

# PRODUCT CATALOGUE



# S SIPMA

For over 20 years SIPMA S.A. successfully places on the domestic and foreign market rich offer of agricultural machines.

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 S.A.

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 Kępa President of the SIPMA S.A. Board of Directors



The high quality of the products offered by SIPMA S.A. is ensured by the implemented and certified ISO 9001:2008 Quality Management System, and the safety of the products is ensured by the CE mark





SIPMA KD 2400 PRERIA SIPMA KD 2410 PRERIA SIPMA KD 2510 KOS SIPMA KD 2910 KOS SIPMA KD 2515 KOS SIPMA KD 2915 KOS







SIPMA KD 2400 PRERIA

The KOS series rear-hitched disc mowers are the latest offer of central and side-suspension disc mowers introduced by SIMPA S.A. to its range. The KOS series, including the earlier SIPMA KD 2400 PRERIA model, is a group of disk mowers which feature state of the art design, robust structural frames and proven functionality. Bottom drive disc mowers are used in mowing all types of green fodder plants for direct feeding, hay preparation or for ensilage.

The bottom drive design ensures the material is uniformly distributed at the entire width of the swathe, which contributes to a homogeneous drying of the mowed grass and allows direct harvesting with round balers (by eliminating tedding and raking).

SIPMA KD 2400 PRERIA SIPMA KD 2410 PRERIA





SIPMA KD 2400 PRERIA

## 6 discs rotating with a speed of 3100 RPM

ensure high mowing quality and efficiency (when compared to top drive mowers) of up to 2.5 ha/h.

## Elastomer guards

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

## Adjustment system

comprised of a connection member which connects the coupling frame upper point and the three-point linkage of the tractor, ensures the adjustment of a proper mowing angle and height in the range of 30 - 80 mm, which has a significant impact on the re-growth speed of the grass.

#### SIPMA PTO shaft with unidirectional clutch

ensures smooth stopping of the machine and protects the disc drives from damage.

## **Hydraulic actuator**

which is powered by the tractor's hydraulic system, allows for lifting the mowing assembly into the transport position, which facilitates work and enhances its comfort.

## Moldboards fitted behind the mower bar

enable adjusting the forage width from 60 to 90% of the operating width of the mower and adjusting it for the devices used in the further stages of the harvest.

## Forage conditioner

allows for the distribution of permeable forage and reduces the green fodder drying time by 20 to 30%.

## Plastic V-shaped forage conditioner beaters

are extremely efficient and minimize the loss of the material. The concave settings (i.e. the working port: 3 frontal and 2 rear) allow 6 different crushing degrees of the mowed material.

## Ground gear wheels

reduce noise and ensure long-lasting, reliable operation.



MODEL		KD 2400 Preria	KD 2410 Preria
Mowing width	m	2.4	2.4
Mowing height			
minimum	mm	30	30
maximum	mm	80	80
Number of discs	pcs	6	6
Number of cutting knives	pcs	12	12
PTO rotation speed	rpm	540	540
Disc rotation speed	rpm	3100	3100
Maximum speed	km/h	≤ 15	≤ 15
Power demand	kW (HP)	30 (42)	40 (55)
Equipment			
PTO shaft		•	•
forage conditioner		×	•
Dimensions			
length	mm	4400	4400
width	mm	1600	1830
height	mm	900	900
Weight	kg	480	690

<sup>● -</sup> standard, ○ - additional equipment, × - unavailable

## REAR-HITCHED DISC MOWERS WITH SIDE SUSPENSION

SIPMA KD 2510 KOS NEW PRODUCT SIPMA KD 2910 KOS NEW PRODUCT







SIPMA KD 2510 KOS

## The welded frame from bent and sheet metal sections is lightweight and guarantees high strength.

The solution facilitates easy hitching of the disc mower to the threepoint linkage of the tractor, with high comfort and efficiency of work.

## The mower bar side suspension

is simple, but makes the mower perfectly follow the terrain at a homogeneous pressure on the ground.

## The SIPMA PTO shaft with unidirectional clutch

ensures smooth stopping of the machine rotating parts and protects the disc drives from damage.

## The elastomer guards

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

## The mouldboards fitted behind the mower bar

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

## The standard knife quick replacement system

assures continued field work with a high efficiency.

## The opened front and rear guards

facilitate servicing of the machine.

## The disc mower design

enables transporting them vertically on the tractor side.

## The relief spring system

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

## The wide mowing range pitch range

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

## The hydraulic actuator

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

## The mowing height adjustment system

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

MODEL		KD 2510 KOS	KD 2910 KOS
Mowing width	m	2.42	2.85
Mowing height			
minimum	mm	43	43
maximum	mm	73	73
Number of discs	pcs	6	7
Number of cutting knives	pcs	12	14
PTO rotation speed	rpm	540	540
Disc rotation speed	rpm	2980	2980
Maximum speed	km/h	≤15	≤15
Work efficiency	kW (HP)	≤ 2.5	≤ 2.9
Power demand	kW (KM)	40 (55)	45(60)
Equipment			
PTO shaft		•	•
Dimensions			
length	mm	4070	4490
width	mm	1630	1630
height	mm	970	970
Weight	kg	500	520

<sup>● –</sup> standard, ○ – additional equipment, × – unavailable

## REAR-HITCHED DISC MOWERS WITH CENTRAL SUSPENSION

SIPMA KD 2515 KOS SIPMA KD 2915 KOS NEW PRODUCT







SIPMA KD 2515 KOS

## The welded frame from bent and sheet metal sections is lightweight and guarantees high strength.

The solution facilitates easy hitching of the disc mower to the threepoint linkage of the tractor, with high comfort and efficiency of work.

## The central suspension of the mowing bar

assures that the mower perfectly follows the terrain and a homogeneous pressure on the ground, resulting in a uniform mowing height along the entire bar.

#### The SIPMA PTO shaft with unidirectional friction clutch

ensures smooth stopping of the machine rotating parts and protects the disc drives from damage.

## The hydraulic collision protection system

deflects the mowing bar back and up when running into an obstacle to protect the machine components from damage.

## The mouldboards fitted behind the mower bar

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

## The standard knife quick replacement system

assures continued field work with a high efficiency.

## The opened front and side guards

facilitate servicing of the machine.

# The disc mowed design allows three transport positions:

- · vertically at the tractor side,
- vertically behind the tractor,
- · horizontally behind the tractor.

## The relief spring system

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

## The wide mowing range pitch range

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

## The hydraulic actuator

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

## The mowing height adjustment system

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

MODEL		KD 2515 KOS	KD 2915 KOS
Mowing width	m	2.42	2.85
Mowing height			
minimum	mm	43	43
maximum	mm	73	73
Number of discs	pcs.	6	7
Number of cutting knives	pcs.	12	14
PTO rotation speed	rpm	540	540
Disc rotation speed	rpm	3180	3180
Maximum speed	km/h	≤15	≤15
Work efficiency	ha/h	≤ 2.5	≤ 2.9
Power demand	kW (HP)	40(55)	45(60)
Equipment			
PTO shaft		•	•
Dimensions			
length	mm	4340	4760
width	mm	1310	1310
height	mm	1430	1430
Weight	kg	670	710

<sup>● –</sup> standard, ○ – additional equipment, × – unavailable



MOWING GRASS SIPMA KD 2410 PRERIA

# S SIPMA **RAKES**

SIPMA ZK 350 WIR SIPMA ZK 450 WIR SIPMA ZK 650 WIR







SIPMA ZK 450 WIF

Forage raking is a very important element of the whole process of green fodder collection. Applying 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.



RAKING A WINDROW BY SIPMA 7K 450 WIR RAKE

## SIPMA 7K 350 WIR SIPMA ZK 450 WIR NEW PRODUCT

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) and four double tines (SIPMA ZK 450 WIR) ensure efficient raking of forage as well as uniform and permeable banks.

## Adjustable screen

allows for setting the desired width of banks.

#### Knob

allows for step-less adjustment of the distance of the raking fingers from the surface

#### 15 x 6.00 - 6 balloon tires

contribute to easy and comfortable operation.

#### Transport position

facilitates 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

(SIPMA ZK 350 WIR – additional equipment, SIPMA ZK 450 WIR – standard) prevents contamination of the forage with soil and quick wear of the tines as well as ensures accurate raking of the material.

## Additional height adjustment (SIPMA ZK 450 WIR)

of the tandem-type chassis allows more accurate set up of the rake's operation height.

## The ground 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.

MODEL		ZK 350 WIR	ZK 450 WIR
Working width	mm	3500	4500
Raking bank width	mm	600 - 1400	800 - 1600
Number of rotors	pcs	1	1
Number of raking arms	pcs	9	11
Number of tines per arm	pcs	3	4
Wheel size		16 x 6.00 – 6 6 PR	16 x 6.00 – 6 6 PR
Maximum speed	km/h	10	10
Power demand	kW (HP)	25.5 (35)	25.5 (35)
Equipment			
PTO shaft		•	•
tandem-type chassis		0	•
ground wheel		×	•
Dimensions in the work position			
length	mm	3210	4200
width	mm	2990	3900
height	mm	1110	1200
Dimensions in the transport position			
length	mm	3210	4200
width	mm	1370	1620
height without rakes	mm	1200	1280
height with rakes	mm	1750	2200
Weight	ka	307	530

#### ■ – standard, ○ – additional equipment, × – unavailable



## SIPMA ZK 650 WIR NEW PRODUCT







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.

## Operational width

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

#### Oil transmission

ensures long-lasting and reliable operation.

### Knob

allows for step-less adjustment of the distance of the raking fingers from the surface.

## 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,

11 pieces, with three double tines, each ensuring uniform and permeable banks.

#### 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 reversals.

## Hydraulic folding of the rake

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

## Three-dimensional tracking of the terrain

allows for very clean collection of the raked material

MODEL		ZK 650 WIR
Operational width	mm	6500 - 7200
Width of raking bank	mm	800 - 1800
Number of rotors	pcs	2
Number of raking arms	pcs	11
Number of raking arm tines	pcs	3
Wheel size		10.0 / 75 - 15.3
Rake set wheel size		16 x 6.00 - 6
Maximum speed	km/h	10
Power demand	kW (HP)	50 (68)
Equipment		
PTO shaft		•
tandem-type chassis		•
Dimensions in the operational position		
length	mm	4800
width	mm	6950 - 7650
height	mm	1400
Dimensions in the transport position		
length	mm	4800
width	mm	2400
height without rakes	mm	3280
height with rakes	mm	4000
Weight	kg	1500

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



SIPMA 7K 650 WIR RAKETHANKS ITS SPAN ALLOWS RAKING LARGE ACREAGE IN A SHORTTIM



**ROUND BALER** 

SIPMA P7 1832 PRIMA



SIPMA PZ 1832 PRIMA

The new SIPMA PZ 1832 PRIMA variable chamber round baler is designed for harvesting hay, straw and green fodder for hay silage.

## **Onboard computer**

monitors the performance of the critical baler features, enables control on the process of bale forming from the tractor cab. It allows adjusting the bale diameter and its compaction in three variants: 1) setting uniform compaction for the core and outer layer, 2) for the core and outer layer separately, 3) separately for the core and outer layer and additionally increased compaction during the final bale forming. Furthermore it controls the uniform filling of the chamber, automatically initiates the wrapping, indicates the actual processing operation, the number of produced bales and measures efficiency.

## **Baling chamber**

consists of five seamless belts which allow producing the bales from 0.90 to 1.80 m in diameter.

## Wide pick-up and rotating feeder

significantly increase the transport capacity of the material and efficiency of the harvest.

## Laminate press covers

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

## Automatic bale wrapping

with the planned wrapping number.

#### Shredder

features 11 shredding knives. It ensures a higher density of the bales which provides excellent ensilage conditions and improves the harvest economy.

## Wide angle PTO shaft with automatic clutch

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

MODEL		PZ 1832 PRIMA	
Pick-up width	mm	2000	
Chamber type		belt	
Bale dimensions			
bale diameter	mm	900 - 1800	
bale width	mm	1200	
Number of cutting knives	pcs	11	
Power demand	kW (HP)	≥ 73 (100)	
Equipment			
PTO shaft with automatic clutch		•	
net binder		•	
chopping unit		•	
electronic control panel		•	
pneumatic brakes		0	
hydraulic brakes		0	
wheels 500 / 50 - 17 18 PR (wide tires)		•	
Dimensions			
length	mm	4800	
width	mm	2600	
height	mm	3000	
Weight	kg	2995	

<sup>● –</sup> standard, ○ – additional equipment, × – unavailable

## Net wrap and wide tires

are standard equipment of the baler.

#### Chamber of the baler made from Domex steel

ensures strength, rigidity of the construction and reliability in use.

## Pneumatic or hydraulic brakes

ensure security on the public roads and during work on the mountainous terrain.



# FIXED CHAMBER ROUND BALERS

SIPMA PS 1210 CLASSIC

SIPMA PS 1510 FARMA

SIPMA PS 1211 FARMA PLUS

SIPMA PS 1221 FARMA PLUS

SIPMA PS 1312 POWER CUT

SIPMA PS 1213 FASTER NEW PRODUCT

SIPMA PS 1223 FASTER

SIPMA PS 1235 PIONIFR NEW PRODUCT

NEW PRODUCT

NEW PRODUCT

## SIPMA PS 1210 CLASSIC



SIPMA PS 1210 CLASSIC

Round baler SIPMA PS 1210 CLASSIC is simple and inexpensive machine which quarantee long and reliable operation.

## The chain-type baling chamber

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

## A wide range of additional equipment

allows adjusting the machine for custom purposes.

## Press clutch (additional equipment)

enables connecting it with bale wrapper SIPMA OS 7531 MAJA, thanks to which, with one driver, we obtained wrapped film, saving time and money.

## Laminate press covers

protect mobile elements of the machine and make it look dynamic and modern

## SIPMA PS 1510 FARMA



SIPMA PS 1510 FARMA

Round baler SIPMA PS 1510 FARMA is advanced model equipped with the chain-type baling chamber and a hydraulic lock. The loose bale core ensures air permeability of the bales, while the highly compact outer layer protects from water.

## The enlarged baling chamber

allows producing less bales from the same area, ensures improved efficiency, saves the consumables, and reduces the demand for shipping capacity and storage area. This series presses are designed for collecting hay and straw, however they are not recommended for hay silage due to the large bale mass.

## Electronic control panel (additional equipment)

supervises correct work of the press (counting the number of bales, watching over the state of sensor, supervising work efficiency).

#### The chain chamber

used in this type of balers enables effective harvest of different crops and ensures optimal weight for a bale of hay or straw.

## The hydraulic chamber lock

effectively protects the machine against overload.

## SIPMA PS 1211 FARMA PLUS SIPMA PS 1221 FARMA PLUS



These round balers SIPMA PS 1211 FARMA PLUS and SIPMA PS 1221 FARMA PLUS are well-equipped for more demanding customers. The balers are designed especially for those farmers who want high-quality hay silage, but they also perform as well for harvesting hay and straw.

## The mechanical baling chamber lock

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

## Laminate press covers

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

## The innovative chain-roller design of the baling chamber

in the round baler SIPMA PS 1221 FARMA PLUS additionally increases the bale pressing grade, which improves the quality of silage and efficiency of operation.

## **Electronic control panel**

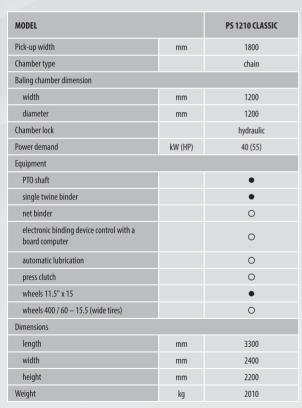
enables installation in the tractor's cab and monitoring harvest.

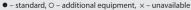
## Central chain lubrication

reduces the time of service and increases life of driver elements.

## Press clutch (additional equipment)

enables connecting it with bale wrapper SIPMA OS 7531 MAJA, thanks to which, with one driver, we obtained wrapped film, saving time and money.







Round baler SIPMA PS 1221 FARMA PLUS

PS 1510 FARMA	PS 1211 FARMA PLUS	PS 1221 FARMA PLUS
1800	1800	1800
chain	chain	roller-chain
1200	1200	1200
1500	1200	1200
hydraulic	mechanic	mechanic
40 (55)	40 (55)	50 (69)
•	•	•
•	•	•
0	0	0
0	•	•
0	•	•
×	0	0
•	×	×
0	•	•
3600	3300	3300
2400	2400	2400
2400	2200	2200
2270	2060	2150

## SIPMA PS 1312 POWER CUT



The POWER CUT system employed in the round balers shreds the collected material prior to pressing. The fodder processed in round balers equipped with shredding knives is better digested by farm animals and considerably facilitates the process of bale shredding in fodder mixing wagons.

## The electronic control panel

displays the performance of the critical baler features, controls the uniform filling of the chamber, automatically initiates the tying, indicates the actual processing operation, releases the binder brakes which facilitates the tying and shows the number of produced bales.

## The rotating feeding and grinding sub-assembly

greatly increases the ability to transport material and protects the machine from clogging and improves its performance.

## The 11 shredding knives

ensure a higher density of the bales – by approx. 15 - 20%, which provides excellent ensilage conditions and improves the harvest economy. The easy knife detach system allows quickly adjusting the cutting length by simply changing the number of blades (with the minimum cutting length of 10 cm). The knives can be hydraulically retracted when shredding is undesired.

## The individual knife overload safety

protects the shredder from stones or other foreign body which may damage the unit (the knives simply fold away) – this increases the operating life of the machine.

## The 'Non-stop' chain lead and stretch system

(which prevents the chain from stopping during the discharge of bales) increases the operating life of the machine. The reinforced chain design ensures a longer operating life and higher resistance to stress.

## The synchronised mechanical lock

ensures that the both chamber locks engage simultaneously and increases the pressure grade.

## The automatic clutch wide-angle shaft

increases the ease of operation, allows tight cornering when turning back without disengaging the machine, and increases its operating life and efficiency.

## Automatic bale wrapping

with the planned wrapping number.



BALES MADE WITH USE OF SIPMA BALER

MODEL		PS 1312 POWER CUT
Pick-up width	mm	2000
Chamber type		chain
Baling chamber dimensions		
width	mm	1200
diameter	mm	1300
Chamber lock		mechanical
Number of cutting knives	pcs	11
Power demand	kW (HP)	66 (90)
Equipment		
PTO shaft		•
net binder		•
chopping unit		•
electronic binding device control with a board computer		•
automatic lubrication		0
wheels 500 / 50 - 15.5		0
wheels 400 / 60 – 15.5 (wide tires)		•
Dimensions		
length	mm	3700
width	mm	2700
height	mm	2300
Weight	ka	2895

standard, ○ – additional equipment, × – unavailable



## SIPMA PS 1213 FASTER NEW PRODUCT SIPMA PS 1223 FASTER NEW PRODUCT







SIPMA PS 1223 FASTER

FASTER fixed chamber round balers are a new series of efficient and quick round balers. Thanks to automatic control of binding processes and the application of the innovative solutions of construction assemblies of the harvester and the scraper, great working speed has been obtained and the efficiency of harvesting has increased significantly.

## Fixed chain chamber

with the dimensions of 1.2 x 1.2 m in SIPMA PS 1213 FASTER baler. guarantees optimal weight of bales for hay, straw and haylage, and firmly compacted surface layer provides resistance to soaking. Application of a reeling chain prevents stopping the bale in the chamber when harvesting dry and slick material.

## Roll-chain structure of the reeling chamber

1.2 x 1.2 m in SIPMA PS 1223 FASTER enables obtaining increased crushing degree and creates better conditions for silage, at the same time preventing stopping the bale in the chamber when harvesting dry and slick material.

## Covers of the balers made of laminate

secure movable elements of the machine, giving it, at the same time, dynamic and modern look.

## Grouped lubrication points of bearings

limit service time, increase life span of bearings, influence increase in efficiency of harvesting and comfort of baler operation.

#### Central lubrication of chains

limits the service time and increases life span of the drive elements.

## Net binding device

protects the bale against unwinding provides considerable shortening of wrapping time and increase in efficiency.

## Electronic control with signalling device for filling the

**chamber** provides work comfort by eliminating the need to observe mechanical indicators on the machine and ensures greater efficiency thanks to automatic control of bale binding processes.

## **Crushing shaft**

already at the harvester, initially compacts the material.

## Torsional copying wheels of the harvester, with tyres

increase comfort of work at turnarounds and effectively maintain working height of the harvester in wet areas.

## Mechanical reeling chamber blockade

relieves the hydraulics of the tractor, increases the crushing degree and provides a significant growth in efficiency of the set. Movable tiller of the baler enables, to a large extent, aggregation of the balers with tractors with fasteners situated at various heights.

## The adjustable drawbar

of the baler allows aggregating balers with tractors having hooks arranged at different heights.

#### Harvester with the width of 1.8 m

with divided beams of harvesting fingers shifting with respect to each other ensures even feeding of material. Application of divided beams and two cams reduces load of the harvester, at the same time boosting its life span.

## Wide tyres

provide a possibility to work in waterloaged areas and peat bogs.

#### Use of anaphoretic ground coat

provides a great resistance to corrosion, which guarantees durability of the machine.

## Press clutch (additional equipment)

enables connection of the baler with wrapping machine SIPMA OS 7531 MAJA, thanks to which in one passage we obtain a bale wrapped in foil, at the same time saving time and money.

#### Possibility of hydraulic lifting of the harvester

when harvesting and at curves or crossings from field to field.

Running speed up to 12 km/h.

## Maximum efficiency of the baler

reaches the level of 45 -55 bales/h.

## Articulated-telescopic wide angle shaft

by SIPMA provides operation of the machine without shutdown of the tractor's WOM during turnaround.

## **On-board computer**

with signalling device for filling the chamber provides comfort of work by eliminating the need to observe mechanical indicators on the machine and ensures greater efficiency thanks to automatic control of bale binding processes.

The computer works on three subprograms: it indicates the currently executed operation, the number of finished bales, operation time down to 1 minute and efficiency. Additionally, it records the number of finished bales from the moment of the first machine activation.

The computer also has a functionality of programming the number of bale wrappings with a net from 1.5 to 5 times. It is done automatically, without the user's intervention.

MODEL		PS 1213 FASTER	PS 1223 FASTER
Harvester width	mm	1800	1800
Chamber type		chain	roll-chain
Reeling chamber dimensions			
width	mm	1200	1200
diameter	mm	1200	1200
Chamber blockade		mechanical	mechanical
Power demand	kW (HP)	55 (75)	55 (75)
Equipment			
articulated-telescopic wide angle shaft		•	•
net binding device		•	•
electronic binding device control with a board computer		•	•
automatic lubrication		•	•
press clutch		0	0
wheels 400 / 60 -15.5 (wide tires)		•	•
Dimensions			
length	mm	3300	3300
width	mm	2400	2400
height	mm	2100	2100
Weight	kg	2200	2285

 $<sup>\</sup>bullet$  – standard,  $\circ$  – additional equipment,  $\times$  – unavailable

## SIPMA PS 1235 PIONIER NEW PRODUCT





SIPMA PS 1235 PIONIER

The SIPMA PS 1235 PIONIER Fixed chamber round baler is designed for collecting green fodder for hay silage. It is also perfect for collecting straw and hay.

## The round roller baling chamber

sized 1.2 x 1.25 m comprises 17 durable ribbed rollers, each 232 mm in diameter, which firmly compact the material and rotate the bale inside irrespective of the operating conditions.

## The double-row barrel bearings

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

## The rotation feeding and shredding unit with 11 knives

guarantees 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. This also improves the fitness of material for handling.

## The individual knife overload safety gear

protects the shredder from stones and other foreign bodies which may damage the unit. This also increases the machine operating life.

## The rotor tilt bottom system

allows fast and easy clearing of jams of the rotor in the shredder. This way the machine operator can clear the baler rotor without leaving the tractor cab.

To push feed 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.

## The pickup

is 2 m wide and properly collects wide swath, even in tight turns, and the side conveyor screws assure smooth flow of the material to the shredding unit trough.

## The pick-up press roller

helps heeping the picked material flow even and pre-compacts the material.

## The tool-free pick-up support wheel adjustment

allows quick and easy setting of the pick-up working height and thus easily adapting the unit to various terrain conditions and swath depth.

#### The duck-bill net binder

feeds the net directly to the rolling chamber, which produces properly bound bales.

## The net loading and replacement

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

## The binding system

can accommodate net up to 1.3 m in width and 4500 m in length. The number of wrapped net layers is preset on the cab computer panel by the operator.

## Hydraulic system

The electrohydraulic power block 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.

## The cab computer panel

controls and monitors the collection, binding and bale unloading cycles. The device also monitors the machine units for proper performance.

## Cab computer panel functionlities:

- · starts and performs the automatic machine work cycle,
- · defines the bale net wrap number,
- · monitors the even filling of the baling chamber,
- · defines and controls the compaction ratio and chamber fill ratio,
- · visualises actual operating stages,
- monitors and displays sensor status,
- enables control over the pick-up, the blades and the titl rotor floor at any moment of the machine work cycle,
- indicates the number of rolled bales, the operating time, the work output and the amount of net remaining on the reel.

## The bearing lubrication point groups

reduce the servicing time, increase the bearing operating life and improve the machine operating comfort.

## The automatic drive chain lubrication system

improves the operating life and reduces the servicing time of the chains. The large oil tank capacity minimises the time of daily machine servicing.

## Automatic lubrication of the rolling roller bearings and the shredder (additional equipment).

An advanced positive-pressure system efficiently feeds the lubricant through the lubrication tubes to all lubrication points. The automatic bearing lubrication system reduces the machine servicing time by limiting the relubrication to simply filling the lubricant tank.

## The polyester glass laminate press covers

protect the moving parts and secure the machine from scratches and dents, while giving the unit a dynamic and modern appearance. The cover opening style gives the operator easy access to the machine parts.

## The wide angle PTO shaft with automatic clutch

allows the machine to work on headlands and protects the baler from overload damage.

MODEL		PS 1235 PIONIER
Pick-up width	mm	2000
Pick-up lift		hydraulic
Chamber type		roller
No. of rolling rollers	pcs.	17
Baling chamber dimensions		
width	mm	1200
diameter	mm	1250
Chamber lock		mechanical
Max. no. of knives	pcs.	11
Knife protection		mechanical
Knife operation		hydraulic
Jam clearing system		tilt bottom
Land follow wheels		pneumatic
PTO rotational speed	rpm	540
Power demand		
without shredding	kW (HP)	60 (82)
with shredding	kW (HP)	75 (102)
Equipment		
wide-angle PTO shaft with automatic clutch		•
pressing roller		•
net binder		•
electronic binding control with cab computer panel		•
automatic lubrication		•
bearing group lubrication		•
automatic bearing lubrication		0
wide tires (400 / 60 - 15.5)		•
Dimensions		
length	mm	4300
width	mm	2550
height	mm	2500
Weight	kg	2990

<sup>● –</sup> standard, ○ – additional equipment, × – unavailable



## **BALE WRAPPERS**

SIPMA OZ 5000 TEKLA SIPMA OZ 7500 TEKLA SIPMA OS 7510 KLARA SIPMA OS 7521 MIRA SIPMA OS 7530 MAJA NEW PRODUCT SIPMA OS 7531 MAJA

SIPMA OS 7535 MAJA SIPMA OR 7532 DIANA



The highest 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 cling 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 S.A. offers bale wrappers with advanced design features which meet the demands of all users

## The main advantages of the offered technology are:

- independence on weather conditions,
- ensilage of low volumes of fodder,
- no waste generated during harvest, ensilage, storage and
- easy fodder pickup and portioning,
- low man labour costs.
- elimination of environmental pollution with silage saps.

## SIPMA OZ 5000 TEKLA SIPMA OZ 7500 TEKLA SIPMA OS 7510 KLARA

#### The tilt 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.

## A solid frame

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

## The universal film dispenser

used in the SIPMA wrappers allows using 0.5 m and 0.75 m wide films. The 0.75 m wide bale wrapping film requires only 16 revolutions of the wrapping table and greatly reduces the wrapping time.

## The aluminium milled film dispenser rollers

ensure pre-stressing of the film and proper adhesion during the wrapping process.

#### The bale counter

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

## A 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 5000 TEKLA SIPMA OZ 7500 TEKLA



SIPMA OZ 7500 TEKLA

Stationary bale wrapping machines, the models SIPMA OZ 5000 TEKLA and SIPMA OZ 7500 TEKLA, are offered to small and medium size farms. They are installed on the three-point linkage of the tractor. The model SIPMA OZ 5000 TEKLA operates with 0.5 m wide film, while the model SIPMA OZ 7500 TEKLA is equipped with a universal film dispenser adapted to 0.5 m and 0.75 m wide films. The hydraulic lifting system of the tractor allows automatic bale unloading.

## The structure suspended

on the tractor three-point linkage enables bale wrapping at the storage areas with the use of a loader (i.e. the SIPMA LC 1500 HERKULES front loader with the bale grip).

## Specially designed rollers

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

## Durable, maintenance-free bearings

ensures long and fail-safe work.

## Bale elevator (additional equipment)

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

#### Foil cutter

enables cutting foil as a result of resolution of the table after unloading bales and ensures long and unfailing work.

## SIPMA OS 7510 KLARA



Self-loading bale wrapping machine SIPMA OS 7510 KLARA 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 (0.5 m and 0.75 m 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.

## The design suspended on the tractor

three-point linkage ensures high mobility of the wrapper and low labour demand – just one person is required to operate the machine.

## Wheels rotating around their vertical axis

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

## Shaft (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		OZ 5000 TEKLA	OZ 7500 TEKLA	OS 7510 KLARA		
Bale dimensions	Bale dimensions					
bale diameter	mm	1300	1300	1200 - 1300		
bale width	mm	≤ 1250	≤ 1250	≤ 1300		
Maximum bale weight	kg	1000	1000	1000		
Foil width	mm	500	500 / 750	500 / 750		
Bale wrapping time	sec.	~120	~120	~120		
Minimum number of wrapping		two times	two times	two times		
Power demand	kW (HP)	28.5 (38)	28.5 (38)	20 (30)		
Equipment						
bale elevator		0	0	×		
shaft (d=40 mm)		×	×	0		
shaft (d=50 mm)		×	×	0		
foil catcher		×	×	0		
hydraulic table lock		×	×	0		
Dimensions						
length	mm	2600	2600	2170		
width	mm	1200	1200	1940		
height	mm	1200	1200	2150		
Weight	kg	470	480	780		

 $\bullet$  – standard, O – additional equipment,  $\times$  – unavailable



SIPMA BALE WRAPPERS MACHINES ENSURE HIGH EFFECTIVNESS OF WORK

## SIPMA OS 7521 MIRA



SIPMA OS 7521 MIRA

The SIPMA OS 7521 MIRA bale wrappers machine 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.

## Technological system 'side-back'

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.

## Advanced hydraulic block

causes lower resistance on hydraulic system and gives more possibilities of controlling through the setting of speed of all control function.

## Hydraulic system with Load-Sensing function

affects smaller fuel consumption and grows the liveliness of tractor hydraulic pump.

## Improvement the work culture of the hydraulic system

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

## Universal film dispenser

allows the use of 0.5 and 0.75 m wide films.

## Aluminum, milled film dispenser rollers

provide the initial film stretching and appropriate adhesion during the wrapping process.

## Hydraulic film catcher-cutter

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

## The sensor on the loading arm

ensures automaticly wrapping start process.

#### The brake of the motor

makes impossible to move the table during the drive.

## **Bale elevator**

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

#### Wide tires

provide the opportunity to work on wetlands and peat fields.



CONTROL PANEL

## Capabilities of the control panel

- large LCD graphic display showing the actual parameters of work,
- · manual or fully automatic operation of the machine,
- monitoring of the ongoing process of wrapping,
- counting the number of wrapped bales,
- measuring the time of operation [h] with the accuracy of 1 minute.
- · counting the achieved performance [bales/h],
- measuring the volume of work on five independent fields independent calculation of the number of wrapped bales, working time and achieved performance,
- setting price for wrapping one bale for a given filed,
- programming the number of film layers (depending on the kind of film used), when reached, the machine passages automatically to next work stage,
- smooth control of the rotating speed of the table during work,
- programming the speed of lifting and lowering the loading arm,
- controlling the foil feeding an additional sensor of foil stops the bale wrapping process in case of foil breaks or finishes,
- · controlling the state of oil filter pollution,
- displaying the status of reed sensors (assessing operating efficiency or lack), thanks to which we are able to change a defective sensor without calling the service,

- displaying the sum of wrapped bales since installing the board computer on the wrappers machine,
- displaying on the screen information concerning work in the whole current season - summing up values of data from all fields, where the bale wrapper worked (number of bales wrapped throughout the season, total working time in a season, efficiency in a season).

MODEL		OS 7521 MIRA
Bale dimensions		
bale diameter	mm	1200 - 1500
bale width	mm	≤ 1250
Maximum bale weight	kg	1000
Film width	mm	500 / 750
Wrapper drive		hydraulic
Bale wrapping time	sec.	~ 60
Oil demand	l/min.	20 - 90
Power demand	kW (HP)	≥ 35 (48)
Equipment		
bale elevator		•
universal foil feeders (500 / 750)		•
foil rolls feeders		•
electronic control panel		•
electrical system permitting driver on public roads		•
hydraulic foil catcher-cutter		•
wide tires 400 x 60 - 15.5		•
Dimensions in operating position		
length	mm	4600
width	mm	4100
height	mm	2300
Dimensions in transport position		
length	mm	4600
width	mm	2400
height	mm	2800
Weight	kg	1390

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

## SIPMA OS 7530 MAJA NEW PRODUCT





Self-loading bale wrapping machine SIPMA OS 7530 MAJA is an economical version of the previous designs of MAJA series bale wrapping machines, which is mechanically controlled with a joystick.

## Technological system 'front-back'

allows for work in the same direction as the direction of the press work (along a field), ensures fast loading of bales, wrapping with foil during the drive until the next bale, high efficiency and coupling the bale wrappers machine with the round baler, ensuring simultaneous rolling and wrapping bale during one way.

## Adjustable shaft

in the positions in work and transport effectively allows for collecting bales and transporting the machine over access roads including public ones to the field.

## Counting the number of wrapped bales

shows the number of foil wrapping and informs about finish of the bale wrapping process.

## The joystick

enables to control the wrapping machine from the cabin of the tractor.

## Aluminum, milled film dispenser rollers

provide the initial film stretching and appropriate adhesion during the wrapping process.

## Hydraulic film catcher-cutter

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

#### Bale elevator

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

#### Wide tires

provide the opportunity to work on wetlands and peat fields.

MODEL		OS 7530 MAJA
Bale dimensions		
bale diameter	mm	1200 - 1500
bale width	mm	≤ 1250
Maximum bale weight	kg	1000
Film width	mm	500 / 750
Wrapper drive		hydraulic
Bale wrapping time	sec.	~ 100
Oil demand	I/min.	≥ 20
Power demand	kW (HP)	≥ 35 (48)
Equipment		
bale elevator		•
universal foil feeders (500 / 750)		•
foil rolls feeders		•
electrical system permitting driver on public roads		•
hydraulic foil catcher-cutter		•
joystick control		•
wide tires 400 x 60 - 15.5		•
Dimensions in operating position		
length	mm	5760
width	mm	3160
height	mm	2210
Dimensions in transport position		
length	mm	5820
width	mm	2350
height	mm	2430
Weight	kg	1360

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

## SIPMA OS 7531 MA IA



SIPMA OS 7531 MAJA

The bale wrappers machine SIPMA OS 7531 MAJA 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.

## Technological system 'front-back'

allows for work in the same direction as the direction of the press work (along a field), ensures fast loading of bales, wrapping with foil during the drive until the next bale, high efficiency and coupling the bale wrappers machine with the round baler, ensuring simultaneous rolling and wrapping bale during one way.

## Adjustable shaft

in the positions in work and transport effectively allows for collecting bales and transporting the machine over access roads including public ones to the field.

## Universal film dispenser

allows the use of 0.5 and 0.75m wide films.

## Aluminum, milled film dispenser rollers

provide the initial film stretching and appropriate adhesion during the wrapping process.

## Hydraulic film catcher-cutter

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

#### Bale elevator

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

#### Wide tires

provide the opportunity to work on wetlands and peat fields.



CONTROL PANEL

## Capabilities of the control panel

- manual, automatic or semi-automatic operation of the machine,
- · monitoring of the ongoing process of wrapping,
- · counting the number of wrapped bales,
- · measuring the time of operation [h] with the accuracy of 1 minute,
- · counting the achieved performance [ha/h],
- measuring the volume of work on three independent fields calculation of the number of wrapped bales, working time, achieved performance,
- programming the number of film layers (depending of foil width), when reached, the machine passages automatically to next work stage,
- setting the machine automatically for transport,
- displaying the status of reed sensors (assessing operating efficiency or lack), thanks to which we are able to change a defective sensor without calling the sernice,
- displaying the sum of wrapped bales since installing the board computer on the wrappers machine.



ADJUSTABLE DRAWBAR OF A WRAPPER

MODEL	0S 7531 MAJA	
Bale dimensions		
bale diameter	mm	1200 - 1500
bale width	mm	≤ 1250
Maximum bale weight	kg	1000
Film width	mm	500 / 750
Wrapper drive		hydraulic
Bale wrapping time	sec.	~ 100
Oil demand	l/min.	20 - 40
Power demand	kW (HP)	≥ 35 (48)
Equipment		
bale elevator		•
universal foil feeders (500 / 750)		•
foil rolls feeders		•
electronic control panel		•
electrical system permitting driver on public roads		•
hydraulic foil catcher-cutter		•
wide tires 400 x 60 - 15.5		•
Dimensions in operating position		
length	mm	5760
width	mm	3160
height	mm	2210
Dimensions in transport position		
length	mm	5820
width	mm	2350

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

height

Weight



mm

kg

2430

1360

## SIPMA OS 7535 MAJA





SIPMA OS 7535 MAJA

The bale wrappers machine SIPMA OS 7535 MAJA 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 bale wrapping machine is distinguished by advanced hydraulic system, which is extended by hydraulic adjustable shaft. The advantage of wrapping process is the economy, which allows to save working time for 12h/1000 bales and to reduce the oil demand by 110l/1000 bales.

## Technological system 'front-back'

allows for work in the same direction as the direction of the press work (along a field), ensures fast loading of bales, wrapping with foil during the drive until the next bale, high efficiency and coupling the bale wrappers machine with the round baler, ensuring simultaneous rolling and wrapping bale during one way.

## Advanced hydraulic unit

causes lower resistance of the hydraulic system and provides greater control possibilities by setting the speed of all controller functions.

#### Hydraulic system with Load-Sensing function

affects smaller fuel consumption and grows the liveliness of tractor hydraulic pump.

## Improvement the work culture of the hydraulic system

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

## Hydraulic adjustable shaft

in the positions in work and transport effectively allows for collecting bales and transporting the machine over access roads including public ones to the field.

#### An additional sensor of foil

stops the bale wrapping process in case of foil breaks or finishes.

## Large LCD graphic display

ensures in easy and intuitive way to put the work parameters and shows the state of wrapping machines parameters.

## Programming the rotating speed

of lifting and lowering the loading arm and the table.

## Smooth control of the rotating speed

of the table during work enables the adapting speed to the weight of the bale, also during bale wrapping process.

## The control panel

enables setting price for wrapping one bale for a given filed and displaying information from whole the season.

## Universal film dispenser

allows the use of 0.5 and 0.75m wide films.

## Aluminum, milled film dispenser rollers

provide the initial film stretching and appropriate adhesion during the wrapping process.

## Hydraulic film catcher-cutter

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

## The sensor on the loading arm

ensures automatically wrapping start process.

#### The brake of the motor

makes impossible to move the table during the drive.

#### Bale elevator

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

#### Wide tires

provide the opportunity to work on wetlands and peat fields.

## Controlling the state of oil filter pollution

signals a necessity of its change when admissible state of pollution will be overdraft.



## Capabilities of the control panel

- large LCD graphic display showing the actual parameters of work,
- manual or fully automatic operation of the machine,
- · monitoring of the ongoing process of wrapping,
- counting the number of wrapped bales,
- measuring the time of operation [h] with the accuracy of 1 minute,
- counting the achieved performance [bales/h],
- measuring the volume of work on five independent fields calculation of the number of wrapped bales, working time, achieved performance,
- · setting price for wrapping one bale for a given filed,
- programming the number of film layers (depending on the kind of film used), when reached, the machine passages automatically to next work stage,
- · smooth control of the rotating speed of the table during work,
- programming the speed of lifting and lowering the loading arm,
- controlling the foil feeding an additional sensor of foil stops the bale wrapping process in case of foil breaks or finishes,
- · controlling the state of oil filter pollution,
- displaying the status of reed sensors (assessing operating efficiency or lack), thanks to which we are able to change a defective sensor without calling the service,
- displaying the sum of wrapped bales since installing the board computer on the wrappers machine,
- displaying on the screen information concerning work in the whole current season. Summing up values of data from all fields, where the bale wrapper worked (number of bales wrapped throughout the season, total working time in a season, efficiency in a season).

MODEL		OS 7535 MAJA
Bale dimensions		
bale diameter	mm	1200 - 1500
bale width	mm	≤ 1250
Maximum bale weight	kg	1000
Film width	mm	500 / 750
Wrapper drive		hydraulic
Bale wrapping time	sec.	~60
Oil demand	I/min.	20 - 90
Power demand	kW (HP)	≥ 35 (48)
Equipment		
bale elevator		•
universal foil feeders (500 / 750)		•
foil rolls feeders		•
electronic control panel		•
electrical system permitting driver on public roads		•
hydraulic foil catcher-cutter		•
wide tyres 400 x 60 - 15.5		•
Dimensions in operating position		
length	mm	5760
width	mm	3160
height	mm	2210
Dimensions in transport position		
length	mm	5820
width	mm	2350
height	mm	2430
Weight	kg	1360

ullet – standard,  $\bigcirc$  – additional equipment,  $\times$  – unavailable



BALE WRAPPER SIPMA OS 7531 MAJA

## SIPMA OR 7532 DIANA NEW PRODUCT





SIPMA OR 7532 DIANA

Bale wrappers machine SIPMA OR 7532 DIANA is a fully automated self-loading machine, tractor-trailed, including working in the unique 3D system (in addition to conventional), enabling the reduction of film consumption by about 25%, which has fully automated the whole process of wrapping, which provides advanced controller compatible with standard ISOBUS, with earlier programming the parameters of work cycle.

## The wrapper gives you the choice of:

- maximum wrapping speed,
- · minimal usage of film.

## The structure of the bale wrappers machine

SIPMA OR 7532 DIANA ensures, besides "conventional wrapping", also wrapping in two planes – 3D wrapping. This effect is achieved thanks to leaning the film dispensers. As result of this method of wrapping it's possible to save up to 25% of the film.

## The in-line process

enables the operation of the machine in direction following the round balers, ensuring fast bale loading and bale wrapping while approaching the next bale, connection of the bale wrapper with the baler provides simultaneous folding and wrapping of the bale in one work pass.

## The damper system

allows bales to be lowered to the ground, protecting them from potential damage during discharge.

## Hydraulic film catcher-cutter

works automatically after each bale wrapping process, providing considerable acceleration of the wrapping process and its efficiency.

## Wrapping speed

The user has two wrapping methods at his disposal:

- conventional 2D wrapping wrapping cycle lasts for approx. 50 seconds and only 8 rotations of the arms are necessary to wrap a bale. 2D wrapping allows for saving of work time.
- 3D wrapping wrapping cycle lasts for approx. 65 seconds and is executed in two stages: round wrapping with horizontal positioning of the film dispensers and wrapping of side surfaces (bale bottoms) with vertical positioning of the film dispensers. 3D wrapping is more time consuming, but it allows for reduction of film consumption by approx. 25%.

## Film consumption for one bale

During conventional wrapping consumption is equal to approx. 60 m of film, whereas during 3D wrapping the value is smaller and is equal to approx. 45 m.

#### Wide tires

allow for work in wetlands and peat lands.

## Film dispenser

allows the use of 0.75 wide films.

## Aluminium, milled film dispenser rollers

provide the initial film stretching, tightness and appropriate adhesion during the wrapping process.

## The extra tray for six additional films

allows for smooth and efficient operation of the wrapper without unnecessary downtime.

## Hydraulic adjustable drawbar

facilitates the machine transport on access roads to the field.

## Hydraulic system with the Load-Sensing function

reduces fuel consumption.

## Control system based on ISOBUS

is a standard equipment of the wrapper and ensures fully automatic operation of the machine and control of all the parameters of its operation.



THANKS TO THE 3D-WRAPPING, THE CONSUMPTION OF FOIL IS REDUCED

# MODERN WRAPPER CONTROL Capabilities of the control panel

- manual or fully automatic operation of the machine,
- monitoring of the on-going process of wrapping (number of wraps counter),
- · counting the number of wrapped bales,
- measurement of the time of operation [h] with the accuracy of 1 minute,
- counting the achieved performance [ha/h],
- measurement of the volume of work on five independent programs (fields),
- programming the number of film layers (we can program the number of wraps, after which the wrapping cycle ends),
- sensor status display (due to the sensors being vulnerable to mechanical damage, we are able to rapidly assess their operation efficiency and change
- a defective sensor without calling for the service),
- large LCD graphic display showing the operation parameters,
- step-less speed control of arms during operation,
- · programming of floating and sinking speed of foot loading,
- film dispensing control additional film sensors stop the bale wrapping process in case of breakage or termination,
- · oil filter contamination control,
- display of the sum of wrapped bales since the installation on the wrapper,

- setting the price for a bale wrappers service for the selected field (program),
- information about operation performed throughout the current season is displayed on the monitor screen. All visible data consists of values from all fields (areas), at which the wrapper operation was executed (number of bales wrapped in a season, total working time in the season, performance achieved in the season).

MODEL		OR 7532 DIANA
Bale sizes		
diameter of wrapped bales	mm	1200 - 1500
width of wrapped bales	mm	≤1200
Maximum bale weight	kg	1000
Film width	mm	750
Wrapper drive		hydraulic
Power demand	kW (HP)	37 (50)
Equipment		
bale elevator		•
foil feeders (750 mm)		•
tray on a roll of film		•
electronic control		•
electric installation which allows for movement on public roads		•
hydraulic film catcher-cutter		•
hydraulic adjustable drawbar		•
wheels 340 / 55 – 16 14 PR (wide tires)		•
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, ○ – additional equipment, × – unavailable



## SELF-LOADING STACKING TRAILER

SIPMA WS 6510 DROMADER



SIPMA WS 6510 DROMADER

The SIPMA WS 6510 DROMADER trailer is a multi-purpose self-loading low-chassis trailer with a loading capacity of 6.5 tons. The truck 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 room for next bales.

## The load body design

enables the trailer to collect and ship 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.

## The safety support

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

## The all-wheel pneumatic brakes and the hand brake

guarantee high safety of work.

## **Road lights**

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



BALE TRANSPORT WITH THE SELF-LOADING TRAILER SIPMA WS 6510 DROMADER

## A tandem chassis (dead axles) and reinforced structure

increase durability and resistance providing a load capacity of 6500 kg.  $\,$ 

## The hydraulic switch

allows controlling the machine from the driver's cab and ensures high operating comfort and efficiency.

MODEL		WS 6510 DROMADER
Loading capacity	t	6.5
Maximum bales number	pcs	8
Maximum bales weight	kg	800
Backward dumping angle		90°
Side discharging angle		45°
Maximum speed	km/h	25
Power demand	kW (HP)	60 (82)
Dimensions of the load body		
length	mm	4000
width	mm	2200
height	mm	370
Dimensions of the staking trailer		
length	mm	6440
width	mm	2630
height	mm	3200
Weight	kg	2610



## **FRONT LOADERS**

SIPMA LC 850 HERKULES NEW PRODUCT SIPMA LC 1200 HERKULES SIPMA LC 1500 HERKULES

Loose material scoops (width range: 1.5m, 1.8m, 2.0m, 2.2m)



Round bale grips (two actuators)



**CROCODILE** manure scoop (one actuator)



Manure and bale forks



Sliding pallet forks



Multi-bucket



The SIPMA LC 850 HERKULES, SIPMA LC 1200 HERKULES and SIPMA LC 1500 HERKULES front loaders are multi-purpose machines for loading different materials.

## Rigid, stress-resilient design

guarantees many years of reliable operation.

## Supports mounted on the support frame of the tractor ensure reliable mounting, compatibility with a wide selection of tractor models and high safety of work.

## Fastening system

ensures easy assembly and disassembly on tractors and increases the comfort of work for the loader.

## Lever of external hydraulic system of a tractor or a joystick allows for operation of the loader from the tractor cab, which makes

work more comfortable and safe.

## Coupling system

allows fast replacement of the loader equipment:

- loose material scoops (width range: 1.5m, 1.8m, 2.0m, 2.2m),
- round bale grips (two actuators),
- CROCODILE manure scoop (one actuator),
- manure and bale forks,
- sliding pallet forks,
- multi-bucket.

MODEL			LC 850 H	ERKULES	
Lifting capacity	kg	850			
Lifting height(depends on tractor type)	mm	mm 3100			
Total equipment swivel angle		128°			
Hydraulic pressure	MPa		1	6	
Dimensions					
length (loader mounted on the tractor)	mm		55	00	
width	mm		13	00	
height (top position)	mm		35	50	
Weight (without equipment)	kg		4:	55	
Counterweight (box)	kg		6	00	
Equipment					
joystick operation					
bracket			(	)	
counterweight			(	)	
Equipment – loose material scoops					
Working width	mm	1500	1800	2000	2200
Dimensions					
length (depth)	mm	870	870	870	870
height	mm	750	750	750	750
Capacity	m <sup>3</sup>	0.65	0.70	0.80	1.00
Weight	kg	160	240	256	280
Equipment – round bale grips					
Working width	mm	1300			
Dimensions					
length (depth)	mm	1700			
height	mm	900			
Weight	kg	270			
Equipment – crocodile manure scoop					
Working width	mm	1400			
Dimensions					
length (depth)	mm	700			
height	mm	850			
Weight	kg		2	60	
Equipment –manure and bale forks					
Working width	mm		14	100	
Dimensions					
length (depth)	mm		7	00	
height	mm	850			
Weight	kg	145			
Equipment – sliding pallet forks					
Working width	mm		0 - 1	1300	
Dimensions					
length (depth)	mm	1470			
height	mm	700			
Weight	kg	275			
Equipment – multi-bucket					
Working width	mm		20	100	
Dimensions					
length (depth)	mm		6.	20	
height	mm		8	80	
Weight	kg	350			

<ul><li>– standard</li></ul>	O - additional	equipment	× – unavailable

	LC 1200 H	IERKULES			LC 1500 F	IERKULES	
	12	:00		1500			
		00		3800			
		7° 6		129° 16			
	'	U			'	U	
	65	00			65	00	
	1300 1300						
	42	100 15				:00 15	
	60					00	
		•				•	
		) )				) )	
					·		
1500	1800	2000	2200	1500	1800	2000	2200
870	870	870	870	870	870	870	870
750	750	750	750	750	750	750	750
0.65	0.70	0.80	1.00	0.65	0.70	0.80	1.00
160	240	256	280	160	240	256	280
13	1300 1500		13	300	15	500	
	1500						
	00 1890			700		190	
	00 70		20 90		00 70		20 90
2.	70	Ζ.	<b>70</b>	2	70	2	90
	14	-00			14	-00	
	7/	00			71	700	
	8.			850			
	260 260						
	14	00			14	00	
	7(	00			7(	00	
	850		850				
	145			145			
	0-1300			0 - 1300			
	1470 1470		1470 1470				
700				00			
275			2	75			
	20	100			20	100	
		20				20	
		20 80		620 880			
880 350		350					



SIPMA RB 1200 KRUK SIPMA RB 1500 KRUK



SIPMA RB 1500 KRUK

The SIPMA RB 1200 KRUK and SIPMA RB 1500 KRUK manufactured by SIPMA S.A. 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.

## **Electronic controller**

in the SIPMA RB 1500 KRUK bale shredder and the three-sectional hydraulic distributor in the SIPMA RB 1200 KRUK allow 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°.

#### Blade 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 drums.

#### Grill installed over the blade drum

ensures steady feeding of the drum with the material, protects the machine from clogging and enhances its durability and reliability.

## Mechanical, floor chain conveyor

uses a hydraulic drive to operate with variable speed, which is adjusted in a step-less manner.

## **Back loading wall**

driven by a hydraulic servo-motor allows for quick and easy loading of bales on the machine

## The oil flow control valve 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.

MODEL		RB 1200 KRUK	RB 1500 KRUK
Maximum straw spreading range	m	14	14
Maximum fodder feeding height	mm	1200	2500
Maximum width of shredded bales	mm	1200	1500
Maximum diameter of shredded bales	mm	1500	2000
Expected bale shredding time	min.	3	2
Number of simultaneously shredded bales	pcs	1	2
Load box length	mm	1350	2350
Load box width	mm	1300	1600
PTO rotations	rpm	540	540
Power demand	kW (HP)	40 (55)	60 (80)
Equipment			
PTO shaft		•	•
Dimensions			
length	mm	3400	5760
width	mm	2000	2300
height	mm	1850	2800
Weight	kg	1200	2100

<sup>● –</sup> standard, O – additional equipment, × – unavailable



SIPMA PK 4000 KOSTKA SIPMA PK 4010 KOSTKA SIPMA PK 4011 KOSTKA





The SIPMA PK 4000 KOSTKA, SIPMA PK 4010 KOSTKA and SIPMA PK 4011 KOSTKA cube balers are excellent straw collecting machines, also effective in collection of hay. The optimum design, excellent operating parameters, as well as high durability and reliability are the reasons why SIPMA has been manufacturing these machines for more than 30 years, continiously improving them. Almost 100.000 machines were sold to farmers so far.

## The pressing chamber design

allows adjusting the pressure force (up to 180 kg/m³), setting the cube length from 0.3 to 1.3 m and adjusting the plane of the ejected cube.

## The balanced crank and piston system

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

## The hydraulic harvester lifting system

increases the safety and comfort of operation.

## The double binding device

used in a machine quickly and accurately binds bales formed by the square baler.

## The safeties installed

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.

## The electrical system

enables driving the machine on public roads – without additional costs.

## The bale slide (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 grade.

## **Knotter for wire binding (additional equipment)**

is mounted pursuant to a special order.

#### Wire container

in the knotter for wire binding edition, allows for smooth supply of wire to the binding apparatus.

## Electronic meter (additional equipment)

allows to control the number of made bales.



BAILING OF STRAW BY SIPMA PK 4100 KOSTKA

MODEL		PK 4000 Kostka	PK 4010 KOSTKA	PK 4011 Kostka	
Harvester width	mm	1780	1780	1780	
Width of the baling com- partment	mm	460	460	460	
Height of the baling compartment	mm	400	400	400	
Bale length - smooth adjustment	mm	300 - 1300	300 - 1300	300 - 1300	
Pressure grade	kg/m³	≤ 180	≤ 180	≤ 180	
Pick-up lifting		mechanical	hydraulic	hydraulic	
Drawbar setting		mechanical	mechanical	hydraulic	
PTO rotations	rpm	540	540	540	
Power demand	kW (HP)	28.5 (38)	28.5 (38)	28.5 (38)	
Recommended parameters of binding twine					
nominal linear mass of sisal twine	tex	4500 - 6700	4500 - 6700	4500 - 6700	
nominal linear mass of propylene twine	m/kg	300 - 400	300 - 400	300 - 400	
Equipment					
PTO shaft		•	•	•	
bale chute		0	0	0	
wire binding knotter		0	0	0	
electronic meter		0	0	0	
Dimensions					
length	mm	4900	4900	4900	
width	mm	2500	2500	2500	
height	mm	1600	1600	1600	
Weight	kg	1555	1560	1570	

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





SIPMA WA 400 DELFIN
SIPMA WA 600 DELFIN
SIPMA WA 900 DELFIN
SIPMA WA 1200 DELFIN
NEW PRODUCT





## Frame bearer

(SIPMA WA 600 DELFIN, SIPMA WA 900 DELFIN, SIPMA WA1200 DELFIN) significantly increases the strength of the trucks. The frame chassis trucks can be adapted for mounting of a soil applicator. Mechanical readjustment of the drawbar eye height in relation to the tank allows for change of the truck's inclination angle.

## Self-supporting construction

(SIPMA WA 400 DELFIN) allows for mechanical readjustment of the drawbar eye in relation to the tank, so as to obtain a satisfactory inclination angle of the truck.

## Pressure relief valves

make the tank impervious to damage from exceeding the nominal pressure.

## Reinforcing rings

the cross-section of which is used in the manufacturing of high-pressure tanks make the structure extremely strong and safe.

#### Three connectors

ensure safe and ergonomic operation of the truck. The trucks feature 3 connector pipes as a standard: two side pipes (one with a brass manual gate valve and one plugged) and one rear with a hydraulic-operated gate valve and a spreading bailer. An additional input connector pipe can be installed in the hatch on order.

## **General-purpose structure**

(SIPMA WA 1200 DELFIN) allows for installation of a pneumatic mixer or a water gun.

#### 5 mm sheet-metal tank

is hot galvanized on both sides. The frame and the tow bar are coated with a special polyurethane paint. These parts may also be hot galvanized on order.



## Inner partition

protects from sudden fluid overflow, especially during sudden braking or traversing difficult terrain with partially filled tank. This avoids the unfavorable rocking of the tank and excessive strain on the tractor coupling. We use two partitions in our tanks, in SIPMA WA 900 DELFIN and SIPMA WA 1200 DELFIN, which distinguishes us from other manufacturers and allows for increasing security and satisfaction of our customers.

## Soil applicator SIPMA AD 251 (additional equipment)

with a working width of 2.3 m equipped with 9 coulters submerging manure to a depth of 10 - 12 cm is compatible with slurry tankers SIPMA WA 600 DELFIN, SIPMA WA 900 DELFIN and SIPMA WA 1200 DELFIN.

## Certificate of approval for the truck

each truck has a certificate of approval as an agricultural trailer, thus it is suitable for transport on public roads.

## **Bottom hatch**

ensures easy cleaning of the tank.

## Battioni Pagani vacuum pumps

ensure reliability and long operating life. Pumps of other performance parameters can be installed on order.

## The pipe indicator

allows for full control over loading of the tank.

## Adjustable axis position

(SIPMA WA 600 DELFIN, SIPMA WA 900 DELFIN, SIPMA WA 1200 DELFIN) simplifies the use of the slurry tanker, especially after the installation of additional equipment – it is possible to relieve / burden the latch.

SLURRY TANKER DURING THE APPLICATION OF SLURRY





THE SOIL APPLICATOR SIPMA AD 251

MODEL		WA 400 DELFIN	
Capacity			
Tank diameter	mm	1250	
Pump		MEC / M 4000	
Diameter of connections	cal (mm)	4 (102)	
Traction system		1 fixed axle	
Maximum speed	km/h	40	
Power demand	kW (HP)	40 (55)	
Equipment			
PTO shaft		•	
2-circuit braking system		•	
1-circuit braking system		0	
brass gate with two stubs		0	
3 connector pipes - 1 rear and 2 side		•	
back cap filler		0	
top 2-ball valve		•	
ball valve siphon with drain valve		•	
rear hydraulic-operated brass gate valve		•	
side manually-operated brass gate valve		•	
additional fate		0	
hose – 6.6 lm		•	
hose – 7.0 lm		0	
galvanized spreading bailer		•	
galavnized brackets		0	
GRANIT slurry spreader - Italian system		0	
water gun		×	
pneumatic mixer		×	
soil applicator SIPMA AD 251		×	
air filter		0	
wheels 400/60 – 15.5 14 PR		•	
wheels 400/60 – 22.5 16 PR		×	
wheels 500/50 – 17 14 PR		0	
wheels 500/60 – 22.5 16 PR		×	
wheels 550/60 – 22.5 16 PR		×	
wheels 600/50 R 22.6		×	
wheels 710/45 R 22.5		×	
Dimensions			
length	mm	5500	
width	mm	2205 - 2340*	
height	mm	2450	
Weight	kg	1650	

$ullet$ – standard, $\bigcirc$ – additional equipment, $\times$ – unavailable
*) depending on the type of wheels used

WA 600 DELFIN	WA 900 DELFIN	WA 1200 DELFIN
6600	9000	12000
1500	1500	1800
MEC / M 6500	MEC / M 8000	MEC / M 11000
5 (127)	6 (152)	6 (152)
1 fixed axle	double suspended axle	double suspended axle
40	40	40
60 (82)	66 (90)	88 (120)
•	•	•
•	•	•
0	0	0
0	0	×
•	•	•
0	0	0
•	•	•
•	•	•
•	•	•
•	•	•
0	0	0
•	•	×
0	0	•
•	•	•
0	0	0
0	0	0
×	×	0
×	×	0
0	0	0
0	0	0
×	×	×
•	•	•
×	×	×
0	0	0
0	0	0
0	0	0
0	0	0
6000	7500	7490
2240 - 2485*	2240 - 2485*	2390 - 2550*
2700	2770	3250
2400	4000	4800



# MINERAL FERTILIZER DISTRIBUTORS

SIPMA RN 410 ANTEK SIPMA RN 610 ANTEK SIPMA RN 500 BORYNA SIPMA RN 1000 BORYNA





Mounted on a three-point hydraulic lift system of a tractor, two disc distributors SIPMA RN 410 ANTEK, SIPMA RN 610 ANTEK, SIPMA RN 500 BORYNA, SIPMA RN 1000 BORYNA are intended for surface distribution of mineral and crystalline fertilizers over farmlands for basic fertilising and nourishing plants.

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 terminal spreading.

# The sturdy frame structure

guarantees long-lasting and reliable operation.

# The spreading system

enables even dosing of fertiliser on the spreading discs and arranges fertiliser on the field surface with precision.

# The spreading discs

feature two pairs of vanes, which allow spreading fertilizers at the operating width of 10 - 18 m (SIPMA RN 1000 BORYNA 18 – 24 m).

# The terminal spreading discs (additional equipment)

allow spreading the fertilizer at the verge of the field.

## Hydraulically operated valves

allow for closing each dosing opening independently.

#### The flexible pendulum agitator

ensures uniform feeding of fertilizers on the spreading discs.

#### The sieves installed in the tank

protect the spreader from clumps of caked fertilizers and impurities penetrating to the spreading zone.

# The stainless steel operating features

(i.e. the spreading discs, dampers at the bottom of the basket and guards) guarantee long-lasting and reliable operation of the distribution.

#### The foldable tarpaulin cover

(additional equipment for SIPMA RN 500 BORYNA, SIPMA RN 1000 BORYNA) installed on the container allows operating in various atmospheric conditions.

#### The top units (additional equipment)

are mounted easily on the top tank and enable adjusting tank capacity depending on needs, thanks to which the distributor can be applied in operations on both small and large areas.



MINERAL FERTILIZER DISTRIBUTION SIPMA RN 610 ANTEK

MODEL		RN 410 Antek
Capacity	1	400
Max load capacity	kg	410
Working width depending on the use of vanes	m	10 - 18
Disc diameter	mm	430
Number of spreading discs	pcs	2
Number of vanes on disc	pcs	2
Control		hydraulic
Maximum working speed	km/h	12
Maximum transport speed	km/h	25
Dimensions		
length	mm	1200
width	mm	2030
filling height	mm	900
Weight	kg	200
Equipment		
PTO shaft		•
terminal spreading discs		0
tarpaulin cover with stand		×
transport trolley		×
Equipment - top units		
Top unit		×
Capacity with top unit	I	×
Max. load capacity with top unit	kg	×
Dimensions with top unit		
length	mm	×
width	mm	×
filling height	mm	×
Weight with top unit	kg	×

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



RN 610 Antek	RN BOR		RN 1 Bor	1000 YNA		
600	50	00	10	00		
1320	11	00	22	00		
10 - 18	10 -	- 18		- 18 - 24		
430	43	30	4:	30		
2	:	2	:	2		
2	;	2	:	2		
hydraulic	hydr	aulic	hydr	aulic		
12	1	2	1	2		
25	2	5	2	5		
1240	11	00	1300			
2040	20	00	2300			
990	11	00	1300			
230	30	00	380			
•	•			•		
0	(	)	(	)		
×	C	)	0			
×	>	<	(	)		
S610	S250	2 x S250	\$500	S1000		
1200	750	1000	1500	2000		
1320	1100 1100		2200	2200		
1240	1100	1100	1300	1500		
2040	2000	2000	2300	2600		
1260	1200	1300	1500	1700		
260	320	340	410	430		





SIPMA RO 1200 TORNADO SIPMA RO 600 ZEFIR NEW PRODUCT SIPMA RO 800 ZEFIR SIPMA RO 1000 ZEFIR

# SIPMA RO 1200 TORNADO



The SIPMA RO 1200 TORNADO manure spreader is designed for spreading manure, peat and compost.

#### Two-drum vertical worm adapter

with cutting blades ensures fine break-up, as well as long range spread and its uniformity.

#### Additional fitting (additional equipment)

which replaces the worm adapter allows spreading lime and chicken droppings.

# Hydraulically-actuated flap

closes the load platform and prevents the material from falling during transport.

# Tandem suspension undercarriage

provides high comfort of operation.

# Dual hydraulic floor conveyor

provides step-less, variable adjustment of the amounts of spread material

### Loading platform

with the capacity of 12 m<sup>3</sup> ensures high efficiency and can additionally be used as high-volume trailer for transport of agricultural commodities.

MODEL		RO 1200 TORNADO
Nominal load	t	12
Capacity	m³	12
Spreading width	m	10
Dose of spread material	kg/s	5 - 60
Number of spreading drums	pcs	2
Suspension		tandem
Size of wheels		400 / 70 R 22.5
Maximum speed	km/h	25
Power demand	kW (KM)	80 (108)
Equipment		
PTO shaft		•
brake system 1-wire		•
brake system 2-wires		0
handbrake		•
hydraulic rear flap		•
hydraulic control of floor transporter		•
lamps (electric installation)		•
ladder and side wall steps		•
adapter for lime and chicken manure		0
Dimensions		
length	mm	7100
width	mm	2300
height	mm	3100
height of capacity	mm	2720
	kg	4850

<sup>• -</sup> standard, O - additional equipment, × - unavailable

# SIPMA RO 600 ZEFIR NEW PRODUCT SIPMA RO 800 ZEFIR NEW PRODUCT SIPMA RO 1000 ZEFIR NEW PRODUCT



Manure spreaders SIPMA RO 600 ZEFIR, SIPMA RO 800 ZEFIR, SIPMA RO 1000 ZEFIR are used for spreading manure, peat and compost. They can also be used for transport of agricultural commodities. They are compatible with tractors equipped with a bottom "hitch" type latch and are fully adapted for transport on public roads.

#### General-purpose adapter

allows for spreading of manure, peat or compost.

#### Two-drum vertical worm adapter

with cutting blades ensures fine break-up, as well as long range spread and its uniformity.

#### **HARDOX** steel adapter blades

ensure the structure's durability and reliability in utilization.

#### Hydraulically-actuated flap

closes the load platform and prevents the material from falling during transport.

#### Wooden strip

protects the side walls from mechanical damage during loading operations.

#### Dual hydraulic floor conveyor

provides step-less, variable adjustment of the amounts of spread material.

#### Wheels

guarantee small roll friction and base pressure, they allow for easier operation and transport in humid areas.

# Self-cleaning tire profile

guarantees comfortable utilization of the spreader.

#### Overload clutch

secures the drive unit in case of possible blockage.

MODEL		RO 600 ZEFIR	RO 800 ZEFIR	RO 1000 ZEFIR	
Nominal load	t	6	8	10	
Capacity	m³	7.9	9.8	11.8	
Spreading width	m	10	10	10	
Dose of spread material	kg/s	5 - 60	5 - 60	5 - 60	
Number of spreading drums	pcs	2	2	2	
Suspension		rigid	rigid	rigid	
Size of wheels		18.4 - 34"	18.4 - 34"	18.4 - 38"	
Maximum speed	km/h	25	25	25	
Power demand	kW (HP)	55 (75)	65 (88)	75 (102)	
Equipment					
PTO shaft		•	•	•	
brake system 1-wire		•	•	•	
brake system 2-wires		0	0	0	
handbrake		•	•	•	
hydraulic rear flap		•	•	•	
hydraulic control of floor transporter		•	•	•	
lamps (electric installation)		•	•	•	
ladder and side wall steps		•	•	•	
wood slat sides		•	•	•	
Dimensions					
length	mm	6800	6800	6800	
width	mm	2760	2760	2667	
height	mm	2990	3260	3620	
height of capacity	mm	2640	2910	3280	
Weight	kg	3900	4150	4670	

<sup>● –</sup> standard, ○ – additional equipment, × – unavailable



SIPMA ZP 2220 ATLAS 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



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 the tightness of the crusher and allows for precise assembly of the processing features.

#### Cast iron or steel incised crushing rollers

ensure high output and reliability of the machine.

#### Adjustable foot height

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

#### System of three crushing rollers

allows for crushing large grains in one run (corn, horse bean, pea and field pea).

#### Working port adjustment mechanism

allows for precise adjustment of the working port and preserves the alignment of the crushing rollers.

#### The magnet cartridge

protects the crusher mechanism from foreign metal bodies.

- ATLAS series
- TYTAN series

# Two methods of drive transmission between the working rollers:

- transmission belts (ATLAS series)
- gears (TYTAN series)





#### Three crusher foot lengths

The ATLAS series features the possibility of using a short or long foot (additional accessories) besides the medium foot (standard accessories). The high foot allows for driving the fodder cart under the crusher.

#### Capability of mounting a bagging machine

(additional accessories for the ATLAS series) and a loading chute.

#### Grain feed adjustment

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

MODEL		ZP 2220 ATLAS	ZP 4020 ATLAS	ZP 4030 ATLAS
Engine power	kW	2.2	4	4
Number of rollers	pcs	2	2	3
Roller width	mm	71	160	160
Roller diameter	mm	240	290	290
Working port	mm	0.1 – 0.5	0.1 – 0.5	0.1 – 0.5
Initial crushing port	mm	×	×	3 - 4
Equipment				
short feet (550 mm)		•	0	0
medium feet (750 mm)		0	•	•
long feet (955 mm)		×	0	0
adjustable feet (680 – 950 mm)		×	×	×
adjustable feet (700 – 950 mm)		×	×	×
adjustable feet (750 – 950 mm)		×	×	×
bag mounting		•	0	0
Dimensions				
length	mm	1100	1240	1240
width	mm	720	640	620
height	mm	1200	2000	2000
Weight	kg	149	250	270

<ul> <li>– standard, ○ – additiona</li> </ul>	l equipment,	× – unavailable
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GRAIN BEFORE CRUSHING

ZP 5520 ATLAS	ZP 5530 ATLAS	ZP 7530 ATLAS	ZZ 4020 TYTAN	ZZ 7520 TYTAN	ZZ 7530 TYTAN
5.5	5.5	7.5	4	7.5	7.5
2	3	3	2	2	3
200	200	300	150	300	300
290	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	0.1 – 0.5
×	3 - 4	3 - 4	×	×	4
0	0	0	×	×	×
•	•	•	×	×	×
0	0	0	×	×	×
×	×	×	•	×	×
×	×	×	×	•	×
×	×	×	×	×	•
0	0	0	•	•	•
1200	1200	1200	1350	1350	1520
710	710	780	850	870	910
1800	1800	1800	1380	1420	1580
355	375	485	196	305	350



GRAIN AFTER THE USE OF **GRAIN CRUSHER SIPMA** 

83



SIPMA AU 220 DZIK SIPMA AU 260 DZIK SIPMA AU 300 DZIK SIPMA AT 300 DZIK





SIRIVIA AU 200 D.

SIPMA AU 220 DZIK NEWPRODUCT
SIPMA AU 260 DZIK NEWPRODUCT
SIPMA AU 300 DZIK NEWPRODUCT

The skimmers SIPMA AU 220 DZIK, SIPMA AU 260 DZIK and SIPMA AU 300 DZIK are machines with a 2-row set of shoes, a row of sprocket or smooth discs and a splined, tabular or cage roller. It is intended for field work after harvest.

# The durable load bearing structure of the skimmers

is built on a rigid frame made of high-grade, thick-wall steel shapes.

# The working components: beam feet and discs

are protected by suitably sized shear pins or springs which secure the skimmer and the tractor against mechanical unit overloading.

# The string packers of the skimmers

ensures disintegration of the chunks generated by processing, levels out the field surface and improves the conditions of humus processes.

# The high clearance under the frame

minimizes clogging during work.



MODEL		AU 220 DZIK	AU 260 DZIK	AU 300 DZIK		
MODEL		AU 220 DZIK	AU 200 DZIK	AU 300 DZIK		
Skimmer service width	m	2.2	2.6	3.0		
Max service depth	mm	200	200	200		
String packer service width	mm	2200	2600	3000		
String packer diameter	mm	500	500	500		
Number of shoe working units	pcs	5	6	7		
Number of tooth discs	pcs	6	7	8		
Diameter of tooth discs	mm	460	460	460		
Maximum speed	km/h	25	25	25		
Power demand	kW (HP)	59 (80)	66 (90)	81 (110)		
Equipment						
shear pin security		•	•	•		
spring security		0	0	0		
splined roller		•	•	•		
tabular roller		0	0	0		
cage roller		0	0	0		
smooth discs		•	•	•		
sprocket discs		0	0	0		
Dimensions						
lenght	mm	3150	3150	3150		
width	mm	2600	3000	3000		
height	mm	1480	1480	1480		
Weight	kg	770	980	1100		

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





The skimmer SIPMA AT 300 DZIK is a machine with a 2-row set of teeth discs and a splined, tabular, cage or a packer roller. It is intended for field work after harvest.

# The durable load bearing structure of the skimmer

is built on a rigid frame made of high-grade, thick-wall steel shapes.

#### Shock absorbers made of rubber

All teeth discs are protected by shock absorbers made of rubber, which secure the disc against overloading of the mechanical unit.

#### Side curtains

prevent a soil from pouring from one side to another during a cultivation.

#### Smoothen straw tines (additional equipment)

are installed at rear end the machine. It is equipped with the raking strings, which additionally smoothen the soil after operation of the toothed plates and the shaft. The tine must be demounted before using the hydropack.

#### The string packers

ensure disintegration of the chunks generated by processing, level the field surface and improve the conditions of humus processes.

#### Possibility of dismantling the corners discs

enables the reduction of the working width also it reduces the power demand of the tractor.

#### The hydraulic power pack (additional equipment)

is a hydraulic coupling unit for the seeder. The kit, consisting of the cultivator, the hydraulic power pack and the seeder is designed to cultivate the soil before sowing and plant seeds in a single pass.

MODEL		AT 300 DZIK
Skimmer operating width	m	3.0
Max operating depth	mm	140
String packer width	mm	3000
String packer diameter	mm	500
Number of teeth discs	pcs	24
Diameter of teeth discs	mm	510
Maximum speed	km/h	25
Power demand	kW (KM)	74 (100)
Equipment		
protect rubber shock absorbers		•
splined roller		•
tabular roller		0
cage roller		0
packer roller		0
sprocket discs		•
side curtain		•
straw tines		0
hydraulic power pack		0
Dimensions		
lenght	mm	2120
width	mm	3300
height	mm	1360
Weight	kg	1370

– standard, ○ – additional equipment, × – unavailable



THE FINAL EFFECT WITH SIPMA SKIMMER WORK



SIPMA PR 600 EKO NEW PRODUCT SIPMA PR 800 EKO NEW PRODUCT SIPMA PR 1000 EKO NEW PRO





Farm trailers SIPMA PR 600 EKO, SIPMA PR 800 EKO and SIPMA PR 1000 EKO with three side tipping box are characterized by robust design and versatility of application. Their advantages are the applied components from reputable companies.

#### Homologated speed

approval is up to 40 km/h. This allows for transport on public roads.

# It can be used as a platform trailer

After removing the lateral sides the trailer can be used as a platform to carry bales of straw, hay and silage.

#### The load platform

is designed for transport of 10 EURO pallets.

#### Sturdy frame

made of steel sections allows for long life of the trailer.

#### Rear latch

and the pneumatic and hydraulic installation connections allow for connection of a second trailer.

#### Damper in the rear wall

allows for precise stream discharge of the grains. Combination of the damper and chute facilitates operation with various grain conveyors.

#### Ladder

provides a convenient and safe access to the interior of the trailer.

#### Framed canvas

protects the cargo from harmful weather conditions.

#### Rigid wall sides

ensure the structure's durability.

# Central locking wall sides

system will shorten unloading and improve ergonomics.

#### Wall sides

which are adjustable to the sides and back facilitate utilization of the trailer.

#### Telescopic hydraulic cylinder

provides three-directional unloading of the trailer (to the sides and the back). Articulated suspension of the cylinder with two rotary axes protects it from damage. The cylinder is also equipped with a hydraulic valve with a maximum tipping angle of 45 °.

#### Wall side seals

ensure tightness of the load platform, which can be used for transport of grains and rapeseed.



MODEL		PR 600 EKO	PR 800 EKO	PR 1000 EK
Capacity	t	6	8	10
Loading capacity with extension / without extension	m³	10.3 / 5.72	11.6 / 6.33	12.7 / 6.35
Loading surface	m <sup>2</sup>	11.55	11.55	11.55
Maximum load capacity	kg	8600	11000	13500
Tipping system		three side	three side	three side
Load platform tipping angle (back, laterally)		45°	45°	45°
Telescopic cylinder - jump	mm	1600	1600	1600
Suspension		parabolic spring	parabolic spring	parabolic spring
Track of wheels	mm	1950	1950	2100
Wheel base	mm	3298	3298	3275
Wall thickness	mm	2	2	2
Floor thickness	mm	3	3	4
Drawbar rod	mm	Ø 40	Ø 40	Ø 40
Maximum speed	km/h	40	40	40
Power demand	kW (HP)	35 (46.6)	40 (54.4)	50 (68)
Equipment				
brake system 2-wires		•	•	•
brake system 1-wire		0	0	0
handbrake		•	•	•
rear brake output		•	•	•
rear power socket		•	•	•
lamps (electric installation)		•	•	•
manual rear latch		•	•	•
auto rear latch		0	0	0
rear rotary latch		0	0	0
rear hydraulic output		•	•	•
spare wheel with elevator		0	0	0
rear mudguards		•	•	•
framed canvas		0	0	0
grain hopper baffle		•	•	•
ladders and side steps		•	•	•
wheels 11.5 / 80-15.3		•	×	×
wheels 400 / 60-15.5 (wide tires)		0	•	×
wheels 385 / 65 R 22.5		×	×	•
Internal dimensions of the load	platform			
length		4770	4770	4770
width		2422	2422	2422
height with extension / without extension		900 / 500	1000 / 500	1100 / 600
height of the platform from the ground		1178	1178	1331
Trailer dimensions				
length	mm	6760	6760	6790
width	mm	2550	2550	2550
height	mm	2100	2210	2430
Weight	kg	2500	2520	3220

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

# S SIPMA **CONVERTIBLE BODIES SYSTEM KOMBO**

#### **CONVERTIBLE UNDERCARRIAGE**

SIPMA PW 2420 KOMBO NEW PRODUCT

#### **BODYWORK BOX**

SIPMA NS 1600 KOMBO SIPMA NS 2000 KOMBO

NEW PRODUCT NEW PRODUCT

#### MANURE SPREADER

SIPMA NR 1600 KOMBO SIPMA NR 2000 KOMBO

NEW PRODUCT

#### **PLATFORM**

SIPMA NP 1400 KOMBO



#### AGRICULTURAL TRAILER

SIPMA NO 3500 KOMBO NEW PRODUCT SIPMA NO 4000 KOMBO





SIPMA NO 4000 KOMBO

# **CONVERTIBLE BODIES SYSTEM KOMBO**

Convertible Bodies Modular System KOMBO are:

- cargo box with capacity of 16 and 20 t.,
- manure spreader with capacity of 16 and 20 t.,
- platform with capacity of 14 t.,
- agricultural trailer with capacity 35 and 40 m<sup>2</sup>,

witch can be combined on the Universal Convertible Undercarriage SIPMA PW 2420 KOMBO with permissible total weight of 24 t. The convertible bodies system is meant for towing on a lower transport hook trailers of min. 2 class (min. towing power: 20 kN, minimum vertical load on the lower transport hook: 18 kN).

SIPMA PW 2420 KOMBO convertible body is meant for transport only of bodies equipped in catches designed for the convertible bodies system.

# CONVERTIBLE UNDERCARRIAGE SIPMA PW 2420 KOMBO NEW PRODUCT



SIPMA PW 2420 KOMBO

SIPMA PW 2420 KOMBO convertible body is a basic element of the convertible bodies System and is used to mount particular bodies.

SIPMA PW 2420 KOMBO tandem convertible body are two axles with spring-hydraulic suspension.

# Tool-less system of aggregation

permits precise and safe aggregation every convertible bodies.

# Hydraulically sprung undercarriage

provides comfortable work.

# Adjustable and hydraulically sprung drawbar

ensures easy adjustment with each sequent convertible body.

#### Remote control

provides comfortable work of operator.

#### Hydraulically steered axle

ensures easy aggregation of bodies and theirs maneuverability.

MODEL		PW 2420 KOMBO
Permissible weight	t	24
Permissible hook load	kg	2500
Wheel track	mm	2050
Axle base	mm	1525
Eye diameter hitch	mm	40
Lass of towing tractor	kN	> 20
Maximum speed	km/h	40
Equipment		
PTO shaft		•
wheels 560/60 R 22.5		•
wheels 19.5 R 22.5		0
wheels 20.5 R 22.5		0
wheels 500/45 R 22.5		0
Dimensions		
lenght	mm	8883
width	mm	2550
height	mm	1836
Weight	kg	3970

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

# **BODYWORK BOX**

SIPMA NS 1600 KOMBO NEW PRODUCT SIPMA NS 2000 KOMBO NEW PRODUCT





SIPMA NS 1600 KOMBO

SIPMA NS 1600 KOMBO and SIPMA NS 2000 KOMBO bodywork box are used to transport bulk freight. Bulk freight can be unloaded by unblocking side locks and tilt of the box rearwards

#### **FUHRMANN** sides

due to the high stiffness ensure durability.

#### Side walls tilting up and down

enable for easy operation of the trailer.

#### Hydraulic central locking wall sides system

reduces the loading / unloading time.

#### Ladder

provides easy access to the inside of trailer.

#### Box tilt telescopic servomotor

thanks to its structure, enables obtaining large range of working stroke.

#### Tilt on the frame

protects the cargo from harmful weather conditions.

MODEL		NS 1600 KOMBO	NS 2000 KOMBO
Capacity	t	16	20
Box capacity	m <sup>3</sup>	19.5	25
Dimensions			
lenght	mm	7257	7257
width	mm	2550	2550
height	mm	1306	1606
Weight	kg	2500	2640

# MANURE SPREADER

SIPMA NR 1600 KOMBO NEW PRODUCT SIPMA NR 2000 KOMBO NEW PRODUCT





SIPMA NR 1600 KOMBO

SIPMA NR 1600 KOMBO and SIPMA NR 2000 KOMBO manure spreaders are meant only for spreading manure, peat and compost. They can be also used as trailers for transport of crops within a farm and on public roads, provided that the spreading assembly will be dismounted.

#### Body

is made of a steel box with floor scraper conveyor.

#### The two drum vertical worm adapter

with cutting blades ensures fine break-up, as well as long range spread and its uniformity.

#### **Universal** adapter

ensures the dispersion of manure, peat, lime or compost.

# Triple floor conveyor

provides infinitely variable adjustment of the spread amounts of material.

#### The knifes of HARDOX steel

provide durability and reliability of operation.

#### Hydraulic flap

closing cargo box prevents contents from falling out during trans-

#### Wood slat

protects the sides from mechanical damages.

MODEL		NR 1600 KOMBO	NR 2000 KOMBO	
Load capacity	t	16	20	
Capacity	m³	19	23	
Number of spreading drums	pcs	2	2	
Dimensions				
lenght	mm	7810	7810	
width	mm	2521	2530	
height	mm	2620	2800	
Weight	kg	5252	5555	

# PLATFORM.

SIPMA NP 1400 KOMBO NEW PRODUCT



SIPMA NP 1400 KOMBO platform body is meant for transport of straw and hay in the form or bales and pressed cubes. The body is made of a loading platform with head wall in the form of a frame. The real wall in the form of a frame is sliding along the platform axis. The head and rear wall are connected with the platform by joint.

# Back wall hydraulically spreading

ensures quick adaptation to the needs.

#### Stable structure

allows the loading and transporting the bales in two layers. Maximum 30 bales with diameter of 1.2 m can be loaded on the body.





MODEL		NP 1400 KOMBO		
Load capacity	t	14		
Dimensions				
lenght	mm	9190 - 10700		
weidth	mm	2550		
height	mm	2553		
Weight	kg	2190		

# AGRICULTURAL TRAILER

SIPMA NO 3500 KOMBO SIPMA NO 4000 KOMBO





SIPMA NO 4000 KOMBO

SIPMA NO 3500 KOMBO and SIPMA NO 4000 KOMBO agricultural trailers are used to transport fodders and light bulk materials. Unloading is carried out by the movement of scraper belt conveyor mounted on the floor of the loading box. The unloading is possible when the rear flap is lifted.

# **Extensions inclined hydraulically**

facilitate use of trailer.

#### Infinitely variable adjustment

of floor conveyor.

# Hydraulically lifted flap

enables unloading of the trailer.

#### Hydraulically lowered front flap

facilitates filling the trailer box during the first passage with the straw cutter.

MODEL		NO 3500 KOMBO	NO 4000 KOMBO			
Capacity	t	9.53	9.31			
Capacity of coffer	m³	35	40			
Dimensions						
lenght	mm	7608	7608			
width	mm	2550	2550			
height	mm	2102	2455			
Weight	kg	4500	4720			



SIPMA PO 2211 OPAL NEW PRODUCT



SIPMA PO 2211 OPAL

Screw - rotary snow plough SIPMA PO 2211 OPAL is a universal machine designed for front and rear mounting on the tractor. Thanks to the use of an optional set for rotation direction change, the user can mount the machine to the tractor equipped with the right and left PTO rotation.

#### **Durable construction**

of the machine ensures stable operation in any weather conditions, both with wet and loose snow.

#### Adjustable operation height

and large working width (2.2 m) allow for effective operation in all winter conditions.

#### Hard-steel ploughshare

featured in the plough scrapes ice and snow from the ploughed surface. The operative height of the ploughshare is adjusted by means of sliding runners located on both sides of the machine.

#### **Ejecting chute**

includes a rotation adjustment of up 180°.



SNOW-CLEARING OF STREETS SIPMA PO 2211 OPAL

# Snow discharge range control

is adjusted with the use of a wire remote. The snow discharge direction is determined with the use of the tractor's lever

#### Snow discharge range

amounts from 5 to 50 m.

MODEL		PO 2211 OPAL
Working width	m	2.2
Discharge range	m	5 - 50
Discharge direction control		hydraulic, from tractor cab
Discharge range control		electronic, from tractor cab
Theoretical capacity	m³/min	5-7
Rotor diameter	mm	620
Screw diameter	mm	500
Tractor connection		3-point linkage system, category
Tractor mounting		front / rear mounting
PTO rotation direction		right / left
PTO rotation speed	rpm	1000
Chute rotation range		180°
Required number of hydraulic joints	pcs	2
Maximum speed	km/h	≤ 5
Power demand	kW (HP)	75 (100)
Dimensions		
length	mm	1550
width	mm	2450
height	mm	2400
Weight	kg	580



# **BASIC PTO SHAFTS**

SIPMA WPT 220 SIPMA WPT 300 SIPMA WPT 460 SIPMA WPT 540 SIPMA WPT 680 SIPMA WPT 900 SIPMA WPT 1200 SIPMA WPT 1700

#### WIDE ANGLE PTO SHAFTS

SIPMA WPTS 680



# 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 S.A. 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 and 1700 Nm in the basic version, and 680 Nm in wide angle version, in two options:

- · 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 allow the transfer of power constantly without having to drive off at the headland.



WIDE ANGLE PTO SHAFTS

# **SAFETY CLUTCHES**

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

- · overload clutch with scoops operating radially,
- overload automatic clutch,
- friction clutch,
- friction and overrunning clutch,
- clutch with shear bolt,
- overrunning clutch.





MODEL	WPT 220	WPT 300	WPT 460			
Strenght parameters - 540 r.p.m.						
power	kW (KM)	12 (17)	17 (23)	26 (35)		
torque	Nm	220	300	460		
Strenght parameters - 1000 r.p.m.						
power	kW (KM)	19 (26)	26 (36)	40 (55)		
torque	Nm	183	250	383		
Max. dynamic torque	Nm	330	450	690		

#### The overload clutch (SP) with scoops operating radially

operates by interrupting the drive transmission when the torque exceeds the clutch setting.

### The overload automatic clutch (SPA)

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.

#### The 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.

#### The 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.

#### The clutch with shear bolt (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.

#### The 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 540	WPT 630	WPT 680	WPT 900	WPT 1200	WPT 1700	WPTS 680
31 (42)	36 (48)	38 (52)	51 (69)	68 (92)	96 (131)	38 (52)
540	630	680	900	1200	1700	680
47 (64)	55 (75)	59 (81)	79 (107)	105 (142)	146 (199)	59 (81)
450	525	567	750	1000	1400	567
810	945	1020	1350	1800	2550	1020





Spare parts are extremely important element of our offer. Their quality and availability determine the comfort of using our products.

**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 S.A. products.

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

**High availability** to the original spare parts enables our dealer website. They can be purchased in our retail outlets in Lublin and Zamość, as well as at our Authorised Dealers or on mail-order.



#### www.grupasipma.pl

The SIPMA GROUP was established in 1996 on the initiative of SIPMA S.A.

The Group associates carefully selected companies which cooperate
in the market of agricultural machines. Currently the following business
entities are included in the Group:



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.



Manufacturer of agricultural machines, using documentation and know-how of SIPMA S.A..



The company offering transport services as well as maintenance and repair service of trucks, tractors and fork-lift trucks.



General distributor in Czech Republic.



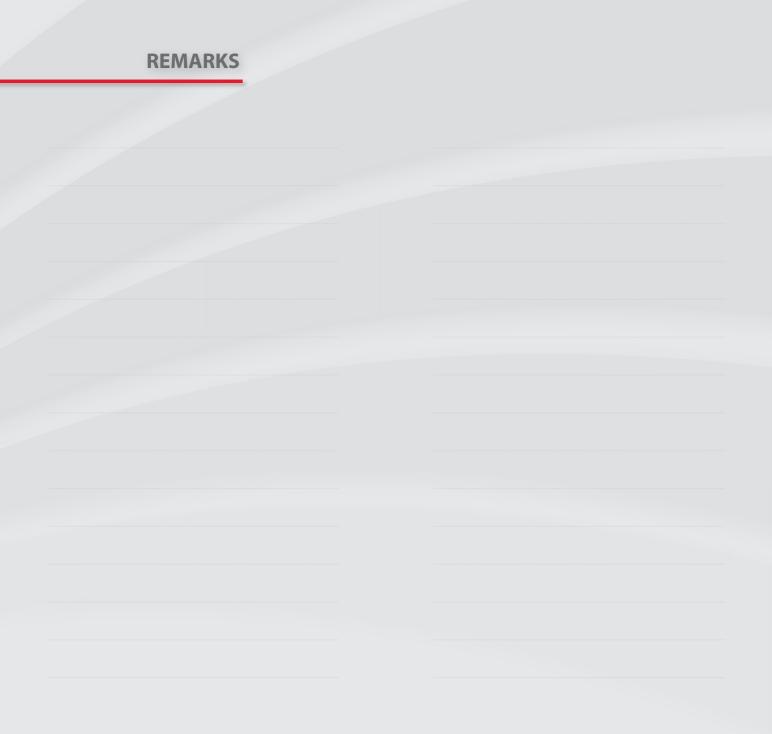
General distributor in Republic of Hungary.



General distributor at the territory of the Russian Federation.

105

104 www.sipma.pl





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