We test with your material. You decide with your data.

We help you check the result before you decide.



MASKIN MEKANO · STE SCREEN RANGE

STE Screen

Precise screening of fines for aggregates and recycled material.

maskin mekano

01 · THE PROBLEM

Poor screening costs you tonnes

The screen decides if a fraction meets the specification. These are the most common types of waste in fine screening:

Fractions out of specification

Material you must screen again or sell as a different product.

Fines that do not pass

They stay in the coarse fractions and spoil the screening curve.

Blocked screen cloths

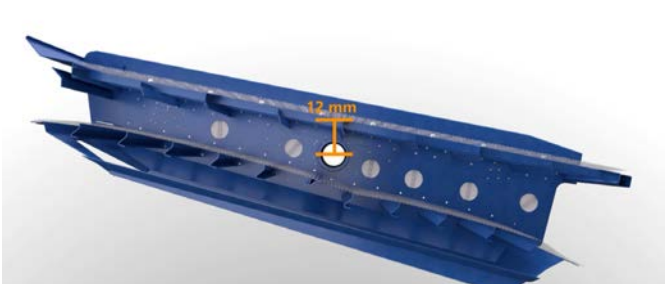
Stops for cleaning and fewer tonnes per hour.

Variable results

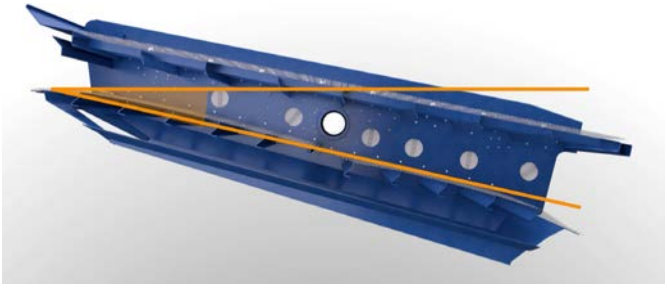
Screening changes with the load, the moisture or the temperature.

02 · HOW THE STE SCREEN WORKS

A powerful stroke and enough time to screen



12 mm stroke. Fines move quickly down to the screening media.



Shallow 11° inclination. More time on the screen to classify each particle.

Feature	How it works	What it can improve	How to check it
12 mm stroke	Separates fine and coarse particles in the bed; fines reach the media first.	Passing of fines and capacity.	Tonnes per hour of each fraction, measured with your material.
11° inclination	More time for the material on the screen.	Precise cut in short fractions.	Grading test of each fraction: oversize and undersize.
Four-bearing screen	Keeps the same rpm and stroke when the load changes.	A more stable and predictable result.	Compare the fractions at different feed levels.

Designed for fine and short fractions: 0-2, 2-4, 4-8, 8-11 and 11-16 mm. The result depends on your material, moisture, feed and screening media.

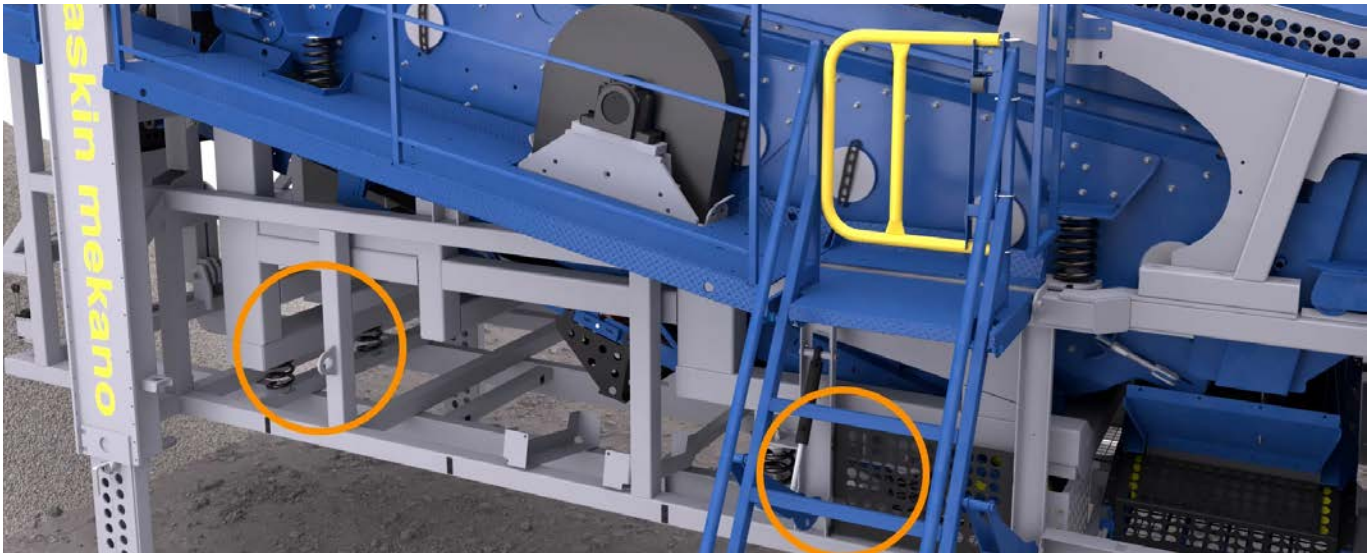
The power stays in the screen box

The STE screen box and its motor are mounted on their own vibration-isolated frame. This frame is also isolated from the main chassis of the machine.

The screen can work with a powerful stroke, while less vibration reaches the chassis and the rest of the equipment.



Screen box and motor on their own vibration-isolated frame.



Vibroblock frame in a mobile Maskin Mekano screening plant.

What it can improve

Less vibration to the chassis and the structure, and more stable operation.

How to check it

Look at the chassis while the screen runs during the test. If you need it, we can agree to measure vibration at points on the chassis.

What it does not replace

Isolation reduces the vibration that is transmitted. It does not replace maintenance or remove wear on the screen itself.



Also for stationary plants

The screen box is built on a Vibroblock frame, so vibration does not spread to the rest of the plant. Maskin Mekano can deliver equipment for your entire plant or adapt the screen frame to fit in.

04 · BALL DECK (OPTION)

Helps keep the screen surface clear with damp or sticky material



Principle drawing: balls in compartments under the screening media.

How it works. The balls sit under the screen cloth. The vibration makes them move and hit the underside, which helps to release sticky material and open the apertures.

How to check it. Compare the open screen area and the cleaning stops with and without a ball deck, with your material and moisture.

- The screen cloth decides the cut. The ball deck helps keep it clear.
- It does not replace washing and cannot remove every blockage.
- Available depending on model and configuration. Ask us about your machine.



Easy inspection

All STE screens have inspection holes with openable covers on the sides, for easy access to the screen decks.

05 · ELECTRIC DRIVE

All machines are electric

All Maskin Mekano machines have electric drive. STE screen motors run at 400 V, from 4.0 to 18.5 kW depending on the model.

Mains power

When the site has a grid connection. The cost depends on your tariff and the real consumption measured.

Diesel generator

When there is no grid connection. Our plants are very energyeffective and conume very little fuel: compare it with your current machine on the same job and period.

Eight models, one principle



Model	Decks	Screen area/ deck (mm)	m² per deck*	Motor	Tensioning of media	Featured in
STE 1-26	1	1200 × 2200	2.6	4.0 kW	Side tensioned	ECO1
STE 2-26	2	1200 × 2200	2.6	4.0 kW	Upper side · lower end tensioned	ECO2
STE 2-37	2	1200 × 3300	4.0	7.5 kW	Upper side · lower end tensioned	ECO4
STE 2-53	2	1200 × 4400	5.3	11.0 kW	Upper side · lower end tensioned	SH 902
STE 2-67	2	1400 × 4800	6.7	11.0 kW	Upper side · lower end tensioned	ECO6, Ls 1202, SH 1202
STE 3-67	3	1400 × 4800	6.7	11.0 kW	Upper side · lower decks end tensioned	Ls 1203, SH 1203
STE 2-94	2	1800 × 5200	9.4	18.5 kW	All decks end tensioned	SH 1502
STE 3-94	3	1800 × 5200	9.4	18.5 kW	All decks end tensioned	SH 1503

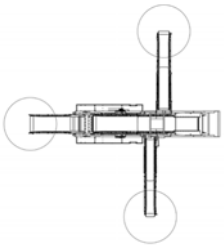
Standard on all models: 12 mm stroke, 11° inclination, 400 V motor and side inspection holes.
Depending on the machine: Vibroblock. **Option:** ball deck, depending on model and configuration.

How to choose: five questions

1. **How many fractions do you need?** 1 deck gives 2 fractions; 2 decks, 3; 3 decks, 4.
2. **How many t/h per fraction?** This defines the screen area. See the capacity examples.
3. **What is your material like?** Grading and moisture decide the screen cloth and if a ball deck is useful.
4. **How and how often do you move it?** This points to the machine (ECO, Ls or SH) or a stationary plant.
5. **What power do you have?** Mains power or a generator, and the power of the complete plant.

Tonnes per hour, per fraction

Manufacturer tests in **crushed granite**, with approved curves: max. 10 % oversize and 15 % undersize. Maskin Mekano states that performance in crushed concrete is similar. **These are examples, not guaranteed production:** your real capacity depends on the material, moisture, feed and screening media. We measure it with your material.



Two-deck screens

3 fractions: outputs 0, 1 and 2

Sorting of 0/8

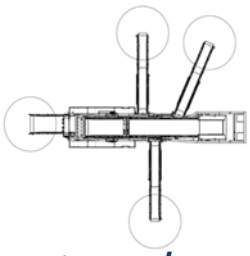
Output	Size	Share	STE 2-53	STE 2-67	STE 2-94
0	0/2	51 %	48	59	83
1	2/4	19 %	18	22	32
2	4/8	29 %	27	34	47
Total t/h			**93**	**115**	**162**

Sorting of 0/11

Output	Size	Share	STE 2-53	STE 2-67	STE 2-94
0	0/4	59 %	66	82	115
1	4/8	24 %	27	34	47
2	8/11	16 %	18	22	32
Total t/h			**111**	**138**	**194**

Sorting of 0/16

Output	Size	Share	STE 2-53	STE 2-67	STE 2-94
0	0/4	51 %	66	82	115
1	4/8	21 %	27	34	47
2	8/16	28 %	36	45	63
Total t/h			**129**	**160**	**225**



Three-deck screens

4 fractions: outputs 0, 1, 2 and 3

Sorting of 0/11

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

Sorting of 0/16 (4 fractions from 0/4)

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

Sorting of 0/16 (4 fractions from 0/2)

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

Maximum capacity for the screen box alone, in dry material

Model	STE 1-26	STE 2-26	STE 2-37	STE 2-53	STE 2-67	STE 3-67	STE 2-94	STE 3-94
Max. t/h	**300**	**300**	**400**	**450**	**500**	**500**	**600**	**600**

Decide on the cost of each tonne, not only on the price

The total cost of ownership is everything the machine costs you while you use it: owning it, running it, maintaining it and powering it. Divide it by the tonnes that meet the specification and you get the cost per tonne.

COST PER TONNE (€/T)

(Allocated investment + Operating cost + Service + Energy) ÷ Tonnes in specification

All for the same period (for example, one year). Allocated investment is the part for that period: depreciation, finance installment or rental.

The data we need

Investment

Price, finance or rental installment; planned period of use; estimated residual value.

Operating cost

Working hours, operator, screen cloths and wear parts, re-screening.

Service

Preventive maintenance, repairs, unplanned downtime and what it costs.

Energy

kWh used and electricity tariff; or liters of diesel for the generator and its price.

Production

Tonnes per hour of each fraction, productive hours in the period and percentage of material in specification.

A fair comparison

Compare the same job, the same tonnes and the same period. If one machine needs more hours for the same tonnage, those hours count too.

We mark where each figure comes from: your data, measured in the test, or assumed. So you know which part of the result is proven.



The tonnes that count are the ones that meet the specification.

09 · NEXT STEP

Check the result with your material

A well-planned test replaces assumptions with measured data. Then you choose the model and configuration knowing what to expect.

What we can measure

- Real production: t/h of each fraction.
- Quality of the fractions: oversize and undersize.
- Blocking and cleaning of screen cloths.
- Energy consumption.
- Downtime and its causes.
- Cost per tonne, when there is enough data.

What we need from you

1. Material and application.
2. Feed grading.
3. Moisture, and if there is clay or sticky material.
4. The fractions you need and their specification.
5. Required production in t/h.
6. Power available on site.

With this data we assess the application and, if it makes sense, we agree a test and its conditions with you.

We test with your material.
You decide with your data.

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