

Doppstadt

SM-SERIES

SMART SCREENING

TROMMEL LINE



Best Solution. Smart Recycling.

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OPTIMUM SCREENING

With Doppstadt trommel screen machines.

The rotating drum can screen even the most difficult materials, with the load-sensing material feed making optimum use of the large screening surface.

The Doppstadt screens with modular design can be adjusted to special tasks. They are extremely mobile and can easily be controlled by one

operator. Due to the direct drive, the drum can be changed very easily. By means of a stonegrid or vibrating screen or with the star screen above the hopper, a third fraction can be separated.

Thanks to the hydraulically controlled discharge conveyors, our drum screen machines are ready to go within less

than five minutes. The standard rotating and hydraulically controlled brush cleans the drum automatically. The machine level is adjustable for stability and a good throughput.

If the machine must be moved, a slip-on coupling for the drawbar is available.



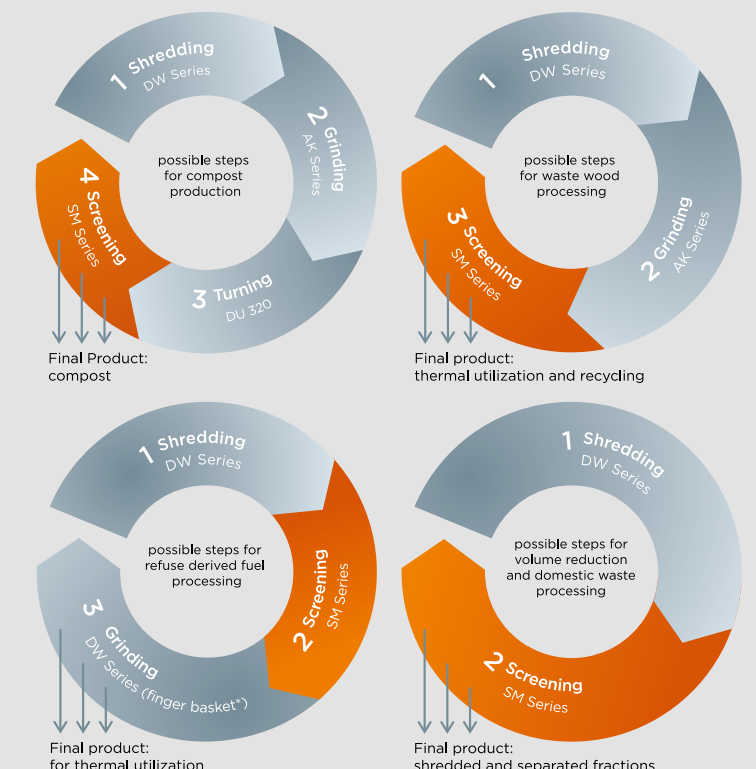
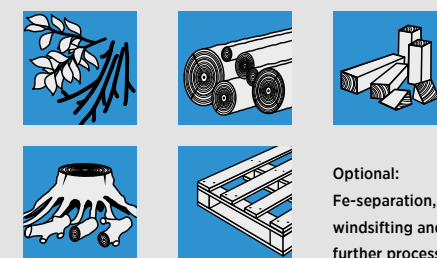
MULTIPLE COMBINATION

POSSIBILITIES

For many fields of application.

With trommels of the SM series you can screen soil, compost, bark mulch, waste wood, building rubble and much more. The screens are ideally suited for combined application e.g. with Doppstadt shredders or windsifters.

COMPOSTING, WASTE WOOD, GARBAGE AND RDF PROCESSING



DETAILS



SLIP-ON COUPLING

The slip-on coupling allows the machine to be transported with a wheel loader (only machines with drawbar).



SWING-OUT DRIVE UNIT

Optimum access to the diesel engine and hydraulic pumps for easy maintenance and repair. The water and oil cooler is provided with an additional dust protection basket.



DRUM DRIVE

The drum with direct drive ensures operational safety and an easy replacement.



CLEANING BRUSH

Self-cleaning of the drum by rotating, hydraulically controlled brush*.



REMOTE CONTROL

Efficient control and monitoring of all of the screening machine's significant functions is possible with the remote control, e.g. from the wheel loader.



SCREEN DRUM

The screen drums can be replaced quickly and easily, enabling the flexibility needed to adjust to nearly any challenge with minimal downtime and conversion time.

REAR AND SIDE CONVEYOR

The coarse fraction is discharged by the rear conveyor, the fines are discharged by the side conveyor. The conveyors can be equipped with a magnetic pulley*, an over-band magnet*, and a wind sifter*. As an option, the conveyor length can also be adjusted and a flow divider* for the rear conveyor can be added.



CENTRAL CONTROL PANEL

Easy operation, exact adjustment and reading of the machine data by multi-functional display.



LARGE DOORS

Optimum access for control, service and maintenance work.

*Option

Explanations and illustrations by the example of the SM 620

A yellow Doppstadt SM-series trommel screen machine is shown from a rear perspective, positioned on a wooden plank walkway. The machine is flanked by large, dense piles of organic waste, including branches and brush. In the background, there are green trees and a sky with heavy, grey clouds. The machine has a hopper at the top and a large drum with a cleaning brush at the rear.

SM-SERIES – TROMMEL SCREENS

Main advantages.

- load-sensing material feed to the drum
- swing-out drive unit for easy maintenance
- quick and easy drum change
- many available options to meet various requirements
- hydraulically controlled cleaning brush
- can be combined with other Doppstadt products
- one-man operation
(remote control of all main functions)



SM 414

The drum of the SM 414 has a length of approx. 4.2 m (13'9") and a diameter of 1.4 m (4'7"). For different applications various mesh sizes are available. Screening surface 15.9 m².

SM 414	
Permissible weight	10,500 kg (23,149 lb)
Drive	Diesel engine
Type	Caterpillar C 2.2
Power	30 kW (41 hp) at 2,000 rpm
Drum length	4,200 mm (13'9")
Drum diameter	1,400 mm (4'7")
Transport dimensions L / W / H	10,500 / 2,300 / 3,750 mm (34'5" / 7'7" / 12'4")



SM 414 K

The SM 414 K is equal to the SM 414, but it is mounted on a tracklaying chassis and permits an independent maneuvering of the machine without using a tractive unit, even on unsurfaced ground.

SM 414 K	
Total weight	12,000 kg (26,455 lb)
Drive	Diesel engine
Type	Caterpillar C 2.2
Power	34 kW (46 hp) at 2,400 rpm
Drum length	4,200 mm (13'9")
Drum diameter	1,400 mm (4'7")
Transport dimensions L / W / H	9,950 / 2,500 / 3,400 mm (32'8" / 8'2" / 11'2")





SM 518 PLUS

The SM 518 Plus has a screening surface of 22,5 m². The screen drum has a diameter of 1,8 m (5'11") and a length of approx. 5 m (16'5"). Optionally skeletal drums with changeable screens or a star screen module available. For different applications various mesh sizes are available.

SM 518 PLUS	
Permissible weight	17,000 kg (37,479 lb)
Drive	Diesel engine
Type	DEUTZ TCD 2.9 L4
Power	55 kW (75 hp) at 2,100 rpm
Drum length	4,700 mm (15'5")
Drum diameter	1,800 mm (5'11")
Transport dimensions L / W / H	11,000 / 2,550 / 4,000 mm (36'1" / 8'4" / 13'1")



SM 620 PLUS

The SM 620 Plus has a screen drum with 2 m (6'7") diameter and approx. 6 m (19'8") length. For different applications various mesh sizes are available. Screening surface 30.2 m². Alternatively a star screen module with 6 m² screen can be used.

SM 620 PLUS	
Permissible weight	19,000 kg (41,888 lb)
Drive	Diesel engine
Type	DEUTZ TCD 3.6 L4
Power	85 kW (116 hp) at 1,800 rpm
Drum length	5,500 mm (18')
Drum diameter	2,000 mm (6'7")
Transport dimensions L / W / H	11,805 / 2,550 / 4,000 mm (38'9" / 8'4" / 13'1")





SM 620 K PLUS

The SM 620 K Plus is equipped with a crawler track unit, so it can be used without tractive unit and is applicable on unsurfaced ground thanks to its height adjustable chassis.

SM 620 K PLUS	
Total weight	24,000 kg (52,911 lb)
Drive	Diesel engine
Type	DEUTZ TCD 3.6 L4
Power	85 kW (116 hp) at 1,800 rpm
Drum length	5,500 mm (18")
Drum diameter	2,000 mm (6'7")
Transport dimensions L / W / H	12,730 / 3,000 / 3,400 mm (41'9" / 9'1" / 11'2")





SM 620 SA PLUS

The SM 620 SA Plus is a mobile and powerful universal 2-fraction screen on a 24-t 2-axle semitrailer chassis with a more than 7 m³ hopper. The machine can optionally be used with a trommel or with a star screen insert.

SM 620 SA PLUS	
Total weight	24,000 kg (52,911 lb)
Drive	Diesel engine
Type	DEUTZ TCD 3.6 L4
Power	85 kW (116 hp) at 1,800 rpm
Drum length	5,500 mm (18")
Drum diameter	2,000 mm (6'7")
Transport dimensions L / W / H	12,730 / 3,000 / 3,400 mm (41'9" / 9'1" / 11'2")



SM 720 SA PLUS

The SM 720 SA Plus has a screen drum with 2 m (6'7") diameter and approx. 7,1 m (23'4") length. For different applications various mesh sizes are available. A third fraction can be separated by using a vibrating grid or a stonegrid. Screening surface 38,8 m².

SM 720 SA PLUS	
Total weight	24,000 kg (52,911 lb)
Drive	Diesel engine
Type	DEUTZ TCD 3.6 L4
Power	85 kW (116 hp) at 1,800 rpm
Drum length	7,100 mm (23'4")
Drum diameter	2,000 mm (6'7")
Transport dimensions L / W / H	13,250 / 2,550 / 4,000 mm (43'6" / 8'4" / 13'1")



OPTIONS FOR SCREENS



HOPPER STAR SCREEN

The hopper star screen can be mounted on the hopper of the screen. It is driven by an additional hydraulic connection at the machine. The hopper star screen separates oversized items before the actual screening of the shredded material (e.g. shredded waste wood, trunks and roots). It enables the separation of the fines and the oversize in just one path.

Available for:

- SM 518 Plus
- SM 620 Plus
- SM 620 K



VIBRATING GRID

The vibrating grid is used for separating bulky contaminants (e.g. big rocks) and prevents damage, e.g. of the drum. The vibration automatically moves the material which is then tipped at the side of the machine. The vibration also loosens cohesive materials and leads to a better screening result. It is driven by an additional hydraulic connection at the machine.

Available for:

- SM 518 Plus
- SM 620 Plus
- SM 620 K
- SM 620 SA Plus
- SM 720 SA Plus



STONEGRID

The stonegrid is used for separating bulky contaminants (e.g. big rocks) and prevents damage, e.g. of the drum. The stonegrid is tilted hydraulically via remote control. The material is tipped at the left side of the machine.

Available for:

- SM 414
- SM 414 K
- SM 518 Plus
- SM 620 Plus
- SM 620 K
- SM 620 SA Plus
- SM 720 SA Plus



WIND SIFTER (REAR CONVEYOR)

The windsifter is used to separate light materials from the oversize fraction. Materials such as foils, plastics, etc. can be sorted out, so that the cleaned oversize is of further use (e.g. biomass, compost, etc.). The windsifter is mounted on the rear conveyor. The contaminants are blown into a container. It is driven by an additional hydraulic connection at the machine.

Available for:

- SM 518 Plus
- SM 620 Plus
- SM 620 K
- SM 620 SA Plus
- SM 720 SA Plus



STAR SCREEN MODULE

The star screen unit is a compact module which can be used instead of the drum. Due to different speeds of the shafts the material is loosened up and pulled apart. Different grain sizes can be reached by using different star screen decks.

Available for:

- SM 518 Plus
- SM 620 Plus
- SM 620 K
- SM 620 SA Plus



WIND SIFTER ON STAR SCREEN DECK

The windsifter is used to separate light materials from the oversize fraction. Materials such as foils, plastics, etc. can be sorted out, so that the cleaned oversize is of further use (e.g. biomass, compost, etc.). The contaminants are blown into a container. It is driven by an additional hydraulic connection at the machine.

Available for:

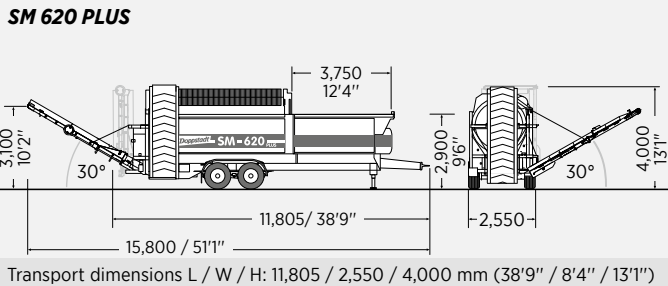
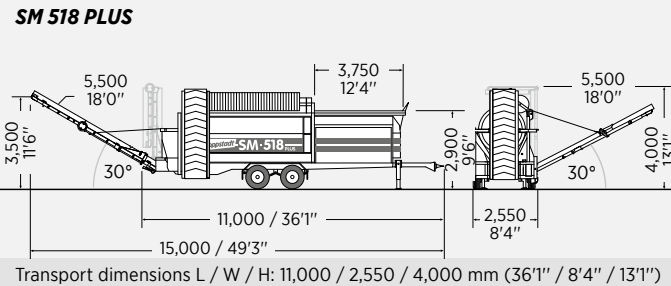
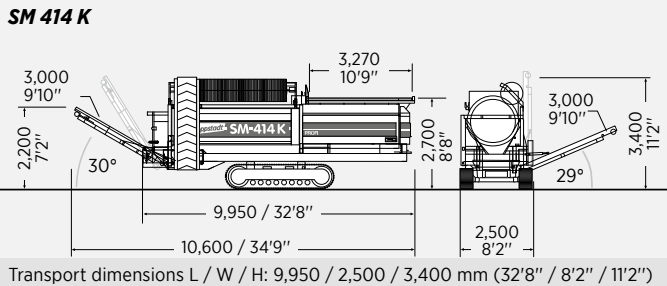
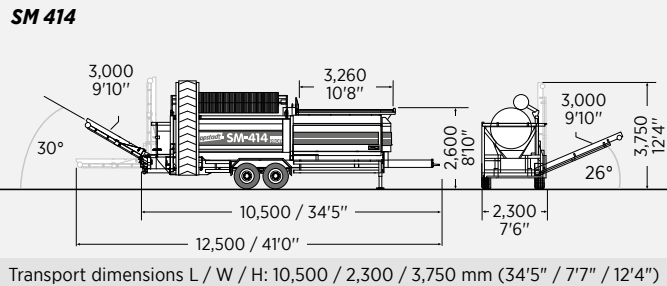
- SM 620 Plus
- SM 620 K
- SM 620 SA Plus



TECHNICAL DATA

SM-SERIES	SM 414		SM 414 K	
				
Weight	10,500 kg (23,149 lb)		12,000 kg (26,455 lb)	
Chassis	2-central-axle trailer chassis, for 80 km/h (50 mph) with ABS		Track drive	
Drive	Diesel hydraulic		Diesel hydraulic	
Type	Caterpillar C 2.2		Caterpillar C 2.2	
Power	30 kW (41 hp) at 2,000 rpm		34 kW (46 hp) at 2,400 rpm	
Torque	Max. 143 Nm		Max. 143 Nm	
Exhaust level	EUROMOT III A		EUROMOT III A	
Fuel tank	100 l (26 gal)		100 l (26 gal)	
Drum	2 screening fractions, 3rd fraction by means of stonegrid		2 screening fractions, 3rd fraction by means of stonegrid	
Drum Diameter	1,400 mm (4'7")		1,400 mm (4'7")	
Drum Length	4,200 mm (13'9")		4,200 mm (13'9")	
Mesh size	Selectable, 3 – 130 mm (0.12 – 5.12")		Selectable, 3 – 130 mm (0.12 – 5.12")	
Mesh type	Selectable (staggered squares, round holes, comb)		Selectable (staggered squares, round holes, comb)	
Drum wall thickness	Selectable		Selectable	
Drum speed	0 – 21 rpm		0 – 21 rpm	
Feeding hopper volume	3,0 m³ (106 ft³)		3,0 m³ (106 ft³)	
Feeding width / height	3,260 / 2,600 mm (10'8" / 8'6")		3,270 / 2,700 mm (10'9" / 8'11")	
Discharge conveyors Length (*option)	Rear 3,000 mm (9'1") 5,000 mm (16'5")*	Side 3,000 mm (9'1") 5,000 mm (16'5")*	Rear 3,000 mm (9'1") 5,000 mm (16'5")*	Side 3,000 mm (9'1") 5,000 mm (16'5")*
Discharge conveyors width	800 mm (2'7")		800 mm (2'7")	
Belt speed m/s (ft in/s)	0.9 m/s (2'1")		1.0 m/s (3'3")	
Options e.g.	Stone grid, remote control, different conveyor lengths, additional hydraulic connections, magnetic pulleys at the side and rear conveyor, skeletal drum on request		Stone grid, remote control, different conveyor lengths, additional hydraulic connections, magnetic pulleys at the side and rear conveyor, skeletal drum on request	

SM-SERIES	SM 518 PLUS		SM 620 PLUS	
				
Weight	17,000 kg (37,479 lb)		19,000 kg (41,888 lb)	
Chassis	2-central-axle trailer chassis, for 80 km/h (50 mph) with ABS		2-central-axle trailer chassis, for 80 km/h (50 mph) with ABS	
Drive	Diesel hydraulic		Diesel hydraulic	
Type	DEUTZ TCD 2.9 L4 (optional: electric motor)		DEUTZ TCD 3.6 L4 (optional: electric drive)	
Power	55 kW (75 hp) at 2,100 rpm		85 kW (116 hp) at 1,800 rpm	
Torque	Max. 300 Nm		Max. 400 Nm	
Exhaust level	EUROMOT III B / Tier IV		EUROMOT IV / Tier 4 final	
Fuel tank	300 l (79 gal)		300 l (79 gal)	
Drum	2 screening fractions, Option: 3rd fraction by means of stonegrid, vibrating screen or hopper star screen; 4th fraction by means of a windsifter at the rear conveyor		2 screening fractions, Option: 3rd fraction by means of stonegrid, vibrating screen or hopper star screen; 4th fraction by means of a windsifter at the rear conveyor	
Drum Diameter	1,800 mm (5'11")		2,000 mm (6'7")	
Drum Length	4,700 mm (15'5")		5,500 mm (18'1")	
Mesh size	Selectable, 3 – 130 mm (0.12 – 5.12")		Selectable, 3 – 130 mm (0.12 – 5.12")	
Mesh type	Selectable (staggered squares, round holes, comb)		Selectable (staggered squares, round holes, comb)	
Drum wall thickness	Selectable		Selectable	
Drum speed	0 – 21 rpm		0 – 20 rpm	
Feeding hopper volume	5.0 m³ (177 ft³)		5.0 m³ (177 ft³)	
Feeding width / height	3,750 / 2,900 mm (12'4" / 9'6")		3,750 / 2,900 mm (12'4" / 9'6")	
Discharge conveyors Length (*option)	Rear 5,500 mm (18'1") 3,000 mm (9'1")*	Side 5,500 mm (18'1") 3,000 mm (9'1")*	Rear 5,500 mm (18'1") 3,000 mm (9'1")*	Side 5,500 mm (18'1") 3,000 mm (9'1")*
Discharge conveyors width	800 mm (2'7")		1,000 mm (3'3")	
Belt speed m/s (ft in/s)	1.1 m/s (3'7")		1.6 m/s (5'3")	
Options e.g.	Star screen module, stonegrid, vibrating grid or hopper star screen, remote control, additional hydraulic connections, magnetic pulleys at the side and rear conveyor, winter equipment, other conveyor lengths, windsifter over rear conveyor, skeletal drum, flow divider for rear conveyor		Star screen module, stonegrid, vibrating grid or hopper star screen, remote control, additional hydraulic connections, magnetic pulleys at the side and rear conveyor, winter equipment, other conveyor lengths, windsifter over rear conveyor, skeletal drum, flow divider for rear conveyor	

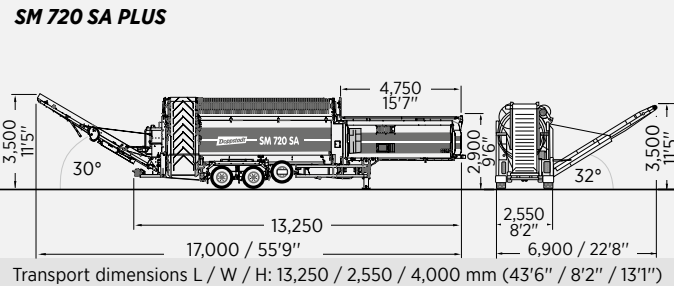
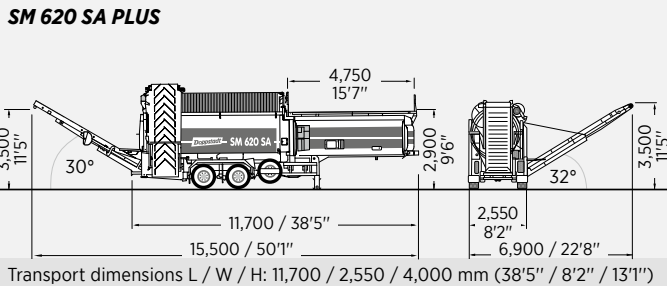
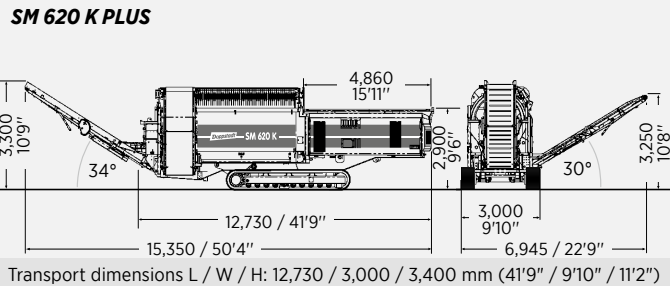


As of April 2018 - subject to technical alterations. All dimensions are in mm (ft/in). The specifications are approximate. Illustrations and descriptions may include options that are not part of the standard equipment.

TECHNICAL DATA

SM-SERIES	SM 620 K PLUS		SM 620 SA PLUS	
				
Weight	24,000 kg (52,911 lb)		24,000 kg (52,911 lb)	
Chassis	Track drive with two speeds		Semitrailer chassis	
Drive	Diesel hydraulic		Diesel hydraulic	
Type	DEUTZ TCD 3.6 L4		DEUTZ TCD 3.6 L4 (optional: electric motor)	
Power	85 kW (116 hp) at 1,800 rpm		85 kW (116 hp) at 1,800 rpm	
Torque	480 Nm at 1,600 rpm		480 Nm at 1,600 rpm	
Exhaust level	EUROMOT IV / Tier 4 final		EUROMOT IV / Tier 4 final	
Fuel tank	400 l (105 gal)		400 l (105 gal)	
Drum	2 screening fractions, Option: 3rd fraction by means of stonegrid or vibrating screen, 4th fraction by means of a windsifter at the rear conveyor		2 screening fractions, Option: 3rd fraction by means of stonegrid or vibrating screen, 4th fraction by means of a windsifter at the rear conveyor	
Drum Diameter	2,000 mm (6'7")		2,000 mm (6'7")	
Drum Length	5,500 mm (18')		5,500 mm (18')	
Mesh size	Selectable, 3 – 130 mm (0.12 – 5.12")		Selectable, 3 – 130 mm (0.12 – 5.12")	
Mesh type	Selectable (staggered squares, round holes, comb)		Selectable (staggered squares, round holes, comb)	
Drum wall thickness	Selectable		Selectable	
Drum speed	0 – 20 rpm		0 – 20 rpm	
Feeding hopper volume	7.0 m³ (247 ft³)		7.0 m³ (247 ft³)	
Feeding width / height	4,860 / 2,900 mm (15'11" / 9'62")		4,750 / 2,900 mm (15'7" / 9'62")	
Discharge conveyors Length (*option)	Rear 5,500 mm (18'1")	Side 5,250 mm (17'3")	Rear 5,500 mm (18'1")	Side 5,500 mm (18'1")
Discharge conveyors width	1,000 mm (3'3")	1,000 mm (3'3")	1,000 mm (3'3")	1,000 mm (3'3")
Belt speed m/s (ft in/s)	1,6 m/s (5'3")	3,1 m/s (10'2")	1,6 m/s (5'3")	3,1 m/s (10'2")
Options e.g.	Star screen inlay, stonegrid, vibrating screen, remote control, additional hydraulic connections, magnetic pulleys at the side and rear conveyor, windsifter over rear conveyor, skeletal drum, flow divider for rear conveyor		Star screen inlay, stonegrid, vibrating screen, remote control, additional hydraulic connections, magnetic pulleys at the side and rear conveyor, windsifter over rear conveyor, winter package, skeletal drum, flow divider for rear conveyor	

SM-SERIES	SM 720 SA PLUS	
		
Weight	24,000 kg (52,911 lb)	
Chassis	Semitrailer chassis	
Drive	Diesel hydraulic	
Type	DEUTZ TCD 3.6 L4 (optional: electric motor)	
Power	85 kW (116 hp) at 1,800 rpm	
Torque	480 Nm at 1,600 rpm	
Exhaust level	EUROMOT IV / Tier 4 final	
Fuel tank	400 l (105 gal)	
Drum	2 screening fractions, Option: 3rd fraction by means of stonegrid or vibrating screen, 4th fraction by means of a windsifter at the rear conveyor	
Drum Diameter	2,000 mm (6'7")	
Drum Length	7,100 mm (23'4")	
Mesh size	Selectable, 3 – 130 mm (0.12 – 5.12")	
Mesh type	Selectable (staggered squares, round holes, comb)	
Drum wall thickness	Selectable	
Drum speed	0 – 20 rpm	
Feeding hopper volume	7,0 m³ (247 ft³)	
Feeding width / height	4,750 / 2,900 mm (15'7" / 9'62")	
Discharge conveyors Length (*option)	Rear 5,500 mm (18'1")	Side 5,500 mm (18'1")
Discharge conveyors width	1,000 mm (3'3")	1,000 mm (3'3")
Belt speed m/s (ft in/s)	1.6 m/s mm (5'3")	3.1 m/s mm (10'2")
Options e. g.	Stonegrid, vibrating screen, remote control, additional hydraulic connections, magnetic pulleys at the side and rear conveyor, windsifter over rear conveyor, winter package, skeletal drum, flow divider for rear conveyor	





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