

PRODUCT CATALOGUE



35 SIPMA

For 35 years SIPMA S.A. successfully offers rich variety of agricultural machines on the domestic and foreign market.

We produce agricultural equipment of the best quality, paying special attention to the situation on the market, as well as to individual needs of our clients

We specialize ourselves in producing balers and bale wrapping machines, still developing our offer in new products of SIPMA.

Choose products of SIPMA and choose quality!

The Mission of SIPMA

To reach excellence in everything we do, with creativity and professionalism at work, preserving our basic values, caring for our customers and employees alike, and facilitating personal development.

> Leszek Kepa President of SIPMA S.A.



Modern constantly supervised production process and experienced technical staff is a guarantee of high quality products offered by SIPMA S.A. Products are subjected to detailed testing and conformity assessment in the Research and Development Center and the safety of their use testifies CE mark.







































DISC MOWERS

SIPMA KD 2620 SPRINT NEW PRODUCT SIPMA KD 3020 SPRINT NEW PRODUCT SIPMA KD 3025 SPRINT

SIPMA disc mowers with side and central suspension are machines with modern design, solid frames and proven functionality. The are used to mow all kinds of green crops dedicated to direct feeding, for hay or for ensiling (haylage).

SIPMA KD 2620 SPRINT NEW PRODUCT SIPMA KD 3020 SPRINT NEW PRODUCT







SIPMA KD 2620 SPRINT

SIPMA KD 2620 SPRINT and SIPMA KD 3020 SPRINT are rearhitched disc mowers with side-suspension. They are modern, lightweight and simple design machines.

Welded frame from closed and bent metal profiles

is lightweight and guarantees high durability. It facilitates easy hitching of the disc mower to the three-point linkage of the tractor, with high comfort and efficiency of work.

Mower bar side suspension

is simple, but makes the mower perfectly follow the terrain with equal pressure on the ground.

Modern SIPMA mower cutterbar

with quick knife replacement system in standard that allows shortening service time to minimum. It features high durability. reinforced skids and cutting discs, and replaceable counter-blades. A reduction in unit ground pressure has been achieved through the use of a wider cutting bar. The increased working diameter of the discs allows a reduction in their rotational speed, which translates into increased durability of the bearings and gears of the cutterbar.



MODERN SIPMA MOWER CUTTERBAR

Safety spring fuse

allow for tilting the mower bar backwards when running into an obstacle, which protects the machine components from damage.

SIPMA PTO shaft

with one-way clutch ensures smooth stopping of the machine rotating parts and protects the disc drives from damage.

Mouldboards fitted behind the mower bar

enable adjusting the forage width for the devices used in the further stages of harvesting.

Front and rear openable covers

facilitate servicing of the machine.

Disc mower design

enables transporting them vertically on the tractor side.

Relief spring system

with adjustment gear assures optimum pressure of the mowing bar on the ground.

Wide mowing range of cutting bar

(from -12° to +24°) enables work on wavy and mountain fields.

Hydraulic actuator

allows lifting the disc mower to its transport position and when u-turning at the headland.

Mowing height adjustment system

operated with the upper link of the tractor three point linkage helps setting the proper mowing height.

SIPMA KD 3025 SPRINT



SIPMA KD 3025 SPRINT rear-hitched disc mower with central suspension guarantee perfect ground copying and equal cutting height across the entire width of the cutterbar.

Welded frame from closed and bent metal profiles

is lightweight and guarantees high durability. It facilitates easy hitching of the disc mower to the three-point linkage of the tractor, with high comfort and efficiency of work.

Mower bar central suspension

guarantee perfect terrain copying along with even pressure, which ensures an equal cutting height across the entire width of cutterbar.

Modern SIPMA mower cutterbar

with quick knife replacement system in standard that allows shortening service time to minimum. It features high durability, reinforced skids and cutting discs, and replaceable counter-blades. A reduction in unit ground pressure has been achieved through the use of a wider cutting bar. The increased working diameter of the discs allows a reduction in their rotational speed, which translates into increased durability of the bearings and gears of the cutterbar.



CUTTING DISC WITH QUICK KNIFE REPLACEMENT

Hydraulic collision protection system

allow for tilting the mower bar backwards and lifting it up when running into an obstacle, which protects the machine components from damage.

SIPMA PTO shaft

equipped with one-way friction clutch ensures smooth stopping of the machine rotating parts and protects the disc drives from damage.

Mouldboards fitted behind the mower bar

enable adjusting the forage width for the devices used in the further stages of harvesting.

Front and rear openable covers

facilitate servicing of the machine.

The design of the mower allows it to be transported in three positions:

- · vertically to the side of the tractor;
- vertically at the rear of the tractor;
- · horizontally at the rear of the tractor.

Relief spring system

with adjustment gear assures optimum pressure of the mowing bar on the around.

Wide mowing range of cutting bar

(from -12° to +24°) enables work on wavy and mountain fields.

Hydraulic actuator

allows lifting the disc mower to its transport position and when u-turning at the headland.

Mowing height adjustment system

operated with the upper link of the tractor three point linkage helps setting the proper mowing height.



| MODEL | | KD 2620 SPRINT | | |
|--------------------------------|---------|----------------|--|--|
| Suspension type | | side | | |
| Mowing width | m | 2,6 | | |
| Mowing height | | | | |
| minimum | mm | 43 | | |
| maximum | mm | 73 | | |
| Number of discs | pcs. | 6 | | |
| Number of cutting knives | pcs. | 12 | | |
| PTO rotation speed | rpm | 540 | | |
| Disc rotation speed | rpm | 3150 | | |
| Working speed | km/h | ≤15 | | |
| Work efficiency | ha/h | ≤2,6 | | |
| Power demand | kW (HP) | 45 (61) | | |
| Equipment | | | | |
| PTO shaft | | • | | |
| Dimensions in working position | | | | |
| length | mm | 4550 | | |
| width | mm | 1330 | | |
| height | mm | 1160 | | |
| Weight | kg | 600 | | |

| ment, × – unavailable |
|-----------------------|
| γ |

| KD 3020 SPRINT | KD 3025 SPRINT |
|----------------|----------------|
| side | central |
| 3,0 | 3,0 |
| | |
| 43 | 45 |
| 73 | 76 |
| 7 | 6 |
| 14 | 12 |
| 540 | 540 |
| 3150 | 2750 |
| ≤15 | ≤15 |
| ≤3 | ≤ 3,5 |
| 50 (68) | 60 (82) |
| | |
| • | • |
| | |
| 4990 | 4850 |
| 1330 | 1750 |
| 1160 | 1450 |
| 640 | 1000 |



TEDDERS

SIPMA PT 520 SALSA SIPMA PT 525 SALSA SIPMA PT 670 SALSA SIPMA PT 675 SALSA

Tedders are machines that support the process of drying hay by tedding the freshly cut, short-stemmed green plants. The advantage of these machines is gentle and uniform spreading of the mown swath, which facilitates aeration and significantly speeds up drying. In our offer you can find mounted and trailed tedders.

SIPMA PT 520 SALSA SIPMA PT 670 SALSA



SIPMA PT 520 SALSA

SIPMA PT 520 SALSA and SIPMA PT 670 SALSA mounted tedders are characterized by high efficiency. Machines guarantee optimal and equal spread of mowed material.

Support frame

has a compact and robust design with low weight.

Gears

are made of high-strength materials. Their working parts are submerged in an oil bath, which guarantees a long service life of the machine.

Rotors

with optimal diameter and number of arms, ensure smooth, consistent operation of the machine and low power requirements.

The hydraulic system

the tedder is equipped with (a pair of single-acting hydraulic cylinders), enables folding and unfolding of the machine for transport or working position. After folding machine to transport position, hydraulic cylinders are blocked automatically, what secure them against accidental unfold.

Spread angle

obtained by adjusting the angle of inclination of the rotors, enables adjusting the machine to the material arranged in various thicknesses swaths.

Tedding tines

with a diameter $\varphi = 10$ mm, are made of high-quality spring steel.

Tine loss protections

prevent from loss of tines when they crack.

Wheels

thanks to using the optimal sizes of tires they provides low rolling friction during operation, even in harsh field conditions. The use of additional guards provides adequate protection against material winding around machine wheels, enabling smooth operation even with troublesome material.

Swivel wheels

facilitate work at the edge of the field and prevent the material from being thrown outside the working range.

Feeler wheel

provides excellent terrain copying in difficult working conditions. Works great on uneven surfaces - minimizes the contact with ground, maintaining longer service life and ensuring the purity of tedded material.



SIPMA PT 525 SALSA SIPMA PT 675 SALSA



SIPMA PT 675 SALSA

Trailed tedders SIPMA PT 525 SALSA and SIPMA PT 675 SALSA are characterized by high efficiency. Machines guarantee optimal and equal spread of mowed material. Dedicated to work at small and medium farm with tractors with low power and low lifting capacity. Lowering the chassis to transport position is done by hydraulic cylinder.

Support frame

has a compact and robust design, which is perfect for intensive and hard work.

Gears

are made of high-strength materials. Their working parts are submerged in an oil bath, which guarantees a long service life of the machine.



GEAR

Rotors

with optimal diameter and number of arms, ensure smooth, consistent operation of the machine and low power requirements.

The hydraulic system

the tedder is equipped with (chassis acutator and a pair of single-acting hydraulic cylinders), enables folding and unfolding the machine to set it to the transport or working position. After folding machine to transport position, hydraulic cylinders are blocked automatically, what secure them against accidental unfold.

Spread angle

obtained by adjusting the angle of inclination of the rotors, enables adjusting the machine to the material arranged in various thicknesses swaths.

Tedding tines

with a diameter $\varphi = 10$ mm, are made of high-quality spring steel.



TEDDING TINES

Tine loss protections

prevent from loss of tines when they crack.

Wheels

thanks to using the optimal sizes of tires they provides low rolling friction during operation, even in harsh field conditions. The use of additional guards provides adequate protection against material winding around machine wheels, enabling smooth operation even with troublesome material.

Swivel wheels

facilitate work at the edge of the field and prevent the material from being thrown outside the working range.

Feeler wheel

provides excellent terrain copying in difficult working conditions. Works great on uneven surfaces - minimizes the contact with ground, maintaining longer service life and ensuring the purity of tedded material.

| MODEL | | PT 520 SALSA |
|----------------------------------|---------|--------------|
| Aggregation method | | mounted |
| Working width | mm | 5200 |
| Number of rotors | pcs. | 4 |
| Number of rotor arms | pcs. | 6 |
| Diameter of rotor | mm | 1200 / 1600 |
| Rotor wheels size | | 16 x 6.5 - 8 |
| Running gear wheels size | | × |
| PTO rotation speed | rpm | 540 |
| Power demand | kW (HP) | 32 (44) |
| Equipment | | |
| PTO shaft | | • |
| tine loss protections | | • |
| feeler wheel | | • |
| axle cover | | • |
| Dimensions in working position | | |
| length | mm | 2150 |
| width | mm | 5450 |
| height | mm | 1710 |
| Dimensions in transport position | | |
| length | mm | 2150 |
| width | mm | 3000 |
| height | mm | 2570 |
| Weight | kg | 600 |

ullet – standard, O – additional equipment, \times – unavailable

| PT 525 SALSA | PT 670 SALSA | PT 675 SALSA |
|--------------|--------------|--------------|
| trailed | mounted | trailed |
| 5200 | 6700 | 6700 |
| 4 | 6 | 6 |
| 6 | 6 | 6 |
| 1200 / 1600 | 1200 / 1600 | 1200 / 1600 |
| 16 x 6.5 - 8 | 16 x 6.5 - 8 | 16 x 6.5 - 8 |
| 23 x 5 - 6 | × | 23 x 5 - 6 |
| 540 | 540 | 540 |
| 30 (40.8) | 44 (60) | 42 (57) |
| | | |
| • | • | • |
| • | • | • |
| • | • | • |
| • | • | • |
| | | |
| 3100 | 2150 | 3050 |
| 5450 | 7880 | 7880 |
| 2910 | 1700 | 2750 |
| | | |
| 3900 | 2150 | 3900 |
| 3130 | 3000 | 3130 |
| 2900 | 3800 | 4100 |
| 840 | 770 | 1020 |



RAKES

SIPMA ZK 350 WIR SIPMA ZK 450 WIR SIPMA ZK 455 WIR SIPMA ZK 650 WIR SIPMA ZK 720 SPINNER

Raking swaths is a very important element of the entire process of harvesting and conservation of green forage. Using rakes ensures obtaining a suitable quality of forage, does not damage fragile parts of grass, does not decrease their nutritional value and it significantly influences the efficiency and quality of working with the next machines in the technological line - round balers.

SIPMA ZK 350 WIR SIPMA ZK 450 WIR



SIPMA ZK 350 WIR and SIPMA ZK 450 WIR rakes are designed to rake green fodder, dried green fodder, hay and straw.

Welded body

with articulated fitting of the front frame allows mounting the rake on the tractor three-point linkage and ensures comfortable operation and excellent tracking of the terrain.

Oil transmission

ensures long-lasting and reliable operation.

Raking arms

with three double tines (SIPMA ZK 350 WIR) or four double tines (SIPMA ZK 450 WIR) ensure efficient raking of forage as well as uniform and permeable swaths.

Tine loss protections (additional equipment)

prevent from loss of tines when they crack.

Adjustable screen

allows to set the appropriate width of the formed swaths.

Easily accessible crank

enables the stepless adjustment of the height of the raking tines from the ground.

Wide tires

ensures easy and comfortable work.

Transport position

facilitates comfortable transport and storage of the rake. Readjustment of the rake into the transport position (without the need of using any tools) is possible due to foldable raking arms and lifted safety guards.

Tandem-type chassis

prevents contamination of the forage with soil and quick wear of the tines as well as ensures accurate raking of the material. This solution is especially recommended in fields with local inequalities.

Additional height adjustment

(SIPMA ZK 450 WIR) of the tandem-type chassis allows more accurate set up of the rake's operation height.

Feeler wheel

(SIPMA ZK 450 WIR) ensures the best mapping of the area, pure raking in difficult work conditions and it improves driving of the machine. It's perfect for irregular surfaces - tines of rake don't have any contact with the ground, they less wear and tear and they maintain a longer life



SIPMA ZK 455 WIR





The SIPMA ZK 455 WIR trailed rake is designed for raking green forage, dried green forage, straw and hay. Designed to work at small and medium-sized farms. Characterized by a low power requirement. Lifting for transport is done hydraulically by hydraulic cylinders mounted on the drawbar and chassis.

Oil transmission

ensures long-lasting and reliable operation.

Wide tires

ensures easy and comfortable work.

Transport position

facilitates comfortable transport and storage of the rake. Readjustment of the rake into the transport position (without the need of using any tools) is possible due to foldable raking arms and lifted safety guards.

Raking arms

with four double tines ensure efficient raking of forage as well as uniform and permeable swaths.

Adjustable screen

allows to set the appropriate width of the formed swaths.

Feeler wheel

ensures the best mapping of the area, pure raking in difficult work conditions and it improves driving of the machine. It's perfect for irregular surfaces - tines of rake don't have any contact with the ground, they less wear and tear and they maintain a longer life.

SIPMA ZK 650 WIR





Rake SIPMA ZK 650 WIR is designed to rake the green fodder, dried green fodder, straw and hay. It has two rotors with inside layering of the forage.

Working width

is adjusted hydraulically from 6.5 to 7.2 m and allows for setting the desired width of swaths.

Easily accessible crank

enables the stepless adjustment of the height of the raking tines from the ground.

Welded body

with articulated fitting of the front frame allows mounting the rake on the tractor three-point linkage and ensures comfortable operation and excellent tracking of the terrain.

Raking arms

 $2\,\,\mathrm{x}$ 11 pieces with 3 double raking fingers each, ensure effective raking and even arrangement and airy swaths.

Tine loss protections (additional equipment)

prevent from loss of tines when they crack.

4-wheel chassis

with front rotational wheels ensure smooth running and exact tracking of the terrain.

Rear twist-beam axis

connected by a tie rod with the articulated front frame ensures comfortable operation at headlands.

Hydraulic rake folding

into the transport position, up to the width of 2.4m and height lower than 4 m facilitates transport on public roads.

Three-dimensional terrain tracking

allows for very clean collection of the raked material.

SIPMA ZK 720 SPINNER



SIPMA ZK 720 SPINNER rake is equipped with two rotors with swath deposition on the side of the machine is intended to rake green forage, dried green forage, straw and hay. Construction of rakes enables to form one or two swaths

Working width

6.5 m in case of single swath disposal or 7.2 m in case of two swath disposal, with hydraulic adjusting of rotors.

Support frame

from closed and bent metal profiles ensures high durability and reliability during everyday exploitation. Along with front frame enable mounting rakes on tractor three-point linkage and ensure unparalleled working comfort and perfect ground following.

Raking arms

 2×11 pieces with 4 double raking fingers each, ensure effective raking of the swath and the arrangement of flat surfaces and airy swaths.

4-wheel chassis

with front rotational wheels ensure smooth running and exact tracking of the terrain.

Easily accessible crank

enables the stepless adjustment of the height of the raking tines from the ground.

Hydraulic raking height adjustment (additional equipment)

allows to adjust the height of the raking tines without leaving the tractor.

3D ground following

ensures really clean collection of raked material.

Rear steering axle

connected by rods to the articulated front frame, it ensures comfortable work at headlands.

Spring-based rotors support

enables to set optimal pressure of rotors to the ground.

Oil transmission

ensures long-lasting and reliable operation.

Hydraulic rake folding

into the transport position, up to the width of 2.83 m and height of 4 m facilitates transport on public roads without necessity to dismantling raking arms.

Tine loss protections

prevent from loss of tines when they crack.



RAKING ARMS

| MODEL | | ZK 350 WIR | ZK 450 WIR | |
|----------------------------------|----------|---------------|---------------|--|
| Aggregation method | | mounted | mounted | |
| Working width | mm | 3500 | 4500 | |
| Raking bank width | mm | 600 - 1400 | 800 - 1600 | |
| Number of rotors | pcs. | 1 | 1 | |
| Diameter of rotors | mm | 2625 | 3500 | |
| Number of raking arms | pcs. | 9 | 11 | |
| Number of tines on raking arm | pcs. | 3 | 4 | |
| Wheel size | | × | × | |
| Rake set wheel size | | 15 x 6.00 - 6 | 15 x 6.00 - 6 | |
| Maximum speed | km/h | 10 | 10 | |
| Power demand | kW (HP) | 25.5 (35) | 25.5 (35) | |
| Equipment | | | | |
| PTO shaft | | • | • | |
| tandem-type chassis | | • | • | |
| feeler wheel | | × | • | |
| tine loss protections | | 0 | 0 | |
| Dimensions in working | position | | | |
| length | mm | 3210 | 4200 | |
| width | mm | 3500 | 4500 | |
| height | mm | 1110 | 1200 | |
| Dimensions in transport position | | | | |
| length | mm | 3210 | 4200 | |
| width | mm | 1370 | 1620 | |
| height without rakes | mm | 1200 | 1280 | |
| height with rakes | mm | 1750 | 2200 | |
| Weight | kg | 397 | 530 | |

| – standard, ○ – additional ed | uipment, × – unavailable |
|---|--------------------------|
|---|--------------------------|

| ZK 455 WIR | ZK 650 WIR | ZK 720 SPINNER |
|---------------|------------------|------------------|
| trailed | trailed | trailed |
| | | |
| 4500 | 6500 - 7200 | 6500 - 7200 |
| 800 - 1600 | 800 -1800 | 800 - 1500 |
| 1 | 2 | 2 |
| 3500 | 2950 | 3160 |
| 11 | 11 | 11 |
| 4 | 3 | 4 |
| 16 x 6.50 - 8 | 11.5 / 80 - 15.3 | 11.5 / 80 - 15.3 |
| 16 x 6.50 - 8 | 15 x 6.00 - 6 | 15 x 6.00 - 6 |
| 10 | 10 | 10 |
| 22 (30) | 50 (68) | 52 (70) |
| | | |
| • | • | • |
| • | • | • |
| • | × | × |
| 0 | 0 | • |
| | | |
| 5220 | 4800 | 7990 |
| 4500 | 6950 - 7650 | 6500 - 7400 |
| 1110 | 1400 | 2540 |
| | | |
| 3990 | 4800 | 7990 |
| 1730 | 2400 | 2830 |
| 1680 | 3280 | 3150 |
| 2640 | 4000 | 4000 |
| 650 | 1500 | 2150 |
| | | |



VARIABLE CHAMBER ROUND BALER



The new generation SIPMA PZ 2780 SUPRA baler from series 2000 is a machine featuring a variable chamber, which allows to adjust the diameter of the formed bales. Its advantage is its versatility - it performs well both in the harvesting of straw or hay, as well as green fodder for silage.

Variable chamber

based on five seamless belts to form bales from 0.9 to 1.8 m in diameter.

New, reliable camless pick-up

2.2 m wide with pressure roller and pneumatic wheels.

New high-performance feeding and shredding unit

with tilting floor system, equipped with 15 knives, each with individual mechanical protection ensures that the material flows fast and efficiently to the baling chamber. The preset cutting length of 75 mm makes the material perfect for forming properly compacted green fodder bales. Cutting of the collected material makes the bales heavier than bales rolled without cutting, which improves the material handling.



FEEDING AND SHREDDING UNIT

The pick-up drive

is equipped with a semi-automatic clutch for overload protection and the highest safety requirements.

Mechanical baling chamber lock

enables a higher pressing grade which improves efficiency and quality of the pressed material.

Reinforced drive

thanks to the increased strength of the main gearbox, the use of spherical roller bearings at key nodes and reinforced bearings on the belt guide rollers, the use of reinforced chains from renowned manufacturers.

OptiFlow System

ensures smooth and even feeding of the material from the pickup through the chopper to the bale chamber with maximum throughput. This achieves maximum feeding speed and minimises the possibility of the machine becoming clogged. The OptiFlow System enables a maximum degree of crushing and a short bale formation time, ensuring more efficient and economical machine operation.

Rotor tilt bottom system

To push the material into the baling chamber, the rotor tilt bottom simply needs to be lowered with the cab computer panel, the PTO started and and then the rotor bottom returned to its original position.

New, reliable chain lubrication system

based on a mechanical pump with the possibility of setting an individual oil dose for each chain. It reduces the service time and increases life of driver components. Large oil tank capacity minimizes the time of daily machine servicing.

Pressing roller

helps to maintain an even feeding of the picked up material and ensures its initial pressing.

Tool-free adjustment of the pick-up's support wheels

allows you to quickly and easily adjust its working height, adapting it easily to changing terrain conditions and swath density.

Individual knife protection

protects the chopper from stones or other elements that could damage it. It also increases the life of the machine.

Modernised net wrapper

taking into account customer feedback, providing better net feeding and guaranteeing correctly wrapped bales.

Net loading and replacement

in the net binder, located at the rear of the baler, is done from ground level, without the need to climb onto the machine.

Grouped bearing lubrication points

reduce the service time, extend the life of the bearings and increase the comfort of machine operation.

Longer drawbar

with the option of fitting it with 40mm or 50mm diameter hitching eyes and a K80 ball and equipped with a shaft support to ensure its stability when the machine is uncoupled from the tractor.

Modern LED road lighting

for even greater safety on the road after dark.

Wide angle PTO shaft with automatic clutch

ensures possibility of working with the machine at turns and protects the machine against overload damage.

New electronic control system

that monitors the entire bale cycle including automatic net wrapping, with the possibility of defining all the machine parameters, such as the degree of crushing for the three layers of the bale, the bale diameter, the number of net wraps and control of the evenness of the chamber filling.



ELECTRONIC CONTROLLER

Functions of the electronic controller:

- activation and carrying out an automatic cycle of the machine operation;
- · defining the number of binds of a bale with a net;
- control of equal spread of material in the chamber;
- defining a bale diameter and the degree of its compression in three variants:
- 1) the core of a bale and its top surface under constant pressure;
- 2) separate setting of pressure for the core of a bale and its external surface;
- 3) separate setting of pressure of a bale core, external surface and additional increased pressure during the final formation of a bale;
- · supervision and sensor status display;
- indication of the number of bales made, working time, efficiency.

| MODEL | | PZ 2780 SUPRA |
|------------------------------------|---------|---------------|
| Pick-up width | mm | 2200 |
| Chamber type | | belt |
| Bale dimensions | | |
| width | mm | 1200 |
| diameter | mm | 900 - 1800 |
| Maximum number of cutting knives | pcs. | 15 |
| Knives protection | | mechanical |
| Knives operation | | hydraulic |
| Unlocking system | | moving floor |
| Feeler wheels | | pneumatic |
| PTO rotation speed | rpm | 540 |
| Power demand | | |
| without shredding | kW (KM) | 60 (82) |
| with shredding | kW (KM) | 75 (102) |
| Equipment | | |
| PTO shaft with automatic clutch | | • |
| pressing roller | | • |
| twine binder | | × |
| net binder | | • |
| shredder | | • |
| electronic control | | • |
| automatic lubrication of chains | | • |
| grouped bearing lubrication points | | • |
| pneumatic brakes | | 0 |
| hydraulic brakes | | 0 |
| wide tyres 500 / 50 - 17 18PR | | • |
| Dimensions | | |
| length | mm | 5020 |
| working width | mm | 2800 |
| transport width | mm | 2730 |
| height | mm | 3050 |
| Weight | kg | 3550 |

● – standard, O – additional equipment, × – unavailable



FIXED CHAMBER ROUND BALERS

SIPMA PS 1210 CLASSIC
SIPMA PS 1211 FARMA PLUS
SIPMA PS 1221 FARMA PLUS
SIPMA PS 1225 FORTIS
SIPMA PS 2520 KRONOS

SIPMA PS 1210 CLASSIC



The SIPMA PS 1210 CLASSIC is the basic model in the SIPMA range of balers. It is characterized by ease of operation and use, while ensuring long and reliable performance.

Chain type baling chamber

with a hydraulic lock ensures an optimum bale mass for hay, straw and the green fodder for hay silage.

Wide range of additional equipment

allows to customize the machine to own needs.

Press covers made from laminate

protects mobile elements of the machine and make it look dynamic and modern.

Electronic control (additional equipment)

supervises the proper operation of the machine and monitors the process of material collecting and bale forming.



ELECTRONIC CONTROLLER

Functions of the electronic controller:

- · visualization of the currently performed operation;
- · supervision over the bale forming process;
- · diagnostics of sensors and electro-coupling;
- counting the number of wrapped bales and working time.

Coupling device (additional equipment)

enables connecting it with bale wrappers SIPMA OS 7531 MAJA or SIPMA OS 7650 GAJA, thanks to this feature we obtain a bale wrapped in foil in one pass, while saving time and money.



COUPLING DEVICE

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SIPMA PS 1211 FARMA PLUS





The SIPMA PS 1211 FARMA PLUS baler with a chain-type baling chamber works very well when harvesting straw and hay. It can also be used for harvesting green silage.

Chain type baling chamber

ensures the proper pressing of the material without fear of stopping the bale rotation. It allows you to roll any material, regardless of the conditions and the required compression ratio.

Mechanical baling chamber lock

enables a higher pressing grade which improves efficiency and quality of the pressed material.

Press covers made from laminate

protects mobile elements of the machine and make it look dynamic and modern.

Electronic control

supervises the proper operation of the machine and monitors the process of material collecting and bale forming.



ELECTRONIC CONTROLLER

Functions of the electronic controller:

- · visualization of the currently performed operation;
- supervision over the bale forming process;
- · diagnostics of sensors and electro-coupling;
- counting the number of wrapped bales and working time.

Automatic chain lubrication

reduces the service time and increases life of driver components.

Coupling device (additional equipment)

enables connecting it with bale wrappers SIPMA OS 7531 MAJA or SIPMA OS 7650 GAJA, thanks to this feature we obtain a bale wrapped in foil in one pass, while saving time and money.



SIPMA PS 1221 FARMA PLUS





The SIPMA PS 1221 FARMA PLUS baler is equipped with a roller-chain baling chamber. It is designed especially for farmers who want to obtain high quality silage, but it works equally well when harvesting straw and hay.

Innovative, roll-chain type baling chamber

increases additionally the ratio of bale compression, improving quality of haylage and work efficiency.

Mechanical baling chamber lock

enables a higher pressing ratio which improves efficiency and quality of the pressed material.

Press covers made from laminate

protects mobile elements of the machine and make it look dynamic and modern.

Automatic chain lubrication

reduces the service time and increases life of driver components.

Coupling device (additional equipment)

enables connecting it with bale wrappers SIPMA OS 7531 MAJA or SIPMA OS 7650 GAJA, thanks to this feature we obtain a bale wrapped in foil in one pass, while saving time and money.

Electronic control

supervises the proper operation of the machine and monitors the process of material collecting and bale forming.



ELECTRONIC CONTROLLER

Functions of the electronic controller:

- · visualization of the currently performed operation;
- supervision over the bale forming process;
- · diagnostics of sensors and electro-coupling;
- counting the number of done bales and working time.



SIPMA PS 1225 FORTIS



The SIPMA PS 1225 FORTIS baler is a well-equipped model of a fixed-chamber round baler that meets the expectations of the most demanding customers. Thanks to the rotor with 11 cutting knives used in the baler, the machine guarantees fast and efficient work.

Innovative, roll-chain type baler chamber

increases additionally the degree of bale compression, improving quality of haylage and work efficiency.

Mechanical baling chamber lock

enables a higher pressing grade which improves efficiency and quality of the pressed material.

Rotor

ensures fast and efficient flow of material into the pressing chamber.

Pickup

(2,1 m wide) ensures correct pick-up of wide windrow, even when making sharp turns, while the side worm conveyors ensure the flow of material into the channel of the rotor unit.

Shredder (additional equipment)

features 11 shredding knives, ensures that the material flows fast and efficiently to the baling chamber. The preset cutting length of 90 mm makes the material perfect for forming properly compacted green fodder bales. Cutting of the collected material makes the bales 20% heavier than bales rolled without cutting, which improves the material handling.

Automatic chain lubrication

reduces the service time and increases life of driver components.

Wide angle PTO shaft with automatic clutch

ensures possibility of working with the machine at turns and protects the machine against overload damage.

Net binder

protects the bale from loosening, significantly shortens the wrapping time and increases efficiency.

Pressing roller

helps to maintain an even feeding of the picked up material and ensures its initial pressing.

Grouped bearing lubrication points

reduce the service time, extend the life of the bearings and increase the comfort of machine operation.

Coupling device (additional equipment)

enables connecting it with bale wrappers SIPMA OS 7531 MAJA or SIPMA OS 7650 GAJA, thanks to this feature we obtain a bale wrapped in foil in one pass, while saving time and money.

Electronic control

supervises the proper operation of the machine and monitors the process of material collecting and bale forming.



ELECTRONIC CONTROLLER

Functions of the electronic controller:

- · supervision and sensor status display;
- indication of the number of bales made, working time and efficiency;
- control of equal spread of material in the chamber;
- · defining and control of compression ratio;
- activation and carrying out an automatic cycle of the machine operation.



SIPMA PS 2520 KRONOS NEW PRODUCT





The new-generation SIPMA PS 2520 KRONOS from 2000 series is ideal for harvesting forage for haylage in particular, thanks to its rolling chamber. It can also be used for harvesting straw and hay. The machine's extensive range of equipment meets the expectations of the most demanding users.

Roll type baling chamber

(1,20 x 1,25 m) build of 17 durable ribbed rollers, which ensure a high degree of compression and rotation of the bale in the chamber, regardless of the prevailing conditions.

New, reliable camless pick-up

2.2 m wide with pressure roller and pneumatic wheels.

New high-performance feeding and shredding unit

with tilting floor system, equipped with 15 knives, each with individual mechanical protection ensures that the material flows fast and efficiently to the baling chamber. The preset cutting length of 75 mm makes the material perfect for forming properly compacted green fodder bales. Cutting of the collected material makes the bales heavier than bales rolled without cutting, which improves the material handling.

The pick-up drive

is equipped with a semi-automatic clutch for overload protection and the highest safety requirements.

Mechanical baling chamber lock

enables a higher pressing grade which improves efficiency and quality of the pressed material.

OptiFlow System

ensures smooth and even feeding of the material from the pickup through the chopper to the bale chamber with maximum throughput. This achieves maximum feeding speed and minimises the possibility of the machine becoming clogged. The OptiFlow System enables a maximum degree of crushing and a short bale formation time, ensuring more efficient and economical machine operation.

Rotor tilt bottom system

To push the material into the baling chamber, the rotor tilt bottom simply needs to be lowered with the cab computer panel, the PTO started and and then the rotor bottom returned to its original position.

New, reliable chain lubrication system

based on a mechanical pump with the possibility of setting an individual oil dose for each chain. It reduces the service time and increases life of driver components. Large oil tank capacity minimizes the time of daily machine servicing.

Pressing roller

helps to maintain an even feeding of the picked up material and ensures its initial pressing.

Tool-free adjustment of the pick-up's support wheels

allows you to guickly and easily adjust its working height, adapting it easily to changing terrain conditions and swath density.

Individual knife protection

protects the chopper from stones or other elements that could damage it. It also increases the life of the machine.



Net binder

"duck-bill" type, provides direct application of the net straight to the rolling chamber, ensuring a correctly wrapped bale.

Binding system

can accommodate net up to 1.3 m in width and 4500 m in length. The number of wrapped net layers is set on the electronic controller by the operator.

Net loading and replacement

is done from the ground level, without the need to climb onto the machine.

Grouped bearing lubrication points

reduce the service time, extend the life of the bearings and increase the comfort of machine operation.

Double-row barrel bearings

installed on the rollers which work under the highest load, assure long operating life and reliability of the machine.

Hydraulic system

with electrohydraulic power block, which operates all working parts of the machine and assures its steady and optimum performance. The continuous oil cycle in the hydraulic system allows automatic starting of machine functions without manual intervention of the operator.

Automatic lubrication of bearing of wrapping rolls and shredder (additional equipment)

delivers effectively grease to all points by means of pipes thanks to advanced pressure system. The automatic bearing lubrication system makes it possible to reduce the servicing time of the machine by limiting the lubricating activity to filling up a container with lubricating liquid.

Longer drawbar

with the option of fitting it with 40mm or 50mm diameter hitching eyes and a K80 ball and equipped with a shaft support to ensure its stability when the machine is uncoupled from the tractor.

Modern LED road lighting

for even greater safety on the road after dark.

Wide angle PTO shaft with automatic clutch

ensures possibility of working with the machine at turns and protects the machine against overload damage.

Coupling device (additional equipment)

enables connecting it with bale wrappers SIPMA OS 7531 MAJA or SIPMA OS 7650 GAJA, thanks to this feature we obtain a bale wrapped in foil in one pass, while saving time and money.

Electronic control

is responsible for adjustment and supervision over the run cycle of collection, wrapping and unloading of bales. It also monitors the correct operation of the machine mechanisms.



ELECTRONIC CONTROLLES

Functions of the electronic controller:

- activation and carrying out an automatic cycle of the machine operation;
- · defining the number of binds of a bale with a net;
- · control of equal spread of material in the chamber;
- · defining and control of compression ratio;
- · visualization of the currently performed operation;
- · supervision and sensor status display;
- enables control over the pickup, the blades and the tilt rotor floor at any moment of the machine work cycle;
- indication of the number of bales made, working time, efficiency and remaining net in roll.



| MODEL | | PS 1210 CLASSIC | PS 1211 Farma Plus |
|--|---------|--------------------|-----------------------|
| Pick-up width | mm | 2000 | 2000 |
| Chamber type | | chain | chain |
| Number of baling rollers | | × | × |
| Baling chamber dimensions | | | |
| width | mm | 1200 | 1200 |
| diameter | mm | 1200 | 1200 |
| Chamber lock | | hydraulic | mechanical |
| Shredder (maximum number of knives) | pcs. | × | × |
| Knives protection | | × | × |
| Knives operation | | × | × |
| Unlocking system | | × | × |
| Feeler wheels | | steel | steel |
| PTO rotation speed | rpm | 540 | 540 |
| Power demand | | | |
| without shredding | kW (HP) | 40 (55) | 40 (55) |
| with shredding | kW (HP) | - | - |
| Equipment | | | |
| wide angle PTO shaft | | 0 | 0 |
| pressing roller | | × | × |
| twine binder | | • | × |
| net binder | | 0 | • |
| electronic control | | 0 | • |
| automatic chain lubrication | | 0 | • |
| grouped bearing lubrication points | | • | • |
| automatic bearing lubrication | | × | × |
| coupling device | | 0 | 0 |
| wide tyres 400 / 60 - 15,5 | | 0 | • |
| wide tyres 500 / 50 - 17 | | × | × |
| swivel hitch eye (diameter = 50 mm) | | • | • |
| swivel hitch eye (diameter = 40 mm) | | 0 | 0 |
| ball hitch K80 | | 0 | 0 |
| Dimensions | | | |
| length | mm | 3300 | 3300 |
| width | mm | 2400 | 2400 |
| height | mm | 2200 | 2200 |
| Weight | kg | 2010 | 2060 |

| PS 1221 Farma Plus | PS 1225 FORTIS | PS 2520 KRONOS |
|-----------------------|------------------------------|-------------------|
| 2000 | 2050 | 2200 |
| roll-chain | roll-chain | roll |
| 5 | 7 | 17 |
| | | |
| 1200 | 1200 | 1200 |
| 1200 | 1200 | 1250 |
| mechanical | mechanical | mechanical |
| × | O (11) | • (15) |
| × | mechanical | mechanical |
| × | hydraulic | hydraulic |
| × | mechanical / moving floor | moving floor |
| steel | pneumatic | pneumatic |
| 540 | 540 | 540 |
| | | |
| 50 (69) | 55 (75) | 60 (82) |
| - | 70 (95) | 80 (110) |
| | | |
| 0 | • | • |
| × | • | • |
| × | × | × |
| • | • | • |
| • | • | • |
| • | • | • |
| • | • | • |
| × | × | 0 |
| 0 | 0 | 0 |
| • | × | 0 |
| × | • | • |
| • | • | • |
| 0 | 0 | 0 |
| 0 | 0 | 0 |
| | | |
| 3300 | 4100 | 4600 |
| 2400 | 2600 | 2800 |
| 2200 | 2300 | 2500 |
| 2150 | 2630 | 3190 |

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ullet – standard, \circ – additional equipment, \times – unavailable



SIPMA PK 4010 KOSTKA





SIPMA PK 4010 KOSTKA cube baler is excellent straw collecting machine, also effective in collection of hay. The optimum design, excellent operating parameters, as well as high durability and reliability are the reasons why SIPMA S.A. has been manufacturing these machines for more than 30 years, continiously improving them. Almost 100,000 machines were sold to farmers so far.

Pressing chamber design

allows adjusting the pressure force (up to 180 kg/m 3), setting the cube length from 0.3 to 1.3 m and adjusting the plane of the ejected cube.

Balanced crank and piston system

improves the working conditions for the operator by eliminating the harmful effect of vibrations affecting the tractor.

Hydraulic pickup lifting system

increases the safety and comfort of operation.

Double binding device

quickly and accurately binds bales formed by the square baler.

Machine protection devices

ensure long-lasting and safe operation. The one-way friction clutch at the flywheel (900 Nm) protects the drive shaft. Behind the flywheel is the main automatic clutch, which protects the whole machine (with six disc springs). The shear bolts protect the needles and binding apparatuses. In addition, the reel and harvester are equipped with overload clutches.

Electrical installation

enables driving the machine on public roads without additional costs.

Bale chute (additional equipment)

ensures transport of bales directly to trailers towed behind the baler, thus significantly reducing the labour consumption and increasing harvest effectiveness. Moreover, use of the slide increases the pressure ratio.

Wire binding knotter (additional equipment)

mounted on special order.

Wire container

in version with a wire binding knotter, ensures smooth delivery of the wire to the binding apparatus.



Electronic counter (additional equipment)

allows to control the number of made bales.

Hydraulically adjustable drawbar (additional equipment)

improves the comfort of work and shortens the time of moving the machine from transport to working position and back.

Knotter fan (additional equipment)

prevents the accumulation of fine material in the area of the binding apparatuses, eliminating its influence on the binding efficiency.

Feeler wheel of the pickup with tyre (additional equipment)

increase comfort of pickup work and improves the copying efficiency, especially in wetlands.



| MODEL | | PK 4010 KOSTKA | | |
|---|---------|----------------|--|--|
| Pick-up width | mm | 1800 | | |
| Bale chamber width | mm | 460 | | |
| Bale chamber height | mm | 400 | | |
| Bale length - smooth adjustment | mm | 300 - 1300 | | |
| Pressure level | kg /m³ | ≤ 180 | | |
| Pick-up lifting | | hydraulic | | |
| Drawbar setting | | mechanical | | |
| PTO rotation speed | rpm | 540 | | |
| Power demand | kW (HP) | 28.5 (38) | | |
| Recommended parameters of binding twine | | | | |
| nominal linear mass of sisal twine | tex | 4500 - 6700 | | |
| nominal linear mass of propylene twine | m/kg | 300 - 400 | | |
| Equipment | | | | |
| PTO shaft | | • | | |
| bale chute | | 0 | | |
| wire binding knotter | | 0 | | |
| electronic counter | | 0 | | |
| Dimensions | | | | |
| length | mm | 4900 | | |
| width | mm | 2500 | | |
| height | mm | 1600 | | |
| Weight | kg | 1560 | | |

^{● –} standard, O – additional equipment, × – unavailable



ENSILAGE BALER

SIPMA PL 7000 SILO





Ensilage balers are basic machines with the technology for ensiling the fodder in film sleeves. Their functionality makes them usable on farms around the world.

Ensilage baler SIPMA PL 7000 SILO is designed for high-compression filling of plastic sleeves with a length of 75 m and a adjustable diameter of 2.7 / 3,0 meters with material intended for production of silage. Also maize green forage, wet grain, grass (pasture forage), lucerne and clover, beet pulp and brewer's grains can be used to fill the sleeves.

Through complete and homogeneous filling of the film sleeve, the user is able to obtain high-quality forage while minimizing losses. The perfect compression of plant material in the sleeve allows you to obtain a lasting silage.

Ensilaging technology with an ensilaging press reduces the unit costs

compared to silage in silos, eliminating the need to compress the material and investment risk associated with building a silo.

Mobility of the baler

provides high flexibility of storage of the ensilaged material.

Wide belt feeder

ensures easy loading of the material from the transporting equipment and great freedom in relation to the type of ensilaged forage.

Rotor with hydraulic braking system

provides very good compression of the ensilaged bulk, which provides the anaerobic conditions and the correct course of the fermentation process.

Interchangeable overlays of rotor teeth

allow you to extend the service life of the machine.

Electrohydraulic block

that operates all working elements of the machine provides consistent and optimum functions of the machine.



BELT FEEDER

Electronic control

is responsible for adjustment and monitoring of the course of filling the sleeve with ensilaged material.



ELECTRONIC CONTROLLER



- · control of the working elements of the machine;
- performing the automatic operation cycle of the machine;
- control of evenness of the sleeve filling by ensuring a constant speed of the conveyor feeding the material;
- visualization of the currently performed operation.

Ensilaging substances aplicator

gives the possibility to add and mix well preservatives while packing it into the sleeve.

Foil sleeves

make the area of opening for taking forage much smaller than the area of extracting silage from silos, which minimizes losses when the sleeve is opened and the forage is taken from it.





| MODEL | | PL 7000 SIL0 | | |
|-----------------------------------|---------|--------------|--|--|
| Foil sleeve diameter | m (ft) | 2.7 / 3,0 | | |
| Maximum sleeve length | m | 75 | | |
| Aplicator capacity | I | 200 | | |
| Feeder width | mm | 2600 | | |
| Tractor hydraulic pump efficiency | I/min | 100 - 150 | | |
| PTO rotation speed | rpm | 1000 | | |
| Maximum transport speed | km/h | 25 | | |
| Power demand | kW (HP) | 160 (218) | | |
| Dimensions in working position | | | | |
| length | mm | 5800 | | |
| width | mm | 5600 | | |
| height | mm | 2960 | | |
| Dimensions in transport position | | | | |
| length | mm | 7360 | | |
| width | mm | 2560 | | |
| height | mm | 3500 | | |
| Weight | kg | 6500 | | |



BALE WRAPPERS

SIPMA OZ 7500 TEKLA SIPMA OS 7510 KLARA SIPMA OS 7520 MIRA SIPMA OS 7521 MIRA SIPMA OS 7530 MAJA SIPMA OS 7531 MAJA SIPMA OS 7650 GAJA SIPMA OR 7532 DIANA SIPMA OG 9750 LENA



SIPMA OS 7650 GAJA

Technology of hay silage processing into filmwrapped round bales ensures the highest quality of fodder.

The basic machines used in this process are bale wrappers designed to wrap the bales made of semi-dry grass or papilionaceous plants with the dry mass content of 40-50%. The bales are wrapped with a special stretch film, which protects the ensilaged material from air, moisture and light. The ensilage process takes about 6 weeks, after which the fodder is suitable for animals.

SIPMA offers bale wrappers with advanced design features which meet the demands of all users.

Main advantages of the offered technology are:

- · independence from weather conditions;
- · possibility of ensiling small amounts of fodder;
- no losses related to the process of harvesting, ensiling, storage and feeding;
- easy fodder pickup and portioning;
- · low man labour costs;
- · elimination of environmental pollution by silage juices.

SIPMA OZ 7500 TEKLA SIPMA OS 7510 KLARA

Solid frame

made from bent and welded sections, makes the whole design stable and resistant to overloads.

Universal foil film dispenser

used in the SIPMA bale wrappers allows using 0.50 and 0.75 m wide films. The 0.75 m wide bale wrapping film requires only 16 turns of the wrapping table and greatly reduces the wrapping time.

Aluminium milled foil film dispenser rollers

ensure the initial foil stretching, tightness and proper adhesion during the wrapping process.

Bale counter

indicates the current number of foil layers and informs about the end of wrapping process.

Wrapping method

of the loaded bale is that successive film layers overleap each other by 50%. It ensures that the green fodder will be properly stored and efficiently ensiled.



SIPMA OZ 7500 TEKLA



Stationary SIPMA OZ 7500 TEKLA bale wrapper is designed for small and medium size farms. It is installed on the three-point linkage of the tractor.

Tilting table

allows discharging wrapped bales, protecting them from mechanical damage at the same time. After unlocking the latch, the tilt table is lifted by tractor's hydraulic lifting system and the bale rolls back.

Mounted type construction

allows mounting wrapper on the tractor three-point linkage and bale wrapping at the storage areas with the use of a loader.

Specially designed rollers

ensure proper bale wrapping, so that even shapeless bales rotate properly.

Durable, maintenance-free bearings

ensures long and failure-free work.

Foil cutter (additional equipment)

enables cutting off the foil during the rotation of the table after bale unloading.

Bale elevator (additional equipment)

allows putting bales on their bottom (on the right or left side of the bale wrapper).

SIPMA OS 7510 KLARA



Self-loading SIPMA OS 7510 KLARA bale wrapper is mounted to the tractor on the three point linkage and has supporting wheels. It is equipped with a lift arm that picks the rolled-up bales from the rear side and allows for wrapping when the tractor moves forward towards the next bale or towards the place of storage. The machine has a modern universal film dispenser (50 cm and 75 cm wide films) as well as a film cut and hold unit eliminating the need of any interventions except for he installation of new film rolls. The machine is controlled from the tractor cab by means of a hydraulic divider.

Mounted type construction

allows mounting wrapper on the tractor three-point linkage enables high mobility of the wrapper and low labor consumption due to one-person operation.

Wheels rotating around their vertical axis

combined with mounting of the machine on the three point linkage, provide high maneuverability of the tractor-wrapper set.

Drawbar (additional equipment)

enables aggregating the bale wrapper by the tractor's transport fastener.

Foil catcher (additional equipment)

enables catching and cutting foil in difficult weather conditions.

Hydraulic table lock (additional equipment)

prevents the table from rotating on unevenness.

| MODEL | | 0Z 7500 TEKLA | OS 7510 KLARA |
|------------------------------|---------|---------------|---------------|
| Bale dimensions | | | |
| diameter | mm | 1300 | 1200 - 1300 |
| width | mm | ≤ 1250 | ≤ 1300 |
| Maximum bale weight | kg | 1000 | 1000 |
| Foil width | mm | 500 / 750 | 500 / 750 |
| Bale wrapping time | S | ~ 120 | ~ 120 |
| Minimum number of bale wraps | | two times | two times |
| Power demand | kW (HP) | 28.5 (38) | 20 (30) |
| Equipment | | | |
| bale elevator | | 0 | × |
| drawbar (d = 40 mm) | | × | 0 |
| drawbar (d = 50 mm) | | × | 0 |
| foil catcher | | × | • |
| foil cutter | | 0 | • |
| hydraulic table lock | | × | 0 |
| machanical table lock | | × | • |
| Dimensions | | | |
| length | mm | 2600 | 2170 |
| width | mm | 1200 | 1940 |
| height | mm | 1200 | 2150 |
| Weight | kg | 480 | 780 |

ullet – standard, \circ – additional equipment, \times – unavailable

SIPMA OS 7520 MIRA SIPMA OS 7521 MIRA

"Side-back" technological system

allows working in a direction perpendicular or parallel to the direction of the press work (across a field), ensures fast loading of bales, wrapping with foil during the drive until the next bale and high efficiency.

Universal foil film feeder

allows the use of 0.50 and 0.75 m wide films.

Aluminium milled foil film feeder rollers

ensure the initial foil stretching, tightness and proper adhesion during the wrapping process.

Bale elevator

allows for putting bales on their bottom or rolling them on their side surface into the field and also protects the wrapped bale from possible damage during unloading.

Hydraulic film catcher-cutter

works automatically after each bale wrapping process. It provides a considerable acceleration of the wrapping process and its efficiency.

Wide tyres

provide the opportunity to work on wetlands and peat fields.

Autonomous hydraulic power system (additional equipment):

- separates the hydraulic system of the wrapper from the hydraulic system of the cooperating tractor;
- ensures constant and optimal demand of oil supplying the hydraulic block of the wrapper;
- maintains a constant level of oil purity in the system.



SIPMA OS 7520 MIRA



Self-loading bale wrapper SIPMA OS 7520 MIRA is an economical version of the MIRA bale wrappers, mechanically controlled by the lever distributor.

Bale wrapping counter

shows the current number of foil wraps, informs about the end of the bale wrapping cycle and counts number of wrapped bales.

Lever distributor

allow to control the wrapper from the tractor cabin.







LEVER DISTRIBUTOR

SIPMA OS 7521 MIRA



SIPMA OS 7521 MIRA bale wrapper is fully automated self-loading machine, attached to the tractor. Full automation of the process is provided by an advanced control system which allows pre-programming a wrapping cycle.

Advanced hydraulic block

provides lower flow resistance in the hydraulic system and gives more control possibilities thanks to the option of setting the speed of all working elements of the wrapper.

Hydraulic system with Load-Sensing function (additional equipment)

contributes to the reduction of fuel consumption and extends the service life of the tractor's hydraulic pump.

Improvement the work culture of the hydraulic system

through the double reduction of average work pressure and the reduction of power consumption.

Sensor on the loading arm

enables automatic initiation of the wrapping process.

Drive motor brake

makes impossible to move the table during the drive.

Electronic control

ensures fully automatic operation of the machine and control of all the parameters of its operation.



ELECTRONIC CONTROLLER

Functions of the electronic controller:

- manual or fully automatic operation of the wrapper;
- · graphic visualization of current wrapping process;
- · counting the number of wrapped bales;
- programming the number of foil layers (depending on the kind of film used), when reached, the machine passages automatically to next work stage;
- displaying the status of sensors (evaluation of efficiency or inefficiency of their operation) allows to replace damaged sensor, without the need to call the service;
- displaying the sum of wrapped bales since the installation of the electronic control on the wrapper;
- automatic machine setting for work and transport;
- large LCD graphic display showing the actual work parameters;
- smooth adjustment of rotation speed and lifting and lowering of the wrapping table;
- smooth regulation of the speed of lifting and lowering of the loading arm;
- number of table turns can be corrected without interrupting the wrapping process;
- table rotation speed can be corrected without interrupting the wrapping process;
- possibility of pausing the automatic table wrapping mode and resuming it at the storage location;
- foil feeding control an additional sensor of foil stops the bale wrapping process in case of foil breaks or finishes;
- · controling the condition of the oil filter contamination;
- editing all parameters of the automatic mode;
- · foreign language support.



| Bale dimensions | MODEL | | OS 7520 MIRA | OS 7521 MIRA |
|---|----------------------------------|---------|--------------|--------------|
| diameter mm 1200 - 1500 1200 - 1500 width mm ≤ 1250 ≤ 1250 Maximum bale weight kg 1000 1000 Foil width mm 500 / 750 500 / 750 Wrapper drive hydraulic hydraulic hydraulic Bale wrapping time s ~ 60 ~ 60 Oil demand l/min 20 - 90 20 - 90 Power demand kW (HP) ≥ 35 (48) ≥ 35 (48) Equipment bale elevator • • universal foil feeder • • • (500 / 750) • • • foil roll feeder • • • hydraulic foil catcher-cutter • • • electronic control × • • lever distributor • × • electric installation allowing to move on public roads • • wide tyres 400 x 60 - 15,5 • • hydraulic system with Load-Sen | Rale dimensions | | | |
| width mm ≤ 1250 ≤ 1250 Maximum bale weight kg 1000 1000 Foil width mm 500 / 750 500 / 750 Wrapper drive hydraulic hydraulic hydraulic Bale wrapping time s ~ 60 ~ 60 Oil demand l/min 20 - 90 20 - 90 Power demand kW (HP) ≥ 35 (48) ≥ 35 (48) Equipment • • bale elevator • • universal foil feeder (500 / 750) • • foil roll feeder • • (500 / 750) * • foil roll feeder • • (500 / 750) * • foil roll feeder • • (500 / 750) * * lever distributor • × electric installation allowing to move on public roads • wide tyres 400 x 60 - 15,5 • • hydraulic system with Load-Sensing function <td< th=""><th></th><th>mm</th><th>1200 - 1500</th><th>1200 - 1500</th></td<> | | mm | 1200 - 1500 | 1200 - 1500 |
| Foil width | width | mm | ≤ 1250 | ≤ 1250 |
| Foil width mm 500 / 750 500 / 750 Wrapper drive hydraulic hydraulic hydraulic Bale wrapping time s ~ 60 ~ 60 Oil demand I/min 20 - 90 20 - 90 Power demand kW (HP) ≥ 35 (48) ≥ 35 (48) Equipment bale elevator • • • • • • • • • • • • • • • • • • • | Maximum bale weight | kg | 1000 | 1000 |
| Wrapper drive hydraulic hydraulic Bale wrapping time s ~60 ~60 Oil demand I/min 20 - 90 20 - 90 Power demand kW (HP) ≥ 35 (48) ≥ 35 (48) Equipment bale elevator • • universal foil feeder (500 / 750) • • foil roll feeder • • hydraulic foil catcher-cutter • • electronic control × • lever distributor • × electric installation allowing to move on public roads • • wide tyres 400 x 60 - 15,5 • • hydraulic system with Load-Sensing function × ○ autonomous hydraulic power system ○ ○ Dimensions in operating position length mm 4600 width mm 2300 2300 Dimensions in transport position length mm 4600 width mm 2400 height mm 2400 height mm 2400 height mm 2800 | | - | 500 / 750 | 500 / 750 |
| Bale wrapping time s | Wrapper drive | | hydraulic | hydraulic |
| Oil demand | | S | · | , |
| Equipment bale elevator universal foil feeder (500 / 750) foil roll feeder hydraulic foil catcher-cutter electronic control lever distributor electric installation allowing to move on public roads wide tyres 400 x 60 - 15,5 hydraulic system with Load-Sensing function autonomous hydraulic power system Dimensions in operating position length mm 4600 width mm 4000 4600 width mm 4600 4600 width mm 4600 4600 width mm 4000 4000 width mm 4000 4000 | | I/min | 20 - 90 | 20 - 90 |
| bale elevator universal foil feeder (500 / 750) foil roll feeder hydraulic foil catcher-cutter electronic control lever distributor electric installation allowing to move on public roads wide tyres 400 x 60 - 15,5 hydraulic system with Load-Sensing function autonomous hydraulic power system Dimensions in operating position length mm 4600 4600 width mm 4100 4100 height mm 2300 2300 Dimensions in transport position length mm 4600 4600 width mm 4400 4600 width mm 2400 2400 height mm 2400 2400 height mm 2400 2400 | Power demand | kW (HP) | ≥ 35 (48) | ≥ 35 (48) |
| bale elevator universal foil feeder (500 / 750) foil roll feeder hydraulic foil catcher-cutter electronic control lever distributor electric installation allowing to move on public roads wide tyres 400 x 60 - 15,5 hydraulic system with Load-Sensing function autonomous hydraulic power system Dimensions in operating position length mm 4600 4600 width mm 4100 4100 height mm 2300 2300 Dimensions in transport position length mm 4600 4600 width mm 4400 4600 width mm 2400 2400 height mm 2400 2400 height mm 2400 2400 | Equipment | | | |
| foil roll feeder hydraulic foil catcher-cutter electronic control Lever distributor electric installation allowing to move on public roads wide tyres 400 x 60 - 15,5 hydraulic system with Load-Sensing function autonomous hydraulic power system Dimensions in operating position Length mm 4600 4600 width mm 4100 4100 height mm 2300 2300 Dimensions in transport position Length mm 4600 4600 width mm 4400 4600 width mm 2400 2400 height mm 2400 2400 height mm 2400 2400 | bale elevator | | • | • |
| hydraulic foil catcher-cutter electronic control lever distributor electric installation allowing to move on public roads wide tyres 400 x 60 - 15,5 hydraulic system with Load-Sensing function autonomous hydraulic power system Dimensions in operating position length mm 4600 4600 width mm 4100 4100 height mm 2300 2300 Dimensions in transport position length mm 4600 4600 width mm 2400 2400 height mm 2400 2400 height mm 2400 2400 | | | • | • |
| electronic control lever distributor electric installation allowing to move on public roads wide tyres 400 x 60 - 15,5 hydraulic system with Load-Sensing function autonomous hydraulic power system Dimensions in operating position length mm 4600 4600 width mm 4100 4100 height mm 2300 2300 Dimensions in transport position length mm 4600 4600 width mm 2400 2400 height mm 2400 2400 height mm 2400 2400 | foil roll feeder | | • | • |
| lever distributor electric installation allowing to move on public roads wide tyres 400 x 60 - 15,5 hydraulic system with Load-Sensing function autonomous hydraulic power system Dimensions in operating position length mm 4600 4600 width mm 4100 4100 height mm 2300 2300 Dimensions in transport position length mm 4600 4600 width mm 2400 2400 height mm 2400 2400 height mm 2400 2400 | hydraulic foil catcher-cutter | | • | • |
| electric installation allowing to move on public roads wide tyres 400 x 60 - 15,5 hydraulic system with Load-Sensing function autonomous hydraulic power system Dimensions in operating position length mm 4600 4600 width mm 4100 4100 height mm 2300 2300 Dimensions in transport position length mm 4600 4600 width mm 2400 2400 width mm 2400 2400 height mm 2800 2800 | electronic control | | × | • |
| to move on public roads wide tyres 400 x 60 - 15,5 hydraulic system with Load-Sensing function autonomous hydraulic power system Dimensions in operating position length mm 4600 4600 width mm 4100 4100 height mm 2300 2300 Dimensions in transport position length mm 4600 4600 width mm 2400 2400 height mm 2400 2400 height mm 2800 2800 | lever distributor | | • | × |
| hydraulic system with Load-Sensing function autonomous hydraulic power system Dimensions in operating position length mm 4600 4600 width mm 4100 4100 height mm 2300 2300 Dimensions in transport position length mm 4600 4600 width mm 400 4600 width mm 400 4000 width mm 4000 4600 width mm 4000 4600 width mm 2400 2400 height mm 2800 2800 | | | • | • |
| Load-Sensing function autonomous hydraulic power system Dimensions in operating position length mm 4600 4600 width mm 2300 2300 Dimensions in transport position length mm 4600 4600 width mm 2300 2300 Dimensions in transport position length mm 4600 4600 width mm 2400 2400 height mm 2800 2800 | wide tyres 400 x 60 - 15,5 | | • | • |
| Dimensions in operating position length | | | × | 0 |
| length mm 4600 4600 width mm 4100 4100 height mm 2300 2300 Dimensions in transport position length mm 4600 4600 width mm 2400 2400 height mm 2800 2800 | | | 0 | 0 |
| width mm 4100 4100 height mm 2300 2300 Dimensions in transport position length mm 4600 4600 width mm 2400 2400 height mm 2800 2800 | Dimensions in operating position | | | |
| height mm 2300 2300 Dimensions in transport position length mm 4600 4600 width mm 2400 2400 height mm 2800 2800 | length | mm | 4600 | 4600 |
| Dimensions in transport position length mm 4600 4600 width mm 2400 2400 height mm 2800 2800 | width | mm | 4100 | 4100 |
| length mm 4600 4600 width mm 2400 2400 height mm 2800 2800 | height | mm | 2300 | 2300 |
| width mm 2400 2400 height mm 2800 2800 | Dimensions in transport position | | | |
| height mm 2800 2800 | length | mm | 4600 | 4600 |
| | width | mm | 2400 | 2400 |
| Weight kg 1540 1550 | height | mm | 2800 | 2800 |
| | Weight | kg | 1540 | 1550 |

• – standard, O – additional equipment, × – unavailable

SIPMA OS 7530 MAJA SIPMA OS 7531 MAJA SIPMA OS 7650 GAJA

"Front-back" technological system

allows work in the same direction as press works. Such solution ensure fast bale loading and foil-wrapping during ride to the next bale. Coupling with press, ensuring simultaneously baling and wrapping during one ride.

Universal foil film feeder (SIPMA OS 7530 MAJA and SIPMA OS 7531 MAJA)

allows the use of 0.50 and 0.75 m wide films.

Aluminium milled foil film feeder rollers

ensure the initial foil stretching, tightness and proper adhesion during the wrapping process.

Bale elevator

allows for putting bales on their bottom or rolling them on their side surface into the field and also protects the wrapped bale from possible damage during unloading.

Wide tyres

provide the opportunity to work on wetlands and peat fields.

Hydraulic film catcher-cutter

works automatically after each bale wrapping process. It provides a considerable acceleration of the wrapping process and its efficiency.

Adjustable drawbar

the working and transport position enables efficient collection of bales. It also facilitates moving the machine and its transport on access roads (including public roads) to the field.

Autonomous hydraulic power system (additional equipment):

- separates the hydraulic system of the wrapper from the hydraulic system of the cooperating tractor;
- ensures constant and optimal demand of oil supplying the hydraulic block of the wrapper;
- · maintains a constant level of oil purity in the system.



AD ILISTARI E DRAWBAR

SIPMA OS 7530 MAJA



Self-loading bale wrapper SIPMA OS 7530 MAJA is an economical version of the MAJA bale wrappers, mechanically controlled by the lever distributor.

Bale wrapping counter

shows the current number of foil wraps, informs about the end of the bale wrapping cycle and counts number of wrapped bales.

Lever distributor

allow to control the wrapper from the tractor cabin.



BALE WRAPPING COUNTER



LEVER DISTRIBUTOR



SIPMA OS 7531 MAJA



SIPMA OS 7531 MAJA bale wrapper is fully automated self-loading machine, attached to the tractor. Full automation of the process is provided by an advanced control system which allows pre-programming a wrapping cycle.



ELECTRONIC CONTROLLER

Functions of the electronic controller:

- · manual or fully automatic operation of the wrapper;
- · graphic visualization of current wrapping process;
- · counting the number of wrapped bales;
- programming the number of foil layers (depending on the kind of film used), when reached, the machine passages automatically to next work stage;
- displaying the status of sensors (evaluation of efficiency or inefficiency of their operation) allows to replace damaged sensor, without the need to call the service;
- displaying the sum of wrapped bales since the installation of the electronic control on the wrapper:
- automatic machine setting for work and transport;
- number of table revolutions can be corrected without interrupting the wrapping process;
- possibility of pausing the automatic table wrapping mode and resuming it at the storage location;
- · foreign language support.

SIPMA OS 7650 GAJA



SIPMA OS 7650 GAJA bale wrapper is fully automated self-loading machine, attached to the tractor. Full automation of the process is provided by an advanced control system which allows pre-programming a wrapping cycle.

The wrapper is distinguished by an advanced hydraulic system, which was expanded with hydraulically adjustable drawbar. The advantage is also visible in the economics of the wrapping process itself, which saves working time by 12 hours per 1000 bales and reduces fuel consumption by 110 liters per 1000 bales.

With all of the advantages from MAJA bale wrappers series, the bale wrapping machine GAJA has strengthened construction which allows to work with bales that weigh up to 1200 kilograms and an electronic control that shows simulation of work on the display.

Advanced hydraulic block

provides lower flow resistance in the hydraulic system and gives more control possibilities thanks to the option of setting the speed of all working elements of the wrapper.

Hydraulic system with Load-Sensing function (additional equipment)

contributes to the reduction of fuel consumption and extends the service life of the tractor's hydraulic pump.

Improvement the work culture of the hydraulic system

through the double reduction of average work pressure and the reduction of power consumption.

Oil filter contamination control

signals the need to replace it when the permissible level of its contamination is exceeded.

Hydraulically adjustable drawbar

to the working and transport position enables efficient collection of bales. It also facilitates moving the machine and its transport on access roads (including public roads) to the field.

Sensor on the loading arm

enables automatic initiation of the wrapping process.

Loading arm smooth regulation

of the speed of lifting and lowering.

Wrapping table smooth adjustment

of rotation speed and lifting and lowering.

DUO foil feeder (additional equipment)

gives the possibility of wrapping the bale with two rolls of foil at the same time, which in turn significantly reduces the machine's work cycle. This solution allows for the correct bale wrapping after its 10th rotation (for 4 layers of foil).

Drive motor brake

makes impossible to move the table during the drive.

Additional film sensor

an additional sensor of foil stops the bale wrapping process in case of foil breaks or ends.

Large LCD graphic display

enables a simple and intuitive way to enter operating parameters and clearly shows the condition of the wrapper sensors.



Electronic control

ensures fully automatic operation of the machine and control of all the parameters of its operation.



ELECTRONIC CONTROLLER

Functions of the electronic controller:

- · manual or fully automatic operation of the wrapper;
- · graphic visualization of current wrapping process;
- · counting the number of wrapped bales;
- programming the number of foil layers (depending on the kind of film used), when reached, the machine passages automatically to next work stage;
- displaying the status of sensors (evaluation of efficiency or inefficiency of their operation) allows to replace damaged sensor, without the need to call the service;
- displaying the sum of wrapped bales since the installation of the electronic control on the wrapper;
- · automatic machine setting for work and transport;
- large LCD graphic display showing the actual work parameters;
- smooth adjustment of rotation speed and lifting and lowering of the wrapping table;
- smooth regulation of the speed of lifting and lowering of the loading arm;
- number of table revolutions can be corrected without interrupting the wrapping process;
- table rotation speed can be corrected without interrupting the wrapping process;
- possibility of pausing the automatic table wrapping mode and resuming it at the storage location;
- foil feeding control an additional sensor of foil stops the bale wrapping process in case of foil breaks or finishes;
- · controling the condition of the oil filter contamination;
- · editing all parameters of the automatic mode;
- · foreign language support.

| MODEL | | OS 7530 MAJA | OS 7531 MAJA | OS 7650 GAJA |
|--|---------|-----------------|-----------------|-----------------|
| Bale dimensions | | | | |
| diameter | mm | 1200 - 1500 | 1200 - 1500 | 1200 - 1500 |
| width | mm | ≤ 1250 | ≤ 1250 | ≤ 1250 |
| Maximum bale weight | kg | 1000 | 1000 | 1200 |
| Foil width | mm | 500 / 750 | 500 / 750 | 750 |
| Wrapper drive | | hydraulic | hydraulic | hydraulic |
| Bale wrapping time | S | ~ 100 | ~ 100 | ~60 |
| Oil demand | I/min | ≥ 20 | 20 - 40 | 20 - 90 |
| Power demand | kW (HP) | ≥ 35 (48) | ≥ 35 (48) | ≥ 35 (48) |
| Equipment | | | | |
| bale elevator | | • | • | • |
| universal foil feeder (500 / 750) | | • | • | × |
| foil roll feeder | | • | • | • |
| hydraulic foil catcher-cutter | | • | • | • |
| electronic control | | × | • | • |
| lever distributor | | • | × | × |
| electric installation allowing to move on public roads | | • | • | • |
| wide tyres 400 x 60 - 15.5 | | • | • | • |
| hydraulic system with Load-Sensing function | | × | × | 0 |
| autonomous hydraulic power system | | 0 | 0 | 0 |
| DUO foil feeder | | × | × | 0 |
| bale marker | | 0 | 0 | 0 |
| Dimensions in operating posi | tion | | | |
| length | mm | 5760 | 5760 | 5760 |
| width | mm | 3160 | 3160 | 3160 |
| height | mm | 2210 | 2210 | 2210 |
| Dimensions in transport posit | ion | | | |
| length | mm | 5820 | 5820 | 5820 |
| width | mm | 2350 | 2350 | 2350 |
| height | mm | 2430 | 2430 | 2430 |
| Weight | kg | 1360 | 1360 | 1420 |

● - standard, O - additional equipment, × - unavailable

SIPMA OR 7532 DIANA



SIPMA OR 7532 DIANA bale wrapper is fully automated self-loading, tractor-trailed machine. In addition to the conventional wrapping, it can work in the 3D system, which enables the reduction of foil consumption by about 25%. It has full automation of the entire wrapping process, which will be provided by an on-board computer with the possibility of earlier programming of the work cycle parameters.

The wrapper gives choice between:

- · maximum wrapping speed;
- minimal foil consumption.

Wrapper design

apart from conventional wrapping they allow to wrap bale in 2 extra dimensions - 3D bale wrapping. This effect is achieved by tilting the foil feeders. The result of this method of wrapping bales is foil savings of approx. 25%.

"Front-back" technological system

allows work in the same direction as press works. Such solution ensure fast bale loading and foil-wrapping during ride to the next bale. Coupling with press, ensuring simultaneously baling and wrapping during one ride.

Bale elevator

allows for putting bales on their bottom and protects the wrapped bale from possible damage during unloading.

Hydraulic film catcher-cutter

works automatically after each bale wrapping process. It provides a considerable acceleration of the wrapping process and its efficiency.

Wrapping speed

depends on chosen technique of wrapping:

- conventional 2D wrapping wrapping cycle last about 50 seconds and 8 spins of arms are enough to wrap whole bale. The 2D wrapping gives opportunity to save working time;
- 3D wrapping wrapping cycle last about 65 seconds, and is realized in 2 stages: circumferential wrapping with a horizontal arrangement of foil feeders and wrapping bottom of the bale with vertical arrangement of foil feeders. 3D wrapping is more laborious but allows to reduce consumption of foil approx. 25%.

Foil consumption per bale

during conventional 2D wrapping requires: approx. 60 m of foil, while during 3D wrapping amount needed lowers to approx. 45 m.

Wide tyres

provide the opportunity to work on wetlands and peat fields.

Foil feeders

allow the use of 0.75 m wide films.

Aluminium milled foil film feeder rollers

ensure the initial foil stretching, tightness and proper adhesion during the wrapping process.



Tray for 6 extra rolls of foil

enables smooth and economical operation without unnecessary downtime.

Hydraulically adjustable drawbar

makes it easier to relocate the machine and its transport on access roads to the field.

Hydraulic system with Load-Sensing function

contributes to the reduction of fuel consumption and extends the service life of the tractor's hydraulic pump.

Electronic control

ensures fully automatic operation of the machine and control of all the parameters of its operation.



ELECTRONIC CONTROLLER

Functions of the electronic controller:

- manual or fully automatic operation of the wrapper;
- current monitoring of the wrapping process;
- · counting the number of wrapped bales;
- measurement of device operation time [h] with an accuracy of 1 minute;
- ability to program the number of wraps (when it goes over programmed number of wraps - wrapping process stops);
- displaying the status of sensors (evaluation of efficiency or inefficiency of their operation) allows to replace damaged sensor, without the need to call the service;
- large LCD graphic display showing the actual work parameters;
- smooth adjustment of the rotational speed of the arms during operation;
- · ability to program speed of lifting and lowering loading device;
- foil feeding control an additional sensor of foil stops the bale wrapping process in case of foil breaks or finishes;
- · controling the condition of the oil filter contamination;
- displaying the sum of wrapped bales since the device were installed on the wrapper;
- displaying on-screen operating information for the entire current season.

| MODEL | | OR 7532 DIANA |
|---|---------|---------------|
| Bale dimensions | | |
| diameter | mm | 1200 - 1500 |
| width | mm | ≤ 1200 |
| Maximum bale weight | kg | 1000 |
| Foil width | mm | 750 |
| Wrapper drive | | hydraulic |
| Bale wrapping time | S | 50 - 65 |
| Oil demand | l/min | ≥ 35 |
| Power demand | kW (HP) | ≥ 37 (50) |
| Equipment | | |
| bale elevator | | • |
| foil feeders (750) | | • |
| foil roll tray | | • |
| hydraulic foil catcher-cutter | | • |
| electronic control | | • |
| electric installation allowing to move on public roads | | • |
| hydraulically adjustable drawbar | | • |
| wide tyres 340 / 55 - 16 14PR | | • |
| hydraulic system with Load-Sensing function | | • |
| Dimensions in operating position | | |
| length | mm | 5490 |
| width | mm | 3680 |
| height | mm | 2890 |
| Dimensions in transport position | | |
| length | mm | 4230 |
| width | mm | 2380 |
| height | mm | 2890 |
| Weight | kg | 1550 |

● – standard, O – additional equipment, × – unavailable

SIPMA OG 9750 LENA



Serial bale wrapper machine (for non-stop wrapping) SIPMA OG 9750 LENA is designed for wrapping round and square bales. Bales of semi-dry hay (with humidity of 60%), after wrapping with a special stretchy self-adhesive foil, create a foil sleeve of several dozen meters filled with pressed bales of dried green forage intended for haylage. Thanks to the linear arrangement of the bales, the necessity of wrapping the contact surface is eliminated, thanks to which the saving of film can reach 50% compared to conventional wrapping. Bales are wrapped on the spot, so there is no risk of damage related to transport to the storage field.

Self-propelled machine

through the use of the combustion engine with integrated hydraulic pump, the serial wrapper gained full autonomy and independence from the cooperating tractor.

Hydraulic system

ensures constant and optimal use of the machine functions thanks to the electro-hydraulic block that operates all the working elements of the wrapper. Continuous oil circulation in the hydraulic system makes it possible to automatically start the machine's functions without the need to engage the operator.

Automatic wrapping process

it is supervised by the electronic controller. It allows one-man work with the machine, during which the operator concentrates only on placing bales on the wrapper.

Electronic controller

is responsible for controlling and supervising the correct course of the wrapping and bale unloading cycle. It allows to operate each of the wrapper's working elements and monitors the correct operation of its mechanisms.

Functions of the electronic controller:

- activates and performs the automatic operation cycle of the machine:
- · defining the number of wrapping the bale with foil;
- graphic visualization of current wrapping process;
- supervision and displaying the status of sensors;
- · handling of all working elements of the wrapper;
- · supervision over the of foil feeding process;
- possibility of independent movement of the wrapper over short distances.



ELECTRONIC CONTROLLER

Universal feeding table

is adapted to load both round and prismatic bales, so that the user has complete freedom to expand their machine park.

Drive wheels with traction tyres

enable autonomous movement of the wrapper over short distances and, in cooperation with the hydraulic system, provide adequate compression of bales during the wrapping process.

Tool-free adjustment

allows for quick and easy setting of the wrapper, adjusting it to work with bales of various shapes and lengths.

Installing and replacing foil film

takes place from the ground, without need to climb onto the machine.

Two foil film feeders

make it possible to use a 750 mm wide foil film. They are equipped with breaking sensor, which pauses the wrapping process when it detects that the film has run out.

Shield sensors

stop the bale wrapping process when the shield is opened, thus protecting the operator from the risk of injury.

Transport drawbar

enables aggregation of the wrapper with a tractor through a transport hitch.

| MODEL | | OG 9750 LENA |
|--------------------------------|---------|-------------------|
| Dimensions of round bales | | |
| diameter | mm | 1200 - 1800 |
| width | mm | ≤ 1500 |
| Dimensions of square bales | | |
| width | mm | 800 - 1200 |
| height | mm | 1200 - 2000 |
| length | mm | ≤ 2000 |
| Maximum bale weight | kg | 1000 |
| Foil width | mm | 750 |
| Wrapper drive | | combustion engine |
| Maximum performance | bales/h | 100 - 120 |
| Maximum number of foil wraps | | 6 |
| Output of the hydraulic system | I/min | 30 |
| Engine power | kW (HP) | 8.7 (11.83) |
| Dimensions | | |
| length | mm | 5700 |
| width | mm | 2900 |
| height | mm | 3300 |
| Weight | kg | 2530 |



SELF-LOADING STACKING TRAILER

SIPMA WS 6510 DROMADER



SIPMA WS 6510 DROMADER trailer is a multi-purpose self-loading low-chassis trailer with a loading capacity of 6.5 tons. The trailer slips its side fork under a bale and picks it up it from the ground. The bale is then moved by special arms towards the rear part of the body in order to make space for next bales.

Load body design

enables the trailer to collect and transport bales (up to 8 bales with the diameter of 1.2 - 1.5 m), crops and other materials (e.g. sand).

Hydraulic distributor

enables control from the cabin and ensures large comfort of work and high efficiency.

Support foot

increases the stability of the trailer during the loading of heavy green fodder bales and also improves the safety of work.

Pneumatic brakes

on all wheels and hand brake guarantee high safety of work.

Road lights

allow the machine to be used on public roads without incurring additional costs.

Tandem chassis

(rigid axles) and reinforced structure increase durability and resistance providing a load capacity of $6.5\ t.$

Hydraulic acutator

ensures bale unloading to the side, sliding backwards and vertical stacking, enabling adaptation to the different needs of users.

| MODEL | | WS 6510 DROMADER |
|------------------------------------|---------|------------------|
| Capacity | t | 6,5 |
| Maximum bale number | pcs. | 8 |
| Maximum bale weight | kg | 800 |
| Backward dumping angle | | 90° |
| Side dumping angle | | 45° |
| Maximum speed | km/h | 25 |
| Power demand | kW (HP) | 60 (82) |
| Load box dimensions | | |
| length | mm | 4000 |
| width | mm | 2200 |
| height | mm | 370 |
| Dimensions of the stacking trailer | | |
| length | mm | 6440 |
| width | mm | 2630 |
| height | mm | 3200 |
| Weight | kg | 2610 |





SIPMA RB 1200 KRUK SIPMA RB 1500 KRUK

SIPMA RB 1850 KRUK NEW PRODUC



SIPMA RB 1200 KRUK SIPMA RB 1500 KRUK



SIPMA RB 1500 KRUK

SIPMA RB 1200 KRUK and SIPMA RB 1500 KRUK are designed for shredding, feeding or spreading of hay, straw and hay silage in stables or open areas.

Multi-purpose design of the shredder

allows feeding of the hay silage or spreading of straw in stables or open areas. The SIPMA RB 1200 KRUK bale shredder is designed to shred round bale, while the SIPMA RB 1500 KRUK shreds both round and square bales.

Machine control

by three-sectional hydraulic distributor in SIPMA RB 1200 KRUK or by electronic controller in SIPMA RB 1500 KRUK allows for full control over the processing from the tractor driver's seat.

Hydraulically controlled ejector channel

allows for diverting the shredded material directly to the mangers and adjusting the ejection up to 14 m (when spreading straw). The SIPMA RB 1500 KRUK shredder allows control of the ejection channel direction in the range of 200°.

Knife drum

shreds the fed material and feeds it to the discharge rotor shoulder blades, ensuring high discharge and efficiency of the machine. The SIPMA RB 1500 KRUK bale shredder is equipped with two shredding barrels

Grate mounted above the knife drum

ensures an even source of material on the knife drum, protects the machine against clogging and increases its value and reliability.

Mechanical, chain floor conveyor

thanks to the hydraulic drive, it can operate with a variable, steplessly adjustable speed.

Back loading wall

activated by a hydraulic acutator allows for easy and quick loading of the bale onto the machine.

Oil flow regulator in the hydraulic distributor

allows for controlling the speed of the bottom-mounted conveyor, which slides the material on the shredding drum. This enables adapting the linear speed of the conveyor to the type of shredded material and ensures optimal use of the machine's utilization capabilities.

Loading area monitoring system

in the SIPMA RB 1200 KRUK shredder, allows the user to observe the full loading process of the bale. Components, such as a camera with a wide-angle lens located at the rear of the working chamber and large, readable display significantly increase the safety and comfort of machine operation.



SIPMA RB 1850 KRUK NEW PRODUCT





The SIPMA RB 1850 KRUK is a trailed shredder for straw, hay and haylage. The shredder is designed for livestock farms for both straw bedding, which provides protection and absorbs moisture, as well as for feeding. It is also used by gardeners and fruit growers to spread straw between rows of strawberries, for example.

The load box

allows loading of one straw bale with a maximum diameter of 1.8 m or two bales of haylage with a diameter of 1.5 m.

A transverse knife drum

equipped with tines and knives to shred the material, so that the feed is distributed evenly over the entire blower surface.

Adjustment of material shredding

possible due to individual setting and arrangement of the number of knives and takers.

The hydraulically controlled ejection chimney

allows the shredded material to be channelled directly into the feed hoppers and the ejection range can be adjusted to a distance of up to approx. 18 m (e.g. for straw bedding). The rotating ejection chimney has an infinitely variable 300-degreedirectional adjustment, which allows the material to be spread to both the left and right side, ensuring a high throughput and efficiency of the machine.

The belt transmission

driving the knife drum, guarantees guiet and smooth operation.

Hydraulic adjustment of the position of the grate

mounted above the knife drum, ensures even feeding of the material onto the drum, protects the machine from clogging and increases its durability and reliability.

Electronic controller

allows infinite adjustment of all machine functions from the tractor

Functions of the electronic controller:

- · conveyor speed and direction;
- · position of the rear loading flap;
- · position and height of the ejection chimney;
- · movement of the grating over the knife drum;
- · switching the knife drum on and off.

An additional control unit

located at the rear of the machine allows the machine operator to load bales easily and safely.

Two rotor speeds

adjustable via a gearbox according to needs: higher for straw strewing and lower for forage feeding.

Mechanical chain floor conveyor with hydraulic drive

can operate at variable speeds, infinitely adjustable.

A rear loading wall

actuated by hydraulic cylinders allows bales to be easily and quickly loaded into the shredder chamber



| MODEL | | RB 1200 KRUK |
|------------------------------------|---------|--------------|
| Maximum straw spreading range | m | 14 |
| Maximum width of shredded bales | mm | 1200 |
| Maximum diameter of shredded bales | mm | 1200 |
| Expected bale shredding time | min | 3 |
| Bales capacity | pcs. | 1 |
| Load box length | mm | 1350 |
| Load box width | mm | 1300 |
| PTO rotation speed | rpm | 540 |
| Power demand | kW (HP) | 40 (55) |
| Equipment | | |
| PTO shaft | | • |
| electronic control | | × |
| Dimensions | | |
| length | mm | 3400 |
| width | mm | 2000 |
| height | mm | 1850 |
| Weight | kg | 1200 |

 $[\]bullet$ – standard, $\, \circ$ – additional equipment, $\, \times$ – unavailable

| RB 1500 KRUK | RB 1850 KRUK |
|--------------|--------------|
| 15 | 18 |
| 1500 | 1200 |
| 1800 | 1800 |
| 2 | 2 |
| 2 | 2 |
| 2350 | 1600 |
| 1600 | 1400 |
| 540 | 540 |
| 60 (80) | 50 (67) |
| | |
| • | • |
| × | • |
| | |
| 4960 | 4550 |
| 2380 | 2050 |
| 2800 | 2630 |
| 2100 | 2470 |



MINERAL FERTILIZER **DISTRIBUTORS**

SIPMA RN 610 ANTEK SIPMA RN 500 BORYNA



SIPMA RN 1000 OPTIMA NEW PRODUCT

SIPMA RN 1000 OPTIMA PRO NEW PRODUCT

SIPMA RN 1600 OPTIMUS NEW PRODUCT

SIPMA RN 1600 OPTIMUS HD

SIPMA RN 1600 OPTIMUS PRO

Mounted on a three-point hydraulic lift system, two disc SIPMA fertilizers are intended for surface distribution of mineral and crystalline fertilizers over farmlands for basic fertilising and plants nourishing.



SIPMA has a modern sowing hall where, with the help of advanced electronic equipment, sowing tables are prepared for all types of mineral fertilizer distributors on the market. SIPMA has focused the technological development on plant nutrition optimization. SIPMA offers a fertiliser spreading program that conforms to any European standards concerning accurate spreading and border spreading.

Robust frame construction

allowing easy and guick aggregation to the tractor, optimally adapted to the spreader's capacity. It guarantees long-lasting and reliable spreader operation.

Sowing system

made entirely of stainless steel, it ensures that fertiliser is evenly metered onto the spreading discs and precisely distributes the fertiliser over the field surface.

Ergonomics of use:

- · low filling height;
- · tool-free rate and working width adjustment systems;
- hopper filling scale with large inspection holes;
- · set of blades for lower spreading range;
- · calibration test kit and spreading tables.

LIMES boundary seeding system mechanically or electronically controlled (additional equipment)

allows work to be carried out at field boundaries in accordance with fertiliser regulations, while ensuring that the correct application rate is delivered right up to the field boundary, and eliminates economic losses resulting from over-fertilisation or the spreading of fertiliser to neighbouring fields. Used when the first tramline lies in the middle of the spreader's working width. Made of stainless steel.



LIMES BORDER SPREADING SYSTEM

Resilient pendulum stirrer

ensures an even flow of fertilizer to the spreading discs.

Border spreading discs (additional equipment)

enable fertiliser to spread at the edge of the field. Made of stainless steel.

Hydraulic seed control

the dual metering and closing gate system is operated independently for both sides, with the possibility of controlling both closing gates simultaneously. Double-acting slide gates can be quickly opened and closed at the ends of the field using a distributor.

Shut-off valve

(standard equipment) preventing the sliders from opening during travel when the tractor hydraulics are not functioning correctly.

Shape of the agitator

guaranteeing that fertiliser is taken up from the entire width of the hopper.

Fine mesh sieves fitted to the tank

protect the spreader against clumped fertiliser or dirt entering the spreading area. For cleaning, the machines easily tilt upwards and lock into place.

Working parts made of stainless steel

(spreader discs, vanes, hopper bottom sliders and guards) guarantee long-lasting and reliable spreader operation.

Rack stand cover (additional equipment)

mounted on the hopper makes spreader operation independent of weather conditions. Opening by means of a lever, lockable by means of rubber straps. bolted construction to save transport space and reduce shipping costs.

Roll-up cover (additional equipment)

ensures maximum fertiliser protection during rainfall while guaranteeing a maximum opening during filling. Opening by means of a lever, lockable by means of rubber straps. bolted construction to save transport space and reduce shipping costs.

Extensions (additional equipment)

are easily mounted on the main hopper and allow the hopper capacity to be adjusted as required, making the spreader suitable for use on both small and large areas. Simple assembly to the basket, bolted construction which saves transport space and reduces shipping costs.



SIPMA RN 610 ANTEK WITH EXTENSION

LED road lighting and warning signs

improve safety and increase visibility for road users in all conditions. Eliminates the need for portable lighting when the spreader blinds the tractor lights.

SIPMA RN 610 ANTEK SIPMA RN 500 BORYNA





SIPMA RN 610 ANTEK and SIPMA RN 500 BORYNA mineral fertilizer distributors are easy to operate and economical machines designed for smaller and medium-sized farms.

Spreading discs

equipped with two pairs of blades, allow fertiliser spreading in working widths of 10 - 24 m.

Transport wheels

facilitating disconnection of the spreader and manoeuvring around the yard.

Electronic controller (additional equipment)

(only in SIPMA RN 500 BORYNA) supervises fertiliser spreading according to the set operating parameters.



ELECTRONIC CONTROLLER

Functions of the electronic controller:

- electronic speed-dependent seed rate control. The set application rate is always the same after changing the working speed;
- · manual or automatic spreading mode;
- measurement of driving speed by means of a GPS module in automatic mode;
- · control of metering sliders;
- determining the dosing aperture based on selected parameters;
- speed programming in manual mode;
- · half-seeding possible;
- the possibility of adjusting the dosage while driving;
- the possibility of conducting a spin test;
- · measurement of acreage sown and hours worked;
- · bin emptying function;
- activation of border sowing with one-sided reduced rate; operation of LIMES border sowing system;
- · supports many languages.



| MODEL | | RN 610 ANTEK | RN 500 BORYNA |
|--|-----|--------------|---------------|
| Working width | m | 10 -24 * | 10 - 24 * |
| Hopper capacity | - 1 | 610 | 500 |
| with extension 1 x 250 I / 2 x 250 I | - 1 | × | 750 / 1000 |
| with extension 1 x 400 l / 2 x 400 l | 1 | × | 900 / 1300 |
| with extension 1 x 600 l | ı | 1210 | × |
| Maximum load capacity | kg | 1450 | 1350 |
| Filling height | m | 0,98 | 0,95 |
| with extension 1 x 250 l / 2 x 250 l | m | × | 1,10 / 1,25 |
| with extension 1 x 400 l / 2 x 400 l | m | × | 1,18 / 1,41 |
| with extension 1 x 600 l | m | 1,26 | × |
| Filling width | m | 1,96 | 1,73 |
| Total width | m | 2,52 | 2,28 |
| Total length | m | 1,26 | 1,25 |
| Rotation speed of the spreading discs | rpm | 720 | 720 |
| Frame linkage | | Cat. II | Cat. II |
| Basic machine weight | kg | 260 | 240 |
| Control | | | |
| Lever-operated hydraulic control | | • | • |
| shut-off valve | | • | • |
| dose adjustment | | manual | manual |
| half-machine seeding cut-off | | • | • |
| Electronic controller - ARETE | | × | 0 |
| speed measurement | | × | manual / GPS |
| GPS antenna | | × | • |
| controller (display) | | × | monochromatic |
| half-machine seeding cut-off | | × | • |
| Equipment | | | |
| PTO shaft with with shear wheel | | • | • |
| PTO shaft with overload clutch | | 0 | 0 |
| transport wheels | | • | • |
| LED road lighting | | • | • |
| calibration kit | | • | • |
| extension | | 0 | 0 |
| rack stand cover | | × | 0 |
| roll-up cover | | 0 | 0 |
| border spreading discs | | 0 | 0 |
| LIMES boundary seeding system - mechanical | | 0 | 0 |
| | | | |

- ullet standard, ullet additional equipment, imes unavailable
- * depending on the spreading blades and fertilizer spread

SIPMA RN 1000 OPTIMA NEW PRODUCT SIPMA RN 1000 OPTIMA PRO NEW PRODUCT





SIPMA RN 1000 OPTIMA

SIPMA RN 1000 OPTIMA and SIPMA RN 1000 OPTIMA PRO mineral fertilizer distributors are equipped with top solutions for precise fertilizer spreading. They ensure high working efficiency and meet the expectations of the most demanding customers.

Weight system

(only in SIPMA RN 1000 OPTIMA PRO) allows precise dosage of mineral fertilizer spreading, while also contributing to savings for the farm and protection of the environment.

Lateral gearboxes with torsionally flexible clutches

supervise the operation of fertilizer spreading according to the set working parameters.

Spreader hopper

with welded construction for low filling height, made of 3 mm thick steel.

Spreading discs

equipped with two pairs of blades, allow fertiliser spreading in working widths of 18 - 32 m.

Machine tilt indicators

help to position the spreader in the correct position in relation to the ground.



MACHINE TILT INDICATOR

Mud flaps

protect the tractor from contact with the newly seeded fertilizer, at the same time preventing mud from under the tractor wheels from getting onto the spreader's working parts.



MUD GUARD

Transport wheels

facilitating disconnection of the spreader and manoeuvring around the yard; equipped with brakes.



TRANSPORT WHEEL

Electronic controller (additional equipment)

(only in SIPMA RN 1000 OPTIMA) supervises fertiliser spreading according to the set operating parameters.



ELECTRONIC CONTROLLER

Functions of the electronic controller:

- electronic speed-dependent seed rate control. The set application rate is always the same after changing the working speed;
- · manual or automatic spreading mode;
- measurement of driving speed by means of a GPS module in automatic mode;
- · control of metering sliders;
- determining the dosing aperture based on selected parameters;
- speed programming in manual mode:
- half-seeding possible;
- · the possibility of adjusting the dosage while driving;
- · the possibility of conducting a spin test;
- · measurement of acreage sown and hours worked;
- · bin emptying function;
- activation of border sowing with one-sided reduced rate; operation of LIMES border sowing system;
- supports many languages.

Electronic controller with ISOBUS (additional equipment)

(only in SIPMA RN 1000 OPTIMA PRO) supervises fertiliser spreading according to the set operating parameters.



ELECTRONIC CONTROLLER

Functions of the electronic controller:

- electronic speed-dependent seed rate control. The set application rate is always the same after changing the working speed;
- measurement of driving speed by means of a GPS module / ISOBUS socket (speed from tractor) in automatic mode;
- · control of metering sliders;
- determining the dosing aperture based on selected parameters;
- half-seeding possible:
- the possibility of adjusting the dosage while driving;
- the possibility of conducting a spin test;
- · measurement of acreage sown and working hours;
- · emptying hopper function;
- activation of border sowing with one-sided reduced rate; operation of LIMES border sowing system;
- ISOBUS solution:
- · weight system control;
- independent application rate metering to the left/right disc;
- dynamic calibration correction of fertilizer application rate based on information from the weight system during seeding;
- automatic switching on/off of the machine depending on its position in the field, especially on headlands, entrances, exits and wedges;
- automatic switching of the spreader at headland location and field edges;
- option to create field boundaries based on the first tour of the field;
- automatic recognition of the scattered field area;
- GPS parallel driving function driving control by means of indicators on the display;
- field map upload function;
- · variable rate function;
- large, intuitive, touch-screen color display;
- · supports many languages.

| MODEL | | RN 1000 OPTIMA | RN 1000 OPTIMA PRO |
|--|-----|---------------------------------|---------------------------------|
| Working width | m | 18 - 32 * | 18 - 32 * |
| Hopper capacity | 1 | 1000 | 1000 |
| with extension 1 x 500 l / 2 x 500 l | 1 | 1500 / 2000 | 1500 / 2000 |
| Maximum load capacity | kg | 2300 | 2300 |
| Filling height | m | 1,12 | 1,12 |
| with extension 1 x 500 l / 2 x 500 l | m | 1,33 / 1,54 | 1,33 / 1,54 |
| Filling width | m | 2,00 | 2,00 |
| Total width | m | 2,30 | 2,30 |
| Total length | m | 1,47 | 1,54 |
| Rotation speed of the spreading discs | rpm | 720 | 720 |
| Frame linkage | | 3 suspension heights Cat. II | 3 suspension heights Cat. II |
| Basic machine weight | kg | 440 | 480 |
| Control | | | |
| Lever-operated hydraulic control | | • | × |
| shut-off valve | | • | × |
| dose adjustment | | manual | × |
| half-machine seeding cut-off | | • | × |
| Electronic controller - ARETE | | 0 | × |
| speed measurement | | manual / GPS | × |
| GPS antenna | | • | × |
| controller (display) | | monochromatic | × |
| half-machine seeding cut-off | | • | × |
| Electronic controller - ISOBUS | | × | • |
| speed measurement | | × | manual / ISO socket / GPS |
| ISO socket | | × | • |
| GPS antenna | | × | 0 |
| ISOBUS | | × | • |
| cable to the tractor terminal | | × | • |
| controller | | × | 0 |
| controller (display) | | × | color - touchscreen |
| weight system | | × | • |
| variable section dosage | | × | • |
| half-machine seeding cut-off | | × | • |
| Equipment | | | |
| PTO shaft with with shear wheel | | • | • |
| PTO shaft with overload clutch | | 0 | 0 |
| tilt indicators | | • | • |
| mud flaps | | • | • |
| transport wheels | | • | • |
| LED road lighting | | • | • |
| calibration kit | | • | × |
| extension | | 0 | 0 |
| rack stand cover | | 0 | 0 |
| roll-up cover | | 0 | 0 |
| border spreading discs | | 0 | 0 |
| LIMES boundary seeding system - mechanical | | 0 | × |
| LIMES boundary seeding system | | | |

ullet – standard, $\, ullet$ – additional equipment, $\, imes$ – unavailable

SIPMA RN 1600 OPTIMUS NEW PRODUCT SIPMA RN 1600 OPTIMUS HD NEW PRODUCT SIPMA RN 1600 OPTIMUS PRO NEW PRODUCT





SIPMA RN 1600 OPTIMUS PRO

The SIPMA RN 1600 OPTIMUS, SIPMA RN 1600 OPTIMUS HD and SIPMA RN 1600 OPTIMUS PRO mineral fertilizer distributors are the latest models in the SIPMA range of precision fertilizer spreading machines. They are characterised by their wide spreading range and large capacity.

Weight system

allows precise dosage of mineral fertilizer spreading, while also contributing to savings for the farm and protection of the environment.

Lateral gearboxes with torsionally flexible clutches

supervise the operation of fertilizer spreading according to the set working parameters. $\,$

Spreader hopper

with welded construction for low filling height, made of 3 mm thick steel.

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^{* -} depending on the spreading blades and fertilizer spread

Machine tilt indicators

help to position the spreader in the correct position in relation to the ground.

Spreading discs

equipped with two pairs of blades, allow fertiliser spreading in working widths of 12 - 32 m.



SPREADING DISC

Mud flaps

protect the tractor from contact with the newly seeded fertilizer, at the same time preventing mud from under the tractor wheels from getting onto the spreader's working parts.



MUD FLAPS

Transport wheels

facilitating disconnection of the spreader and manoeuvring around the yard; equipped with brakes.

Hydraulic drive

(only in SIPMA RN 1600 OPTIMUS HD) drives the spreader discs and agitators independently of the tractor engine speed. This keeps the spreader discs at a constant speed and makes the machine more economical due to lower fuel consumption.

The modular design

makes maintenance and possible service work on the machine easier and more convenient.

Advanced LIMES boundary seeding system mechanically or electronically controlled (additional equipment)

allows work to be carried out at field boundaries in accordance with fertiliser regulations, while ensuring that the correct application rate is delivered right up to the field boundary, and eliminates economic losses resulting from over-fertilisation or the spreading of fertiliser to neighbouring fields. Used when the first tramline lies in the middle of the spreader's working width. Made of stainless steel.

Inspection ladder (additional equipment)

mounted when extensions are used, facilitates safe viewing of the load compartment.

Spreader scales

with clearly marked graduations, facilitate precise setting of spreading parameters.

Brushes

mounted above the spreader discs ensure precise fertiliser metering.



SOWING SYSTEM WITH VISIBLE SCALE AND BRUSHES

Electronic controller (additional equipment)

(only in SIPMA RN 1600 OPTIMUS and SIPMA RN 1600 OPTIMUS HD) supervises fertiliser spreading according to the set operating parameters.



ELECTRONIC CONTROLLER

Functions of the electronic controller:

- electronic speed-dependent seed rate control. The set application rate is always the same after changing the working speed;
- · manual or automatic spreading mode;
- measurement of driving speed by means of a GPS module in automatic mode;
- · control of metering sliders;
- · determining the dosing aperture based on selected parameters;
- · speed programming in manual mode;
- · half-seeding possible;
- · the possibility of adjusting the dosage while driving;
- the possibility of conducting a spin test;
- · measurement of acreage sown and hours worked;
- · bin emptying function;
- activation of border sowing with one-sided reduced rate; operation of LIMES border sowing system;
- · supports many languages.



SIPMA RN 1600 OPTIMUS PRO

Electronic controller

(only in SIPMA RN 1600 OPTIMUS as additional equipment and in SIPMA RN 1600 OPTIMUS PRO) supervises fertiliser spreading according to the set operating parameters.



ELECTRONIC CONTROLLER

Functions of the electronic controller:

- electronic speed-dependent seed rate control. The set application rate is always the same after changing the working speed;
- measurement of driving speed by means of a GPS module / ISOBUS socket (speed from tractor) in automatic mode;
- · control of metering sliders;
- · determining the dosing aperture based on selected parameters;
- · half-seeding possible;
- · the possibility of adjusting the dosage while driving;
- · the possibility of conducting a spin test;
- · measurement of acreage sown and working hours;
- · emptying hopper function;
- activation of border sowing with one-sided reduced rate; operation of LIMES border sowing system;
- · ISOBUS solution;
- · weight system control;
- · independent application rate metering to the left/right disc;
- dynamic calibration correction of fertilizer application rate based on information from the weight system during seeding;
- automatic switching on/off of the machine depending on its position in the field, especially on headlands, entrances, exits and wedges;
- automatic switching of the spreader at headland location and field edges;
- option to create field boundaries based on the first tour of the field;
- automatic recognition of the scattered field area;
- GPS parallel driving function driving control by means of indicators on the display;
- · field map upload function;
- · variable rate function;
- · large, intuitive, touch-screen color display;
- · supports many languages.

| MODEL | | RN 1600 Optimus |
|--|-----|-------------------------------|
| Working width | m | 12 - 32 * |
| Hopper capacity | 1 | 1600 |
| with extension 1 x 1250 l | - 1 | 2850 |
| with extensions 2 x 1250 l | 1 | 4100 |
| Maximum load capacity | kg | 4700 |
| Filling height | m | 1,32 |
| with extension 1 x 1250 l | m | 1,67 |
| with extensions 2 x 1250 l | m | 2,02 |
| Filling width | m | 2,45 |
| Total width | m | 2,99 |
| Total length | m | 1,75 |
| Rotation speed of the spreading discs | rpm | 700-900 |
| Frame linkage | | 3 suspension heights Cat. III |
| Basic machine weight | kg | 820 |
| Spreading discs and agitators drive | | mechanical |
| Control | | |
| Electronic controller | | • |
| Electronic controller with big, color display | | 0 |
| ISOBUS | | × |
| Weight system | | • |
| Equipment | | |
| PTO shaft with with shear wheel | | • |
| PTO shaft with overload clutch | | 0 |
| tilt indicators | | • |
| mud flaps | | • |
| transport wheels | | • |
| LED road lighting | | • |
| calibration kit | | • |
| extension | | 0 |
| inspection ladder | | 0 |
| rack stand cover | | 0 |
| roll-up cover | | 0 |
| LIMES boundary seeding system right - hydraulic | | 0 |
| LIMES boundary seeding system right - electronic | | 0 |

| – standard, | O – additional equipment, × – unavailable |
|-------------------------------|---|
| × 1 1 | |

⁻ depending on the spreading blades and fertilizer spread

| RN 1600 Optimus HD | RN 1600 OPTIMUS PRO |
|-------------------------------|-------------------------------|
| 12 - 32 * | 12 - 32 * |
| 1600 | 1600 |
| 2850 | 2850 |
| 4100 | 4100 |
| 4700 | 4700 |
| 1,32 | 1,32 |
| 1,67 | 1,67 |
| 2,02 | 2,02 |
| 2,45 | 2,45 |
| 2,99 | 2,99 |
| 1,75 | 1,75 |
| 700-900 | 700-900 |
| 3 suspension heights Cat. III | 3 suspension heights Cat. III |
| 820 | 820 |
| hydraulic | mechanical |
| | |
| • | × |
| × | • |
| × | • |
| • | • |
| | |
| × | • |
| × | 0 |
| • | • |
| • | • |
| • | • |
| • | • |
| • | • |
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |
| 0 | × |

S SIPMA

MANURE SPREADERS

SIPMA RO 600 TA JEUN SIPMA RO 800 TA JEUN SIPMA RO 1000 TAJFUN SIPMA RO 1210 TORNADO NEW PRODUCT



SIPMA RO 600 TAJFUN SIPMA RO 800 TAJFUN SIPMA RO 1000 TAJEUN





SIPMA RO 800 TAJFUN

SIPMA RO 600 TAJFUN, SIPMA RO 800 TAJFUN and SIPMA RO 1000 TAJFUN are used for spreading manure, compost, peat, chicken manure and lime. They can also be used for transport of agricultural commodities after removing the adapter. They are compatible with tractors equipped with a bottom "hitch" type latch and are fully adapted for transport on public roads.

General purpose, two-beaters vertical auger adapter

with cutting knives ensures high fragmentation of the spread material as well as a large range and uniformity of spreading. Equipped with bottom plates allows for spreading manure, compost, peat, chicken manure and lime.

Low loading height

facilitates comfortable work

Adapter knives made from HARDOX steel

ensure durability of the construction and reliable operation.

Hydraulically opened rear flap

closes the load box to prevent the load from falling out during transport.

Wooden protective extensions

protect the side panels against mechanical damage, during loading.

Double floor conveyor

with an automatic tensioning mechanism is hydraulically driven, what ensures stepless adjustment of the quantity of the spread material.

Overload clutch

secures the drive unit in case of potential clogs.

Sprung drawbar (additional equipment)

equipped with longitudinal spring leaves provides high comfort of usage.



SPRUNG DRAWBAR



SIPMA RO 1000 TAJFUN

Tyres

guarantee low rolling resistance and pressure exerted on the ground, which facilitates operation and movement on wet terrain. Self-cleaning tyres ensure convenient operation of the spreader.

Mechanical/hydraulic deflectors (additional equipment) ensure protection of the adapter during transport and adjust spreading width during work.



DEFLECTORS AND VERTICAL ADAPTERS

Inspection ladder

provides a safe view of the load compartment.

Front shields

they protect the tractor cab from dirt and any possible damage.

Gate and box seals

resistant to dilute acids and alkalis, they ensure a durable design and reliability in operation.

Rotor movement signalling system

warns bystanders of rotating components when the machine is stationary.

Wide lower blades

they enable the spreading of lime.

Mudguards

they protect the machine from dirt, ensuring it runs cleaner and more efficiently.

Docking points for hydraulic, electrical and pneumatic hoses

Protecting their connector from contamination, they ensure ergonomic use of the machine.

Electronic control (additional equipment)

provides convenient control of the machine from the tractor cabin and enables precise dosing of natural fertilizers or lime.



ELECTRONIC CONTROLLER

Functions of the electronic controller:

- control of the belt conveyor speed by means of a knob in the range from 0 to 100;
- independent setting of the left and right deflector positions;
- control of the floor conveyor (conveyor operation / reverse);
- setting the position of the rear cover, if the spreader is equipped with one.

| MODEL | | RO 600 Tajfun | RO 800 Tajfun | RO 1000 Tajfun | |
|-------------------------------------|---------|------------------|------------------|-------------------|--|
| Nominal load | t | 6 | 8 | 10 | |
| Capacity | m³ | 7 | 9 | 11 | |
| Spreading width | m | 7.5 - 10 | 5 - 12 | 5 - 12 | |
| Dose of spread material | kg/s | 5 - 60 | 5 - 60 | 5 - 60 | |
| Number of spreading beaters | pcs. | 2 | 2 | 2 | |
| Suspension | | rigid | rigid | rigid | |
| Maximum speed | km/h | 25 | 25 | 25 | |
| Power demand | kW (HP) | 55 (75) | 65 (88) | 75 (102) | |
| Equipment | | | | | |
| wide angle PTO shaft | | • | • | • | |
| electronic control | | 0 | 0 | 0 | |
| electric control of floor conveyor | | 0 | 0 | 0 | |
| rigid drawbar | | • | • | • | |
| sprung drawbar | | 0 | 0 | 0 | |
| 1-wire brake system | | • | • | • | |
| 2-wire brake system | | 0 | 0 | 0 | |
| hydraulic brakes | | 0 | 0 | 0 | |
| handbrake | | • | • | • | |
| hydraulically opened rear flap | | • | • | • | |
| hydraulic reverse of the floor | | • | • | • | |
| road lights (electric installation) | | • | • | • | |
| inspection ladder | | • | • | • | |
| wooden protective extensions | | • | • | • | |
| deflectors (mechanical / hydraulic) | | 0 | 0 | 0 | |
| tyres 23,1 - 26 18PR | | • | • | • | |
| fenders | | • | • | • | |
| Dimensions | | | | | |
| length | mm | 7680 | 7680 | 8330 | |
| width | mm | 2520 | 2520 | 2520 | |
| height | mm | 2660 | 2970 | 3090 | |
| loading height | mm | 2250 | 2310 | 2500 | |
| Weight | kg | 4250 | 4560 | 4680 | |

ullet – standard, \odot – additional equipment, \times – unavailable

SIPMA RO 1210 TORNADO SIPMA RO 1410 TORNADO NEW PRODUCT









SIPMA RO 1410 TORNADO

SIPMA RO 1210 TORNADO and SIPMA RO 1410 TORNADO manure spreaders are used for spreading manure, compost, peat, chicken manure and lime. Characterized by a solid design and large loading capacity.

Loading box

with the capacity of 13,5 m³ or 15,5 m³ ensures high efficiency and can additionally used as high-volume trailer for transport of agricultural commodities.

General purpose, two-beaters vertical auger adapter

with cutting knives ensures high fragmentation of the spread material as well as a large range and uniformity of spreading. Equipped with bottom plates allows for spreading manure, compost, peat, chicken manure and lime.

Adapter knives made from HARDOX steel

ensure durability of the construction and reliable operation.

Tandem type suspension

provides great comfort of work.

Mechanical/hydraulic deflectors (additional equipment)

ensure protection of the adapter during transport and adjust spreading width during work.

Double floor conveyor

with an automatic tensioning mechanism is hydraulically driven, what ensures stepless adjustment of the quantity of the spread material



DOLIBLE ELOOR CONVEYOR

Overload clutch

secures the drive unit in case of potential clogs.

Hydraulically opened rear flap

closes the load box to prevent the load from falling out during transport.

Wooden protective extensions

protect the side panels against mechanical damage, during loading.

Tvres

guarantee low rolling resistance and pressure exerted on the ground, which facilitates operation and movement on wet terrain. Self-cleaning tyres ensure convenient operation of the spreader.

Rear flap opening indicator

placed in the front part of the machine, it allows precise opening of the rear flap to the desired height.

Inspection ladder

allows to look into the load box safely.

Light signaling system

warns bystanders of rotating parts when the machine is stopped.

Road lights

allow the machine to move on public roads.

Metal fenders

they protect the machine from mud and dirt, and also ensure its cleaner and more efficient work

Rotating drive transmission elements

placed in permanent covers, ensure the safety of the machine's use.

Bracket with wire handles

provides ergonomic arrangement of hydraulic and electrical wiring. Handles and sockets placed on it ensure order and aesthetics after work.

Optimal placement of elements related to daily operating activities

on one side of the spreader (hydraulic, pneumatic, electric lines, inspection ladder, handbrake) ensures ergonomic use of the machine.

Wide range of hitch eyes

enable the spreader to be aggregated to a wide range of tractors.

Docking points for hydraulic, electrical and pneumatic hoses

protecting their connector from contamination, they ensure ergonomic use of the machine.

Gate and box seals

resistant to dilute acids and alkalis, they ensure a durable design and reliability in operation.

Pneumatic or hydraulic brakes

allows you to choose the spreader equipment depending on the tractor you have on the farm. At the same time, the innovative design of the spreader makes it possible to install both systems at the same time.

EU Approval

which the SIPMA RO 1210 TORNADO and SIPMA RO 1410 TORNADO spreaders have, is a guarantee that the machines have been subjected to rigorous tests and examinations and that they meet the highest quality and safety standards. The homologation also allows the machines to move on public roads in the European Union.



SIPMA RO 1410 TORNADO

Electronic control (additional equipment)

provides convenient control of the machine from the tractor cabin and enables precise dosing of natural fertilizers or lime.



ELECTRONIC CONTROLLER

Functions of the electronic controller:

- control of the belt conveyor speed by means of a knob in the range from 0 to 100;
- independent setting of the left and right deflector positions;
- control of the floor conveyor (conveyor operation / reverse);
- setting the position of the rear cover, if the spreader is equipped with one.



SIPMA RO 1210 TORNADO

| MODEL | | RO 1210 TORNADO | RO 1410 TORNADO |
|-------------------------------------|---------|--------------------|------------------------------|
| Nominal load | t | 12 | 14 |
| Capacity | m³ | 13,5 | 15,5 |
| Capacity with extensions | m³ | 20,7 | 22,7 |
| Spreading width | m | 5 - 14 | 5 - 14 |
| Dose of spread material | kg/s | 5 - 60 | 5 - 60 |
| Number of spreading beaters | pcs. | 2 | 2 |
| Suspension | | tandem type | tandem type |
| Number of axles | | 2 | 2 |
| Maximum speed | km/h | 25 | 25 |
| Power demand | kW (HP) | 80 (108) | 100 (136) |
| Equipment | | | |
| wide angle PTO shaft | | • | • |
| electronic control | | 0 | 0 |
| electric control of floor conveyor | | • | • |
| rigid drawbar | | • | • |
| sprung drawbar | | × | × |
| 1-wire brake system | | 0 | 0 |
| 2-wire brake system | | • | • |
| hydraulic brakes | | 0 | 0 |
| handbrake | | • | • |
| hydraulically opened rear flap | | • | • |
| hydraulic reverse of the floor | | • | • |
| road lights (electric installation) | | • | • |
| inspection ladder | | • | • |
| wooden protective extensions | | • | • |
| deflectors (mechanical / hydraulic) | | 0 | 0 |
| tyres | | 500/45R 22,5 | 560/45R 22,5 600/50R 22,5 |
| fenders | | metal | metal |
| rear flap opening indicator | | • | • |
| Dimensions | | | |
| length | mm | 8860 | 8860 |
| width | mm | 2540 | 2860 |
| height | mm | 3530 | 3650 |
| loading height | mm | 2640 | 2880 |
| Weight | kg | 5950 | 6380 |

• - standard, O - additional equipment, × - unavailable



GRAIN CRUSHERS

SIPMA ZP 4020 ATLAS SIPMA ZP 4030 ATLAS SIPMA ZP 5520 ATLAS SIPMA ZP 5530 ATLAS SIPMA ZP 7530 ATLAS SIPMA ZZ 4020 TYTAN SIPMA ZZ 7520 TYTAN SIPMA ZZ 7530 TYTAN



SIPMA ZZ 4020 TYTAN

Grain crushers are designed for crushing grains of all types of crops (barley, oat, wheat, rye) and leguminous plants for feed concentrates and such grains as corn, pea, linen.

Modern technology

of crushed grain fodder processing has numerous advantages over the grinding method and allows obtaining high-quality fodders.

Crushing process

ensures nutritive absorption at the level of 95% (compared to only 70% of ground fodder) and significantly reduces the electrical power demand in comparison to grinding. The use of this method ensures obtaining low content of dusty fractions.

Body design

ensures high tightness of the crusher and enables precise assembly of working elements.

Cast iron or steel crushing rollers with notches

ensure high efficiency as well as durability and reliability of the device.

Adjustable foot height

(in TYTAN series) allows for easier feeding of the material into the charging hopper or placement of a larger container under the crusher.

Three crushing rollers system

allows for crushing large grains in one run (corn, field beans, peas, field peas).

Working port adjustment mechanism

allows for precise adjustment of the working gap and preserves the optimal position of the crushing rollers.

Magnet cartridge

protects the crusher mechanism from unwanted metal or stones parts.

Possibility to attach a bagging machine (additional equipment in ATLAS series)

and a loading chute.

Grain dosing adjustment

allows for adjusting the amount of charged grain to the working gap size.

TWO WAYS OF TRANSMITTING DRIVE BETWEEN WORK ROLLS





V-BELTS (ATLAS SERIES)

GEARS (TYTAN SERIES)

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| MODEL | | ZP 4020 ATLAS | ZP 4030 ATLAS | ZP 5520 ATLAS | | | |
|--------------------------------|------------|------------------|------------------|------------------|--|--|--|
| Engine power | kW | 4 | 4 | 5.5 | | | |
| Number of rollers | pcs. | 2 | 3 | 2 | | | |
| Width of roller | mm | 160 | 160 | 200 | | | |
| Diameter of roller | mm | 290 | 290 | 290 | | | |
| Working port | mm | 0.1 - 0.5 | 0.1 - 0.5 | 0.1 - 0.5 | | | |
| Initial crushing port | mm | × | 3 - 4 | × | | | |
| Equipment | | | | | | | |
| legs (750 mm) | | • | • | • | | | |
| adjustable legs (680 - 950 mm) | | × | × | × | | | |
| adjustable legs (700 - 950 mm) | | × | × | × | | | |
| adjustable legs (750 - 950 mm) | | × | × | × | | | |
| bag mounting | | 0 | 0 | 0 | | | |
| Dimensions | Dimensions | | | | | | |
| length | mm | 1240 | 1240 | 1200 | | | |
| width | mm | 640 | 620 | 710 | | | |
| height | mm | 2000 | 2000 | 1800 | | | |
| Weight | kg | 250 | 270 | 355 | | | |

• – standard, O – additional equipment, × – unavailable



GRAIN BEFORE CRUSHING

| ZP 5530 ATLAS | ZP 7530 ATLAS | ZZ 4020 TYTAN | | | |
|------------------|------------------|------------------|-----------|-----------|--|
| 5.5 | 7.5 | 4 7.5 | | 7.5 | |
| 3 | 3 | 2 | 2 | 3 | |
| 200 | 300 | 150 | 300 | 300 | |
| 290 | 290 | 240 | 240 | 240 | |
| 0.1 - 0.5 | 0.1 - 0.5 | 0.1 - 0.5 | 0.1 - 0.5 | 0.1 - 0.5 | |
| 3 - 4 | 3 - 4 | × | × | 4 | |
| | | | | | |
| • | • | × | × | × | |
| × | × | • | × | × | |
| × | × | × | • | × | |
| × | × | × | × | • | |
| 0 | 0 | • | • | • | |
| | | | | | |
| 1200 | 1200 | 1350 | 1350 | 1520 | |
| 710 | 780 | 850 | 870 | 910 | |
| 1800 | 1800 | 1380 | 1420 | 1580 | |
| 375 | 485 | 196 | 305 | 350 | |



GRAIN AFTER THE USE OF SIPMA GRAIN CRUSHER



TRAILED FORAGE HARVESTER FOR ENERGY CROPS



SIPMA SR 1010 HEROS trailed forage harvester is designed for single phase harvesting of energy crops, mainly energy willow

Cutting unit

equipped with hydraulic drive of saws allows to reach high rotational speed of cutting blades, which improves cutting down the sprouts of energy crops, leaving the optimum rootstock for regrowth of plants. The arm bending the plants is adjustable from the tractor cabin and it enables proper orientatation the shoots with different heights into the pull-in unit.

Compressing and pull-in unit

consists of 5 ribbed rollers. It enables to correctly place and feed the chopping rotor chamber with shoots of energy crops. Mechanical pressure and variable clearance between the rollers ensures optimum compression of cut shoots and reliable transportation of crops. Power take-off shafts that drive the pull-in rollers are equipped with safety couplings, which reduce excessive load on the machine. As the direction of rotation of pull-in rollers can be changed from the operator cab, any clogging can be removed from the machine without leaving the tractor.

Chopping rotor

which at the same time acts as a flywheel, is equipped with cutting blades. At the rim of the rotor there are blades mounted, which provide quick and effective feed of shredded material onto means of transport.

Built-in blade sharpening system

allows for easy-to-use and accurate sharpening of blades, providing even edges. During grinding, the rotor revolves with low speed and grinding wheel easily sharpens the blades, which quickly become sharp again.

Power transmission system

with a belt gearing enables adjustment of length of the cut shoots of energy crops ranging from 20 to 55 mm and reduces the risk of damage to the machine during the momentary overloads. The entire power transmission system of the forage harvester is protected against overload with friction coupling mounted on the main power take-off shaft.

Hydraulically controlled suspension

allows you to adjust the height of crop cutting to the field conditions and provides proper clearance during transportation.

Discharge chute

enables effective feeding of shredded material onto means of transport with the ability to set the direction and distance of crop chips discharge.

Hydraulically adjustable drawbar

allows for correct setting of the machine and tractor in interrows, reducing the risk of damage to the rootstock and machine wheels to the minimum.

Hydraulic folding mechanism of the discharge chute

allows quick and convenient preparation of the machine for transport on public roads.

Hydraulic system

with electro-hydraulic block that operates all working items of the machine, consistent and optimum machine functions are provided, including smooth acceleration and stopping of the cutting unit.

Electronic control

allows to adjust the functions of the machine from the operator's seat, without leaving the tractor.



ELECTRONIC CONTROLLER

Functions of the electronic controller:

- · activating the cutting unit;
- activating the reverse of the pull-in and compression unit;
- · adjustment of the bending arm height;
- · control of the discharge chute;
- · adjustment of cutting height;
- · drawbar control.

Addidional equipment:

- extension of the discharge chute allows to deliver the shredded material for greater distances;
- elevation of the discharge chute allows to load the shredded material on higher means of transport;
- rear hitch allows you to couple the trailer to the harvester in order to load the shredded material when it is not possible to for the means of transport to go past the harvester.

HYDRAULIC SYSTEM

CHOPPING ROTOR







| MODEL | SR 1010 HEROS | |
|--|---------------|------------------------|
| Number of rows / row spacing | pcs./m | 1/0.75 |
| Bulk discharge capacity | t/h | 15 |
| Number of cutting blades | pcs. | 2 |
| Diameter of cutting blades | mm | 450 |
| Cutting height | mm | 50 - 120 |
| Maximum diameter of cut shoots | mm | 70 |
| Height of cut shoots | mm | 9000 |
| Chopping unit | | disc and axe |
| Number of blades | pcs. | 4 |
| Cutting length | mm | 20 - 55 |
| Max. height of discharge | m | 5 |
| Max. distance of discharge | m | 10 |
| Control system | | electronic |
| Wheel size | | 10.0 / 75 - 15.3 10 PR |
| PTO rotation speed | rpm | 540 |
| Maximum working speed | km/h | 8 |
| Maximum transport speed | km/h | 25 |
| Power demand | kW (HP) | 80 (108.8) |
| Equipment | | |
| wide angle PTO shaft with friction clutch | | • |
| extension of the discharge chute | | 0 |
| elevation of the discharge chute | | 0 |
| rear hitch | | 0 |
| Dimensions | | |
| length | mm | 5000 |
| width | mm | 2650 |
| height | mm | 2350 |
| loading height | mm | 3880 |
| Weight | kg | 1500 |

● – standard, O – additional equipment, × – unavailable



PTO SHAFTS

BASIC PTO SHAFT

SIPMA WPT 220

SIPMA WPT 300

SIPMA WPT 460

SIPMA WPT 540

SIPMA WPT 630

SIPMA WPT 680

SIPMA WPT 900

SIPMA WPT 1200

SIPMA WPT 1700

WIDE ANGLE PTO SHAFT

SIPMA WPTS 300

SIPMA WPTS 680

SIPMA WPTS 900

SIPMA WPTS 1200



SIPMA PTO shafts

SIPMA PTO shafts are designed to transmit a specific torque from the Power-Take-Off spline shaft of the tractor to the Power-Take-On spline shaft of the machine. SIPMA makes PTO shafts designed to transmit the torque of the following ranges: 220 Nm, 300 Nm, 460 Nm, 540 Nm, 630 Nm, 680 Nm, 900 Nm, 1200 Nm, 1700 Nm in the basic version and 300 Nm, 680 Nm, 900 Nm, 1200 Nm in wide angle version.

Wide angle PTO shafts come in two versions:

- · with one wide angle joint;
- · with two wide angle joints.

Basic PTO shafts

Basic PTO shafts are used when the mutual location of the Power-Take-Off and Power-Take-On spline shafts during continuous works does not result in exceeded 25° of joint breaking angle.

Wide angle PTO shafts

Wide angle PTO shafts are used in the case where the fracture of relative position of the tractor power take off to the machine power input connection shaft can allow reaching up to 50° angles in every working moment and 80° angles temporary. These shafts make it possible continuous power transmission without necessity disengaging the drive on headlands.



WIDE ANGLE PTO SHAFT

BASIC PTO SHAFTS

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Safety clutches

Basic and wide angle PTO shafts, depending on needs, may be equipped in the following safety cluthches:

- · overload clutch (SP);
- · overload automatic clutch (SPA, SSPA);
- · friction clutch (SC);
- friction clutch with a plate spring (SB);
- friction and overrunning clutch (SD);
- · one-way friction clutch with a plate spring (ST);
- shear bolt clutch (SK);
- overrunning clutch (SJ).

Overload clutch (SP)

with scoops operating radially, operates by interrupting the drive transmission when the torque exceeds the clutch setting.

Overload automatic clutch (SPA, SSPA)

is used to interrupt the power flow when the transmitted torque reaches a preset size. The clutch does not require the immediate shutdown of the drive at the time of the overload occurs.

Friction clutch (SC)

transmits torque without switching off the drive when the overload reaches the set value. It can be used as a starting or overload clutch for machines with elements having high inertia.

Friction clutch with a plate spring (SB)

transmits the torque without disengaging the drive when the overload reaches the set value. It is used as a starting or overload clutch for driving machines with elements with high moment of inertia.

| MODEL | | WPT 220 | WPT 300 | WPTS 300 | WPT 460 | WPT 540 | |
|--------------------------------|---------|------------|------------|-------------|------------|------------|--|
| Strength parameters - 540 rpm | | | | | | | |
| power | kW (HP) | 12 (17) | 17 (23) | 17 (23) | 26 (35) | 31 (42) | |
| torque | Nm | 220 | 300 | 300 | 460 | 540 | |
| Strength parameters - 1000 rpm | | | | | | | |
| power | kW (HP) | 19 (26) | 26 (36) | 26 (36) | 40 (55) | 47 (64) | |
| torque | Nm | 183 | 250 | 250 | 383 | 450 | |
| Max. dynamic torque | Nm | 330 | 450 | 450 | 690 | 810 | |

Friction and overrunning clutch (SD)

allows for the torque transmission without switching of the drive, even under overload conditions exceeding the maximum clutch setting. At the same time, it allows the torque transmission in one direction only. It can be used for machines with elements having high inertia.

One-way friction clutch with a plate spring (ST)

allows the transmission of torque without shutting down the drive, even when the overload reaches the size of the clutch setting. At the same time, the one-way friction clutch allows the torque to be transferred only in one direction. It can be used in machines with elements with a high moment of inertia. The clutch can be available right or left.

Shear bolt clutch (SK)

protects the driveline against blockage and disconnects the torque transmission from the tractor when the torque exceeds the clutch setting which breaks the bolt.

Overrunning clutch (SJ)

transmits the torque in one direction only and is used in PTO shafts which drive machines with elements having high inertia (e.g. disc mowers).



| WPT 630 | WPT 680 | WPTS 680 | WPT 900 | WPTS 900 | WPT 1200 | WPTS 1200 | WPT 1700 |
|------------|------------|-------------|------------|-------------|-------------|--------------|-------------|
| | | | | | | | |
| 36 (48) | 38 (52) | 38 (52) | 51 (69) | 51 (69) | 68 (92) | 68 (92) | 96 (131) |
| 630 | 680 | 680 | 900 | 900 | 1200 | 1200 | 1700 |
| | | | | | | | |
| 55 (75) | 59 (81) | 59 (81) | 79 (107) | 79 (107) | 105 (142) | 105 (142) | 146 (199) |
| 525 | 567 | 567 | 750 | 750 | 1000 | 1000 | 1400 |
| 945 | 1020 | 1020 | 1350 | 1350 | 1800 | 1800 | 2550 |





www.grupasipma.pl

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Quality is our goal and as the first company in the farming machinery industry we have introduced the uniform method of packing our spare parts with SKIN-PAK. This system protects the parts from damage and corrosion, it also guarantees quality and origin.

Reliability is a feature characteristic for original spare parts for SIPMA products.

Long life and work safety of the machines even after many years of operation is guaranteed only by original spare parts.

Easy access to original spare parts is ensured by our wide sales network. Spare parts can be purchased in our retail outlets in Lublin and Zamość, as well as at our Authorised Dealers or on mail order.



Dominant entity of SIPMA GROUP which produces agricultural machines.



Research and Development Centre which comprehensively fulfils technical projects, prototypes production and testing in the range of agricultural and communal machines as well as other designs in the field of mechanics.



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