be accurately calibrated.
- The hydraulically operated hydraulic shutters (left/right) and the possibility of half-folding the beam make it possible to reduce the working width by half in order to avoid overlaps.
- The hydraulically folding tarpaulin of the hopper as standard equipment of the machine guarantees the high comfort of its operation.
- The longitudinal leaf spring placed in the line of the drawbar reduces the load on the tractor hitch, even on uneven surfaces.
- Tandem spreader with Boogie type suspension with rear steering axle
- The basic equipment of the spreader also includes a drawbar support, lighting system and a dual-circuit brake system.

TYTAN TD PREMIUM

SPREADERS WITH SELF-SUPPORTING TIGHT HOPPER



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TECHNICAL SPECIFICATIONS:

MODEL		TYTAN 7TD PREMIUM	TYTAN 8TD PREMIUM	TYTAN 10TD PREMIUM
load capacity [kg]	nominal	5500	6500	8000
	in the field	8000	9000	11000
adapter width [m]		1,8	1,8	1,8
pto rotations [rpm]		540	540	540
working width [m]	4-shaft vertical adapter	4÷6	4÷6	4÷6
	2-shaft vertical adapter	8÷12	8÷12	8÷12
	horizontal / shredding adapter	—	—	—
standard tires		400/60-15,5	400/60-15,5	500/50-17

MODEL		TYTAN 11TD PREMIUM	TYTAN 13TD PREMIUM	TYTAN 18TD PREMIUM
load capacity [kg]	nominal	9000	10000	14000
	in the field	12000	13000	16000
adapter width [m]		2,0	2,0	2,0
pto rotations [rpm]		540	540	540
working width [m]	4-shaft vertical adapter	—	—	—
	2-shaft vertical adapter	8÷12	8÷12	8÷12
	horizontal / shredding adapter	12÷24	12÷24	12÷24
standard tires		400/60-22,5	500/60-22,5	550/60-22,5

ADVANTAGES:

- A four-chain, hydraulically controlled floor conveyor (11 mm diameter links) allows the material to be transported freely towards the adapter.
- The loading hopper tailgate in the basic equipment of the machine separates the loading hopper from the adapter, thanks to which the weight does not press against the shafts when starting the spreader.
- The tub structure of the hopper ensures tightness and comfort during everyday work.
- The sprung axle suspension guarantees a smooth ride even in difficult terrain.
- Depending on the customer's requirements, the spreaders can be equipped with a top or bottom hitch.
- The tandem chassis ensures the appropriate distribution of weight to the soil surface, minimizing its compaction.
- Convenient control of the floor conveyor speed by means of a potentiometer (standard) or the Starter Spread / Starter Spread Pro controller (option).
- The extensive standard equipment of the machine includes, among others: a pneumatic brake system, wheel fenders, lighting system, drawbar support and wide-angle shaft.

TYTAN 20 / 24

EFFICIENT AND DURABLE



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TECHNICAL SPECIFICATIONS:

MODEL		TYTAN 20	TYTAN 24
load capacity [kg]	nominal	14000	18000
	in the field	16000	20000
adapter width [m]		2,0	2,0
pto rotations [rpm]		1000	1000
working width [m]	2-shaft vertical adapter	8÷12	8÷12
	horizontal / shredding adapter	12÷24	12÷24
standard tires		550/60-22,5	600/55-26,5



ADAPTER COVER

The rear adapter cover, which is standard equipment of each TYTAN 20 and 24, prevents the material from spilling out during transport and protects the adapter against possible damage.

ADVANTAGES:

- The longitudinal leaf spring placed in the line of the drawbar effectively improves comfort and safety during work and transport.
- The axles with tracking control allow the wheels of the spreader to turn when cornering, in line with the direction of travel of the tractor.
- The use of the two-axle sprung suspension ensures appropriate weight distribution and optimisation of the drawbar pressure on the hitch.
- The large contact area of the spreader wheels with the soil surface minimises unit pressure, thus protecting the soil structure.
- The convenient, stepless, hydraulically controlled floor conveyor adjustment facilitates the operator's work.
- A four-chain conveyor (2 pairs) with 14 mm diameter links ensures durability and long life.
- The spreader can be equipped with one of three optional controllers and with three different types of adapters (2-shaft vertical, 2-shaft horizontal, shredding), or with a capacity attachment.
- The extensive standard equipment of the machine includes, among others: a hydraulic tailgate, a rear adapter cover, a pneumatic brake system, road lighting, and a drawbar support.

TYTAN 30 / 36

THREE-AXIS SPREADERS



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TECHNICAL SPECIFICATIONS:

MODEL		TYTAN 30	TYTAN 36
load capacity [kg]	nominal	20000	22000
	in the field	22000	24000
adapter width [m]		2,0	2,25
pto rotations [rpm]		1000	1000
working width [m]	2-shaft vertical adapter	8÷12	8÷12
	horizontal / shredding adapter	12÷24	12÷24
standard tires		550/60-22,5	600/55-26,5



THREE-AXLE CHASSIS

The use of a three-axle chassis allows the spreader to be operated even in difficult field conditions. The spreader also works well when turning at headlands, thanks to the use of the 1st and 3rd (self-aligning) axles in the chassis.

ADVANTAGES:

- The three-axle chassis ensures perfect weight distribution of the machine, reduces the pressure on the tractor hitch and allows the use of large loading hoppers.
- The spreader is perfect for large-scale farms thanks to its impressive load capacity, which can carry up to 24 tonnes in the field.
- The tub structure of the hopper and the robust chassis guarantee safe and trouble-free operation.
- The longitudinal leaf spring placed in the line of the drawbar effectively improves comfort during work and transport.
- In TYTAN 30/36 spreaders, the hydraulic drive of the floor conveyor is operated by a special gear box designed to transfer heavy loads.
- The key working elements of the adapter are made of the highest quality steel.
- The spreader can be equipped with one of three optional controllers and with different types of adapters: 2-shaft vertical, 2-shaft horizontal (TYTAN 30), 3-shaft horizontal (TYTAN 36), shredding adapter, or with a capacity attachment.
- The extensive standard equipment of the machine includes, among others: a hydraulic tailgate, a rear adapter cover, a pneumatic brake system, road lighting, and a drawbar support.



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TECHNICAL SPECIFICATIONS:

MODEL		APOLLO 6	APOLLO 8	APOLLO 10
load capacity [kg]	nominal	5000	6500	8000
	in the field	7500	9000	11000
adapter width [m]		1,5	1,5	1,5
pto rotations [rpm]		540	540	540
working width [m]	2-shaft vertical adapter	8÷12	8÷12	8÷12
	2-shaft horizontal adapter	12÷24	12÷24	12÷24
standard tires		18,4-30	18,4-34	18,4-38

MODEL		APOLLO 11	APOLLO 14	APOLLO 16
load capacity [kg]	nominal	9000	11000	13000
	in the field	12000	14000	16000
adapter width [m]		1,5	1,5	1,5
pto rotations [rpm]		540	1000	1000
working width [m]	2-shaft vertical adapter	8÷12	8÷12	8÷12
	2-shaft horizontal adapter	12÷24	12÷24	12÷24
standard tires		23,1 R26	28,1 R26	650/75 R32

ADVANTAGES:

- Large wheels for lower rolling resistance and good load capacity and manoeuvrability.
- The tub structure of the hopper guarantees tightness and comfort during everyday work.
- A hydraulically controlled, two-chain floor conveyor with 14 mm diameter links moves the material smoothly towards the adapter.
- The loading hopper mounted directly on the axle allows for a significant increase in the spreader's stability.
- The longitudinal leaf spring placed in the line of the drawbar reduces the load on the tractor hitch, even on uneven surfaces.
- A wide selection of hoppers, with a capacity from 5 to 16 tonnes, allows you to adapt the spreader to the needs of your farm.
- Possibility to control the floor conveyor with a standard potentiometer, or with one of 3 optional controllers: Starter Spread, Starter Spread Pro or SUPERIOR.
- The extensive standard equipment of the machine includes, among others: a hydraulic tailgate, mechanical support for the drawbar, lighting system and pneumatic brake system.

APOLLO PREMIUM

SPREADERS WITH A WIDE ADAPTER



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TECHNICAL SPECIFICATIONS:

MODEL		APOLLO 8 PREMIUM	APOLLO 10 PREMIUM	APOLLO 11 PREMIUM
load capacity [kg]	nominal	6500	8000	9000
	in the field	9000	11000	12000
adapter width [m]		1,8	1,8	2,0
pto rotations [rpm]		540	540	540
working width [m]	2-shaft vertical adapter	8÷12	8÷12	8÷12
	horizontal / shredding adapter	12÷24	12÷24	12÷24
standard tires		18,4-34	18,4-38	23,1 R26

MODEL		APOLLO 13 PREMIUM	APOLLO 14 PREMIUM	APOLLO 16 PREMIUM
load capacity [kg]	nominal	10000	11000	13000
	in the field	13000	14000	16000
adapter width [m]		2,0	2,0	2,0
pto rotations [rpm]		540	1000	1000
working width [m]	2-shaft vertical adapter	8÷12	8÷12	8÷12
	horizontal / shredding adapter	12÷24	12÷24	12÷24
standard tires		580/70 R38	28,1 R26	650/70 R32

ADVANTAGES:

- The adapter is much wider than the section of the hopper, it can easily take even heavy, straw manure.
- The large wheels of the spreader protect the soil structure and facilitate manoeuvring and travel even in difficult working conditions.
- A hydraulically controlled floor conveyor ensures smooth feeding of the material towards the adapter.
- The chain links of a mining-grade conveyor with 14 mm diameter links ensure durability and long operation.
- The drive transmission by means of short shafts prevents the generation of vibrations, and the overload clutches protect the entire drive system against impacts.
- A robust, tight and steep loading hopper ensures very good manure spreading and its handling.
- A wide range of adapters and controllers makes it extremely easy to set up APOLLO PREMIUM as required.
- The extensive standard equipment of the machine includes, among others: a hydraulic tailgate, mechanical support for the drawbar, lighting system and pneumatic brake system.



THE MACHINE IS AVAILABLE
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TECHNICAL SPECIFICATIONS:

MODEL		PL 6 (RIGID AXLE)	PL 6 (STEERING AXLE)
load capacity [kg]		6200	6100
net weight [kg]		2060	2160
total length [mm]		9000	9000
load part width [mm]	standard	2400	2400
	with extension	2900	2900
standard tires		400/60-15,5	400/60-15,5



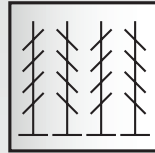
INCREASED LOAD AREA

By equipping the platform with additional, optional boards, you can increase the total load area to 17.4m², thanks to which the transport of larger items is not a problem.

ADVANTAGES:

- The floor is hydraulically lowered to the ground, allowing easy loading of machines and other materials.
- The PL 6 Platform is available with both a rigid and a steering axle.
- The movable hitch on the beam of category II or III facilitates manoeuvring and reduces the turning radius.
- The robust structure and 45 mm thick boards ensure that the platform has a nominal load capacity of over 6 tonnes.
- The mechanical transport lock and the pneumatic brake system improve safety when driving and loading.
- Special holders for fastening belts allow for additional protection of transported materials and increase the stability of the platform during operation.
- The standard loading area of 6x2.4 m provides a large space that can be optionally increased to 6x2.9 m.
- The platform can be additionally equipped with simple railings, or special railings – for transporting bales, which widens the scope of its use.

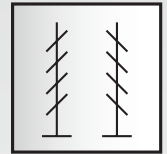
ADAPTER TYPES



Vertical 4-shaft adapter

Adapter is intended above all for spreading cows manure. Characterised by aggressive tear material to pieces and high capacity.

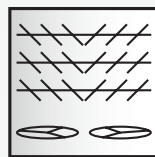
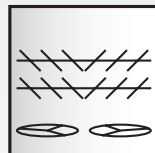
Working width: 4–6 m



Vertical 2-shaft adapter

Universal adapter, ideal for fertilization different type of manure, works also with lime.

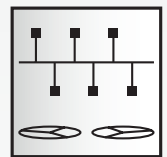
Working width: 8–12 m



Horizontal + spinner disc adapter

Adapter ideal for lime fertilization, peat, compost and other materials which needs high precision of crumble and dispersion.

Working width: 12–24 m



Shredding + spinner disc adapter

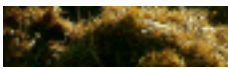





Adapter with simple construction, ensures intense and evenly crumbling of material, ideal for lime.

Working width: 12–24 m



Capacity adapter

A spreader equipped with a set of special top extensions and capacity increasing adapter with hydraulically opened rear wall changes so, that the machine becomes a trailer with automatic unloading.

TYPE		4-SHAFT VERTICAL ADAPTER	2-SHAFT VERTICAL ADAPTER	HORIZONTAL + DISC ADAPTER	SHREDDING + DISC ADAPTER
	fresh manure	+++	++	—	—
	rotten manure	+++	+++	++	+
	chicken manure	++	++	+++	++
	compost, peat	+	++	+++	+++
	calcium	—	++	+++	+++
	slime	—	+	++	+++

— NOT RECOMMENDED

+ ACCEPTABLE

++ GOOD

+++ PERFECT





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DEALER



APOLLO PREMIUM

UNIVERSAL SPREADERS

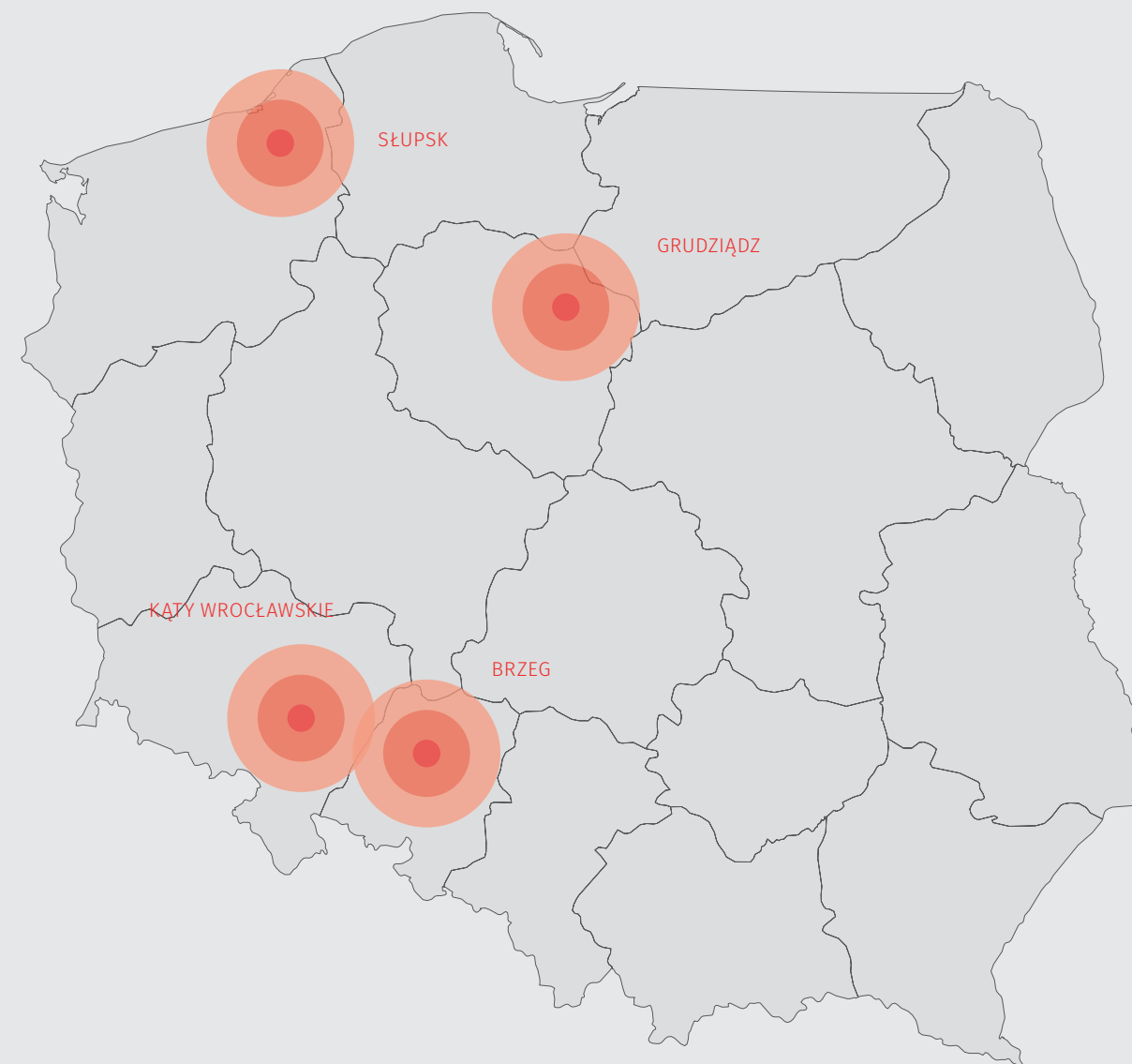




UNIA is the largest Polish manufacturer of agricultural machinery. It manufactures nearly 25,000 of machines per year, of which over 10,000 are exported to 60 countries around the world. To build them, it uses 100,000 tonnes of top quality steel per year.

FOUR FACTORIES

UNIA produces its machines and farm products in four factories (Grudziądz, Brzeg, Słupsk and Kąty Wrocławskie). Their total production area is 11.5 hectares with almost 1,000 employees. The employees are equipped with modern design offices, machining centres and lasers to maintain excellent part repeatability. The apple mark is now well recognised on many European and world markets, and Polish farmers do not associate it with the ploughs of the former Unia Grudziądz only any longer.



MANURE FERTILISATION

Like mineral fertilisation, manure fertilisation is subject to increasingly stringent regulations. From the environmental point of view, the minerals contained in natural fertilisers can be as destructive to the environment as those contained in granulated fertiliser. That is why in the total fertilisation balance, they are subject to the same rules. From the agricultural point of view, it is an equally or even more valuable fertiliser as it is enriched with precious organic matter which has an influence on the humus content of the soil. Higher humus content means greater water storage capacity, the development of the so-called soil life, and overall improvement of soil structure.

Organic fertilisation is obviously supplemented with additional mineral components. In the latter case, great importance is generally attached to the precise fertiliser distribution on the field surface while this is not always the case in manure. And yet it is an equally important element of fertilisation. Even distribution of the components delivered to the field together with manure is a prerequisite for optimised overall fertilisation.

Even distribution of organic fertilisers

is an important factor influencing the economic result of organic fertilisation.

Proper fertilisation guarantees, inter alia, the following:

- optimal use of minerals on the field surface;
- fast decomposition of manure and availability of components for plants;
- easy mixing of the fertiliser with the soil during cultivation;
- minimising the risk of the clogging of cultivating tools with manure;
- reducing the “felt” layer formation at the bottom of the furrow to limit moisture absorption;
- the possibility of reducing mineral fertilisation expenditure.



APOLLO PREMIUM

The tunnel spreaders are increasingly popular. They are featured by large wheels which provide excellent driving in the field, even in extremely difficult terrain conditions. Large diameter of tyres ensure easy work in the most difficult terrain conditions. Large tyre width and wide wheel track preventing rolling on the tractor's tracks reduce soil compaction and rut formation. The wide wheel track also means greater stability of the machine on uneven ground. As a result, the spreaders of this type are chosen by the most demanding farmers.

The Apollo Premium series brings together all these features and offers even more. These models are featured by a wide adapter, much wider than the trailer box. This unique solution significantly affects the quality and performance of the machine's key work unit. It is also possible to choose the adapters according to the needs of the farm. The leaf spring drawbar shock absorption system significantly increases the comfort of work, both on the road and in the field, and at the same time reduces structure overload. As a result, Apollo Premium spreaders are at the top of the list of competitive products.

Wide adapter

Apollo Premium spreaders are equipped with a wide adapter located just behind the trailer box and not inside it. In Apollo 11 Premium and larger models, the adapter is 2 m wide, which is 50 cm more than the box clearance. This ensures that the manure is evenly drawn from the tank sides without energy loss. The large diameter of the vertical adapter shafts makes it easier to take the material and spread it over the full working width, and reduces powertrain overload. The adapter works more smoothly and achieves higher throughput. Its forward-leaning position ensures even material intake, without spreading, and even spreading pattern.

Thanks to the use of a wide adapter, the excellent driving characteristics of the tunnel spreader are combined with the great performance of classic spreaders equipped with a wide box.



Models

The Apollo Premium spreaders are designed to meet the requirements of both smaller farms (e.g. with a cattle herd of 20–30 pieces) and larger farms requiring a high level of performance. The smallest model in the series requires a tractor of approx. 80 HP. The maximum load capacity for single-axle models is 16 tonnes. For those who expect even greater load capacities, the two-axle Apollo 24 Premium model is available to hold up to 20 tonnes of fertiliser. The use of a double axle reduces the unit pressure on the soil and the hydraulically lowered drawbar loads the tractor's hitch if there is little manure left inside the trailer box.

Apollo Premium	Box volume [m ³]	Nominal load capacity [t]	Max. load capacity [t]	
8	7,5+3	6,5	9	
10	10+3	8	11	
11	11+3	9	12	
13	12+3,5	10	13	
14	14+3,5	11	14	
16	16,5+3,5	13	16	
24	20+3,5	18	20	

DRIVING CHARACTERISTICS

Trailer boxes of Apollo Premium spreaders are smaller in width, but have a sufficiently large volume and a relatively low loading height. This is because the box floor is lowered. The box is mounted directly on the axle. In this case, the rigid axle is the optimum solution as it guarantees the stability of the spreader, even on a sloping ground. The vibration damping is thanks to large-size tyres and sprung drawbar.



Low centre of gravity

The trailer box is mounted directly on the axle, which significantly increases the stability of the spreader. In combination with its large wheel track, Apollo Premium is perfect for working in difficult terrain, even on hilly terrain.

Comfort and stability

The longitudinal leaf spring placed in the line of the drawbar is a very effective solution improving comfort and safety at work. It provides exceptional stability while driving and reduces the load on the tractor's hitch, even on uneven ground. With the three-stage position adjustment, height of the drawbar can be adapted to any model of the tractor.



Large wheels

The large-diameter wheels reduce rolling resistance and ensure excellent off-road performance. The weight of the machine is distributed over a large area of soil to prevent excessive compaction and rut formation. The wheels do not clog, even if used with a large amount of fresh manure and on a slippery, wet ground. With the Apollo Premium spreaders, manoeuvres are extremely efficient and comfortable.



Grassland use

Tires with a cube protector, optionally available, provide additional soil and turf protection. Cattle production and grassland are inseparable. Grassland manure fertilisation is a common practice in many farms. Thanks to meadow tires combined with large-diameter wheels, this procedure does not cause rut formation and turf damage.



Soil protection

The wheels of the Apollo Premium spreader are wider than those of the tractor so that the weight can be distributed over an even larger area. The field remains even and rut-free after the travel and work in high humidity conditions does not end up getting stuck.



ROBUSTNESS AS STANDARD

The strong powertrain with overload protection is a guarantee of trouble-free operation. Solid conveyor chains placed in large diameter socket wheels ensure machine durability. Strong axles and brakes selected to match the load capacity of the spreader ensure safety. All these features are ensured by the Apollo Premium spreader design engineers.

Tight and strong box

Made of 3-mm thick Domex sheet metal, is a perfect compromise between box strength and machine weight. The structure is tight to ensure the transport of loose and semi-liquid materials.



Powertrain

With short rollers. Short shafts, used in place of one long shaft, smoothly transmit the power and do not generate vibrations.

Hydraulic conveyor drive

Hydraulic drive means flexibility. The feed speed is smoothly controlled by means of an oil flow regulator. Even feed rate ensures that the equal manure dose is maintained. The power from the hydraulic motor is transmitted to the conveyor via a heavy-duty transmission.



Wide-angle shaft

Available as standard, it ensures smooth operation when cornering and a long service life.



Large-diameter socket wheels

The large diameter of the socket wheels reduces overload and wear on the chains. The self-cleaning wheel profile prevents the accumulation of manure under the chains.



Overload clutches

The overload and one-way clutches protect the adapter and the entire powertrain of the spreader and tractor against shocks.

Easy chain tensioning

The adjustment screws located in a well accessible place make it easier to operate the tensioners and the strong springs keep the chains tensioned.

Strong conveyors

The number of floor conveyors is adapted to the requirements of the machine. In Apollo 13 Premium and smaller models, one conveyor ensures easier operation. In larger models, two conveyors are used to handle high loads. The Apollo Premium spreader conveyors are made of very strong mining chains with 14-mm links.



CONTROL

Efficient control system is a prerequisite for making full use of the spreader. The control system provides a high level of comfort and functions improving its quality, efficiency and precision. One of the functions is the automatic dose maintenance, regardless of the travel speed, to guarantee the proper mineral balance on the field surface.

RBS valve

Uses all the functions of a well-equipped spreader with a tractor with a small number of hydraulic outlets. One outlet with a constant output can support both the conveyor drive and additional functions, such as box tailgate, adapter covers and deflectors.



Starter Spread

Is an easy-to-use controller to adjust the conveyor feed speed directly from the cab with the possibility of viewing operating parameters. In the "pro" package with a conveyor speed sensor and tailgate opening indicator, the controller precisely sets of the manure dose in t/ha or in m3/ha using the fertiliser chart supplied with the spreader.

Electronic controller

Ensures remote control of the extension speed directly from the tractor cab. It is operated using the Starter Spread or Superior computer.



Superior

Is an advanced computer with extensive functionality. It enables precise control of the conveyor feed and automatic maintenance of the fertilisation dose, regardless of the travel speed. It can operate hydraulic functions (deflectors, adapter cover and the box tailgate), and its large, colour display shows operating parameters and messages. The touch panel and ergonomic joystick make operation of the spreader a sheer delight. Thanks to the compatibility with other UNIA machines equipped with Superior (the so-called small ISOBUS), it is possible to use one computer for various tasks and reduce the number of terminals in the tractor.



	Standard	Starter Spread Basic	Starter Spread Pro*	Superior *
hydraulic adjustment of the conveyor speed	+	+	+	+
electronic conveyor control from the cabin	-	+	+	+
box tailgate opening indicator	-	-	+	+
precise setting of the fertiliser dose in m3/ha or t/ha	-	-	+	+
maintaining the dose regardless of the travel speed	-	-	-	+
computer-based operation of hydraulic functions	-	-	-	+

*available models: Apollo Premium 11-24



Manual oil flow controller

Is used to precisely adjust the speed of the floor conveyor. It is located above the drawbar in a well accessible place.

Tailgate opening indicator

Is supplied with the Starter Spread and Superior controller and is used for precise setting of the fertiliser dose.

Hydraulic oil filter

Comes with the electronic oil flow controller. It guarantees failure-free and precise operation, even in difficult conditions.












HEART OF THE SPREADER

The adapter is a key working element of the spreader. The quality of work depends mainly on the operation of the adapter. Due to a huge variety of fertilisers distributed by the spreader, various types of adapters have been developed to ensure the right shredding and spreading effect. The adapter can be quickly changed to adapt the Apollo Premium spreader to fertilisation with different types of manure and to transport of bulk material.

Adapter selection

Proper grinding and mixing with soil during cultivation operations is a key parameter that guarantees even distribution of the fertiliser on the field surface, even at low doses. This leads to a rapid breakdown of organic matter and ensures good use of nutrients by plants.

Various fertiliser properties require a well-thought-out selection of adapter. The Tytan Premium spreader adapters are universal. They can be used for many different types of fertilisers, but the right choice gives the best possible result.

SELECTION OF THE ADAPTER TYPE	  		
	2-shaft vertical adapter	Horizontal adapter + disc	Shredding adapter + disc
	Fresh manure ++	—	—
	Dry manure +++	++	+
	Chicken manure ++	+++	++
	Com-post, peat ++	+++	+++
	Lime ++	+++	+++
	Sludge +	++	+++
— not recommended + acceptable			
++ good +++ very good			



2-shaft vertical adapter

Two vertical, spiral shafts equipped with exchangeable tines and blades made of Hardox steel intensively tear up the manure and spread it to a width of up to 12 m. High throughput and aggressive operation make this type of adapter especially suitable for working with manure, even if it contains a large amount of straw placing high demands on the adapter. The 2-shaft vertical adapter can also be used for other fertilisers, such as compost, chicken manure and lime. Fertilisers that are easy to spread are scattered by means of the discs located in the lower part of the shafts which scatter the material exiting the lower part of the trailer box.

The 2-shaft vertical adapter is usually used by owners of cattle farms which use cattle manure which is difficult to process. To increase the use of the spreader during the season, the adapter can also be used for liming.

Application

Universal adapter, perfect for spreading different types of manure and suitable for liming.

Working width:
8-12 m



Operating elements

Replaceable elements made of Hardox steel are characterized by high resistance to damage and wear.



Powerful drive

Durable adapter gears are additionally protected by an overload and one-way clutch.



Application

Perfect for fertilising with lime, peat, compost and other materials that require high precision of shredding and spreading.

Working width:
12-24 m



Horizontal shafts

Spiral shafts equipped with exchangeable fingers shred the fertiliser which is then transferred to the discs.



Spinner discs

Large-diameter discs with adjustable blades spread the shredded fertiliser evenly over a considerable width.



Shredding + spinner disc adapter

A single horizontal shaft equipped with a set of hammers suspended on chains is the component responsible for shredding the material. It is enclosed in a rigid housing and spins at a high speed ensuring smooth collection and very precise shredding of the fertiliser. The shredded material is transferred to the spinner discs and evenly spread over a large width.

Precise shredding of the material is particularly important if lime and other loose materials, such as compost or peat, are used for fertilisation. It allows to achieve a uniform spreading even at low doses. Its other assets are simple design and moderate price.

The shredder can be a perfect supplement to the vertical adapter on farms which use the spreader for a variety of tasks, both for manure fertilisation and fertilisation with lime or sludge from a biogas plant.



Flail adapter

Chain-mounted hammers moving at high speed intensively crush the material and protect the drive against shock.



Simple design

One horizontal large-diameter shaft means fewer gears, lower purchase price and simpler operation.

Application

Simple design ensures intensive and even material shredding, perfect for lime.

Working width:
12-24 m

2-shaft horizontal + spinner disc adapter

Two horizontal adapter shafts scarify and shred the material, which falls onto the sowing discs. The tailgate is hydraulically raised for inspection purposes, but during operation, it is in the lowered position and directs the fertiliser to the discs. The lower part of the tailgate is hinged, which prevents the formation of blockage at higher doses of fertiliser.

The advantage of the horizontal adapter is that it precisely shreds the mass and operates at a large working width, which makes it perfect for fertilising with lime, peat, compost and other easily shredded fertilisers. It is not recommended for straw and fresh cattle manure.

The horizontal adapter is chosen by farmers who prefer liming with a spreader and those who use loose natural fertilisers, especially in smaller doses which require the highest precision of spreading.

ADDITIONAL EQUIPMENT

With a wide range of optional components, Apollo Premium spreaders can be adapted to the individual needs of each farm.

Capacity attachment

Ensures efficient transport of bulk materials, e.g. chopped grass and corn to the silo. Requires disassembly of the adapter and the box tailgate.



Hydraulic tailgate

Prevents the manure from falling down on the adapter shaft so that it is easier to start it. Ensures optimal filling of the box with manure without spillage and evenly starts the spreading.



Mechanical deflectors for the vertical adapter

Simple and effective solution to limit the spreading width at the edge of the field.



Cover of the vertical adapter

Hydraulically raised. Secures the adapter during transport. In some countries, it is required by law.



Deflectors for the horizontal adapter

Mechanically adjustable. They limit the width of the manure or lime spread through the sowing discs, e.g. at the edge of the field.

Hydraulic deflectors for the vertical adapter

Operated in a convenient way directly from the tractor cab. They also act as a cover of the vertical adapter during transport.



Hydraulic support foot

Ensure safer and more comfortable machine disconnecting after work.



Wheel mudguards

Protect the machine and the tractor from soil contamination and manure that breaks away from the protector while driving.



APOLLO PREMIUM

STANDARD EQUIPMENT:

- wide adapter (1.8 or 2.0 m)
- hydraulic conveyor drive
- sprung bottom drawbar on a longitudinal leaf spring
- mechanically adjustable drawbar support
- 1-line air brake system
- handbrake
- lighting installation
- wide angle PTO shaft

ACCESSORIES AT EXTRA CHARGE:

- trailer box tailgate
- rear cover of the vertical adapter
- mechanical or hydraulic deflectors for the vertical adapter
- mechanical deflectors for the horizontal/shredding adapter
- capacity attachment
- wheel mudguards
- hydraulic support
- RBS distributor
- Starter Spread basic controller
- Starter Spread pro with a tailgate opening indicator
- Superior computer
- 2-line air brake system
- hydraulic brake system
- K80 ball hitch
- tyre options (for more information, contact your dealer)

Technical Data APOLLO PREMIUM

APOLLO PREMIUM	8	10	11	13	14	16	24
Nominal load capacity [t]	6,5	8	9	10	11	13	18
Load capacity on field [t]	9	11	12	13	14	16	20
Box capacity [m3]	7,5+3	10+3	11+3	12+3,5	14+3,5	16,5+3,5	20+3,5
Overall dimensions: length/width/height [m]	7,30 / 2,77 / 2,70	7,00 / 2,77 / 2,95	8,00 / 2,80 / 3,00	8,05 / 2,80 / 3,20	8,60 / 3,09 / 3,00	8,60 / 2,93 / 3,20	8,95 / 2,60 / 3,42
Loading height [m]	2,4	2,65	2,55	3	2,6	3	3,05
Box dimensions: length/width/height [m]	4,34 / 1,46-1,96 / 1,18	4,34 / 1,46-1,96 / 1,37	5,16 / 1,50-2,30 / 1,40	5,16 / 1,53 / 1,70	5,68 / 1,50-2,30 / 1,40	5,68 / 1,50-2,30 / 1,75	6,50 / 1,50-2,30 / 1,83
Number of conveyors	1	1	1	1	2	2	2
Adapter width [m]	1,8	1,8	2	2	2	2	2
PTO revolutions	540	540	540	540	1000	1000	1000
Total weight [kg]	4100	4200	4500	4800	5730	5880	5650
Power demand [HP]	80	90	80-100	80-120	100-120	120-150	120-130
Tyres [standard]	18,4x34	18,4x38	23,1 R26	580/70 R38	28,1 R26	650/75 R32	23,1 R26



Field tests

Together with industry specialists and research centres, the spreaders are precisely tested against the uniformity of the fertiliser spread, rolling resistance, energy loads in the drive system, fuel consumption as well as axle and drawbar loads.



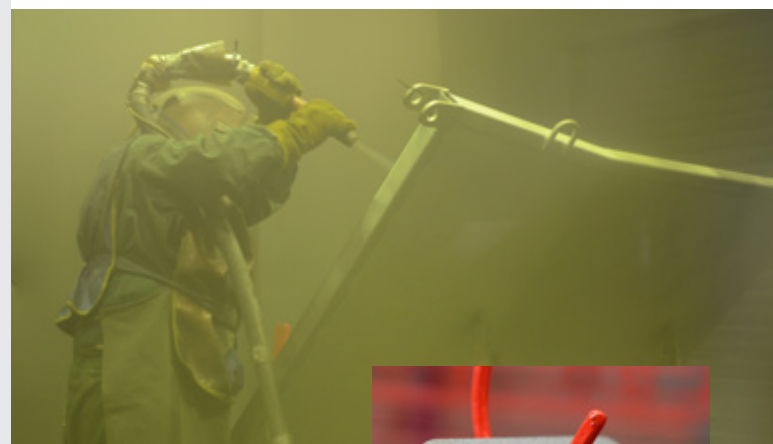
QUALITY

Based on many years of experience in the production of agricultural machinery, UNIA specialists developed highly advanced production technologies that guarantee the highest quality in machines designed for working in difficult conditions. Manure spreaders exposed to aggressive substances corrosive to metal require special care in the process of applying the paint coating and at the stage of preparing steel for painting. That is why Apollo Premium spreaders use painting processes adapted to the work needs and conditions, and steel preparation technologies that guarantee the strong bonding of the corrosion protection layer and the painted surface.



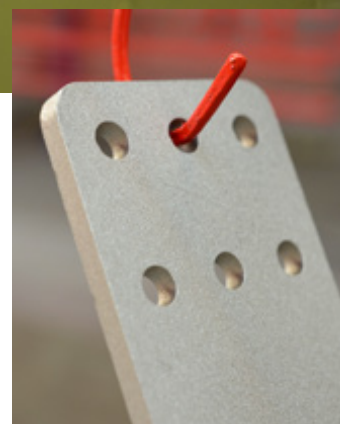
Modern assembly line

The assembly is carried out in accordance with the highest standards provided for machines working in difficult conditions..



Surface preparation

The powder coating is preceded by shot blasting to achieve a matt surface and ensure that the coat of paint can adhere to it perfectly.



Powder coating

A modern powder paint shop was created to provide the highest quality paint coating.

After application, electrostatically charged powder particles adhere perfectly to metal surfaces. Then the painted elements are baked at the right temperature guaranteeing the formation of a coating resistant to external factors and mechanical damage.

The frame and box are spray painted. In this case, two layers are applied: a primer layer and the main coat of paint.



Green dust-free painting

Modern painting chambers prevent harmful substances from getting into the environment. Powder that does not settle on the painted parts is recovered.



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