

maskin mekano

**SH 1503**

MOBILE SCREENING UNIT



# Premium screening

Swedish family owned company Maskin Mekano has designed a screener range complying with the current demands on higher capacity, better screening accuracy, lower operating costs, less noise impact, smaller CO<sub>2</sub> footprint and safer work environment. The 1500-range consists of two deck screener SH 1502 and three deck screener SH 1503, they are unique mobile units, in production mode very similar to stationary screens thanks to the high jacking legs.

At the heart of the plants is the STE screen box which measures 1.8 m x 5.2 m on two or three decks. The screen meshes for all decks are end tensioned and the sizes are identical. They are split in the middle for easy handling and for optimum tensioning ability, which is essential for fines material.

The screen-box is an extension of the renown Maskin Mekano STE-brand; they are four bearing with a strong 12 mm circular stroke and 11° elevation, operating at 800 rpm. The aggressive stroke provides unsurpassed capacity and consistent operation regardless of weather and load. In combination with them being almost horizontal the accuracy and predictability of the screening curves exceeds any requirements.

The Maskin Mekano Vibroblock concept means the screen box is mounted on a vibration damped frame which prevents the vibrations from the screen from transmitting to the chassis. This saves the entire plant from damages caused by vibration, whilst the screening motion remains efficient. The Vibroblock design allows the STE screen to operate with the capacity of a four-bearing screen as smooth as a two bearing screen, and keeps the power in the screen-box where it belongs.



3



1.8 X 5.2



30.000



Trailer



24 kW



15 Min







## Outstanding screening features

A powerful stroke. Almost horizontal. The key features of the superior screening ability of the STE screen. The aggressive action cascades and thus separates the material layers effectively and forces the finer sizes through the screening media easily. This means high capacity.

The low inclination secures that all material is exposed to the meshes sufficiently so that even near-size particles end up in the right pile. This means high accuracy and consistent screening results, providing high quality end products.

## Operating securely

The screens are fitted with Vibroblock, the effective Maskin Mekano anti-vibration concept. The screen box is mounted

on a vibration damped frame which prevents the vibrations from the screen from transmitting to the chassis. This saves the entire plant from damages caused by vibration, whilst the aggressive screening motion remains where it belongs. Thus unequalled operation reliability is ensured without any sacrificing of screening performance.

## High jacking legs

With the 1500 range we strive to combine the advantages of mobile and stationary screening solutions. The plants are fitted with big rubber wheels for transports on site, and there is a hook for handling placed in the rear, so it is simple to place the screen under feeding conveyors or a crusher conveyor. The compact transport sizes (length: SH 1502 8.7 m, SH 1503 9.7 m) makes them ideal for trailer transports. Thanks to the high jacking legs it is easy to keep the area around the plant clean.





## Minimal maintenance

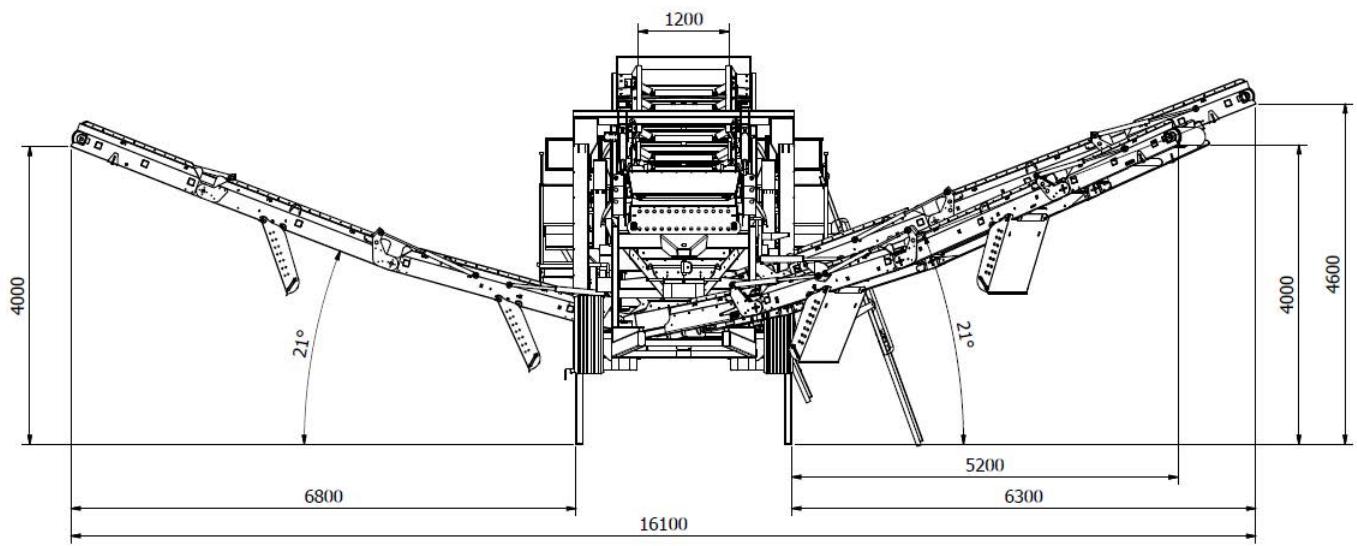
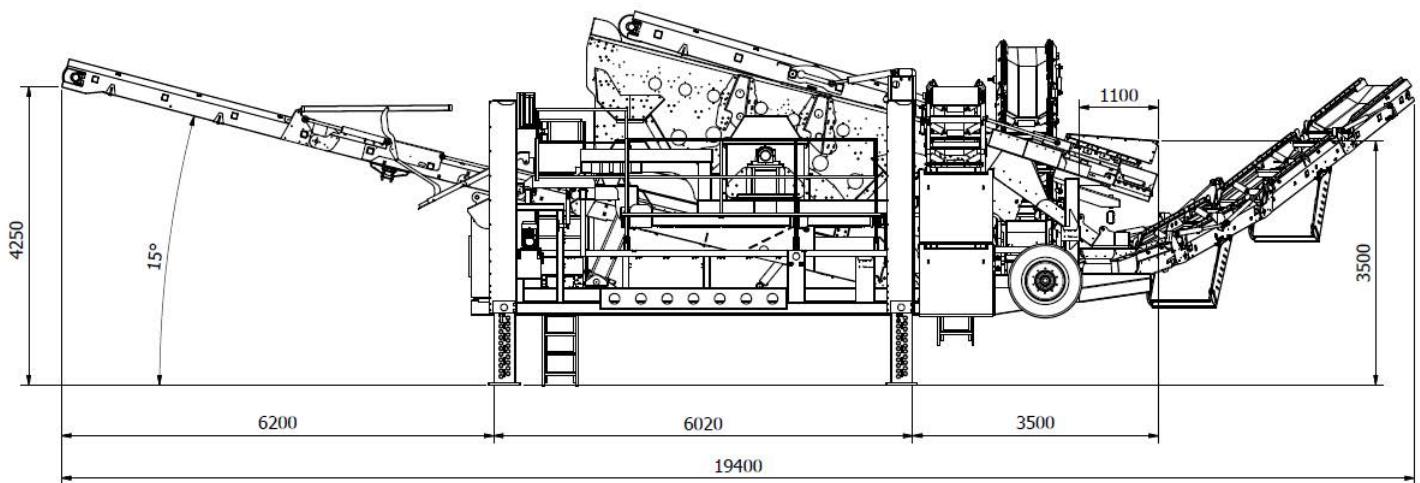
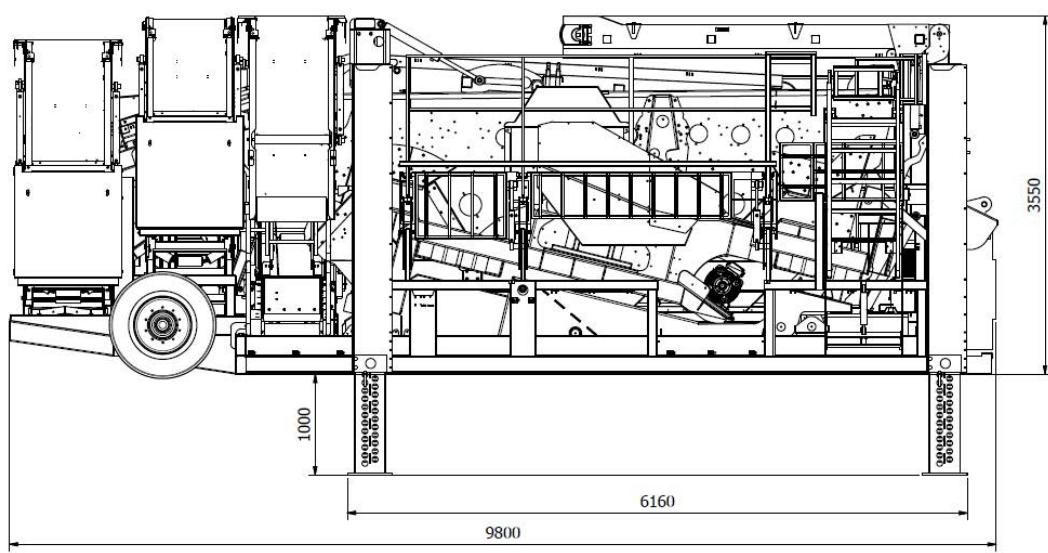
A screening plant is also a working site. Our aim has been to create a safe and secure space for the operators, not least in the steps involved in changing meshes. The on-board wrap-around catwalk is sturdy and reached via hydraulically folded stairs equipped with handrails and a self-closing gate. On the fines conveyor you find an unloading shelf for safer handling of the screen meshes. The chutes in front of the screen box are slideable, and an extra catwalk is provided in the front to further facilitate the change of meshes.

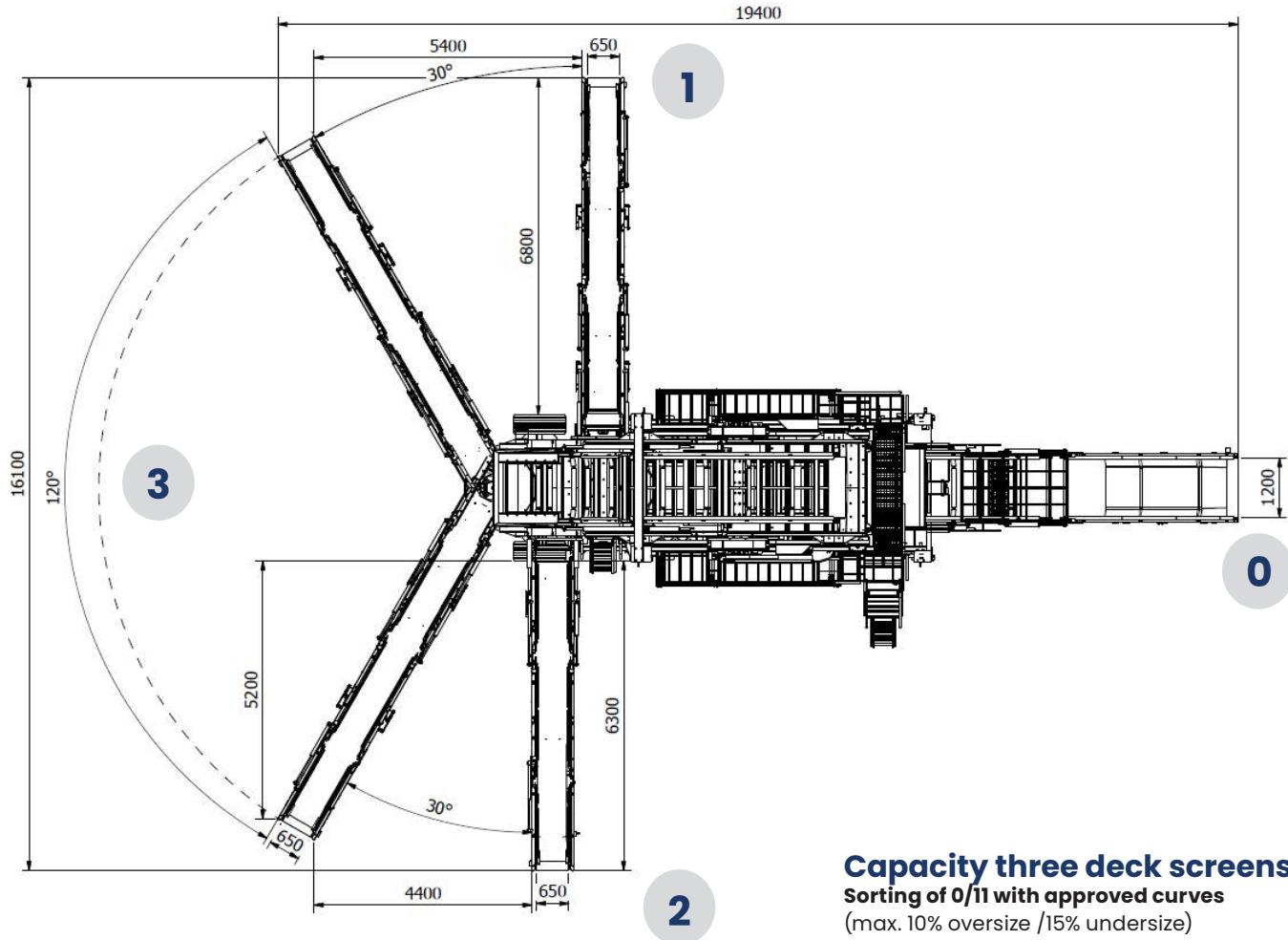
The Maskin Mekano design team has worked hard to minimize the number of operator interventions on the plant. For example, all bearings on the conveyors are lubrication free. The screen bearings are central lubricated. The tensioning devices for the meshes are spring loaded to minimize the need of re-tightening.

## Low carbon footprint

All Maskin Mekano plants are electrically driven. Hydraulics is only used for linear motions (such as jacking legs, catwalks and folding of conveyors) which reduces the risk of harmful leakages of hydraulic oil to a minimum. The fuel consumption per hour for the SH 1502 is 5 litres when a generator is used. Compared to hydraulically driven screeners the CO<sub>2</sub>-emission is reduced with 80% and the noise impact is lowered with 10 dB. Electrical drive is not only profitable, it is about our environment and a question of credibility for the crushing- and screening industry.







**Capacity three deck screens\***  
 Sorting of 0/11 with approved curves  
 (max. 10% oversize /15% undersize)

		STE 3-67	STE 3-94	
	Size	Share	tonnes/h	tonnes/h
0	0/2	43%	59	83
1	2/4	16%	22	32
2	4/8	24%	34	47
3	8/11	16%	22	32
			138	194

Sorting of 0/16 with approved curves  
 (max. 10% oversize /15% undersize)

		STE 3-67	STE 3-94	
	Size	Share	tonnes/h	tonnes/h
0	0/4	51%	82	115
1	4/8	21%	34	47
2	8/11	14%	22	32
3	11/16	14%	22	32
			160	225

Sorting of 0/16 with approved curves  
 (max. 10% oversize /15% undersize)

		STE 3-67	STE 3-94	
	Size	Share	tonnes/h	tonnes/h
0	0/2	37%	59	83
1	2/4	14%	22	32
2	4/8	21%	34	47
3	8/16	28%	45	63
			160	225

\*These capacity examples are done in crushed granite,  
 the performance in crushed concrete is similar

# Technical Specification Maskin Mekano SH 1503

Transport Length	9.8 m
Transport Width	3.0 m
Transport Height	3.55 m
Machine Weight	approx. 30 tonnes
Screenbox	STE 3-94 Screening surface 1.8 x 5.2 m on three decks Single axle mechanically controlled with 12 mm stroke 11° incline Electric motor 18.5 kW, 400 V Vibroblock frame prevents vibrations
Feeding conveyor	Width 1200 mm Length 7.5 m Electric motor 5.5 kW
Midsize conveyors (1,2)	Belt width 650 mm Length 9.2 m Electric drum motor 4.0 kW Height under the drum drive 4.0/4.6 m
Oversize conveyor (3)	Belt width 650 mm Length 9.2 m Electric drum motor 4.0 kW Height under the drum drive 4.0 m Radial
Fines conveyor (0)	Belt width 1200 mm Length 12.5 m Electric drum motor 5.5 kW Height under the drum drive 4.3 m
Catwalks and stairs	Hydraulically foldable catwalks and stairs Access for media changes both back and front of screen
Electric equipment	Distribution box with integrated touchscreen and push buttons, safety breaker, safety disconnection breaker, emergency stop, preregulator as well as extra motor socket. Emergency stops also on conveyors and chassis. Power inlet with 125 A CEE-device
Hydraulic equipment	Hydraulic aggregate for folding of the conveyors and lifting of hydraulic legs Motor 4.0 kW
Wheel- and towing device	Hook lift frame for transports on site Chassis for trailer transports Hydraulic legs for production mode

Our policy is one of continuous improvement and we reserve the right to change the detailed specification of our products at any time without prior notice.



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