RECYCLING EQUIPMENT RANGE

MOBILE TROMMEL SCREENS

MPB 14.44, MPB 18.47, MPB 20.55, MPB 20.72 MPB 18.47g, MPB 20.55g, MPB 20.55gh, MPB 20.72g

MOBILE SLOW-SPEED SHREDDERS

MRW 2.85, MRW 2.85g, MRW 2.85h MRW 2.1010, MRW 1.300

MOBILE HIGH-SPEED SHREDDER

MRS 1.53

WINDROW TURNER MBA 4512g

MOBILE STOCKPILERS MPT 18g, MPT 24g, MPT 15g, MPT 18/1g, MPT 24/1g

HYDRAULIC CHANNEL BALING PRESS

HPBK-67HA





MOBILE TROMMEL SCREENS MPB 14.44, MPB 18.47, MPB 20.55, MPB 20.72 MPB 18.47g, MPB 20.55g, MPB 20.55gh, MPB 20.72g	4
DRUMS	20
STARSCREEN FOR MPB20.55	21
MOBILE SLOW-SPEED SHREDDERS MRW 2.85, MRW 2.85g, MRW 2.85h, MRW 2.1010	22
MOBILE SINGLE SHAFT SLOW-SPEED SHREDDER	32
MOBILE HIGH-SPEED SHREDDER MRS 1.53	
SHAFTS FOR MULTIPLE APPLICATIONS	38
WINDROW TURNER MBA 4512g	40
MOBILE STOCKPILERS MPT 18g, MPT 24g	46
MOBILE STOCKPILERS MPT 15g, MPT 18/1g, MPT 24/1g	54
HYDRAULIC CHANNEL BALING PRESS	58



Gold Medal MTP 2014 **Mobile Trommel Screen** MPB 18.47

Gold Medal MTP 2016 Mobile Slow-speed Shredder MRW 2.1010



MEDA

Gold Medal MTP 2016 **Customer choice** Mobile Slow-speed Shredder MRW 2.1010





Gold Medal MTP 2017 Mobile Stockpiler MPT 18g



Gold Medal MTP 2018 **Customer choice** Mobile Stockpiler MPT 18g



Gold Medal MTP 2018 Mobile slow-speed shredder MRW 1.300

Gold Metal MTP 2019 Hydraulic channel baling press HPBK-67HA





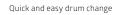
Mobile trommel screens are used for effective material separating into different size fractions.

Thanks to solid construction and simple principle of operation mobile trommel screens are perfectly suited for work with many different materials - municipal waste, wood waste and chips, compost, biomass, coal, soil, gravel, aggregates etc. Four available sizes allow to fit machine according to the task. Replacable drums can be made according to customers needs - thickness adequate to- the material and hole size for separting the required fraction.

> Replaceable drums with round or square holes and drum thickness according to customer requirements



Hydraulically raised and lowered trommel cleaning brush



Rear control panel for safe and easy conveyors unfolding.



Hydraulic support legs improve machine tability on uneven grou





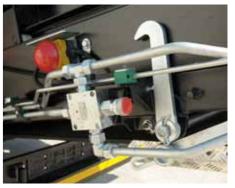
Homologation allows for moving screener on roads (up to 100km/h)



Sealing in the hopper prevents material from leaking to the inside of the machine



Control panel with easy-to-use functions



Belt speed adjustment - adjusts the speed to the type of screened material to maximize the performance. It also allows to stack more material of each fraction without the need of relocating the machine

The engine and hydraulic system are mounted on a pull-out frame which provides easy access for maintenance



Pronar offer of mobile trommel screens is complemented with tracks version models.

A totally autonomous drive system allows for trouble-free operations without additional towing machines required. The screens may be repositioned at any time thanks to the tracked chassis and can be used in hard to reach areas.





Rear conveyor folded by means of two hydraulic cylinders

Beacon light signalises work/drive mode









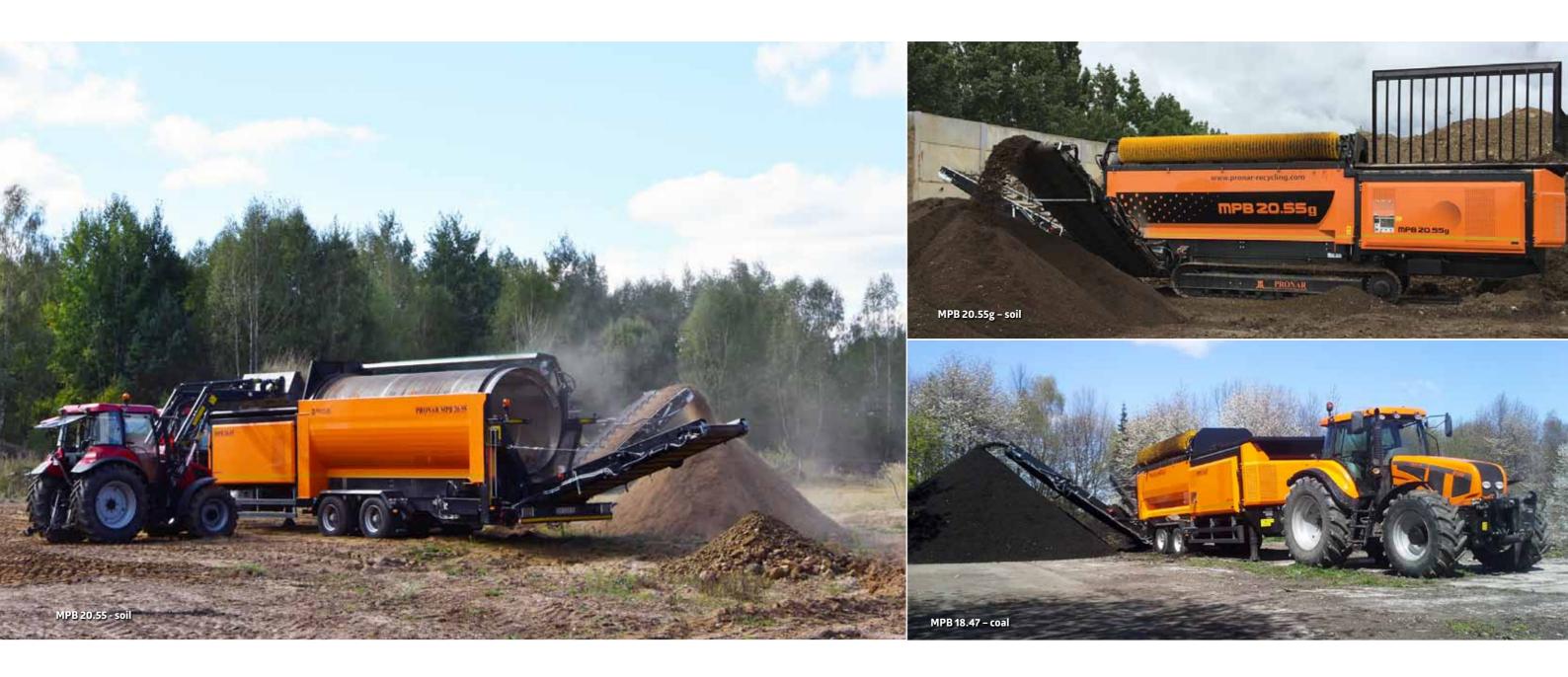


Hydraulic system for adjusting chassis position in MPB 20.55gh. The mechanism allows leveling machine on longitudinal slopes and increases the clearance for easier moving on uneven terrain



Tracked chassis for moving the machine without any additional towing vehicles

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Air separator perfectly separates light materals from larger fraction - additional recovery of secondary raw materials such as foil or paper on rear and side discharge conveyors on rear and side discharge conveyors the trommel drum. Used for debris, gravel and stones



 Remote controls for basic machine functions. Especially useful when using hopper tipping grid. Loader operator can remove the accumulat-ed material directly from his cabin. Remotes also have the emergency stop button. (available 6- and 10-button versions)
 Ribbed belt - special construction prevents slipping of the hopper belt when screening high-density materials i.e. gravel
 Electric pump for easy refuelling









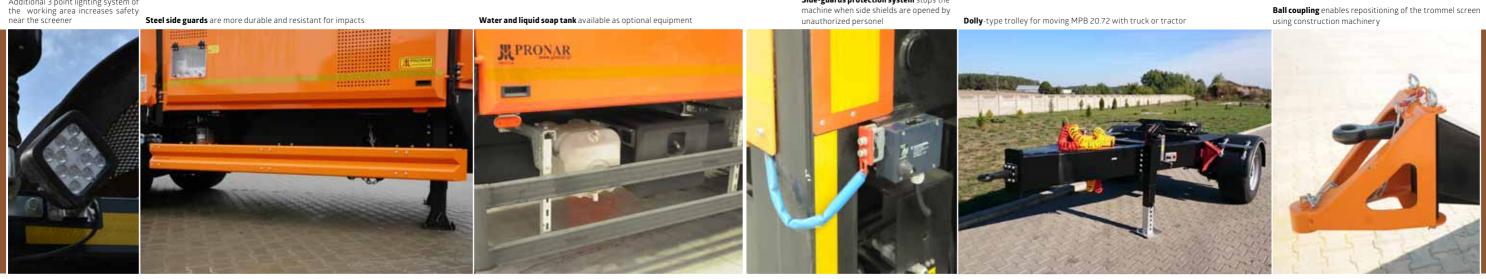
Reliable Caterpillar or Deutz engines – thanks to the application of the latest environment-friendly technologies, the engine meets latest emissions standards

Optional electric motor allows a significant reduction of running costs and noise levels



Hydraulic legs opened from main control or hand pump

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Additional 3 point lighting system of the working area increases safety near the screener

MPB 18.47e - coal

Side-guards protection system stops the machine when side shields are opened by unauthorized personel





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MOBILE TROMMEL SCREENS MPB 14.44 / 18.47 / 20.55 / 20.72 / 18.47g / 20.55g / 20.55gh / 20.72g

CHASSIS	MPB 14.44	MPB 18.47	MPB 20.55	MPB 20.72
Gross weight [kg]	11000	12800	16000	17600
Overall dimensions (length/width/height) [mm]	10690/2300/3900	10990/2550/3900	12000/2550/4000	12350/2550/4000
Maximum speed [km/h]	100	100	100	100
Brake system	Pneumatic with EBS	Pneumatic with EBS	Pneumatic with EBS	Pneumatic with EBS
ABS configuration	45/2M	45/2M	45/2M	45/2M
Brake type	drum brake	drum brake	drum brake	drum brake
Additional power supply to EBS module	+	+	+	+
Type of mounting attachment	mechanical	mechanical	mechanical	mechanical
Number of wheels	4	4	4	4
Tyre dimensions	435/50 R19.5 (160J)	435/50 R19.5 (160J)	435/50 R19.5 (160J)	435/50 R19,5 (160J)
Axle manufacturer	ATW/ADR	ATW/ADR	ATW/ADR	ATW/ADR
Number of axles	2	2	2	2
Maximum axle load [kg]	9000	9000	9000	9000
Front support legs	2 mechanical	2 mechanical	2 mechanical	2 mechanical
Rear support legs	1 hydraulic	1 hydraulic	1 hydraulic	1 hydraulio
Road lighting voltage [V]	24 (12)	24 (12)	24 (12)	24 (12)
Type of road lights	LED	LED	LED	LED
Drawbar eye diameter [mm]	50	50	50	-
Drawbar eye height [mm]	950 (±110)	950 (±110)	950 (±110)	
Coupling bolt diameter (king pin)	-	-	-	2'
Height of king pin coupling		-		1150
Cutting barriers	+	+	+	+
Mudguards	steel	steel	steel	steel
Mud flaps	+	+	+	+
Warning signs	+	+	+	+
Wheel chocks	+	+	+	+
Contour markings	+	+	+	
Rotating warning beacon	+	+	+	
Tool box (1 piece: - 50I)	+	+	+	
Water container (30I) with a soap dispenser	-	-	-	+
Detachable rear bumper	+	+	+	
Rear conveyor belt speed control	+	+	+	+
Side conveyor belt speed control	+	+	+	
TRACKED CHASSIS	MPB 18.47g	MPB 20.55g	MPB 20.55gh	MPB 20.72g
Gross [kg]	14000	20000	20840	20300
Overall dimensions (length/width/height) [mm]	9530/2900/3420	10610/2910/3450	11620/3100/3500	12400/2900/3650
Maximum speed [km/h]	1	1	1	1
Remote control	radio	radio	radio	radio
Approach angle	16 / 11	16 / 11	16 / 11	16 / 11

Brand, displacement, Exhaust, NOM power kW (HP) / rpm / MAX power kW (HP) / rpm

MPB 14.44	MPB 18.47	MPB 20.55	MPB 20.72	MPB 18.47g	MPB 20.55g	MPB 20.55gh	MPB 20.72g
Caterpillar, 2,2 L, Stage 3A, 32 (44) / 2200 / 36,4 (49) / 2800	Caterpillar, 3,4 L, EU Stage 3B, 55,4 (75) / 2200 / 55,4 (75) / 2200	Caterpillar, 4,4 L, EU Stage 3B, 72 (98) / 1600 / 74,5 (101) / 2200	Deutz, 3,6 L, EU Stage 3B, 82 (111) / 2000 / 90 (122) / 2300	Caterpillar, 3,4 L, EU Stage 3B, 55,4 (75) / 2200 / 55,4 (75) / 2200	Caterpillar, 4,4 L, EU Stage 3B, 72 (98) / 1600 / 74,5 (101) / 2200	Caterpillar, 4,4 L, EU Stage 3B, 72 (98) / 1600 / 74,5 (101) / 2200	Deutz, 3,6 L, EU Stage 3B, 82 (111) / 2000 / 90 (122) / 2300
Deutz, 2,9 L, EU Stage 3A, 32 (44) / 2200 / 36,4 (49) / 2600)	Deutz, 2,9 L, EU Stage 3B, 55,4 (75) / 2200 / 55,4 (75) / 2600	Deutz, 3,6 L, EU Stage 3B, 68 (92) / 1600 / 74,4 (101) / 2300	Caterpillar, 3,4 L, EU Stage IV, 90 (122) / 2000 / 90 (122) / 2200	Deutz, 2,9 L, EU Stage 3B, 55,4 (75) / 2200 / 55,4 (75) / 2600	Deutz, 3,6 L, EU Stage 3B, 68 (92) / 1600 / 74,4 (101) / 2300	Deutz, 3,6 L, EU Stage 3B, 68 (92) / 1600 / 74,4 (101) / 2300	Caterpillar, 3,4 L, EU Stage IV, 90 (122) / 2000 / 90 (122) / 2200
-	Deutz, 2,9 L, EU Stage V, 55,4 (75) / 2200 55,4 (75) / 2600	Caterpillar, 3,4 L, EU Stage IV, 81,1 (110) / 1600 / 90 (122) / 2200	Deutz, 3,6 L, EU Stage IV, 90 (122) / 2000 / 90 (122) / 2200	Deutz, 2,9 L, EU Stage V, 55,4 (75) / 2200 55,4 (75) / 2600	Caterpillar, 3,4 L, EU Stage IV, 81,1 (110) / 1600 / 90 (122) / 2200	Caterpillar, 3,4 L, EU Stage IV, 81,1 (110) / 1600 / 90 (122) / 2200	Deutz, 3,6 L, EU Stage IV, 90 (122) / 2000 / 90 (122) / 2200
-	Caterpillar, C2,8T, EU Stage V, 44 (60)/2500	Deutz, 3,6 L, EU Stage IV, 80,4 (109) / 1600 / 90 (122) / 2200	-	Caterpillar, C2,8T, EU Stage V, 44 (60)/2500	Deutz, 3,6 L, EU Stage IV, 80,4 (109) / 1600 / 90 (122) / 2200	Deutz, 3,6 L, EU Stage IV, 80,4 (109) / 1600 / 90 (122) / 2200	-
-	ABB, el., 30 (41) / 1450	ABB, el., 55 (75) / 1450	ABB, el., 55 (75) / 1450	-	-	-	-
ABB, el., 30 (41)	ABB, el., 45 (61) /	-	-	-	-	-	-

MATERIAL TRANSPORT	MPB 14.44	MPB 18.47	MPB 20.55	MPB 20.72	MPB 18.47g	MPB 20.55g	MPB 20.55gh	MPB 20.72g
Trommel dimensions (length/width) [mm]	4400/1400	4700/1800	5500/2000	7200 / 2000	4700/1800	5500/2000	5500/2000	7200 / 2000
Trommel rotational speed max[rpm]	23	23	24	23	23	20	20	19
Effective sieve surface [m²]	16	22,1	29,8	40,6	22,1	29,8	29,8	40,6
In-feed hopper dimensions (length/width) [mm]	3560/1850	3560 / 2120	3900/2230	3900/2230	3560 / 2120	3900 / 2230	3900 / 2230	3900/2230
Loading height [mm]	2600	2800	2850	2730	2660	2700	2700	2830
In-feed hopper capacity [m³]	3,3	5	6	6	5	6	6	6
Dimensions of exterior side conveyor (length/width) [mm]	5200/800	5200/800	4900/1000	4900 / 1000	5200/800	4900/1000	6000/1000	4900 / 1000
Dimensions of exterior rear conveyor (length/width) [mm]	5200/800	5200/800	4900/1000	4900 / 1000	5200/800	4900/1000	6000/1000	4900 / 1000
Width of interior longitudinal conveyor [mm]	1000	1300	1300	1300	1300	1300	1300	1300
Width of interior transverse conveyor [mm]	600	600	800	800	600	800	800	800
Control voltage [V]	12	12	12	12	12	12	12	12
Central lubrication system	+	+	+	+	+	+	+	+
Rear conveyor belt speed regulation	+	+	+	+	+	+	+	+
Side conveyor belt speed regulation	+	+	+	+	+	+	+	+

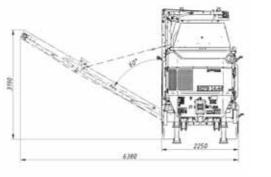
ADDITIONAL AND OPTIONAL EQUIPMENT	MPB 14.44	MPB 18.47	MPB 20.55	MPB 20.72	MPB 18.47g	MPB 20.55g	MPB 20.55gh	MPB 20.72g
Magnetic Roller - rear converyor	+	+	+	+	+	+	+	+
Magnetic Roller - side converyor	+	+	+	+	+	+	+	+
Air separator	-	+	+	+	+	+	-	+
Stone Grid above charging hopper	+	+	+	+	+	+	+	+
Chute near In-Feed hopper	+	+	+	+	+	+	+	+
Side convoyer cleaning brush	+	+	+	+	-	-	-	+
Rear convoyer high guards	+	+	+	+	-	-	-	+
Rear conveyor 3m	+	+	+	+	+	+	-	-
Side conveyer 3m - left side	-	-	+	+	-	+	-	+
Side conveyer 3m	-	-	+	+	+	+	-	+
Ball attachment	+	+	+	-	n.a	n.a	n.a	n.a
Hydraulically controlled front	+	+	+	-	n.a	n.a	n.a	n.a

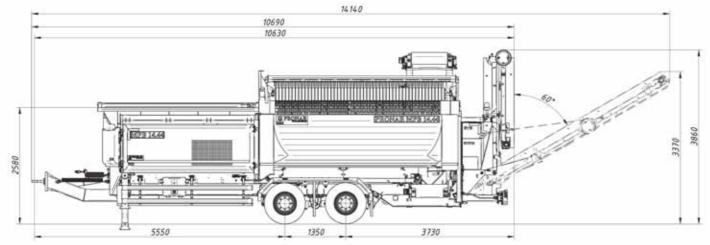
ADDITIONAL AND OPTIONAL EQUIPMENT	MPB 14.44	MPB 18.47	MPB 20.55	MPB 20.72	MPB 18.47g	MPB 20.55g	MPB 20.55gh	MPB 20.72g
Magnetic Roller - rear converyor	+	+	+	+	+	+	+	+
Magnetic Roller - side converyor	+	+	+	+	+	+	+	+
Air separator	-	+	+	+	+	+	-	+
Stone Grid above charging hopper	+	+	+	+	+	+	+	+
Chute near In-Feed hopper	+	+	+	+	+	+	+	+
Side convoyer cleaning brush	+	+	+	+	-	-	-	+
Rear convoyer high guards	+	+	+	+	-	-	-	+
Rear conveyor 3m	+	+	+	+	+	+	-	-
Side conveyer 3m - left side	-	-	+	+	-	+	-	+
Side conveyer 3m	-	-	+	+	+	+	-	+
Ball attachment	+	+	+	-	n.a	n.a	n.a	n.a
Hydraulically controlled front support legs	+	+	+	-	n.a	n.a	n.a	n.a
Screen hole size			according	to customer's	s requirements	5		
Sieve wall thickness			according	to customer's	s requirements	5		
Drawbar eye diameter ø40	+	+	-	-	n.a	n.a	n.a	n.a
Drawbar eye diameter ø57 (Swedish standard)	+	+	+	-	n.a	n.a	n.a	n.a
Side security guards	+	+	+	+	+	+	+	+
Cleanfix for motor cooler	+	+	+	+	+	+	+	+
Cleanfix for hydraulic oil cooler	+	+	+	+	+	+	+	+
In-Feed hopper load/pressure sensor	+	+	+	+	+	+	+	+
Water container (30l) with a soap dispenser	+	+	+	-	+	+	+	+
Work area light system (3 points)	+	+	+	+	+	+	+	+
Steel bike catchers	+	+	+	-	n.a	n.a	n.a	n.a
Additional hydraulic pumps (20 l/ min, 40 l/min)	-	-	+	+	+	+	+	+



Mobile trommel screen MPB 14.44

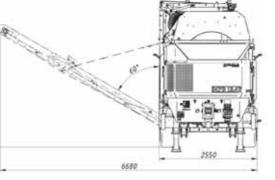


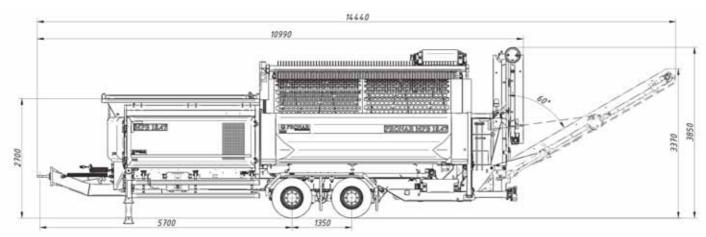




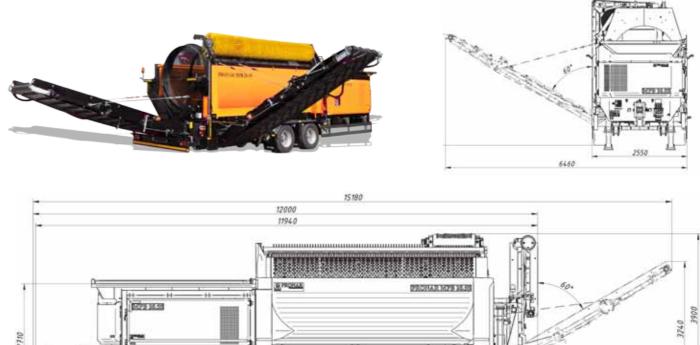
Mobile trommel screen MPB 18.47

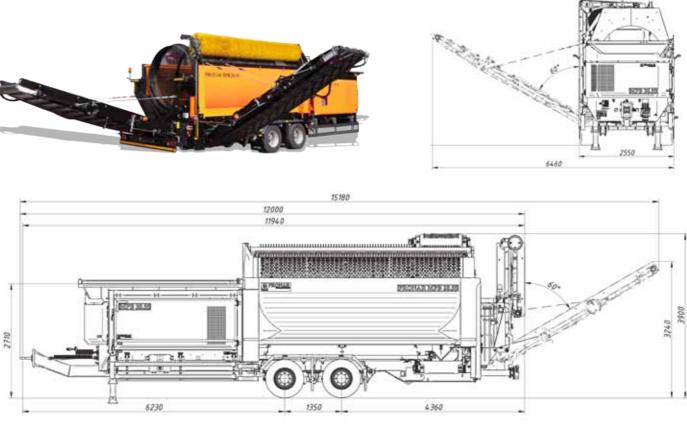






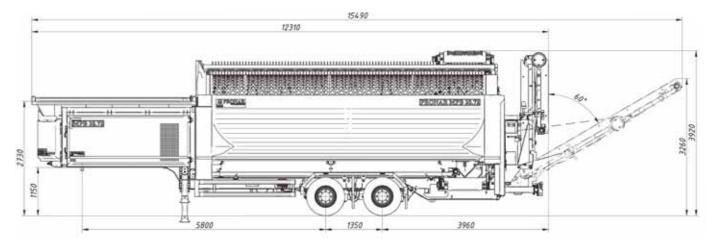
Mobile trommel screen MPB 20.55

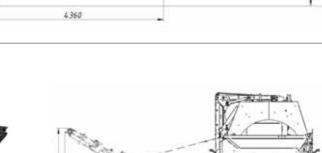




Mobile trommel screen MPB 20.72







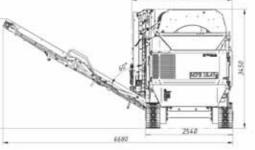
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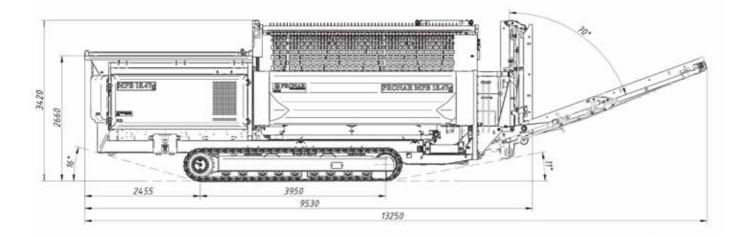
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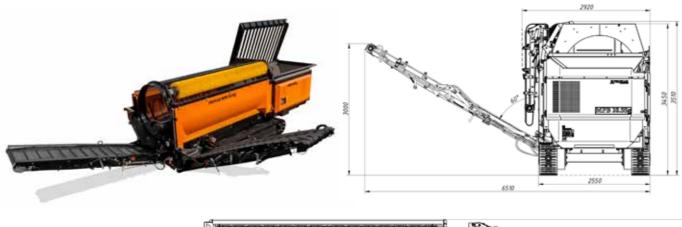
Tracked mobile trommel screen MPB 18.47g

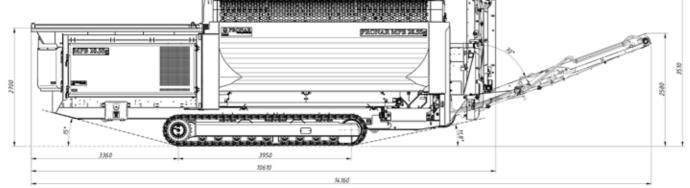






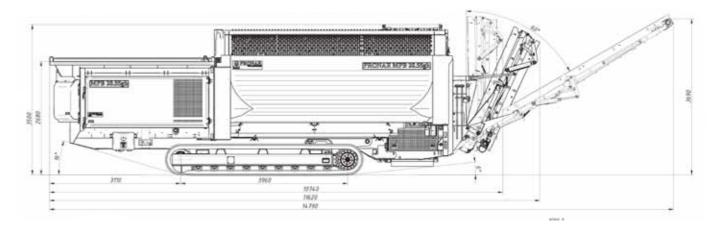
Tracked mobile trommel screen MPB 20.55g





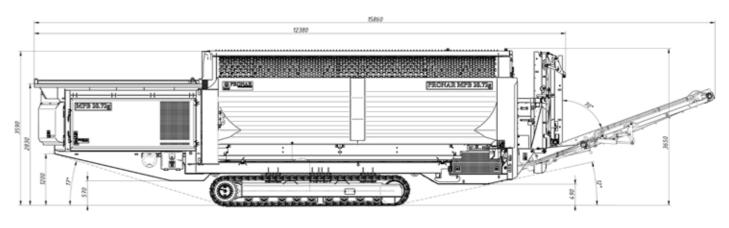
Tracked chassis mobile trommel screen with hydraulic system clearance regulation MPB 20.55gh





Tracked mobile trommel screen MPB 20.72g







Pronar MPB Trommel drums may be easily changed to suit material screening requirements.

Pronar also produces screen drums compatible with other manufacturers' machines.

Depending on the screened material: soil, compost, municipal

waste, aggregate, biomass; different types of perforation are available, shapes include round or square, any size hole available.

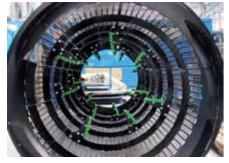
There are 4 standard drum versions available:

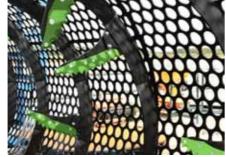
- length 4,4 m & diameter 1,4 m
- length 4,7 m & diameter 1,8 m
 length 5,5 m & diameter 2 m

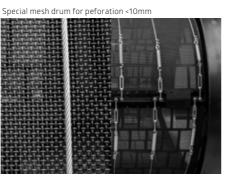
 length 7,2 m & diameter 2 m
 There are 3 standard wall thickness versions: 6 mm, 8 mm and 10 mm.

Hole size, regardless of its shape, could be from 10 to 100 mm. Upon client's request, we are able to manufacture a drum of nonstandard holes or made of steel mesh

Screwed knives for ripping bags with waste







Steel lifters in the drum help more efficient separation and

Drum length [mm]	Drum diameter [mm]	Available drum thickness [mm]	
4400	1400	6/8/10	square / round
4700	1800	6/8/10	square / round
5500	2000	6/8/10	square / round
7200	2000	6/8/10	square / round

ШШ mm П





Different types of perforation "O"-round

Starscreen can be used instead of trommel. Utilising starscreen during works on wet material increases machine efficiency. The rotation speed of the stars can be steplessly regulated which allows for accurate setting of the separated fraction

Destinated for:

- Municipal and industrial waste, compost,
- Shredder tree stumps, wood, bark,
- Contaminated aggregates: sand, gravel, clay, stones, soil, peat, coal,
- Materials for road or garden works ٠



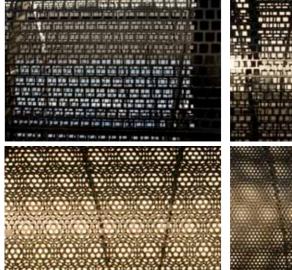
Available starscreens:

Model

MPB 20.55, 20.55g, 20.55gh



Different types of perforation "K" - square













Material spreading shaft

Screening area

1,2 x 4,9 (5,72 m²)



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Pronar mobile slow-speed shredders are designed for primary shredding different types of materials.

Machines can be used for shredding municipal green, industrial, construction waste, pallets, tree cutting residues, tree stumps, bulky and oversized materials, light scrap.

Working element consists of two synchronised shredding shafts placed in the working chamber. Working elements are manufactured from wear-resistant materials, which ensures longlife and failure-free operating.

Depending on the chassis type, the shredders can be moved around area at any moment without the use of towing vehicles(tracked chassis) or towed on roads up to 100km/h (wheeled chassis).



Conveyor belt speed rate adjustme



Working chamber made of wear-resistant materials which significantly increase lifetime of the machine

trol for basic machine operating functions

Hydraulic support legs ensures ility of machine Hydraulic tipping chute allows to feed over-sized material into working chamber





Central lubrication system ensures good greasing of



Machine oparating mode indicator - for status check and security warnings



Central control panel with touchscreen











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MRW 2.85h - carrying by hooklift frame carriers

MRW 2.85h - drag wheel for moving on working place

MRW 2.85 SELF CRAWLER - self-propelled system



Inspection windows of the working chamber for easy cleanout and maintenance

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MOBILE SLOW-SPEED SHREDDERS MRW 2.85 / 2.85g / 2.85h / 2.1010

CHASSIS:	MRW 2.85	
Maximum total weight [kg]	~ 27000	
Dimension (length/width/height) [mm]	8850x2550x4000	
Max speed [km/h]	100	
Brake system	Pneumatic with EBS	
ABS configuration	4S/2M	
Brake type	Drum	
Additional Power supply to EBS system	+	
Type of attachment mechanism	mechanical	
Number of wheels	б	
Tyre dimensions	435/50 R19,5 (160J)	
Axle manufacturer	ATW / ADR	
Number of axles	3	
Max axle load [kg]	9000	
Front support legs [pcs]	1	
Rear support legs [pcs]	2	
Road light voltage [V]	24 (12)	
Type of road lights	LED	
Drawbar eye diameter [mm]	50	
Drawbar height from ground (adjustable) [mm]	950 (± 110)	
Mud flaps	+	
Wheel chocks	+	
Contour markings	+	
Beacon light	+	
Toolbox	+	
Rear removable bar	+	
Marking plates	+	

TRACKED CHASSIS	MRW 2.85g	MRW 2.1010
Total weight [kg]	26380	~40000
Dimension (length/width/height) [mm]	7800/2550/3200	9500/3000/3200
Number of speeds	2	2
Approach angle (front/rear) [°]	20 / 15	21 / 14

HOOKLIFT CHASSIS	MRW 2.85h	
Total weight [kg]	~21500	
Dimension (length/width/height) [mm]	7370/2550/2700	
Number of wheels	2	
Hooklift standard	DIN 30722-1	

м

SHREDDING SYSTEM		MRW 2.85	MRW 2.85g	MRW 2.85h	MRW 2.1010
Dimension of working shafts (leng	gth/diameter) [mm]	1700 / 685	1700 / 685	1700 / 685	2440 / 850
Max. shaft speed [rpm]	-	37/42	37/42	37/42	34
Number of shafts [Pcs.]	2	2	2	2	
Working chamber dimension (leng	gth/width) [mm]	1720 / 2340	1720 / 2340	1720 / 2340	2440 / 2880
Loading height [mm]		3150	3000	2450	3200
Hopper capacity [m ³]		~ 3,0	~ 3,0	~ 3,0	~ 4,5
Transport belt width [mm]		1400	1400	1400	1400
Control voltage [V]		24	24	24	24
Central lubrication system		+	+	+	+
Belt speed regulation		+	+	+	+
Operation signal lights		+	+	+	+
Hydraulically lifted loading hoppe	r	+	+	+	+
Loading hopper and shafts made	of wear-resistant steel	+	+	+	+
ADDITIONAL EQUIPMENT:		MRW 2.85	MRW 2.85g	MRW 2.85h	MRW 2.1010
Bar between shafts		+	+	+	+
Magnetic separator		+	+	+	+
Ball coupling		+	n.a	+	n.a
Drawbar eye: ø57 (Swedish stand	ard)	+	n.a	+	n.a
Lighting of working areas		+	+	+	+
Road lighting adapter 15 pin - 2x7	pin (std 15 pin - 15 pin)	+	n.a	n.a	n.a
Shafts according to customer req	uirements	+	+	+	+
DRIVE:	MRW 2.85	MRW 2.85g	MRW 2.	.85h N	1RW 2.1010
Diesel engine	Caterpillar (EU Stage 4, 9.3 I – 298 kW (405 HP) / 2200 rpm)	Caterpillar (EU Stage 4, 9.3 I – 298 kW (405 HP) / 2200 rpm)	Caterpillar (El 9.3 I – 298 kW 2200 rj	(405 HP) / 16.1 I -	Penta (EU Stage 2, 565 kW (768 HP) / 1850 rpm)
	Volvo Penta (EU Stage 4, 13 I – 315 kW (428 HP) / 1900 rpm)	Volvo Penta (EU Stage 4, 13 I – 315 kW (428 HP) / 1900 rpm)	-		-
	Caterpillar (Stage IIIA 9.0 I – 280 kW (374 HP) / 2200 rpm)	Caterpillar (Stage IIIA 9.0 l – 280 kW (374 HP) / 2200 rpm)	-		-
	Caterpillar (EU Stage Tier 4 Final), 9.3B I – 310 kW (416 HP) /2200 oб/rpm)	Caterpillar (EU Stage V, Tier 4 Final), 9.3B I – 310 kW (416 HP / 2200 rpm	Caterpillar (El Tier 4 Fi 9.3B l – 310 kW 2200 م6/	inal), V (416 HP) /	-
Electric engine (shafts + hydraulics)	-	-	250 kW (3 + 22 kW (3		-
Fuel tank capacity [l]	700	700	700		1200
Cleanfix system for engine cool- ing system	+	+	+		+
Cleanfix system for hydraulic oil cooler	+	+	+		+
Lighting for engine area	+	+	+		+

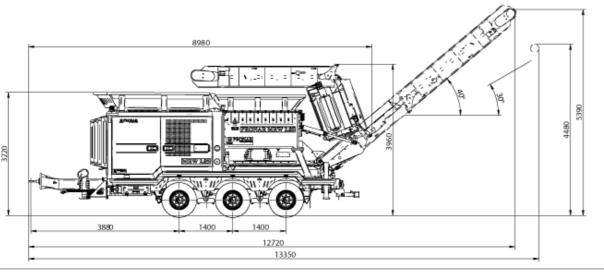
DRIVE:	MRW 2.85	MRW 2.85g	MRW 2.85h	MRW 2.1010
Diesel engine	Caterpillar (EU Stage 4, 9.3 I – 298 kW (405 HP) / 2200 rpm)	Caterpillar (EU Stage 4, 9.3 I – 298 kW (405 HP) / 2200 rpm)	Caterpillar (EU Stage 4, 9.3 l – 298 kW (405 HP) / 2200 rpm)	Volvo Penta (EU Stage 2, 16.1 l – 565 kW (768 HP) / 1850 rpm)
	Volvo Penta (EU Stage 4, 13 I – 315 kW (428 HP) / 1900 rpm)	Volvo Penta (EU Stage 4, 13 I – 315 kW (428 HP) / 1900 rpm)	-	-
	Caterpillar (Stage IIIA 9.0 I – 280 kW (374 HP) / 2200 rpm)	Caterpillar (Stage IIIA 9.0 I – 280 kW (374 HP) / 2200 rpm)	-	-
	Caterpillar (EU Stage Tier 4 Final), 9.3B I – 310 kW (416 HP) /2200 o6/rpm)	Caterpillar (EU Stage V, Tier 4 Final), 9.3B l – 310 kW (416 HP / 2200 rpm	Caterpillar (EU Stage V, Tier 4 Final), 9.3B I – 310 kW (416 HP) / 2200 oб/rpm)	-
Electric engine (shafts + hydraulics)	-	-	250 kW (340 HP) + 22 kW (30 HP)	-
Fuel tank capacity [l]	700	700	700	1200
Cleanfix system for engine cool- ing system	+	+	+	+
Cleanfix system for hydraulic oil cooler	+	+	+	+
Lighting for engine area	+	+	+	+

Advantages:
* Processing of a wide range of materials
* Easy service thanks to easy access to engine area
* Remote control as a standard
* Shredding chamber inspection doors on both sides
' User-friendly control panel
Cleanfix sytem for engine radiator and hydraulic oil cooler
* Shredding chamber made from top -quality materials

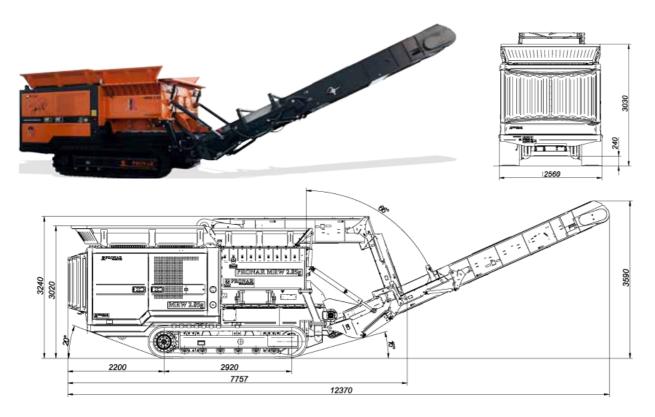


Mobile slow-speed shredder MRW 2.85

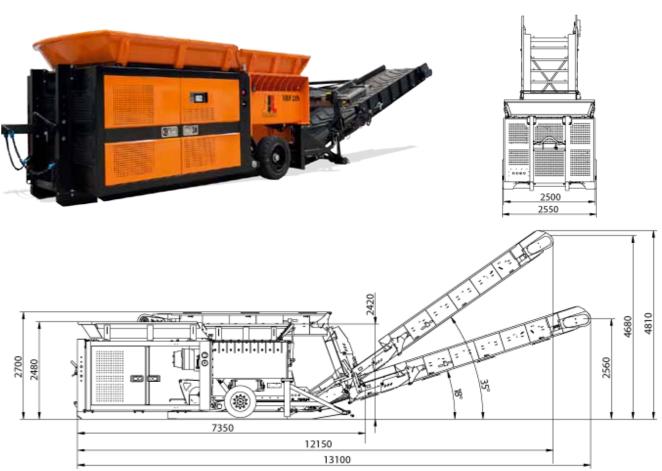


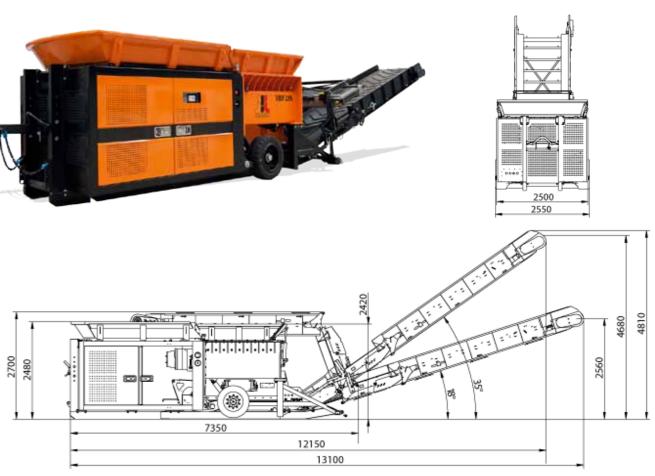


Mobile slow-speed shredder on tracked chassis MRW2.85g

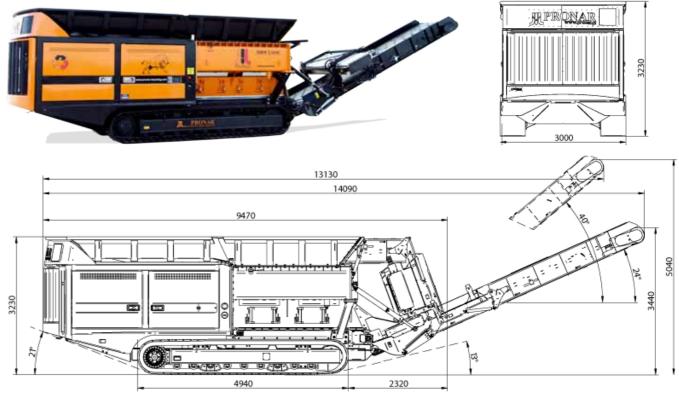


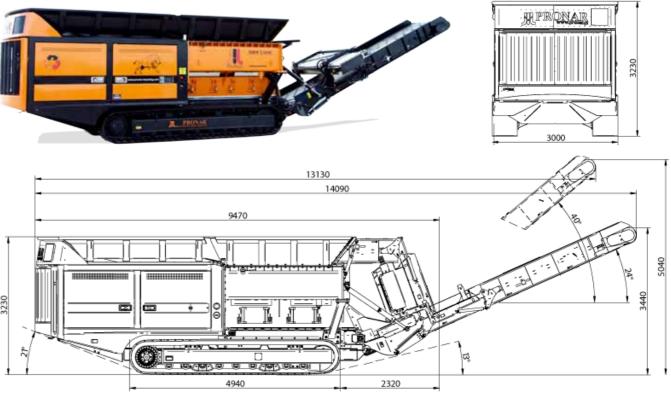
Mobile slow-speed shredder on hooklift chassis MRW 2.85h





Mobile slow-speed shredder on tracked chassis MRW 2.1010







Pronar introduced the new Mobile Slow Shredder MRW 1.300. The line of recycling machines has been completed with a single-shaft machine. The shredder is used in the production of compost, shredding green organic waste, wood, biomass, paper, plastics and foil, small scrap, etc.

The machine can be adapted to the customer's needs thanks to the availability of different types of teeth, sieves and counter-knives.



Single shaft with max. 27 rpm. Depending on the input material different types of knives are available: breakers (for wood, green waste, household, plastic), cutting (for rubber, foil, plastics, fabrics) and crumbling (for roots, logs, railway sleepers)



shredding material



Engine - Vovlo Penta (550 hp/ 405 kW)



Sizing basket Get the size of the material that is right for you. Choose size and shape of holes in the basket that is placed under the shaft. Those baskets are easily changeable.





Counter knives. The grinding system tilting beam system with coun terknives ensures long operations of the shredder allows removal of large, unbreakable materials - longer and troublefree operations of the machine. The standard electric reverse allows you to rotate the shaft in any direction without starting the combustion engine to remove blockages



The standard shaft has 42 knife attachment sockets. Assembly and replacement are possible using generally available tools, and exchange is fast.

Easily accessible shedding chamber for cleaning or changing counter knives.



THREE-AXLE CHASSIS	MRW 1.300
Maximum total weight [kg]	27000
Overall dimensions (length / width / height) [mm]	10 000 x 2500 x 3700
SHREDDING SYSTEM	MRW 1.300
Number of shafts [Pcs.]	1
Dimension of working shafts (lenght/diameter) [mm]	3000 / 970
Shaft speed [rpm]	27
Loading height [mm]	2850
Working chamber dimension (length/width) [mm]	3650 / 2200
DRIVE	MRW 1.300
Diesel engine	Volvo Penta (Stage IV, Stage V, Tier 4 Final, 12,8 L, -MAX: 405 kW (550 HP) / 1900 rpm)

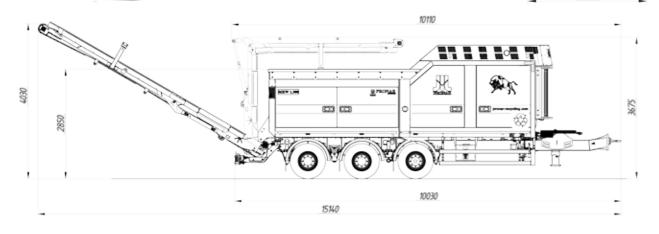
Features and Standard equipment:

- electric reverse .
- tilting bar system with counter knives
- user-friendly knives replacement system .
- hydraulic front supporting leg
- cleanfix system for engine cooler system
- central lubrication system
- remote control •
- large spacious doors with easy access to the engine and hydraulics
- engine compartment lighting •

Mobile slow-speed shredder MRW 1.300

- stepless speed regulation of the conveyor .
- demountable bar with lights
- ABS and traction control (permissible speed up to .
- 100 km / h) .
- fuel tank with a capacity of 640l
- Additional and optional equipment:
- ball coupling .
- magnetic separator
- lightning of working areas
- self crawler .
- air compressor





MOBILE HIGH-SPEED SHREDDER

THREE-AXLE CHASSIS

Total weight [kg]

Dimensions [length/width/height] [mm]

WORKING PARAMETERS

Number of shafts [Pcs.] Shredding shaft dimensions (length/diameter] [mm] Rotation speed [rpm] Loading height [mm] Working chamber dimensions (length/width) [mm]

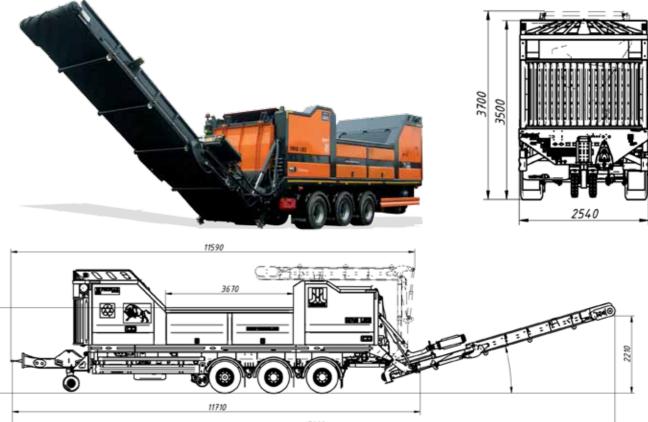
DIESEL ENGINE

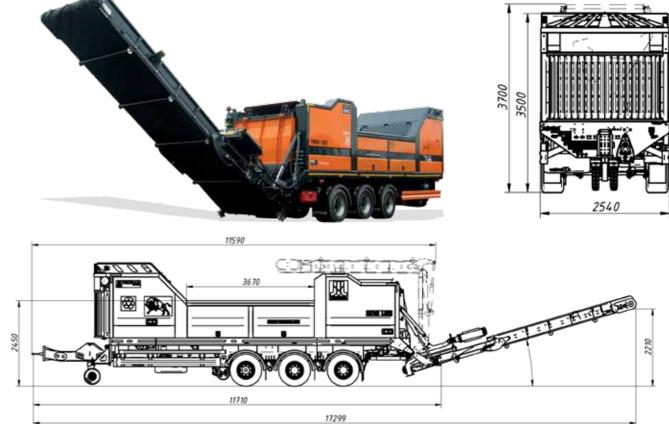
Engines

Features and Standard equipment:

- easy sieve exchange •
- easy knives replacement
- hydraulic front supporting leg
- automatic cleaning system of engine cooler - Cleanfix
- central lubrication system
- wireless remote control
- large spacious doors with easy access to
- engine and hydraulics
- engine compartment lighting
- stepless conveyor speed regulation

Mobile High-Speed Shredder MRS 1.53







MRS 1.53

~ 24 000

12000 x 2550 x 3750

MRS 1.53

MRS 1.53

Volvo Penta (Stage V, 12.8l, 13 L, -MAX: 389.81 kW (530 HP) / 1900 rpm)

- demountable lighting beam
- ABS and traction control (permissible speed) up to 100 km / h)
- fuel tank with a capacity of 700l

Additional and optional equipment:

- magnetic separator above the rear conveyor (overband) lowered / raised mechanically
- together with the conveyor
- ball coupling for towing
- lighting of work zones
- working knives for various materials



Pronar presented new high-speed shredder MRS 1.53. It is a great addition to the recycling line-up as a single-shaft machine. This shredder is designed to prepare compost, shred wood and green waste. The working shaft can be configured with different types of knives.



Magnetic separator Use of neodymium magnet ensures effective separation of ferromagnetic material.





R5 | 63

Shredding shaft Equipped with 36 knives, it rotates at 1000 rpm. Designed to work with pallets, green and Keeps engine and hydraulic oil coolers clean in dusty environment. wood waste

Engine Volvo Penta (EU Stage V, 13L, 390 kW, 530 BHP @ 1900 rpm)



Sieve The size of the obtained fraction is regulated by an exchangeable sieve placed under the grind-ing shaft. Innovative water cutting technology maintains the most important material proper-ties during processing.



Self-crawler The machine can perform basic maneuvers without the need for additional equipment.





Central lubrication system Provides automatic lubrication of all key machine components



The shredding shafts used in Pronar MRW and MRS series recycling machines, as well as custom-made shafts, are solutions tailored to customer's needs. A wide range allows to apply them to all the most popular work shredding municipal waste, construction waste, pallets, light debris, tree stumps, branches, bulky materials or scrap. The customer can make a choice of either a universal shaft or with knives and hooks designed for a specific type of material. During the production of shafts, the latest technologies are used - including water cutting. This ensures high hardness of the shredding element of the shaft in its entire cross-section. The use of intelligent welding robots allows to achieve perfect weld and high repeatability of movements. Long work without the need of frequent regenerating of the shafts is ensured by the the use of high resistance steel.



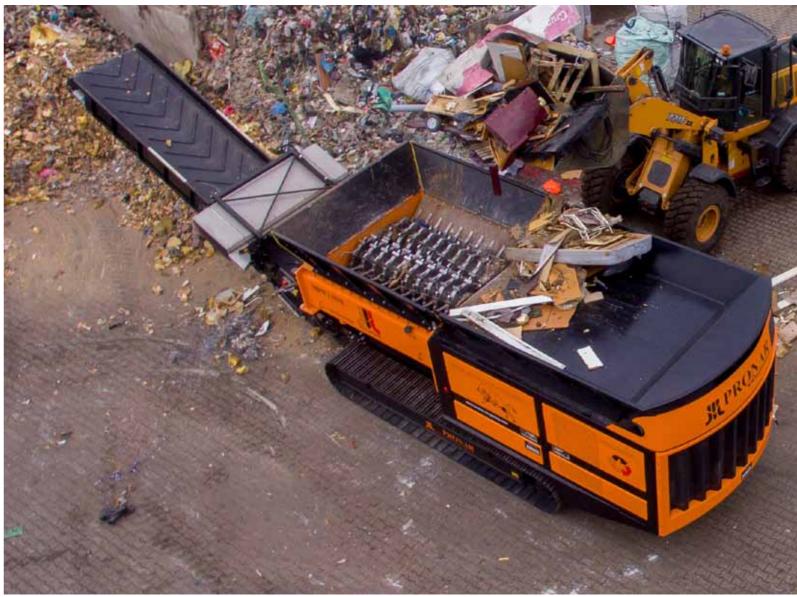
Shredding shafts

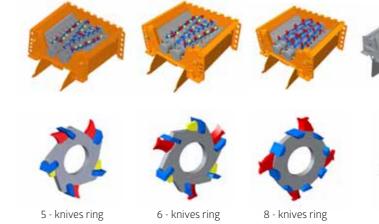
- bulky waste - railroad sleepers

Shafts	Type of the shredded materials:
5-knives	-wood waste (tree stumps, pallets, furniture) -municipal and industrial waste -household waste -bulky waste -tyres -aluminum -paper, paper bales -railroad sleepers
6-knives	wood waste (tree stumps, pallets, furniture) - municipal and industrial waste - household waste - bulky waste - tyres - aluminum - paper, paper bales - thin-walled scrap up to 2 mm thick - railroad sleepers
8-knives	-wood waste (tree stumps, pallets, furniture) -green waste
10-knives	- wood waste (tree stumps, pallets, furniture) - municipal and industrial waste - household waste - bulky waste - tyres - aluminum - paper, paper bales - thin-walled scrap up to 2 mm thick, car bodies - railroad sleepers
36-knives (for the fast-speed shredders)	-wood waste, pallets -green waste
42-knives (for the single shaft slow speed shredders)	- wood waste (tree stumps, pallets, furniture) - municipal and industrial waste - household waste

knives (for the single shaft slow speed shredders)







38 >>>>>> Technology for nature



Shredding shafts in the PRONAR MRW 2.1010 machine



10 - knives ring





36 - knives ring (high-speed shaft)





42 - shredding knives

39 >>>>>>

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The Pronar Mobile Windrow Turner MBA 4512g is used to optimize the parameters of the bialogical compost decomposition on heaps to accelerate this process by releasing excess heat, allowing water to evaporate, or wetting the material, aerating and loosening the dropped waste. The shaft with a diameter of 1.2 m allows to achieve a capacity of approximately 3000 m³ per hour of compost on prisms up to 4.5 m wide and up to 2.2 m high.

The shaft can rotate at speeds of up to 220 rpm. The choice of direction can be changed at any time by the user, also during work. The knives of the shifting shaft, plowshares, slides of the scraping wings and plowshares of the rear stripping scraper are made of high-resistant steel, thanks to which their service life is increased.

- Air conditioning and heating system ensure comfort at any temperature, and the air cleaning system in the cabin (meeting the EN-15695 standard cat. 4) guarantees clean air without dust and odors from the outside.

Four independently adjustable work lamps on both front and back allow to work after dark and in difficult lighting conditions $% \lambda = 0 \lambda$





When working in difficult conditions and high dust content, in order to ensure the reliability of the engine and hydraulic oil cooling system, the radiators have been equipped with an automatic cleaning system (Cleanfix)



Central system for exchange of operating fluids has been placed on the left and right sides of the machine

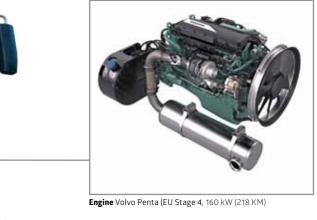


The camera ensures visibility on the back of the Windrow Turner, making it easier to work and raises the level of security 0





Central lubrication system improves the comfort of work and ensures the continuity of lubrication of the most important points of the machine, extending its working life



Optional side mirrors - Improve visibility and safety around the machine



The Windrow Turner with the working shaft has the possibility of lifting 35 cm





Adjustable tailgate limits the ejection of compost





Track drive allows convenient maneuvering of the machine and moving at speeds of up to 4km/h Sprinkler system mounted on the machine moistens the material to ensure optimal composting conditions



Parking power supply allows to operate the Windrow Turner without starting the diesel engine for service and maintenance

An ergonomic pneumatic suspension seat with automatic positioning, weight control, vibration damping has been installed in the cab



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WINDROW TURNER	MBA 4512g
Total weight [kg]	14 500
Dimensions (length/width/height) [mm]	4000 / 5170 / 4600
WORKING PARAMETERS	MBA 4512g
Shaft diameter[mm]	1200
Max. widht of prism [m]	4500
Max. hight of prism [m]	2200
Speed of the shaft [rpm]	220
Efficiency [m ³ /h]	3200
ENGINE	MBA 4512g

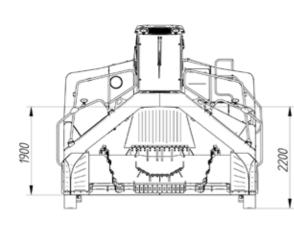
ENGINE

Standard equipment

- control: two joysticks and a touch screen radio MP3 .
- .
- radio MP3 machine status indicator with sound signaling central lubrication system air conditioning four lights rear camera reversible fans for radiators cleaning points for drainage of operating fluids .
- .
- .
- .
- .
- .
- .

Windrow turner MBA 4512g





Additional equipment

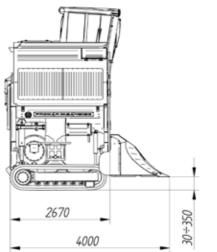
hydraulic oil heating system to facilitate start ofwork at low temperatures CB radio - the operator can stay in constant contact with the composting facility sunblinds rear ripping strip prism sprinkling system 360 monitoring hose drum feed pump .

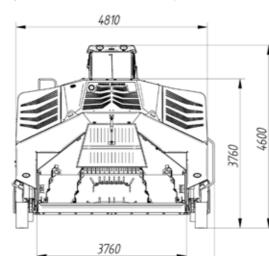
Volvo (EU Stage IV, V, 160 kW (218 KM)

- .

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- .
- .
- .
- feed pump fleece winder .





5170







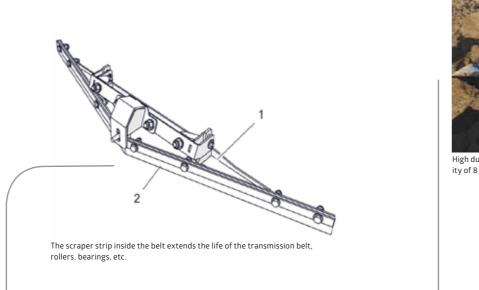
Mobile Stockpilers Pronar MPT 24g and MPT 18g have a wide range of application, high efficiency are mobile and heavy duty.

Stockpiler could be a part of the processing line of raw materials or can be fed directly by a wheeled loader or excavator after fitting a direct charge hopper with the capacity of 8 m³.

Stockpiler can be ready for work in amazingly short period of time.

The use of stockpilers in the processing line of raw materials saves money by reducing expenses on maintaining a wheeled loader and an operator. Low fuel consumption and maintenance-free operation are the main advantages of MPT.

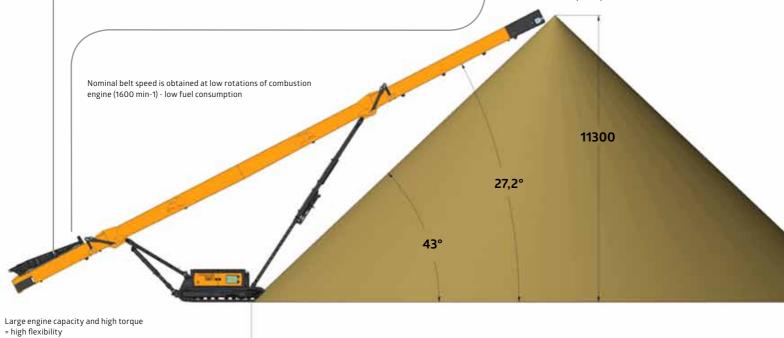






High durability of the stockpiler enables the use of a direct charge hopper with a capacity ity of 8 m³ without any additional modifications to the stockpiler

Theoretical maximum volume of 1700 m³ cone. When storing gravel with density 1600 tons / $m^{3}\!,\,$ the pile contains 2725 tons of material. The weight of the raw material on the pile depends on material



Support legs of the stockpiler improve safety and stability of the machine. Available options: hydraulic (on the photo) or mechanical



The wireless remote control allows to prepare the machine for work in a short period

of time and provide comfortable handling during work

Smooth or chevron belt type

24000





The ability to change the angle of rollers supporting the belt to form stream of transferred material (change of the belt's profile)



The functional control panel allows to monitor and set work parameters of the stockpiler

A scraper on the top of the stockpiler, cleans the belt from the material that stick to the belt and simultaneously increases the efficiency of material transfer



MOBILE STOCKPILER MPT 18g, 24g





The hopper chute allows to adjust the release speed of the material from the hopper



The beam with adjustable dampers relieves the belt and eliminates dynamic loads during



The compact design allows transport in a 40 feet HQ container



Rubber track pads protect the ground against the scratches



The Cleanfix system protects the engine from overheating due to clogged radiator, cleaning it periodically and guaranteeing effective heat exchange

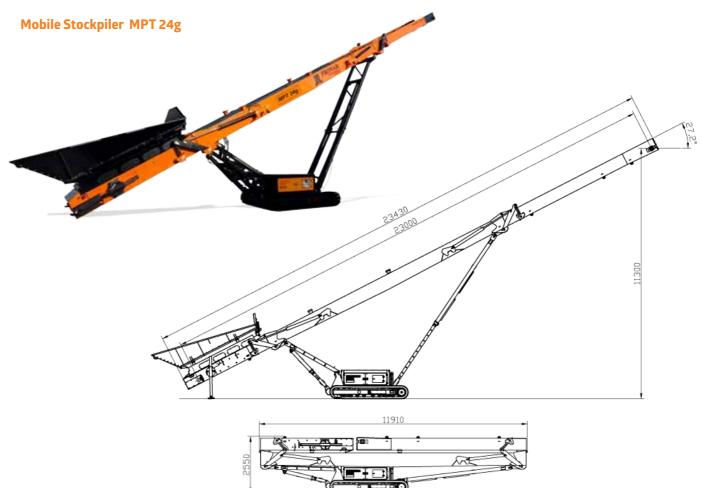
Stockpiler opening mechanism

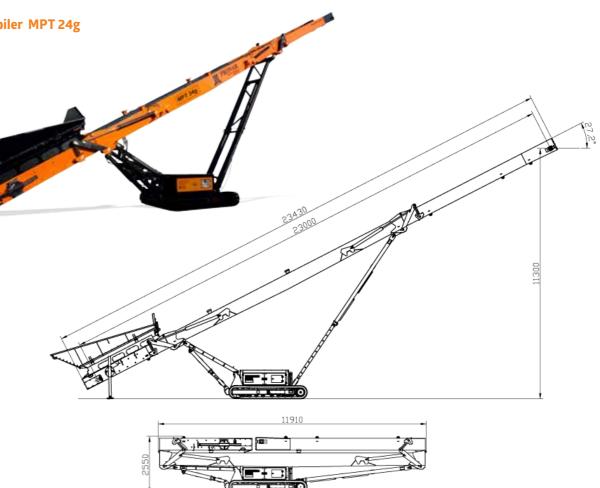


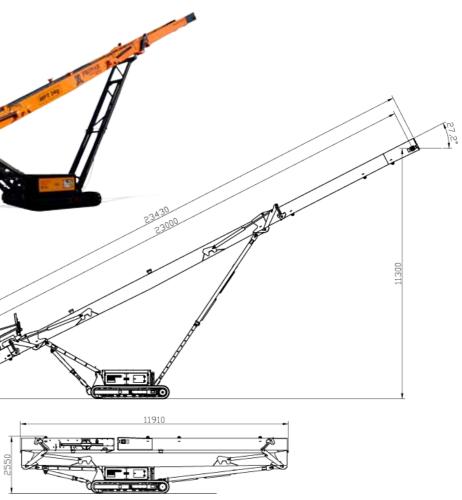














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MOBILE STOCKPILER

CHASSIS	MPT 18g	MPT 24g
Weight [kg]	13800	15600
Dimension (length/width/height) [mm]	11862/2259/2557	11910/2259/2550
MATERIAL TRANSPORT	MPT 18g	MPT 24g
Efficiency max [t/h]	option 500/600	option 500/600
Max working angle of the stockpiler [°]	25,2	27,2
Max discharge height [mm]	8700	11300
Belt width [mm]	1000	1000
Belt length [mm]	18475	23000
ENGINE	MPT 18g	MPT 24g
Diesel engine	Caterpillar (EU Stage 3B, 3.4 l – 55,4 kW (75 HP) / 2200 rpm)	Caterpillar (EU Stage 3B, 3.4 l – 55,4 kW (75 HP) / 2200 rpm)
	Caterpillar (EU Stage V), 2.8l – 55 kW (74 HP) / 2500 rpm)	Caterpillar (EU Stage V), 2.8l – 55 kW (74 HP) / 2500 rpm)

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Mobile Stockpiler MPT 18g



MPB 20.72 and MPT 24g the sand screening line

Mechanical support legs at the rear of the stockpiler



Tiltable walls of direct charge hopper





CONTROL PANEL

Intuitive and simple to control whole machine. Colour display shows all important parameters of work.



FOLDING MECHANISM

Efficient engines give the opportunity to quickly unfold the machine and start working. Throughout the entire process, the operator has full control.



ENGINE An efficient and ecological diesel units that meet Stage V emission

standards.

DURABLE MATERIALS

Machines are made of high-strength steel, which ensures high rigidity of individual segments of

CRAWLER CHASSIS

It allows you to move independently on difficult terrain and adapt the machine to work. In models MPT 18 / 1g and MPT 24 / 1g, caterpillars with a width of 40cm are mounted, in MPT 15g - 30cm (40cm is also available as an option).

BELT

At the client's request, it is possible to use tapes with different types of rubber, abrasion class and lining thickness. An optional equipment is the side seal of the tape.





the conveyor.





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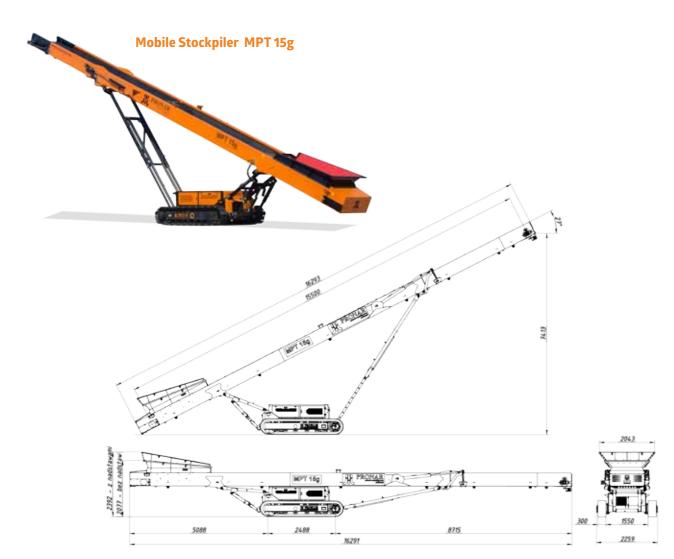


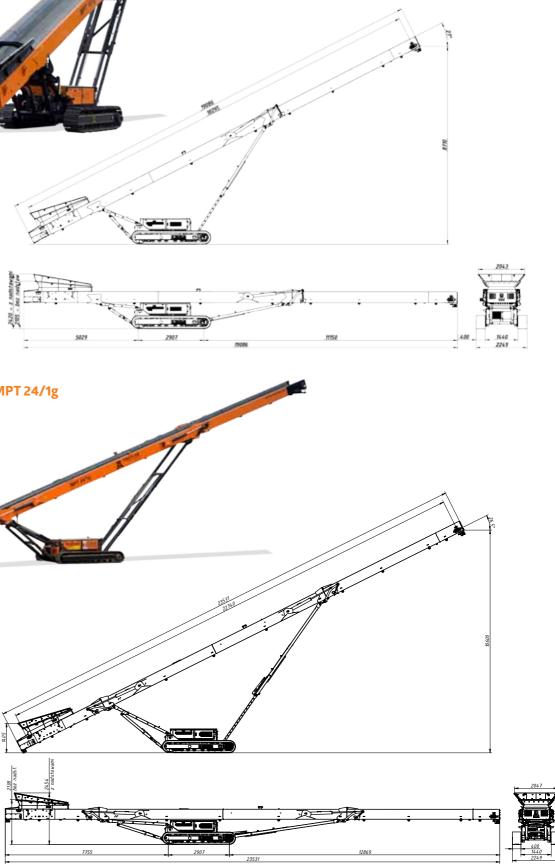
Mobile Stockpiler MPT 18/1g

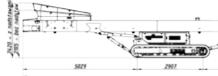


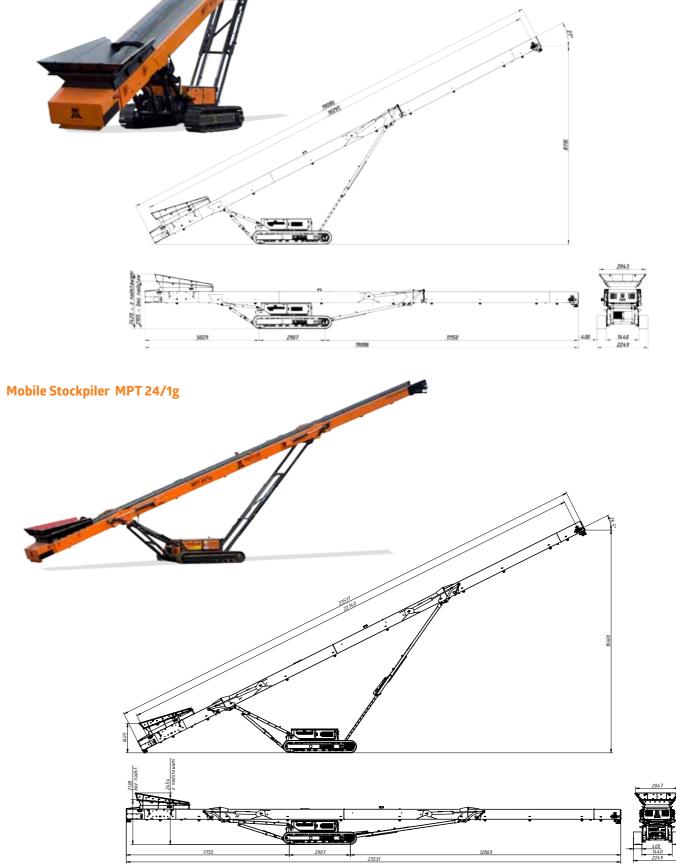
CHASSIS	MPT 15g	MPT 18/1g	MPT 24/1g
Weight [kg]	9385	9720	11265
Dimension (length/width/height) [mm]	11857/2259/2253-2411	11857/2249/2281-2441	11885/2249/2319-2475
MATERIAL TRANSPORT	MPT 15g	MPT 18/1g	MPT 24/1g
Efficiency max [t/h]	up to 400	up to 400	up to 400
Max working angle of the stockpiler [°]	27°	27°	26,5°
Max discharge height [mm]	7413	8710	10600
Belt width [mm]	900	900	900
Belt length [mm]	15550	18295	22740

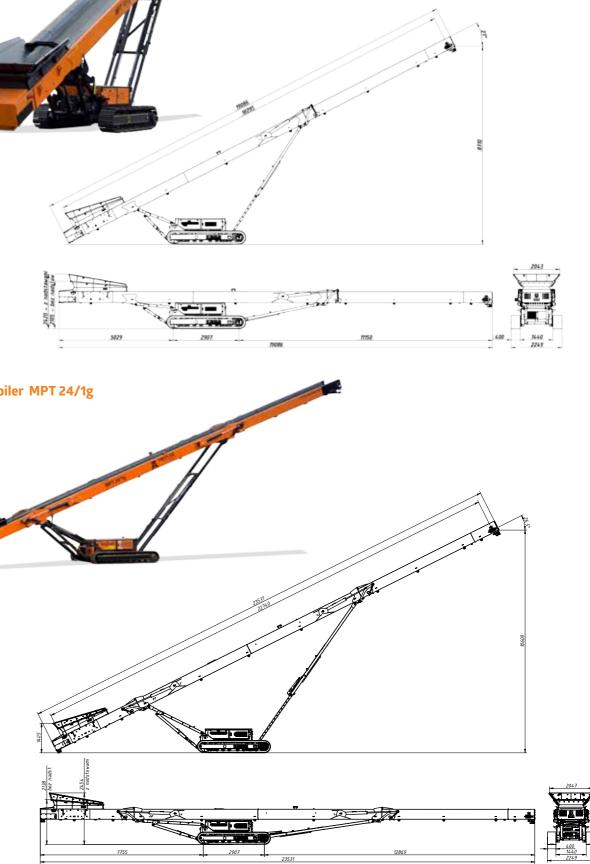
SILNIK	MPT 15g	MPT 18/1g	MPT 24/1g
Diesel engine	Caterpillar (EU Stage 3A, 2,2 I –	Caterpillar (EU Stage 3A, 2,2 I –	Caterpillar (EU Stage 3A, 2,2 I –
	36,4 kW (50 HP) / 2300 rpm)	36,4 kW (50 HP) / 2300 rpm)	36,4 kW (50 HP) / 2300 rpm)
	Kubota (US Tier IV Final,	Kubota (US Tier IV Final,	Kubota (US Tier IV Final,
	1.7 l – 37 kW (49,6 KM)	1.7 I – 37 kW (49,6 KM)	1.7 l – 37 kW (49,6 KM)
	Caterpillar (US Tier IV Final,	Caterpillar (US Tier IV Final,	Caterpillar (US Tier IV Final,
	2.2 I – 50 kW (75 KM) / 2800 rpm)	2.2 l – 50 kW (75 KM) / 2800 rpm)	2.2 l – 50 kW (75 KM) / 2800 rpm)
	Caterpillar (EU Stage V), 1.7T I –	Caterpillar (EU Stage V), 1.7T I –	Caterpillar (EU Stage V), 1.7T I –
	36 kW (48 KM)	36 kW (48 KM)	36 kW (48 KM)











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HYDRAULIC CHANNEL BALING PRESS	НРВК-67НА
Maximum crushing force [kN]	635
Binding	fourfold, horizontal, automatic
Weight of the bale (depends on the material) [kg]	up to 550
Engine power [kW]	37
Volume reduction (depends on the material) [%]	up to 90
Bale size (H/W/L) [mm]	750/1100/600-1200
Machine size (H/W/L) [mm]	8640/4070/3870
Loading hole dimensions (W/L) [mm]	1050/1530
Length of pressing channel [mm]	2670

X

Useful information:

- Fourfold, horizontal binding for easy transport and not scratching the surface Perforator and pre-crush bottles
- Automatic pressing process
- Resistive touch screen that can be used also while wearing gloves .
- Locked doors to the pressing chamber
- Almost maintenance free apart from refilling the wire .

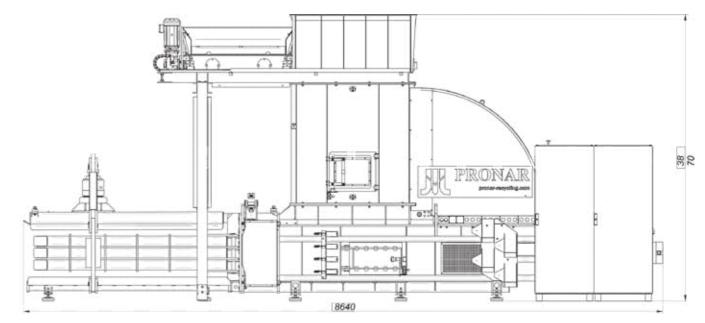
The main element of the **Pronar HPBK-67HA** press is a slider moving in the channel. Its movement is forced by a hydraulic cylinder with a maximum crushing force of 635 kN. The press slider compresses the material in the chamber, after which it is withdrawn from and the cycle is repeated after the chamber is filled again. After obtaining the appropriate - previously programmed - bale length, the machine starts the automatic fourfold binding system. The bale with a width of 1100 mm, a height of 750 mm and a length from 600 to 1200 mm is pushed out of the chamber by the next forming bale.

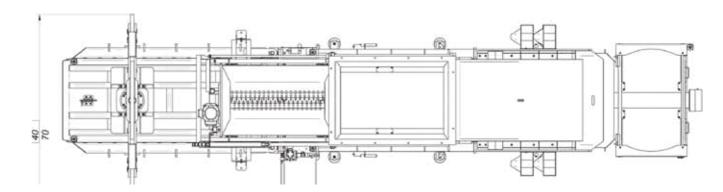
This press is not only modern but also safe to use. The machine is practically maintenance-free (apart from putting in the wire once in a while). Baling takes place automatically. The door to the crushing chamber is locked and secured with a special lock. The HPBK-67HA baling press is convenient to use as well. Its working parameters are set using a 10.4-inch touch screen. The technology used here allows operation without having to remove protective gloves.

HYDRAULIC CHANNEL BALING PRESS HPBK-67HA



HYDRAULIC CHANNEL BALING PRESS HPBK-67HA







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