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Narew, 2014

# **PRONAR FERTILIZER SPREADERS**



#### FERTILIZER SPREADERS FD1-M03, FD1-M05



FERTILIZER SPREADERS	PRONAR FD1-M03	PRONAR FD1-M05	
Working width	from 4	to 14	m
Fertilizer box capacity	0,25	0,5	m <sup>3</sup>
Amount of spread fertilizer	10 do 1	2000	kg/ha
Power demand	11/1	15	kW/HP
Maximum working speed	10		km/h
Maximum transport speed	20		km/h
Nominal rotation speed of spreading disc	540		RPM
Height / width / length	1,06 / 1,12 / 1,25	1,33 / 1,12 / 1,25	m
Weight	42	52	kg
STANDARD EQUIPMENT			
Spreading disc and blades made of plastic			
ADDITIONAL EQUIPMENT (optional)			
cover			
PTO shaft			

TWIN DISC FERTILIZER SPREADER FD2-M10







PRONAR	FD2-M10	
Working width	od 10 do 24	m
Fertilizer box capacity	1	m <sup>3</sup>
Amount of spread fertilizer	10 do 1500	kg/ha
Carrying capacity	1300	kg
Power demand	12 / 16	kW/HP
Maximum working speed	12	km/h
Maximum transport speed	20	km/h
Nominal rotation speed of spreading disc	540	RPM
Height (with tarpaulin cover) / width / length	1,32 / 1,88 / 1,23	m
Charging height	1,2	m
Number of spreading discs	2	pcs.
Number of blades	2 pcs (2 on each disc)	
Weight (with tarpaulin cover)	170	kg
Method of linking with carrying vehicle	Category II, 3-point hitch acc. to ISO 730-1	
Nominal pressure of the hydraulic system	16	MPa
Nominal voltage	12	V
ADDITIONAL EQUIPMENT (optional):		
tarpaulin cover, PTO shaft		
the second se		



# **DISC MOWERS**

Choice of the appropriate mower, its correct setting and matching with the appropriate tractor has a decisive influence on the quality and economy of mowing. A modern mower should ensure good ground surface tracking (correct mower setting in relation to mown surface), clean and aesthetic cut, correct cutting height and appropriate productivity. These factors have a significant influence on the quality of the fodder produced on the farm. Modern technical solutions, applied in Pronar mowers, fulfil the above criteria and work with the mowers is easier. Pronar mowers have been designed and implemented into production by a team of the best construction designers of this product group in Poland.

High-quality gearing and cutter bar are applied in the Pronar mower drives. These cutter bars and gearings are also used by the greatest manufacturers of agricultural machines in the world.











## PRONAR PDK210\*, PDK220\*\* REAR MOUNTED DISC MOWERS



Quick blade exchange lever

DISC MOWER	PRONAR PDK 210*	PRONAR PDK 220**	
Cutting width	2,1	2,2	m
Swath width	1,38	1,45	m
Capacity	2,1	2,2	ha/h
Number of discs		5	
Number of blades		10	
Minimum tractor power	22	2/30	kW/HP
PTO shaft	5	40	RPM
Linkage		cc. to ISO 730-1 lacement of pins)	
Recommended mowing speed		10	km/h
Weight	380	540	kg
Power take-off shaft	Standard		
Additional set of blades	Star	ndard	
Spray RAL 6010 400 ml	Star	ndard	

The smallest PRONAR PDK210 and PRONAR PDK220 mowers are the most economical solutions for small and medium-size green crops farms. The mowers can be easily mounted on various tractors equipped with the cat. II three-point linkage. Adjustable lower link pin of PRONAR PDK210 mower makes it possible to mount the mower also on the cat. I three-point linkage.



n the surface

\* while stock lasts \*\* new product

Central suspension guarantees uniform pressure of cutter bar on the surface. Three-step adjustment system of stay springs guarantees optimum pressure of the mower on the ground.



## PRONAR PDT260, PDT260C REAR MOUNTED DISC MOWERS

Rear mounted	l disc mower	s have 3	8 transport	positions.
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DISC MOWER	PRONAR PDT 260	PRONAR PDT 260C	
Cutting width	2,6	2,6	m
Min/max swath width	1,2/1,6	1,3/1,9	m
Capacity	2,	6	ha/h
Number of discs	6	,	
Number of blades	1:	12	
Minimum tractor power	33/45	44/60	kW/HP
PTO shaft	54	0	RPM
Linkage	Category II and III according to ISO 730-1		
Recommended mowing speed	10		km/h
Weight	640	860	kg
Swath guide	Single	Double	
Power take-off shaft	Stand	dard	
Additional set of blades	Stand	dard	
Spray RAL 6010 400 ml	Stand	dard	



Vertical position at the rear of the tractor.
 Vertical position at the side of the tractor.
 Horizontal position at the rear of the tractor.



Transfer into transport position and working position is accomplished by means of hydraulic cylinders. Extensive range of inclination facilitates operation on uneven and steep surface.

Light but strong structure of the mowers is made of high quality materials.



## PRONAR PDT300, PDT300C REAR MOUNTED DISC MOWERS







DISC MOWER	PRONAR PDT 300	PRONAR PDT 300C	
Cutting width	3	3	m
Min/max swath width	1,2/2	1,5/2,3	m
Capacity	3	3	ha/h
Number of discs	7	7	
Number of blades	1.	4	
Minimum tractor power	44/60	55/75	kW/HP
PTO shaft	1000		RPM
Linkage	Category II and III according to ISO 730-1		
Recommended mowing speed	1	0	km/h
Weight	740	930	kg
Swath guide	Single	Double	
Power take-off shaft	Standard		
Additional set of blades	Standard		
Spray RAL 6010 400 ml	Stand	dard	

#### CONDITIONERS (PDT 300C, PDT 260C, PDF 300C, PDT 290C\*)

PRONAR PDT 260 and PDT 300 rear mounted rotary disc mowers are available also in versions with a swath conditioner (marked as PRONAR PDT 260C and PDT 300C). These mowers perform simultaneous grass mowing and swath conditioning. Consequently, grass is dried faster because conditioner teeth distribute mown material uniformly. Good quality of green fodder is achieved in this way.





## PRONAR PDT290C, PRONAR PDT 340 REAR MOUNTED DISC MOWERS

PRONAR PDT 290C	
2,9	m
1,5/2,1	m
3	ha/h
7	
14	
55/75	kW/HP
540	RPM
Category II and III according to ISO 730-1	
10	km/h
800	kg
Standard	
Standard	
Standard	
	2,9 1,5/2,1 3 7 14 55/75 540 Category II and III according to ISO 730-1 10 800 Standard Standard



The disc mower with swath conditioner performs simultaneous conditioning and forming of green fodder swath. Conditioning fingers arranged on the conditioner shaft ted the mown green fodder while metal swath guides form a 1,50 - 2,15 m wide swath. Grass drying time is reduced because wax surface of grass is damaged. The swath conditioner is driven directly from the cutter bar drive transmission by a double chain with a spring tensioner. The spring tensioner guarantees smooth drive transmission even in high load conditions. The rotational speed of the conditioner shaft is approximately 800 rpm. The swath conditioner fingers, with double shock absorption, are helically arranged on the conditioner shaft. Intensity of swath conditioning can be adjusted by shifting the lever located on the conditioner housing.

DISC MOWER	PRONAR PDT 340	
Cutting width	3,4	m
Min/max swath width	1,5/2,4	m
Capacity	3,4	ha/h
Number of discs	8	
Number of blades	16	
Minimum tractor power	59/80	kW/HP
PTO shaft	1000	RPM
Linkage	Category II and III according to ISO 730-1	
Recommended mowing speed	10	km/h
Weight	800	kg
Power take-off shaft	Standard	
Additional set of blades	Standard	
Spray RAL 6010 400 ml	Standard	



#### PRONAR PDF300, PDF300C FRONT MOUNTED DISC MOWERS



DISC MOWER	<b>PRONAR PDF 300</b>	PRONAR PDF 300C	
Cutting width		3	m
Min/max swath width	1,2/2,0	1,5/2,3	m
Capacity		3	ha/h
Number of discs		7	
Number of blades	1	4	
Minimum tractor power	44/60	55/75	kW/HP
PTO shaft	10	000	RPM
Linkage	Category II and II	l acc. to ISO 730-1	
Recommended mowing speed	1	0	km/h
Weight	780	1020	kg
Power take-off shaft	Stan	dard	
Additional set of blades	Stan	dard	
Spray RAL 6010 400 ml	Stan	dard	

In addition to rear mounted disc mowers, Pronar offers also front mounted disc mowers. Our offer includes the following front mounted disc mowers: PRONAR PDF300 / PDF300C and PDF390.

PRONAR PDF300 / PDF300C are modern and robust mowers which are characterized by light weight structure and a large working width. They are equipped with a standard tractor triangle hitch (quick hitch) of category II and are mounted on the front three-point linkage of a 60/75 KM tractor. They can be used together with PDT300/ PDT300C rear mounted mowers. The width of such a unit is 5,7m. PRONAR PDF300/ PDF300C front mounted mowers offer optimum adjustment of contact with the ground – height of 270 mm and 240 mm below the working position. During mowing, the blade beam precisely follows even the largest irregularities of the ground. Inclination with regard to the ground is from +7° to -6°. Clean cutting and required cutting height can be achieved in this way.





#### **PRONAR PDF390 FRONT MOUNTED DISC MOWER**

FRONT MOUNTED DISC MOWER	PRONAR PDF 390	
Cutting width	3,9	m
Min/max swath width	~ 1,9	m
Capacity	4	ha/h
Number of discs	9	
Number of blades	18	
Minimum power of Fortschritt carrying vehicle	70/95	kW / HP
Recommended mowing speed	10	km/h
Weight	730	kg
Disk type double swath guides		
Power take-off shaft	Standard	
Additional set of blades	Standard	
Spray RAL 6010 400 ml	Standard	





#### PRONAR PDF 390 DISC MOWER for "Fortschrift" E300 self-propelled mower

Thousands of "Fortschritt" E300 self-propelled mowers, which were made in the 80's and in the beginning of the 90's in the German Democratic Republic (GDR), are still in good technical conditions and will work reliably for many years when equipped with a PRONAR PDF 390 cutter bar.

PRONAR PDF 390 front mounted disc mower – cutter bar for "Fortschritt" E300 selfpropelled mower – is the most economical solution for large farms. Advantages of PRONAR PDF 390 cutter bar:

Advantages of PRONAR PDF 390 CUI

- large working width
- the discs form even swaths with width up to 2m
- compact, strengthened cutter bar
- cutting height adjustment

#### Advantages of PRONAR PDF 390 mower:

low fuel consumption, robust and resistant structure, good operation on uneven surfaces, easy and quick replacement of blades. Tarpaulin shield prevents ejection of various objects from under the mower. Smooth adjustment of cutting height does not harm the grass root system.

## PRONAR PDD810\*, PDD830\*\* DISC MOWER COMBINATIONS





PDD810 and PDD830 disc mower combinations consist of two 3 meter wide rear mounted disc mowers (left one and right one) installed on the support frame. This design performs very well when combined with a PDF300/PDF300C front mounted mower

#### TRANSPORT

As opposed to single rear mounted disc mowers, PDD810 and PDD830 disc mower combinations can be transported only in one transport position i.e. when raised and folded at the side of the tractor.

DISC MOWER COMBINATION	PRONAR PDD 810*	PRONAR PDD 830**	
Cutting width	8,1***(2 x 290)	8,3***	m
Min/max swath width	2x1,7/2x1,9	2x(1,2/2,0)	m
Capacity (at recommended cutting speed)	~8***	~8***	ha/h
Number of discs	2 x 7	7	
Number of blades	2 x 14		
Minimum tractor power	81/110***	88/120	kW / HP
PTO shaft	1000		RPM
Linkage	Category II and III acc	ording to ISO 730-1	
Recommended mowing speed	10		km/h
Weight	1110	1140	kg
Quick blade replacement	Stande	ard	
Power take-off shaft	Standard		
Additional set of blades	Standard		
Spray RAL 6010 400 ml	Stande	ard	

\* while stock lasts

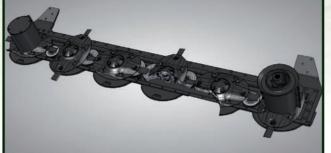




# **PRONAR** cutter bars



Additional protective skids



Robust chute with a stiffening profile

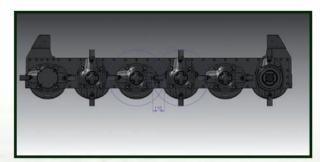


Disc cross-section



Dismountable shields of articulated connector





Advantages of Pronar cutter bars:

- gears with ground teeth are used (reduced noise),
- height of gears is increased (20mm),
- gears with increased number of teeth are used,
- cutter bar body is made of materials with increased strength,
- cutter bar is strengthened with a stiffening profile enclosed in the cutter bar body,
- ergonomic shape of discs ensures lower cutting resistance and power demand during cutting (although Pronar cutter bars have increased cutting width by 100mm, power demand is not increased),

- frame-type driving disc ensures easy access to driving connector without the necessity of disassembling the cutter bar from the mower frame,

- possibility of quick replacement of blades at the front and at the back of the bar,
- longer blades are used (120mm),
- all components in direct contact with the ground are made of hardened boron steel,
- additional replaceable protective skids made of abrasion resistant steel are used.

Overlapping of mown areas

# **PRONAR PWP 530, PWP 770 ROTARY TEDDERS**

**ROTARY TEDDER** 

Working width

Capacity

PTO shaft

Number of rotors

Number of working arms on one rotor

Ground surface tracking upwards

Ground surface tracking downwards

Type of central transmission

Type of rotor transmission

Minimum tractor power



m

0

ha/h

kW/HP

RPM

km/h

kg

**PRONAR PWP 770** 

7.7

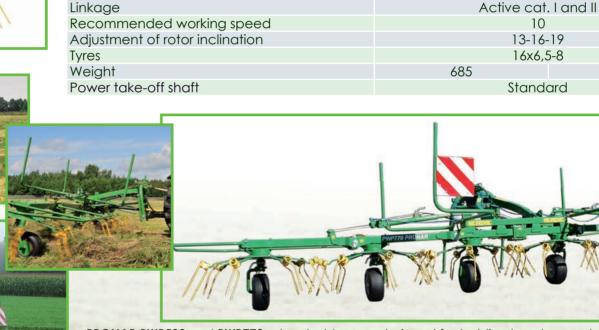
7,7

37/50

915







**PRONAR PWP530** and **PWP770** rotary tedders are designed for tedding low stemmed green fodder and pre-dried hay or for tedding and spreading mown plants on cultivated fields and meadows. There are 7 working arms on one rotor of the tedder and each working arm is ended with one double spring tine. The rotors are driven by extremely robust transmissions lubricated with grease (maintenance free transmissions). Rotors are folded and unfolded synchronously by means of hydraulic system. Active suspension of the rotors, with self aligning head, ensures uniform distribution of grass even on turns and improves ground surface tracking and manoeuvrability of the machine. Spring absorbers stabilize the machine position with regard to the tractor and improve driving comfort. Ejection angle is set by triple step adjustment of wheel mounting height.

PRONAR PWP 530

5,3

5,3

22/30

wet (in oil bath)

maintenance free (lubricated with grease)

up to 30°

up to 6°

540



# PRONAR PWP 530, PWP 770 ROTARY TEDDERS



Dry lubrication and maintenance-free gear rotors



Innovative method of fixing the tedder spring times



Searching through border



Stabilizing absorbers

#### Teeth

All spring tines made of 9 mm-thick spring steel have the same design - there is no distinction between the left tines and the right tines. Galvanized, stable spring tine holder. High flexibility ensures proper ground surface tracking.



Synchronous folding and unfolding of rotors - hydraulic system



Adjusting the angle of ejection - inclination 13,°16,°19°



# **PRONAR ZKP 800 TWIN ROTARY RAKE**



PRONAR ZKP800 - Hydraulically set working width from 7 to 8 m, with manual lock of required width. Swath width from 0,9 to 1,9m. Turning hitch ensures that required driving route of the rake behind the tractor is maintained. Rear turning wheels of the drawbar improve manoeuvrability. Tandem axle system of the rotors guarantees correct ground surface tracking and facilitates keeping the required driving route of the rake. Self aligning rotors enable longitudinal and lateral ground surface tracking. The rake offers also manual adjustment of raking height and hydraulic synchronized raising and lowering of rotors.



TWIN ROTARY RAKE	PRONAR ZKP 800	
Working width	7,0/8,0	m
Swath width	0,9/1,9	m
Rotor diameter	3,1	m
Linkage	Category II and III	
Number of rotors	2	
Number of working arms of a single rotor	11	
Number of raking spring tines on a single working	4	
Type of rotor transmissions	dry (lubricated with grease)	
Drawbar wheels and suspension	two steerable turning wheels	
Raking assembly wheels and suspension	six wheels in tandem configuration	
Rotor wheels	Pneumatic in tridem configuration, 16x6, 5-8	
Drawbar turning wheels	Pneumatic steerable 10,0/75-15,3	
PTO shaft	540	RPM
Minimum tractor power	59/80	kW/HP
Weight	1940	kg
Power take-off shaft	Standard	
Full rubber wheels 400/60 - 15,5	special orders	



Hydraulic cylinders adjust working width of the machine – 7-8 m



Raking spring tines are made of very durable steel



Dry rotor transmissions of our own design



Hydraulic and synchronized raising and lowering of rotors



# PRONAR ZKP 300, ZKP350, ZKP 420 ROTARY RAKES

ROTARY RAKE	PRONAR ZKP 300	PRONAR ZKP 350	PRONAR ZKP 420	
Working width	3	3,5	4,2	m
Number of working arms	8	9	11	
Number of raking spring tines on a single arm	3	3	4	
Capacity	3	3,5	4,6	ha/h
Type of rotor transmission	wet (in oil bath)	wet (in oil bath)	wet (in oil bath)	
Minimum tractor power	15/20	18/25	22/30	kW / HP
PTO shaft	540	540	540	RPM
Linkage	Rigid cat. I and II	Rigid cat. I and II	Rigid cat. I and II	
Recommended mowing speed	10	10	10	km/h
Tyres	15x6.0-6	15x6.0-6	15x6.0-6	
Weight	290	315	500	kg
Power take-off shaft	Standard	Standard	Standard	

**PRONAR ZKP300** - single rotor rake with working width of 3 m, equipped with eight working arms. There are three double raking spring tines on each arm. The axle system is equipped with two wheels with pneumatic tyres. The rotary rake power requirement is 15 kW (20 HP) and its weight is 290 kg.

**PRONAR ZKP350** - single rotor rake with working width of 3,5 m, equipped with nine working arms. There are three double raking spring tines on each arm. The axle system is equipped with two wheels with pneumatic tyres. Power requirement of ZKP350 rotary rake is 19 kW (25 HP) and its weight is 315 kg.

**PRONAR ZKP420** - single rotor rake with working width of 4.2m, equipped with eleven working arms, there are four double raking spring tines on each arm. Due to its mobile head, the active suspension of ZKP420 rotary rake improves manoeuvrability and surface tracking. Two shock absorbers improve working comfort and guarantee that the machine is positioned centrally behind the tractor. The axle system is equipped with four wheels with pneumatic tyres in tandem arrangement. ZKP420 rotary rake power requirement is 22 kW (30 HP) and its weight is 500 kg.



Advantages of **PRONAR** rotary rakes: -Strengthened rear loadbearing beam made of high quality steel,

-Strengthened front loadbearing beam with a welded wear resistant ring in the area of shock absorber,

-Intermediate element between the transmission and raking arm, made of thick-wall high quality steel pipe and attached with double fixing studs, guarantees strong, robust and clearance-free connection with the transmission shaft, -Strengthened loadbearing frames.



Driving mechanism of PRONAR ZKP300 and PRONAR ZKP350 rotary rakes

Transport position of

rake

PRONAR ZKP420 rotary

Raking arms folded at

transport base. Raised

swath material and

protective pipe.



# PRONAR ZKP 300, ZKP350, ZKP 420 ROTARY RAKES





#### Teeth height setting

Teeth height above the ground is set by means of the spindle crank supported on bearings in the transmission. This activity is performed effortlessly. In competitive machines, a pair of strong hands is required to make this adjustment.



Independent ground surface tracking - large and safe range of movement on slopes and elevations.

Disassembly of raking arms for transport

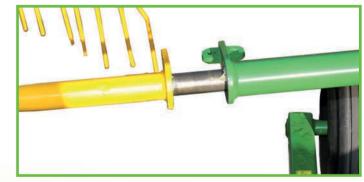




Remove spring pin



Tandem driving mechanism of PRONAR ZKP420 rotary rake



Pull raking arm out



Swath material setting for forming a swath of required width.



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# **PRONAR ROUND BALER Z 500K**

ROUND BALER	PRONAR Z 500K	
Pickup header width	1,8	m
Chamber type	Stationary chamber, chain type	
Chamber diameter	1,2	m
Chamber width	1,2	m
Power demand	40/55	kW/HP
Tyres	400/60-15,5	
PTO shaft	Standard	
Chamber interlock	Mechanical	
String binder	Double	
Binding density adjustment	Triple step-manual	
Binder engagement	Hydraulic	
Control of chamber and pickup header	From tractor control panel	
Bale counter	On control panel	kg
Weight	2 220	
PTO shaft	Standard	
Control panel (installed in the tractor)	Standard	
Adjustable hitch	Standard	
Bale ejector	Standard	
Capacity of chamber for spare spools	4	pcs.





Dosing rake - adjustment of thickness of fed material layer

1,8 m-wide pickup header with adjustable rubber wheels guarantees accurate collection of material







PRONAR Z500K baler with stationary chamber - High bale density,

- Maximum throughput,
- Higher productivity,





Rolling chain makes it po-ssible to collect over-dried material as well as moist material



#### PRONAR Z500R ROUND BALER WITH A ROTOR

-universal rigid drawbar for connecting to the lower hitch or upper hitch of the tractor, -functions of the round baler are controlled by means of the control panel that can be moved to the tractor cab

-rotor and fodder cutting mechanism
-wrapping with net
-chamber for spare net rolls
-control panel with function signalling lights
-bale counter
-bale ejector



## **PRONAR Z 500R ROUND BALER**



		PRONAK
ROUND BALER	PRONAR Z 500R	
Pickup header width	2,035	m
Chamber type	Stationary chamber, chain type	
Chamber diameter	1,2	m
Chamber width	1,2	m
Power demand	48/65	kW / HP
Tyres	400/60-15,5 TL	
Chamber interlock	Mechanical	
Rotor reverse	Manual	
Rotor drive disconnection	Hydraulic	
Undercutter	15 blades	
Blade engagement	Hydraulic	
Minimum cutting length	67	mm
Cutting length adjustment	Manual (each blade is removed separately)	
Protection of blades	Individual for each blade	
Overload protection	Pickup header	
Weight	3 060	kg
Net binder	Standard	
Central lubrication system	Standard	
Power take-off shaft	Standard	
Automatic lubrication system	Standard	
Wrapping with film (instead of net)	Standard	
Central lubrication of chains	Standard	
Adjustable hitch	Standard	
Bale ejector	Standard	
Control panel (installed in the tractor)	Standard	
PTO shaft	540	RPM
Capacity of chamber for spare spools	4	pcs.







# **PRONAR Z 500G ROUND BALER**

ROUND BALER	PRONAR Z 500G	
Pickup header width	1,8	m
Chamber type	Stationary chamber, chain type	
Chamber diameter	1,2	m
Chamber width	1,2	m
Power demand	40/55	kW / HP
Axle system	Caterpillar type	
Suspension	Two independent trailing arms	
Caterpillar spacing	2950	mm
Caterpillar width	810	mm
Caterpillar length	2415	mm
Weight	2 800	kg
PTO shaft	standard	
Chamber interlock	Hydraulic-mechanical	
String binder	Double	
Binding density adjustment	Triple step mechanical	
Binder engagement	Hydraulic	
Control of chamber and pickup header	From control panel in the tractor	
Bale counter	On control panel	
Weight	2 800	kg
PTO shaft	540	RPM
Capacity of chamber for spare spools	4	pcs.
Bale ejector	Standard	



## PRONAR Z500G caterpillar track round baler with rotor

- caterpillar axle system
- cam type pickup header with four rows of pickup fingers

- functions of the round baler are controlled by means of the control panel that can be moved to the tractor cab

- binding with two strings
- bale counter on control panel
- PTO shaft







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# **BALE TRANSPORTATION TRAILERS**



BALE TRANSPORTATION TRAILERS	PRONAR TO22	PRONAR T025	PRONAR T023	PRONAR TO26	
Maximum gross weight	10000	12000	15000	18000	kg
Carrying capacity	7360	9040	11300	13720	kg
Empty weight	2640	2960	3700	4280	kg
Load surface	16,4 (17,7*)	16,4 (17,7*)	24 (26,2*)	24 (26,2*)	m <sup>2</sup>
Length of load platform	6495	6495	9695	9695	mm
Length of load surface	6740 (7270*)	6740 (7270*)	9880 (10770*)	9880 (10770*)	mm
Width of load surface	2435**	2435**	2435**	2435**	mm
Dimensions (length/width/height)	9135***/2500/2780	9135***/2500/2860	11995***/2500/2780	11995***/2500/2860	mm
Height of ladders (from load surface)	1680	1680	1680	1680	mm
Floor thickness	3	3	3	3	mm
Height of platform from ground	1100	1180	1100	1180	mm
Wheel track	1730	1820	1730	1820	mm
Suspension		p	arabolic springs		
Tyre dimensions	400/60-15,5	500/50-17	400/60-15,5	500/50-17	
Design speed	40	40	40	40	km/h
Minimum tractor power demand	67,6/49,7	72,8/53,5	83,2/61	93,6/68,8	kW/HP

\* With extended rear frame that extends the load platform

\*\* Width of load box adapted to EUROPALET transport

\*\*\* Standard platform length





**Bale transportation trailers** - perform excellently when transporting straw or hay/silage bales. It is possible to load up to three layers of bales

wide tyres facilitate loading on marshy and peat meadows. They perform excellently in long distance transport.



# **PRONAR T024 BALE TRANSPORTATION TRAILER**

BALE TRANSPORTATION TRAILER	PRONAR TO24	
Maximum gross weight	12000	kg
Carrying capacity	8900	kg
Empty weight	3100	kg
Load surface	17,4	m <sup>2</sup>
Length of load platform	7170	mm
Width of load surface	2435*	mm
Dimensions (length/width/height)	9290/2500/2750	mm
Height of ladders (from load surface)	1680	mm
Floor thickness	3	mm
Height of platform from ground	1110	mm
Wheel track	1750	mm
Suspension	parabolic springs	
Tyre dimensions	15,0/70-18TL	
Drawbar eye load	1925	kg
Design speed	40	km/h
Minimum tractor power demand	62,5/45,9	kW/HP





Manual rear hitch



Built on tandem type chassis



Hydraulic shear type drawbar support



Lighting system with side clearance lamps





# **BALE TRANSPORTATION TRAILERS**



BALE TRANSPORTATION TRAILERS	PRONAR T022M	PRONAR T025M	PRONAR TO23M	PRONAR T026M	
Maximum gross weight	10000	12000	15000	18000	kg
Carrying capacity	7360	9040	11300	13720	kg
Empty weight	2640	2960	3700	4280	kg
Load surface	16,4 (17,7*)	16,4 (17,7*)	24 (26,2*)	24 (26,2*)	m <sup>2</sup>
Length of load platform	6495	6495	9695	9695	mm
Length of load surface	6740 (7270*)	6740 (7270*)	9880 (10770*)	9880 (10770*)	mm
Width of load surface (with side strips/without side strips)	2517/2410**	2517/2410**	2517/2410**	2517/2410**	mm
Dimensions (length/width/height)	9135***/2550/2830	9135***/2550/2860	11995***/2550/2780	11995***/2550/2860	mm
Height of ladders (from load surface)	1680	1680	1680	1680	mm
Floor thickness	4	4	4	4	mm
Height of platform from ground	1150	1180	1150	1180	mm
Wheel track	1730	1820	1730	1820	mm
Suspension		pa	rabolic springs		
Tyre dimensions	400/60-15,5	500/50-17	400/60-15,5	500/50-17	
Design speed	40	40	40	40	km/h
Minimum tractor power demand	67,6/49,7	72,8/53,5	83,2/61	93,6/68,8	kW/HP

\* With extended rear frame that extends the load platform

\*\* Width of load box adapted to EUROPALET transport

\*\*\* Standard platform length

BALE TRANSPORTATION TRAILERS	PRONAR TO24M	
Maximum gross weight	12000	kg
Carrying capacity	8700	kg
Empty weight	3300	kg
Load surface	17,4*	m <sup>2</sup>
Length of load platform	7170	mm
Width of load surface (with side strips/without side strips)	2517/2410**	mm
Dimensions (length/width/height)	9290/2550/2740	mm
Height of ladders (from load surface	1680	mm
Floor thickness	4	mm
Height of platform from ground	1060	mm
Wheel track	1820	mm
Suspension	parabolic springs	
Drawbar eye load	1925	
Tyre dimensions	15,0/75-18	
Design speed	40	kg
Minimum tractor power demand	62,5/45,9	kW/HP



Rear underrun protection integrated with rear lights





The use of countersunk screws and twopoint system for fixing resistance ladders

Profiled and rounded side strips protect film-wrapped bales against sliding off the trailer without damaging them.



#### **PRONAR TB4 SELF LOADING BALE TRAILER**

BALE TRANSPORTATION TRAILER	PRONAR TB4	
Maximum gross weight	10500	kg
Carrying capacity	7000	kg
Empty weight	3500	kg
Load surface	17,5	m <sup>2</sup>
Capacity	12 B	
Length of load surface	6910	mm
Width of load surface	2550	mm
Dimensions (length/width/height)	8940/2720/1980	mm
Height of ladders (from load surface)	1060	mm
Floor thickness	4	mm
Height of platform from ground	930	mm
Wheel track	1900	mm
Suspension	parabolic springs	
Drawbar eye load	1350	kg
Tyre dimensions	400/60-15,5	
Design speed	30	km/h
Minimum tractor power demand	100/73	kW/HP

**PRONAR TB4** trailer enables efficient and quick transport of straw fodder and green fodder at maximum driving speed of 30 km/h.

The trailer is equipped with the hydraulically adjustable drawbar and the hydraulically controlled mechanism that collects bales and loads them onto the trailer. The trailer can transport up to 12 bales with diameter up to 1200 mm. Unloading of bales is performed by raising the front part of the platform and opening the rear interlock. The complete process is controlled from the tractor cab.

The use of **PRONAR TB4** trailer can shorten the time required for loading and transporting straw bales and green fodder bales.

#### PRONAR TB4 SELF LOADING BALE TRAILER

**PRONAR TB4** self loading bale trailer is a new product of Pronar. This trailer supplements our range of machines for green crops. Only one tractor and this trailer are necessary to collect bales.



# **PRONAR T024G TRAILERS FOR TRANSPORTING BALES**





BALE TRANSPORTATION TRAILER	PRONAR T024G	
Maximum gross weight	13000	kg
Carrying capacity	8000	kg
Empty weight	ok. 5000*	kg m <sup>2</sup>
Load surface	17,4	m <sup>2</sup>
Length of load platform	7170	mm
Width of load surface	2435	mm
Dimensions (length/width/height	9290/3680/2955	mm
Height of ladders (from load surface)	1680	mm
Floor thickness	3	mm
Height of platform from ground	1310	mm
track gauge	2270	mm
track width	1400	mm
Length of track	4040	mm
Suspension	stiff arm longitudinal	
Load drawbar eye	1925	kg







## PRONAR T400 TRAILER FOR TRANSPORTING BIOMASS

TRAILER FOR TRANSPORTING BIOMASS	PRONAR T400	
Maximum gross weight	22000	kg
Carrying capacity	14550	kg
Empty weight	7450	kg
Cargo capacity	40	m <sup>3</sup>
Load surface	16,84	m²
Internal load box length	8000	mm
Internal load box floor width	Trapezoid 2080/2130	mm
Dimensions (length/width/height)	10100/2900/3950	mm
Height of load box walls	2260	mm
Thickness of side walls	0,75	mm
Height of load box floor from ground	1690	mm
Wheel track	2200	mm
Axle base	1810	mm
Suspension	Tandem parabolic leaf spring suspension with passive turning system	
Drawbar eye load	2000	kg
Tyre dimensions	700/50-26,5	
Design speed	40	km/h
Minimum tractor power demand	160/118	kW/HP



The trailer walls are made of trapezoid profiles covered with aluminium-zinc coating



Wooden floor plate with metal guides of conveyor chains



Hydraulically raised rear wall



Straight mechanical telescopic drawbar support



Tandem parabolic leaf spring suspension with passive turning system

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# **PRONAR FRONT LOADERS**



Front loader type	ŁC-1650	LC2	LC3	LC4	LC5
Lifting capacity [kg]	1650	1300	1820	2080	2320
Mounting method		Brackets mounted to the	half-frames and beams attache	d to the rear axle of the tractor	
Quick mount system for boom and accessories			Mechanical		
Optimum tractor power [hp]	80 ÷ 150	40 ÷ 70	70 ÷ 110	80 ÷ 130	100 ÷ 180
Power transmission			Tractor external hydraulics		
Hydraulic shock absorption	Option		Star	ndard	
Operation			3-sectional electro-hydraulia	5	
Maximum oil operating pressure [MPa]	15		] {	8,5	
Power to operate 3 sections of the hydraulic system			12V from lighter socket		
Engaging 3 sections of the hydraulic system		E	By pressing a button on the contro	ol lever	
Maximum working speed			6 km/h		
Maximum transport speed			15 km/h		
Boom weight (without accessories) [kg]	670	356	406		550
Available for models	PRONAR tractor: 1025A**; 1025All*; 1523A; 1221A; 1221All Belarus: 1025**; 1025.3**; 1221; 1523 (only with MMZ engines)	PRONAR tractor: 320 AMK KIOTI: 451C*; 551C* ZEFIR: 40* / 40 K* ZETOR: 5320 KUBOTA: M6040	PRONAR tractor: 5112/5122; 5110/5130*; 5115/5135,82A; 825A; 8275A; 82AII; 82T5AII; 82SAIII; 82T5AIII, 1025A, 1025AII, 1025AII Belarus*; 820; 920; 952; 920,3; 920,4; 952,3; 952,4; 1025;1025.3, KIOTI: DK751C; DK901C; DK904C; DX7510, ZEFIR: 85 / 85K,NEW HOL- LAND: 15040; TD5010; TD5030; TD5040; TD5050; TD80D; TD95D, DEUZ FHAR: Agroplus 77; Agrofarm 420, JOHN DEERE: 5720; 5080M ZETOR 8441; Proxima 85 FARMTRAC685DT, Massey Ferguson 3625, CASE JX90, JX80, KUBOTA 9540, Landini 5-100H, Ursus 914, Steyr 9078, URSUS: 5314, LANDINI: DT 100A,	Pronar tractor: 82A; 82SA; 82TSA1025A; 1025All; 1025All; 1221A; 1221All; 1523A Belarus:820;920;952;920.3;920.4; 952.3; 952.4;1025.3; 1221.3; 1523.3 URSUS: 1014 ZETOR FORTERRA: 105 NEW HOLLAND: T6010	Pronar tractor: 1025A; 1025A  ; 1221A; 1221A  ; 1523A; 6170; 6180; 7150 Belarus 1523.3; 1221.3; 1523.4 Massey Ferguson 8120, Ursus 1224 DEUTZ-FAHR: Agrofarm M610 URSUS: 914

\* possible use with front three-point linkage
 \*\* possible use with front three-point linkage + PTO
 -the front loader can be mounted to Belarus tractors after installing a cigarette lighter socket



# **PRONAR FRONT LOADERS**

What is important in the purchase of a tractor is also important in the purchase of a front loader: power, efficient hydraulic system, visibility, ergonomics and economy. Ease of operation and servicing is also important, equally for the loader as for the tractor. Pronar front loaders fulfil all these requirements.







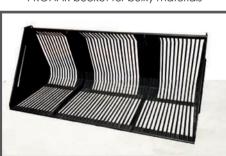


#### www.pronar.pl

**PRONAR** multifunction bucket



PRONAR bucket for bulky materials



PRONAR bucket for bulky materials



PRONAR bucket for bulk



PARAMETERS / CV MODEL CV	V2
Capacity	
Width	
Height	
Length	
Working depth	
Weight	

PARAMETERS /

MODEL

Capacity Width

Height

Length

Working depth

Weight

Linkage

0,6 m<sup>3</sup>

1,54 m

185 kg

EURO

Linkage

PARAMETERS /

MODEL

Capacity Width

Working width

Height

Length

Working depth

Weight

Linkage

PARAMETERS / MODEL

Capacity

Width

Nominal pressure

Number of hydraulic cylinders

Weight Linkaae

TYPE ŁC-

1650

PARAMETERS / MODEL	CV24E	CV24	CV24S	
Capacity		1,26 m	13	
Width		2,43 m	า	
Height		0,93 m	า	
Length		1,22 m	า	
Working depth		1,07 m	ı	

EURO

35C15 35C15E 35C18 35C18E 35C20 35C20E CM15E

0,8 m<sup>3</sup>

2,04 m

230 kg

1650

lub SMS (CV24S)

COK20

1.1 m<sup>3</sup>

2,55 m

2,14 m

0,85 m

0,95 m

0,86 m

235 kg

TYPE EURO Jub TYPE SMS

CW-18E

0,52 m<sup>3</sup>

1,9 m

18,5 MPa

2 410 kg

EURO

TYPE

EURO

0,32 m<sup>3</sup>

1,5 m

0,61 m

0,63 m

0,57 m

80 kg

TYPE

EURO

0,7 m<sup>3</sup>

1,84 m

0,71 m

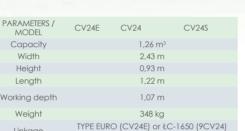
0,86 m

0,78 m

210 kg

1650

TYPE TYPE LC- TYPE TYPE LC-





PRONAR round bale grapple

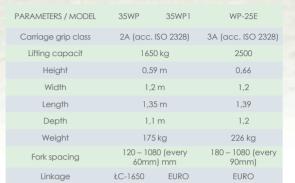


PRONAR square bale grapple

Maximum square bale (bale)		2,04 m		
vinimum square bale (bale)		0,64 m		
Opened width		2,27 m		
Minimum width		1,21 m		
Height		0,51 m		
Length		1,7 m		
Nominal pressure		18,5 MPa		
Weight		324 kg		
Gripping depth		1,06 m		
Number of hydraulic cylinders		2		
Linkage	ŁC-1650		EURO	
PARAMETERS / MODEL	35CB	35CB1	35CB2	
Bale diameter		<1,2 m		



PRONAR pallet fork



168CB

PARAMETERS / MODEL

Opened width

Closed width

Height

Length

Nominal pressure

Weight

Linkage

Minir

# **PRONAR FRONT LOADER FITTINGS**



168CBS

168CBS

2,27 m

1,56 m

0.67 m

1,37 m

18,5 MPa

235 kg

EURO

EURO-SMS

ŁC-1650



# **PRONAR FRONT LOADER FITTINGS**

FRONT LOADER FITTINGS	CK	CKE
Log diameter*	0, 2 – 1 (GRIPPING 0	DF A SINGLE LOG) m
Height*	1,2	2 m
Width	0,1	2 m
Length*	1,4	3 m
Nominal pressure	187	MPa
Weight	75	kg
Class of grip (carriage)	2A (acc.	ISO 2328)
Hydraulic system	ŁC-1650 (TWO PINS)	EURO EURO (PIN + SOCKET)

\*- parameters achieved with 35WP1 or 35WP pallet forks

PARAMETERS / MODEL	35WO1	35WO2	35WO	35WO3	WO-12E
Width	1,34	ŧm	1,84	4 m	1,16 m
Height		0,8	5 m		0,68 m
Depth	0,94 m			0,83 m	
Weight	125	kg	165	kg	102 kg
Number of teeth	7 p	CS.	9 p	ICS.	7 pcs.
Linkage	ŁC-1650	EURO	ŁC-1650	EURO	EURO

PARAMETERS / MODEL	35CO1	35CO3	35CO4	35CO5	35CO	35CO2	CO-12E
Width		1,42	2 m		1,9	2 m	1,23 m
Height		0,94 m					0,86 m
Height after opening			1,4	2 m			1,39 m
Nominal pressure				18,5 MPa			
Number of horizontal teeth		7 pcs.				DCS.	7 pcs.
Number of vertical teeth		6 pcs.				DCS.	6 pcs.
Weight	265	i kg	220	) kg	29	5 kg	191 kg
Number of hydraulic cylinders	4	2		1		2	1
Linkage	ŁC- 1650	EURO	ŁC- 1650	EURO	ŁC- 1650	EURO	



PRONAR log fork



PRONAR manure fork



PRONAR manure fork with grapple

PARAMETERS / MODEL	WK1.25E; WK1.25EW; WK1.25; WK1.25W; WK1.25SMS; WK1.25SMSW; WK1.5E; WK1.5EV WK1.5; WK1.5W; WK1.5SMS; WK1.5SMSW						VK1.5EW;	
Volume of cut block		0,85	m3			1,0	m3	
Width		1,35	ōm			1,5	9 m	
Cutting width		1,25	ōm			1,4	9 m	
Height after opening				1,38	m			
Height after closing				0,95	m			
Opening height				0,86	m			
Depth	1,12	2 m	1,1	4 m	1,1:	2 m	1,1,	4 m
Cutting depth				0,73	m			
Weight	546 kg	530 kg	546 kg	530 kg	600 kg	580 kg	600 kg	580 kg
Number of horizontal teeth		9+2	pcs.			11+2	pcs.	
Nominal pressure				18,5 N	ЛРа			
Linkage	EUI	20	ŁC-	1650	EU	RO	ŁC-1	650
Blade mounting method	Welded	bolted	Welded	bolted	Welded	bolted	Welded	bolted



PRONAR silage block cutter



#### www.pronar.pl







PRONAR counterweight



PARAMETERS / MODEL	Wei
Capacity	
Dimensions (h/w/d)	765/9
Method of linking with carrying vehicle	c
Tare weight	
Maximum weight of filled box	

L	Weight 400 kg	Weight 1000 kg
	0,2 m <sup>3</sup>	0,5 m <sup>3</sup>
	765/965/485 mm	930/965/835 mm
ying	category II thr	ee-point linkage
	60 kg	100 kg
OX	400 ka	1000 ka







l	1		
	C		
		r	

PARAMETERS / MODEL	ZB10
Mounting	EURO
Weight	70 kg
Lifting capacity	1000 kg
Hitching height (adjustable every 100mm)	1260-1560 mr
Dimensions (length x width x height)	0,6 x 1,1 x 1,2



PRONAR grapple bucket

PARAMETERS / MODEL	CHC15	CHC15E	CHC18	CHC18E	CHC20	CHC20E	
Capacity	0,69	9 m3	0,	0,82 m3		0,91 m3	
Width	1,5	4 m	1	1,84 m		2,04 m	
Working width	1,5	im		l,8 m	:	2,0 m	
Minimum height				0,94 m			
Maximum height				1,55 m			
Depth	0,98 m						
Working depth				0,78 m			
Maximum depth				1,22 m			
Weight	350 kg		3	94 kg	4	121kg	
Linkage	ŁC-1650	LC2,LC3	ŁC-1650	LC3,LC4,LC5	ŁC-1650	LC3,LC4,LC5	

# **PRONAR FRONT LOADER FITTINGS**



# **PRONAR VMP 5S MIXER-FEEDER**

MIXER-FEEDER	PRONAR VMP 5S	
Maximum gross weight	3800	kg
Carrying capacity	2200	kg
Empty weight	1600	kg
Tank capacity	5	m <sup>3</sup>
Maximum tank length	2990	mm
Maximum tank width	2190	mm
Tank height	1430	mm
Tank floor diameter	1700	mm
Dimensions (length/width/height)	3880/2190/2130	mm
Thickness of floor/tank wall/wall extension	12/6	mm
Height of tank floor from ground	695	mm
Wheel track	1500	mm
Suspension	rigid	mm
Drawbar eye load	800	kg
Tyre dimensions	10.075-15.3	kg
Design speed	15	km/h
Weighing system	3-point	
Feed dispensing system	Side window, at the front, on the right side	kW/HP
Number of mixer rotations (at PTO speed of 540 rpm)	33	RPM
Minimum tractor power demand	50/36,7	kW/HP







- The mixer-feeder is designed for cattle farms with a herd of cows numbering about 40 animals
- The mixer-feeder tank is characterized by high rigidity and resistance to abrasion
- Discharge window on the right side of the tank guarantees uniform and smooth dispensing of feed from the tank
- Optimally shaped auger mixer shortens the feed cutting and mixing time to minimum
- Four high quality divided cutting blades guarantee long and failure-free operation
- Two manually adjustable counter blades
- Upper ring prevents feed from falling out
- 3-point weighing system located under the tank floor
- Large clearly readable digital display with adjustable position
- Platform with steps on both sides of the mixer-feeder
- Minimum tractor power 50/36,7 kW/HP





# PRONAR VMP 5T MIXER-FEEDER

MIXER-FEEDER	PRONAR VMP 5T	
Maximum gross weight	3800	kg
Carrying capacity	2200	kg
Empty weight	1600	kg
Tank capacity	5	m <sup>3</sup>
Maximum tank length	2990	mm
Maximum tank width	2190	mm
Tank height	1430	mm
Tank floor diameter	1700	mm
Dimensions (length/width/height)	3880/2190/2130	mm
Thickness of floor/tank wall/wall extension	12/6	mm
Height of tank floor from ground	695	mm
Wheel track	1500	mm
Suspension	rigid	
Drawbar eye load	800	kg
Tyre dimensions	10.0/75-15.3	
Design speed	15	km/h
Weighing system	3-point	
Feed dispensing system	2 side windows at the front and 1 at the back	
Number of mixer rotations (at PTO speed of 540 rpm)	33	RPM
Minimum tractor power demand	50/36,7	KM/HP











# PRONAR VMP 10, VMP 10S MIXER-FEEDERS

MIXER-FEEDER	PRONAR VMP 10	PRONAR VMP 10S	
Maximum gross weight	7700		kg
Carrying capacity	4000		kg
Empty weight	3700		kg
Tank capacity	10*		m <sup>3</sup>
Tank load surface	7,1		m <sup>2</sup>
Maximum tank length	3530		mm
Maximum tank width	2490		mm
Tank height	1588*	*	mm
Tank floor diameter	1960		mm
Dimensions (length/width/height)	4860/2550/2670	4860/2490/2700	mm
Thickness of floor/tank wall/wall extension	20/8/8	3	mm
Height of tank floor from ground	820		mm
Wheel track	1700		mm
Suspension	rigid		kg
Drawbar eye load	1300		kg
Tyre dimensions	30x11,5-14,5 reg	generated	
Design speed	25		km/h
Weighing system	4-poir	it in the second s	
Feed dispensing system	side wind	wob	
Number of mixer rotations (at PTO speed of 540 rpm)	25		RPM
Minimum tractor power demand	60/44,	1	kW/HP



Counter blade lever





\* Tank capacity with one 250mm wall extension \*\* Internal tank height without a wall extension



Auger mixer with four cutting blades



Ladder with a platform





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# PRONAR VMP 10, VMP 10S MIXER-FEEDERS







**VMP 10** - two dispensing windows symmetrically arranged on the sides of the longitudinal axis of the machine

**VMP 10S** - two dispensing windows symmetrically arranged on the sides of the longitudinal axis of the machine









Slant arrangement of discharge openings



# **PRONAR Z 245 BALE WRAPPER**

BALE WRAPPER	PRONAR Z 245	
Maximum bale diameter	1800	mm
Maximum bale width	1200-1500	mm
Permissible bale weight	1 100	kg
Film width	500 or 750	mm
Loading arm	Hydraulically controlled	
Unloading mechanism	Hydraulically controlled	
Film grabbing mechanism	Hydraulically controlled	
Film cutting	Automatic	
Required tractor power	35/48	kW/HP
Weight	2070	kg
Wrapping counter L-01	Standard	
Three holders for rolls	Standard	
Tyres	340/55-16	
Tyres	340/55-16	



Hydraulic cutting and grabbing system cuts and holds the film in the position for wrapping the next bale,







# PRONAR Z245/1 BALE WRAPPER



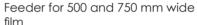


Front loading when the wrapper is positioned next to the side of the bale



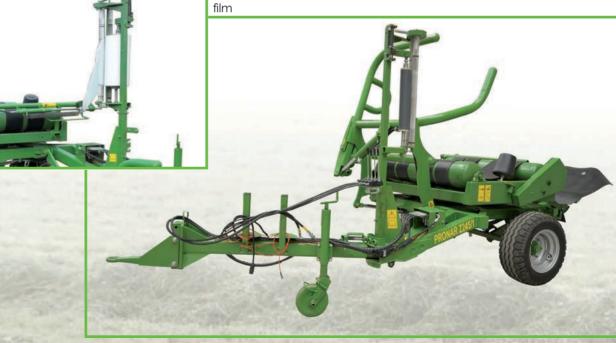
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BALEWRAPPER	<b>PRONAR Z 245/1</b>	
Maximum bale diameter	1200-1500	mm
Maximum bale width	1250	mm
Permissible bale weight	1 000	kg
Film width	500 or 750	mm
Loading arm	Hydraulically controlled	
Unloading mechanism	Hydraulically controlled	
Film grabbing mechanism	Hydraulically controlled	
Film cutting	Automatic	
Required tractor power	35/48	kW/HP
Weight	1650	kg
Wrapping counter L-01	Standard	
Two holders for rolls	Standard	
Tyres	340/55-16	





Bales can be unloaded on their side or front surface







This catalogue presents technical specifications of various equipment sets occurring equally in standard as in non-standard product versions. Due to the continuous product development process, data presented herein is subject to change. Manufacturer reserves the right to make changes without notice. This publication does not constitute a commercial offer.

# PRONAR

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