

MULTISTAR

MOBILE STAR SCREENS WIDE RANGE OF APPLICATION PRECISE SCREENING LOW OPERATING COSTS MULTI-FUNCTIONAL





- » Separation into 2 or 3 fractions on one machine, in one pass
- » High throughput and precise selectivity with the CLEANSTAR system
- » High flexibility with particle size changes in just seconds
- » Ease of operation and simple servicing with intelligent machine design
- » Multi-functional with numerous options







SCREENING WITH **STARS**

Screening is a fundamental treatment stage in the processing of waste, recyclables. and biomass. Star screen technology is increasingly used for the job, and in most cases the screener is a Multistar. The reason is simple - one machine and one pass are sufficient to divide the material into 2 or 3 fractions. Thanks to the patented cleaning system, throughput and selectivity are high, even with moist material.

To change the particle size, the operator just presses a button - the machine does the rest. The electrical drive gives quiet, efficient and economical operation. With a host of options, there is a configuration that is ideal for virtually any application and system size. Magnet separation, wind sifting and separation of the rolling fraction make star screens multi-functional workhorses.



Biomass

Green waste, rootstocks, forestry residue, fresh compost

Using star screen technology, high-quality fuel can be extracted from shredded, woody biomass in just one screening run. The rotating stars disentangle the material and knock off any dirt or mud. What is output as fine or oversized particles is decided from the operator console. Variations in the material are evened out, and a high quality usable fraction is assured.



Compost

Green compost, bio-compost, sludge compost

Screening is always in season with Multistar star screens. Throughput and selectivity are high, even with fluctuations in moisture content and states of decomposition. Options such as wind sifting, Fe separation and separation of the rolling fraction ensure a quality compost product that is free of contaminants.



Wood

Treated/untreated waste wood, wood chips, bark

Star screens give impressively high throughput, and can produce all particle sizes commonly required in the market. Fines and overlengths are reliably separated out, and Fe separation and wind sifting can be added if required.



Waste

Commercial waste, MSW, residual waste

Fractions with high calorific value are separated from shredded waste fractions by the disc separator/star screen combination (MS L3 Flowerdisc). High throughput, low wear, and thus low maintenance overhead are the hallmarks of this flexible mobile solution.

INSIDE THE MACHINE

The functional principle: From coarse to fine

The core of the star screens consists of one or two screen decks, depending on the model. The rotating shafts of the coarse screen deck move the material horizontally. Everything that cannot fall through the defined gap between the stars is separated off as coarse material. Material falling through the screen moves on the fine screen deck fitted with smaller stars, and is separated into fine and medium fractions in the same way. The screening flow from coarse to fine delivers high quality output in a short screen length, and keeps larger contraries out of the fine fraction.

Particle size can be controlled by varying the rotation speed of the star shafts. Using frequency converters on the operator console, the particle size can be changed within seconds within the range determined by the star geometry. All functions are monitored by a central control unit which reports on the current operational status.



- » Electric drive of all components, from grid power or a diesel generator
- » Lower fuel, wear, and maintenance costs than with diesel-hydraulic drive



Metering drum

Coarse screen deck

Hopper with scraper conveyor

Diesel generator

05 Fine screen deck

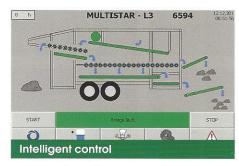


- » Large hopper with rounded corners and active metering drum
- » Reliable material feed with inclined floor and scraper conveyor (L/XL/XXL/XXXL)



Screen decks - coarse before fine

- » Coarse before fine screening delivers high-quality output in compact machine dimensions
- » Fast, easy reconfiguration of screen decks thanks to modular design



- » Easy touch panel operation with automatic starting and idle, programmable settings, etc. (L/XL/XXL/XXXL)
- » Wide range of star speed adjustment to control screening size

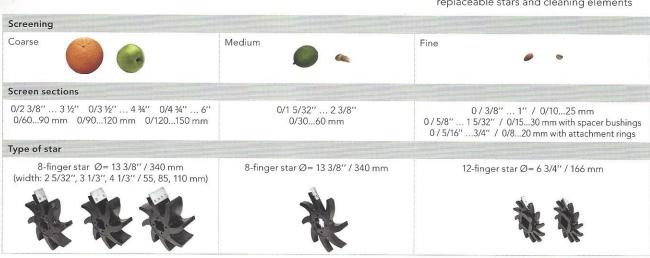


- » Low-maintenance deck drive by electric motors with frequency converters
- » All service areas readily accessible
- » Motor units swing or pull out for service; openings provide easy access to the fine screen deck



- » Geometrically optimised, highly elastic stars with cleaning elements
- » Low wear costs through individually replaceable stars and cleaning elements







- » Separation into three fractions (M2: Two fractions) with discharge of all fractions at machine end
- » High throughput with precise selectivity with the **CLEANSTAR** system
- » High flexibility, with particle size change in seconds
- » Ease of operation and simple servicing through intelligent machine design



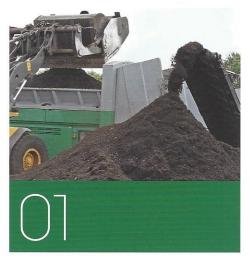


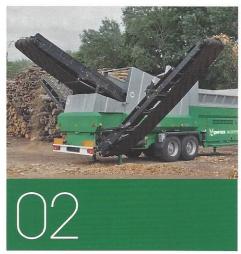
M2/M3**ENTRY-LEVEL**

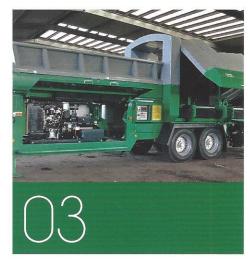
The Multistar M3 and M2 star screen machines offer professional technology for the medium performance range. Features include mobility through mounting on a central two-axle trailer,

a 6.5 yd³ / 5 m³ feed hopper with low loading height, and three separate folding discharge belts at the machine end (M2: two discharge belts).

The electric drive (or optional dieselelectric) and intelligent control with self-explanatory graphics provide a comfortable working environment. Servicing and maintenance work is simple and quick with the extendable motor unit, large folding side panels and completely retractable fine screen deck.







Right-sized

The M3 is optimised for operation with one front-loader. It can handle everything a front-loader can move, i.e. filling of the machine and removal of the screened fractions.

The hopper, similar too Komptech drum screen technology, boasts a volume exceeding 6.5 yd³ / 5 m³ and a loading height of only 9'2" / 2.8 m.

Out the back

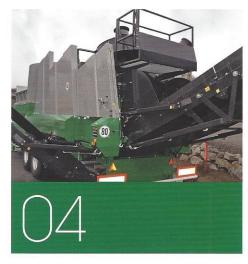
A coarse screen and a fine screen underneath it split the material into three fractions. All material is discharged at the rear of the machine, via the three conveyor belts. Windrows can be created from the output, and the intake mechanism at the front remains accessible during operation.

Economical hybrid drive

On the Multistar star screens all components electric-powered, by a diesel generator, or directly from the grid for the lowest energy costs. The removable generator version (M3, M2) provides high flexibility, since it makes it possible to run the machine where no electrical connection is available.

Technical specifications

	Multistar M2	Multistar M3		
Drive				
Power input (kW):	34	46		
Diesel generator (kVA / HP):	48 / 51	48 / 51		
Material feeding				
Hopper volume:	$> 6.5 \text{yd}^3 / > 5 \text{ m}^3$	> 6.5yd³ / > 5 m		
Screen section				
Coarse screen L x W / area:		7' x 3'9" / 26.2 ft ² 2132 x 1138 mm / 2.4 m ²		
Fine screen L x W / area:	14′10′ x 3′9′′ / 54.9 ft² 4522 x 1138 mm / 5.1 m²	11′9″ x 3′9″ / 44.1 ft 3591 x 1138 mm / 4.1 m		
Dimensions				
Transport dimension L x W x H:	38'7" × 8'4" × 13'1" 11750 × 2550 × 4000 mm	37'9'' x 8'4'' x 13'1'' 11500 x 2550 x 4000 mm		
Throughput (dependent on material)				
Throughput performance:	up to 130 yd³/h up to 100 m³/h	up to 157 yd³/h up to 120 m³/h		



M2 with optional wind sifter

The M2 is the perfect choice for operators who need only two fractions but still want to leverage the benefits of star screen technology. The feed area is the same as on the M3, but there is only one screen deck, for either fine or coarse screening. An optional wind sifter with powerful 15 kW suction capacity provides effective separation of contraries from the coarse fraction.



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- » Three size fractions (L2: two fractions), windsifting, Fe-separation, in one compact machine
- » 9.2 yd³ / 7 m³ hopper, wide discharge belts for convenient working
- » Extremely economical, high throughput, low energy and wear costs
- » Mobility central axle trailer (L3/L2) or semitrailer (XL)
- » Long coarse screen on L3-L and XL - ideal for biomass processing



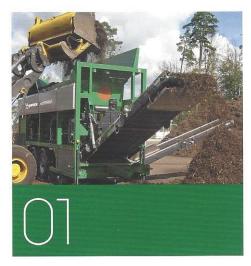


L2/L3/XL MULTITALENTS

Within just a short time, the Multistar L3 has become one of the most successful star screen machines on the market. That's hardly surprising – it packs everything that modern screen technology has to offer into an overall length of just 36'1'' / 11 m. One pass gives three fractions (L2: two fractions), wind sifting, and Fe separation if desired. With the machine going at full capacity, two wheel loaders have their

hands full.

Yet everything runs quietly and smoothly, thanks to the electric drive with intelligent control unit and easy touch panel operation. On the XL and L3-L versions, an extended coarse screen boosts throughput for applications where coarse screening is the bottleneck, for example with fresh biomass.



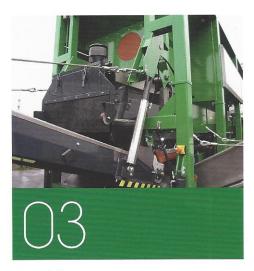
Extremely efficient

High throughput plus low operating costs equals the highest operating efficiency. The hopper, feed system, and design and dimensions of the screen decks combine to form a compact unit with virtually unbeatable throughput. Effective wear protection of all parts in contact with material and an efficient diesel-electric drive system ensure the lowest operating costs.



Always clean thanks to CLEANSTAR

The screen units are continually cleaned by the simple and efficient patented CLEANSTAR cleaning system. Each star has a wear-resistant cleaning finger that clears the screen gap to the surrounding stars on each rotation, so screening is always in season with Multistar star screens.



Anything goes

A series of options makes the L3 a genuine all-rounder: Wind sifter for the coarse and medium fraction, magnetic rollers, and rolling fraction separator. Production can also be switched to just two fractions. Options like hopper overload sidewalls, central lubrication and pneumatically sprung axles increase ease of use.

Technical specifications

	Multistar L2	Multistar L3	Multistar XL	
Drive				
Diesel generator (kVA / HP):	44 / 47	60 / 64	60 / 64	
Material feeding				
Hopper volume:	$9.2 \text{ yd}^3 / > 7 \text{ m}^3$	$9.2 \text{ yd}^3 / > 7 \text{ m}^3$	$9.2 \text{ yd}^3 / > 7 \text{ m}^3$	
Screen section				
Coarse screen L x W / area:	-	10'6'' x 4'1'' / 40.9 ft² 3200 x 1250 mm / 3.8 m²	13'1" x 4'1" / 51.7 ft ² 4000 x 1250 / 4.8 m ²	
Fine screen L x W / area:	19' x 4'1'' / 77.5 ft ² 5800 x 1250 mm / 7.2 m ²	19' x 4'1" / 77.5 ft ² 5800 x 1250 mm / 7.2 m ²	19' x 4'1'' / 77.5 ft ² 5800 x 1250 mm / 7.2 m ²	
Dimensions				
Transport dimension L x W x H:	35′3′′ × 8′4′′ × 13′1′′ 10750 × 2550 × 4000 mm	36'11" x 8'4" x 13'1" 11260 x 2550 x 4000 mm	38'10" x 8'4" x 13'1" 11850 x 2550 x 4000 mm	
Throughput (dependent on ma	aterial)			
Throughput performance:	up to 195 yd³/h up to 150 m³/h	up to 235 yd³/h up to 180 m³/h	up to 330 yd³/h up to 250 m³/h	



For the big jobs

If high coarse-grain separation is what you need, the extra-large coarse screen surface is a big plus for the L3-L and XL. It boosts throughput as well as separation accuracy when screening coarselyshredded biomass. Need things really coarse? The new wider stars in the coarse screen enable separation in the 5" - 5 15/16" / 120-150 mm range.



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- » High-performance machines for large operations
- » Huge hopper and extremely wide discharge belts for ease of operation
- » High throughput with precise selectivity, even with moist materials
- » Simple star speed control at the screen deck, to change particle size in seconds

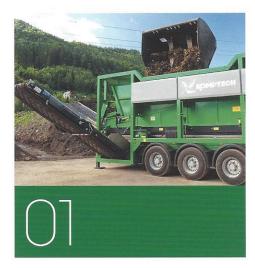




TOP PERFORMANCE

The Multistar XXL and XXXL are the top of the line, top-performance star screens from Komptech. They are designed for the heaviest duty with the highest throughput, while retaining the benefits of mobility. Heavy-duty components for continuous operation, large screen decks with wide

discharge belts, and powerful yet very economical electric drive via diesel generator all keep things moving. The result is unbeatably low operating costs at full capacity production.



Built to perform

The sheer scale makes it obvious - these machines are built for big volumes, more than one lager front-loader can keep up with. Luckily, the 15.7 yd3 / 12 m3 (XXL) or 19.6 yd³ / 15 m³ (XXXL) hopper can be filled from both sides. Extremely wide output conveyors make sure that what goes in, comes out without a hitch.



From fine to coarse at the press of a button

Particle size can be controlled by varying the rotation speed of the star shafts. In just seconds the particle size can be changed within the range provided by the star size, using the touchscreen graphic control panel. The different star dimensions and arrangements cover screening sections from 5/16" - 5 15/16" / 8-150 mm.

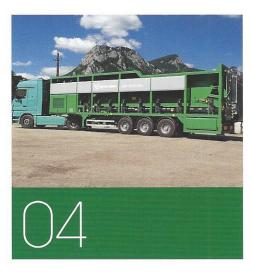


Effective wear protection

On all Multistar screeners, the screen units are kept continuously clean by carbide, ceramic or specially coated cleaning elements, as appropriate for the specific application. This keeps wear to a minimum, for economical operation.

Technical specifications

	Multistar XXL	Multistar XXXL		
Drive				
Diesel generator (kVA / HP):	100 / 107	135 / 145		
Material feeding				
Hopper volume (m³):	$15.7 \text{ yd}^3 / > 12 \text{ m}^3$	19.6 yd³ / > 15 n		
Screen section				
Coarse screen L x W / area:	16′ 9′′ x 4′ 1′′ / 66 ft² 5100 x 1250 mm / 6.1 m²	16' 9" x 5' 7" / 92.6 ft ² 5100 x 1700 mm / 8.6 m ²		
Fine screen L x W / area:	29′ 2″ x 4′ 1″ / 117 ft² 8900 x 1250 mm / 10.9 m²	29′ 3″ × 5′ 7″ / 163 f 8910 × 1700 mm / 15.1 m		
Dimensions				
Transport dimension L x W x H:	44′ 11″ × 8′ 4″ × 13′ 1″ 13700 × 2550 × 4000 mm	35′ 3′′ x 10′ x 13′ 1′ 10750 x 3050 x 4000 mm (exceptional permission required		
Throughput (dependent on material)				
Throughput performance:	up to 530 yd³/h up to 400 m³/h	up to 654 yd³/h up to 500 m³/h		



Full mobility

Although the XXL and XXXL can outperform many a stationary machine, the semi-trailer design makes them easy to move from point A to point B, so that nothing stands in the way of off-site use. Extend the supports, fold out the conveyors, and you're ready to run.



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- » Designed to remove oversizes from commercial waste, bulky waste and waste wood
- » High throughput with low energy consumption
- » Contrary-resistant disc separator for coarse screening
- » High-selectivity star screen for fine screening





L3 FLOWERDISC THE TRASH SPECIALIST

The Multistar L3 Flowerdisc is a noteworthy addition to the mobile screening options for bulky waste, commercial waste and waste wood. Using a combination of disc separator and star screen, it separates out a typically inert fine fraction and a medium and coarse fraction for refuse-derived fuel, all in just one operation.

Normally, a conveyor from an upstream shredder feeds the input material directly to the screen deck. The high-performance drive, 19' 8" and 23' / 7 m and 6 m screen lengths on the contrary-resistant Flowerdisc, and highly selective star screen provide the right conditions for high throughput.







MULTISTAR HOOK SIMPLY FLEXIBLE

The rugged, straightforward Multistar Hook star screen deck separates compost, bark, biomass, etc. into oversized and undersized particles, extremely reliably and with low noise levels. With its simple support base, it lifts on and off a truck bed for quick and flexible semi-mobile use.

When used in conjunction with a shredder, overlengths (shredded waste wood, green waste, rootstocks etc.) are effectively removed, for simple, cost-effective material treatment.

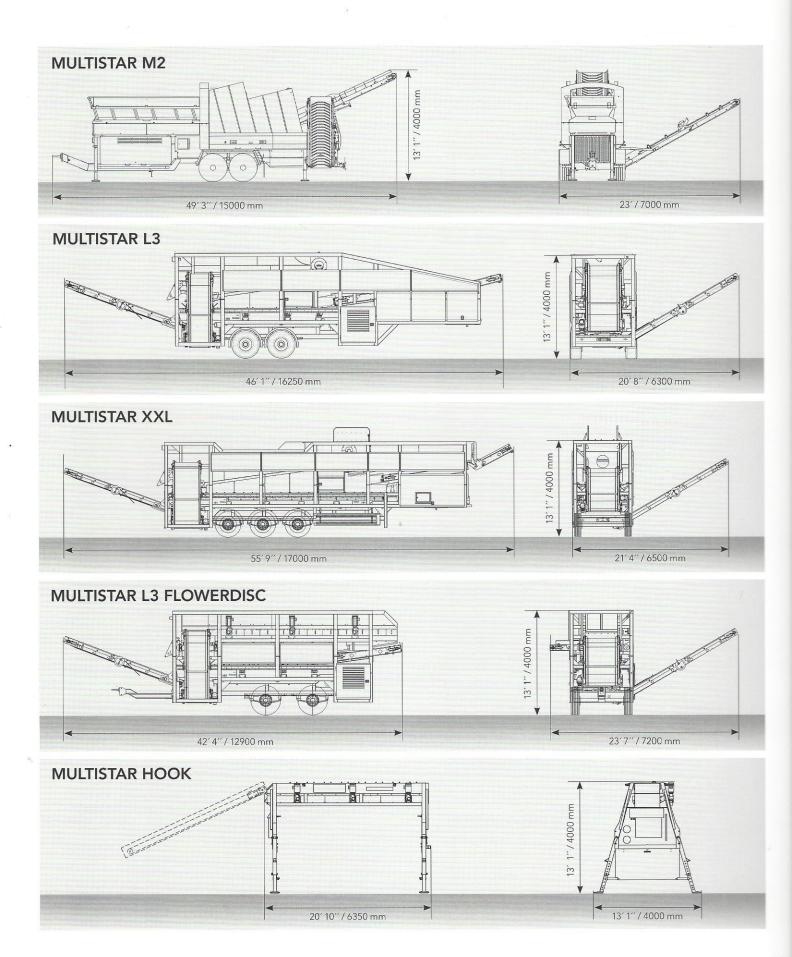
HIGHLIGHTS

- » Quickly deployable with lift-off base
- » High throughput with precise selectivity, even with moist materials
- » Simple screen deck speed control changes particle size in seconds
- » Ideal for removing overlengths in conjunction with a shredder

TECHNICAL SPECIFICATIONS

	Multistar Hook	Multistar M2	Multistar M3	Multistar L2	Multistar L3	Multistar XL	Multistar XXL	Multistar XXXL	Multistar L3 Flowerdisc
Drive									
Diesel generator (kVA HP):		48 / 51	48 / 51	44 / 47	60 / 64	60 / 64	100 / 107	135 / 145	60 / 64
Power input (kW):	12 - 27,5	34	46						
Material feeding - feed	hopper								
Hopper volume:		>6.5 yd³ >5 m³	>6.5 yd³ >5 m³	>9.2 yd³ >7 m³	>9.2 yd³ >7 m³	>9.2 yd³ >7 m³	>15.7 yd³ >12 m³	>19.6 yd³ >15 m³	
Filling length:		13' 1'' 4000 mm	13′ 1" 4000 mm	11′ 10″ 3600 mm	11′ 10″ 3600 mm	11' 10'' 3600 mm	15′ 9″ / 19′ 4800/5800 mm	15′ 9′′ / 19′ 4800/5800 mm	
Filling height:		9′ 2″ 2800 mm	9′ 2" 2800 mm	11′ 6″ 3500 mm	11′ 6′′ 3500 mm	11′ 6′′ 3500 mm	12′ 2" 3700 mm	12′ 2″ 3700 mm	
Screen size L x W / area									
Coarse screen:	19' 8" x 3' 3" / 65 ft² 6000 x 1000 mm / 6 m²		7' x 3' 9'' / 26.2 ft² 2132 x 1138 mm / 2.4 m²		10' 6" x 4' 1" / 77.5 ft ² 3200 x 1250 mm / 3.8 m ²	13' 1" x 4' 1" / 51.7 ft ² 4000 x 1250 mm / 4.8 m ²	16' 9" x 4' 1" / 66 ft ² 5100 x 1250 mm / 6.1 m ²	16' 9" x 5' 7" / 92.6 ft ² 5100 x 1700 mm / 8.6 m ²	Disc screen 90.4 ft² / 8.4 m²
Fine screen:		14' 10" x 3' 9" / 54.9 ft² 4522 x 1138 mm / 5.1 m²	11' 9" x 3' 9" / 44.1 ft ² 3591 x 1138 mm / 4.1 m ²	19' x 4' 1" / 77.5 ft² 5800 x 1250 mm / 7.2 m²	19' x 4' 1'' / 77.5 ft² 5800 x 1250 mm / 7.2 m²	19' x 4' 1'' / 77.5 ft² 5800 x 1250 mm / 7.2 m²	29' 2" x 4' 1" / 117 ft ² 8900 x 1250 mm / 10.9 m ²	29' 3" x 5' 7" / 163 ft ² 8910 x 1700 mm / 15.1 m ²	Star screen 77.5 ft² / 7.2 m²
Screen section standard									
Coarse particle:	>2 2/3"3 1/2" >6090 mm	>1 5/32"2 2/3" >3060 mm	>6090 mm	>2 2/3"3 1/2" >6090 mm	>2 2/3"3 1/2" >6090 mm	>2 2/3"3 1/2" >6090 mm	>2 2/3"3 1/2" >6090 mm	>2 2/3"3 1/2" >6090 mm	>2 2/3"3 1/2" >6090 mm
Medium particle:			3/8"1" / 2 3/8"3 1/2" 1025 / 6090 mm		3/8"1" / 2 3/8"3 1/2" 1025 / 6090 mm	3/8"1" / 2 3/8"3 1/2" 1025 / 6090 mm			
Fine particle:	0 / 2 3/8" 3 1/2" 0/6090 mm	0 / 1 5/32" 2 3/8" 0/3060 mm	0 / 3/8" 1" 0/1025 mm	0 / 2 3/8" 3 1/2" 0/6090 mm	0 / 3/8" 1" 0/1025 mm	0 / 3/8" 1" 0/1025 mm	0 / 3/8" 1" 0/1025 mm	0 / 3/8" 1" 0/1025 mm	0 / 3/8" 1" 0/1025 mm
Material discharge max.	discharge heig	ht							
Coarse fraction:	11′ 10′′ 3600 mm	11' 3350 mm	13′ 5″ 4100 mm	9′ 10″ 3000 mm	9′ 10′′ 3000 mm	9' 10'' 3000 mm	11′ 10′′ 3600 mm	11' 10'' 3600 mm	8′ 8″ 2650 mm
Medium fraction:			10′ 6′′ 3200 mm		11′ 10′′ 3600 mm	11′ 10′′ 3600 mm	11′ 10′′ 3600 mm	11′ 10′′ 3600 mm	11′ 10″ 3600 mm
Fine fraction:	10′ 10′′ 3300 mm	10′ 6′′ 3200 mm	10′ 6" 3200 mm	10' 6'' 3200 mm	10′ 6′′ 3200 mm	10′ 6′′ 3200 mm	10′ 6" 3200 mm	10′ 6′′ 3200 mm	10′ 6′′ 3200 mm
Dimensions (*exceptiona	l permission req	uired)							
Transport dimension L x W x H:	22' x 8' 2" x 8' 10" 6700 x 2500 x 2700 mm	38' 7" X 8' 4" × 13' 1" 11750 × 2550 × 4000 mm	37' 9"x 8' 4" x 13' 1" 11500 x 2550 x 4000 mm	35′ 3″ × 8′ 4″ × 13′ 1″ 10750 × 2550 × 4000	43' x 8' 4" x 13' 1" 13100 x 2550 x 4000	38' 11" x 8' 4" x 13' 1" 11850 x 2550 x 4000	44' 11" × 8' 4" × 13' 1" 13700 × 2550 × 4000	35′ 3″ × 10′ × 13′ 1″* 10750 × 3050 × 4000*	36' 11" x 8' 4" x 13' 1" 11250 x 2550 x 4000
Working dimension L x W x H:	20′ 10″ x 13′ 1″ x 13′ 1″ 6350 x 4000 x 4000 mm	49' 3" x 23' x 13' 1" 15000 x 7000 x 4000 mm	42' 8" x 36' 1"	46′ 1′′× 20′ 8″ × 13′ 1″ 14050 × 6300 × 4000 mm	53' 4" × 20' 8" × 13' 1" 16250 × 6300 × 4000 mm	55' 7" × 21' 4" × 13' 5" 16950 × 6500 × 4100 mm	55' 9" x 21' 4" x 13' 1" 17000 x 6500 x 4000 mm	55′ 9′′ × 23′ × 15′ 17000 × 7000 × 4580 mm	42' 4" × 23' 7" × 13' 1" 12900 × 7200 × 4000 mm
Weight:	~ 5 t.sh ~ 4.5 t	~ 19 t.sh ~ 17.0 t	~ 19 t.sh ~ 17.0 t	~ 18 t.sh ~ 16.0 t	~ 21 t.sh ~ 19.0 t	~ 23 t.sh ~ 21.0 t	~ 29 t.sh ~ 26.0 t	~ 33 t.sh ~ 30.0 t	~ 22 t.sh ~ 20.0 t
Throughput (dependent	on material)								
Throughput performance: Options	up to 330 yd³/h up to 250 m³/h	up to 130 yd³/h up to 100 m³/h	up to 157 yd³/h up to 120 m³/h	up to 200 yd³/h up to 150 m³/h	up to 235 yd³/h up to 180 m³/h	up to 330 yd³/h up to 250 m³/h	up to 530 yd³/h up to 400 m³/h	up to 660 yd³/h up to 500 m³/h	up to 44 t.sh up to 40 t/h

Different screen options for coarse and fine screen, magnetic drum, discharge belt for rolling pieces, windsifter, diesel generator (M-version) towing and chassis options, radio remote control, central lubrication and more



TECHNOLOGY FOR A BETTER ENVIRONMENT



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