

# **MEKA**

# **HORIZONTAL SCREENS**

ENDURANCE, CAPACITY AND  
EFFICIENCY



MEKA CRUSHING SCREENING AND  
CONCRETE BATCHING TECHNOLOGIES  
[www.mekaglobal.com](http://www.mekaglobal.com)



## MEKA Horizontal Screens Designed For The Toughest Applications

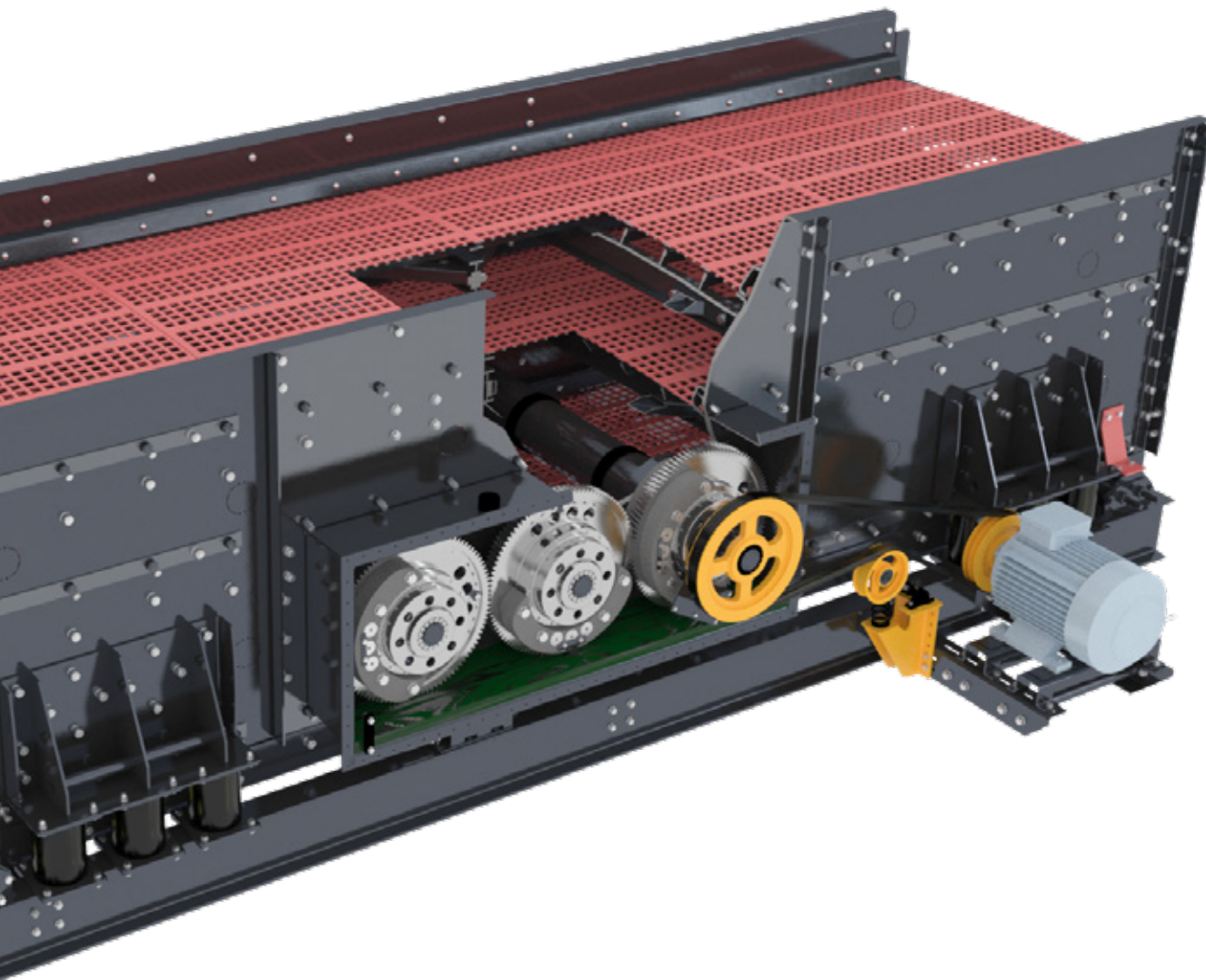
MEKA Horizontal Screens are a combination of quality, reliability, and performance; providing a long service life while operating under the most demanding applications.

Nowadays, customers are requiring tighter specifications for products for precisely shaped aggregate or closely-sized stone. As a result, tighter control over the process is of utmost importance and the most effective point to do that is at screening. For that critical step you can trust MEKA Horizontal Screens.

The screens elliptical motion is combined with high acceleration, thereby bringing more power into play than in traditional screens. This “high power” feature delivers better performance in terms of both throughput and screening efficiency.

# MEKA

## HORIZONTAL SCREENS



Proven oval stroke design increases production, reduces recirculation load. Oval throw action makes MEKA screens virtually non-plugging and raises quality output. The ability to fine tune stroke angle, amplitude and speed adds versatility in meeting changing screening conditions. Extra-strong body construction, durable bearing mountings, computer designed chrome-moly-nickel gear set with premium metallurgy extend service life.

These screens provide outstanding performance for all screening and can be widely applied in mining, aggregates, and concrete and asphalt recycling. The special applications for Horizontal screens include: when fine screening with a large percentage of near size product, wet washing or when low head room is critical such as mobile mounted equipment.

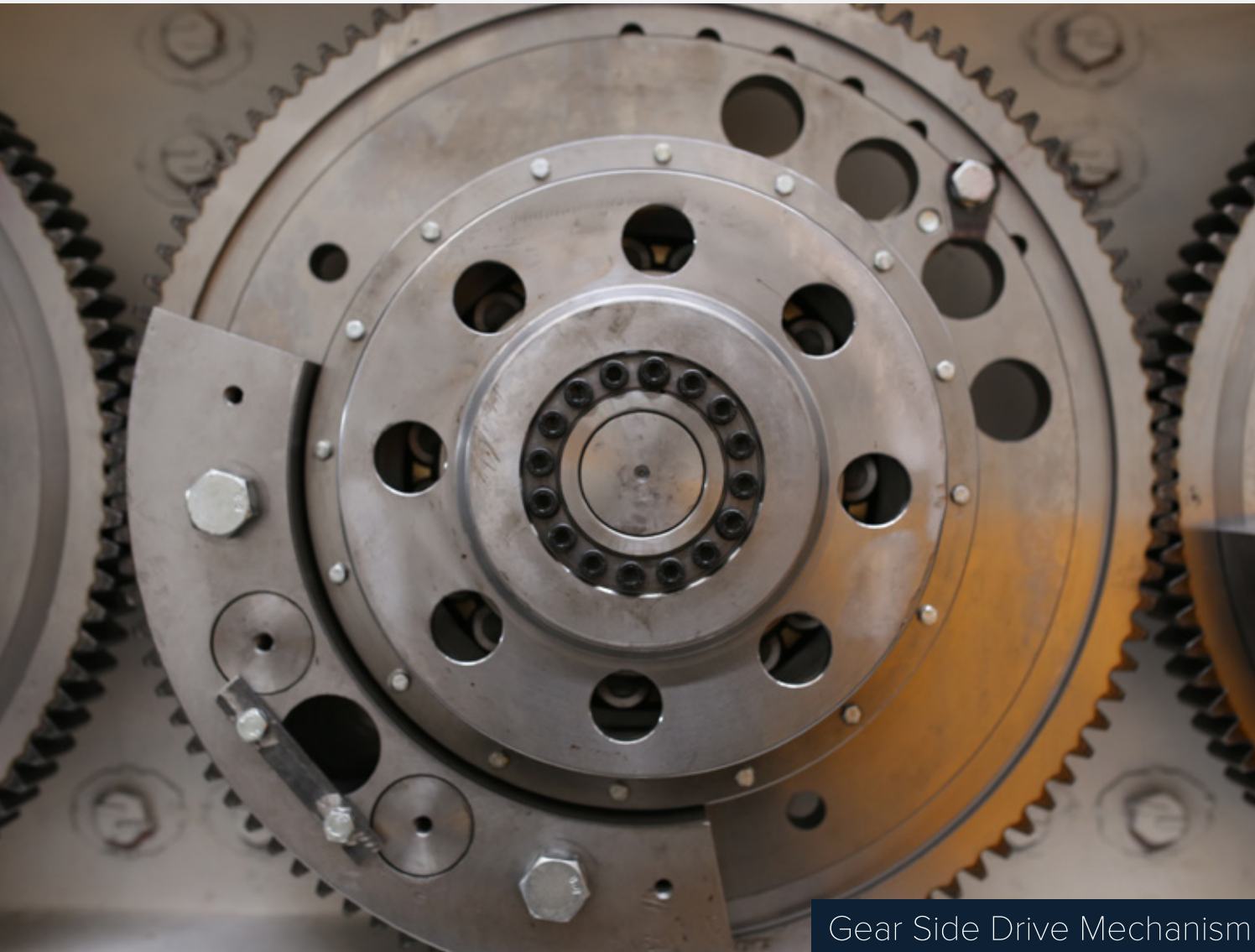




## Oval Stroke Geared To Productivity

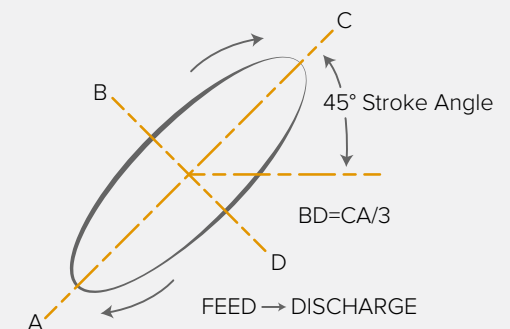
MEKA Horizontal Screens generate power via three-shaft impulse mechanism located in the centre of the screen body with eccentric counterweights. The combination of the three shafts provide an oval stroke with adjustable amplitude, speed and operating angle, determined by application.

Oval stroke screen action combines the best features of the circle and straight line throw into a unique oval stroke, by benefiting from the screening of the circle throw with the conveying action of the straight line. The motion is nearly vertical through the initial lift phase of the stroke, and the openings in the screen cloth are perpendicular to the material. This provides optimum alignment and maximum probability of material passage through the screen openings.



Gear Side Drive Mechanism

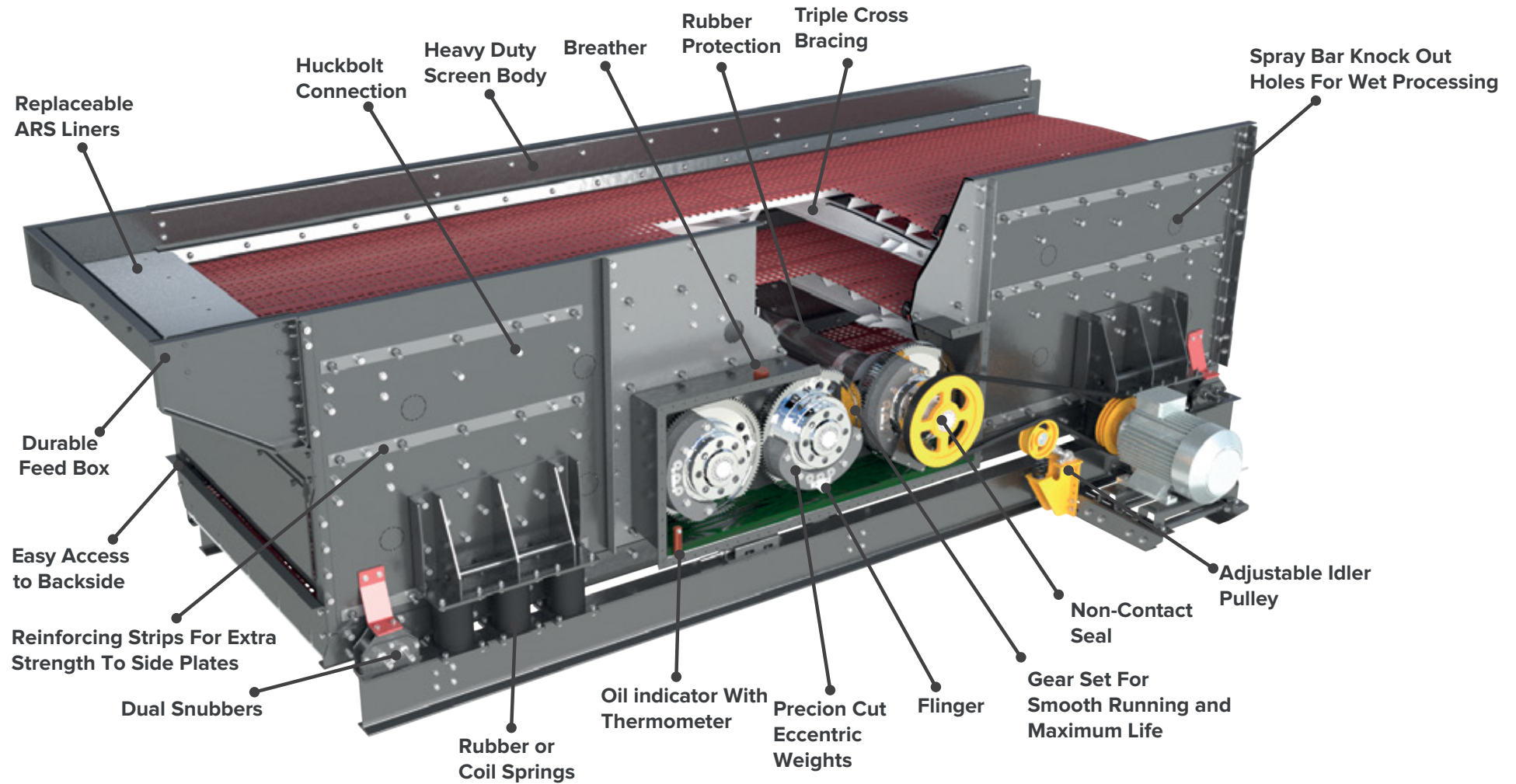
Adjusting the stroke angle has been found to be the most influential in optimising the screen efficiency. Higher stroke angles increase the number of chances the material has to pass through the openings and also increases the impact to shake fines loose. Lowering the stroke angle increases the travel rate for heavy screening or scalping operations. Higher speed is sometimes desired for scalping duty.



Other benefits include,

- Less horsepower required
- Smooth running-eliminates jerking action of straight stroke screens
- Adjustable angle and length of stroke
- High capacity and efficiency
- High G force action for better material stratification, reduced plugging and greater range of screenable material



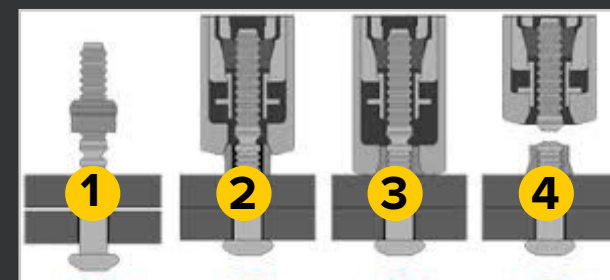




## HIGH STRENGTH SCREEN BODY

The body of the screen is extremely strong supporting the stresses required by the high power mechanism. This rigidity is provided by frames made from beam sections with stiffeners positioned in critical areas.

Side plates are made from high quality steel and laser cut holes. Frames are huck-bolted to the side plates insuring structural integrity and eliminate stress fatigue in the screen body.

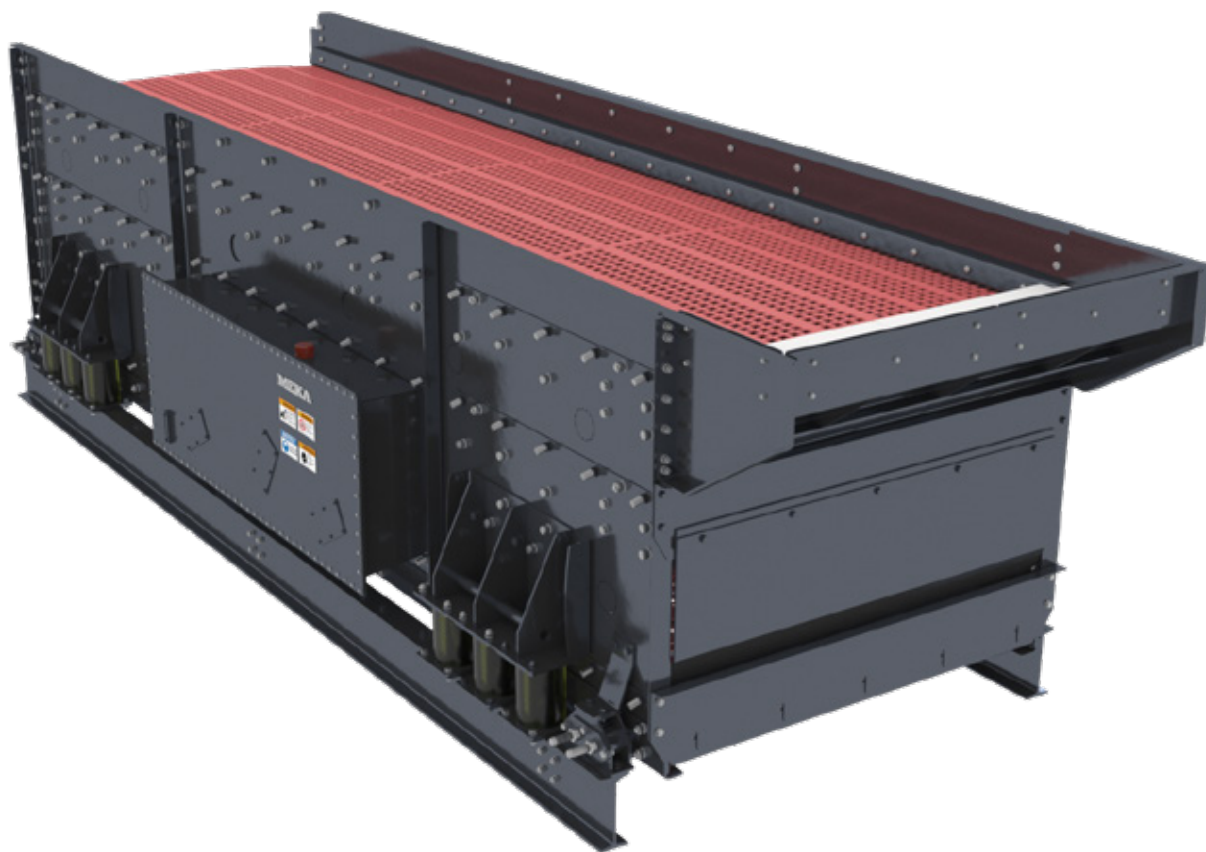




## MOTOR BASE

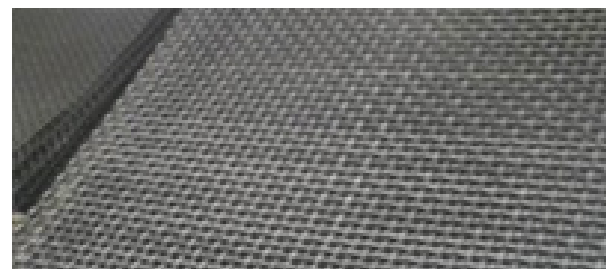
The motor base coupled with the belt tensioning system enables a practical motor assembly and V belt - pulley replacement, and provides energy efficiency by keeping the belt tension at the desired level. In addition, by providing a bolted connection between the motor frame and the main frame, cracks and fatigue issues associated with welding are avoided.





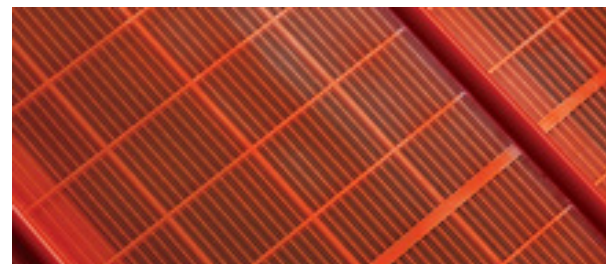
### SCREEN DECKS

MEKA Horizontal screens can accommodate all media types, wire cloth, urethane and rubber. Steel Wire cloth is suitable for the screening of low moisture materials that are non-corrosive and non-abrasive, and that will not cause clogging or accumulation problems.



### RUBBER AND POLYURETHANE SCREEN MEDIA

Rubber and Polyurethane screen media is used for the screening of highly corrosive materials that require high abrasion resistance. They are more resistant to clogging and material accumulation than steel wire mesh.





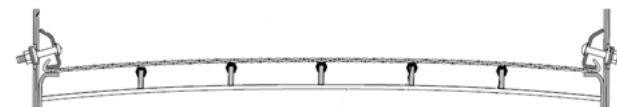
## WET SCREENING

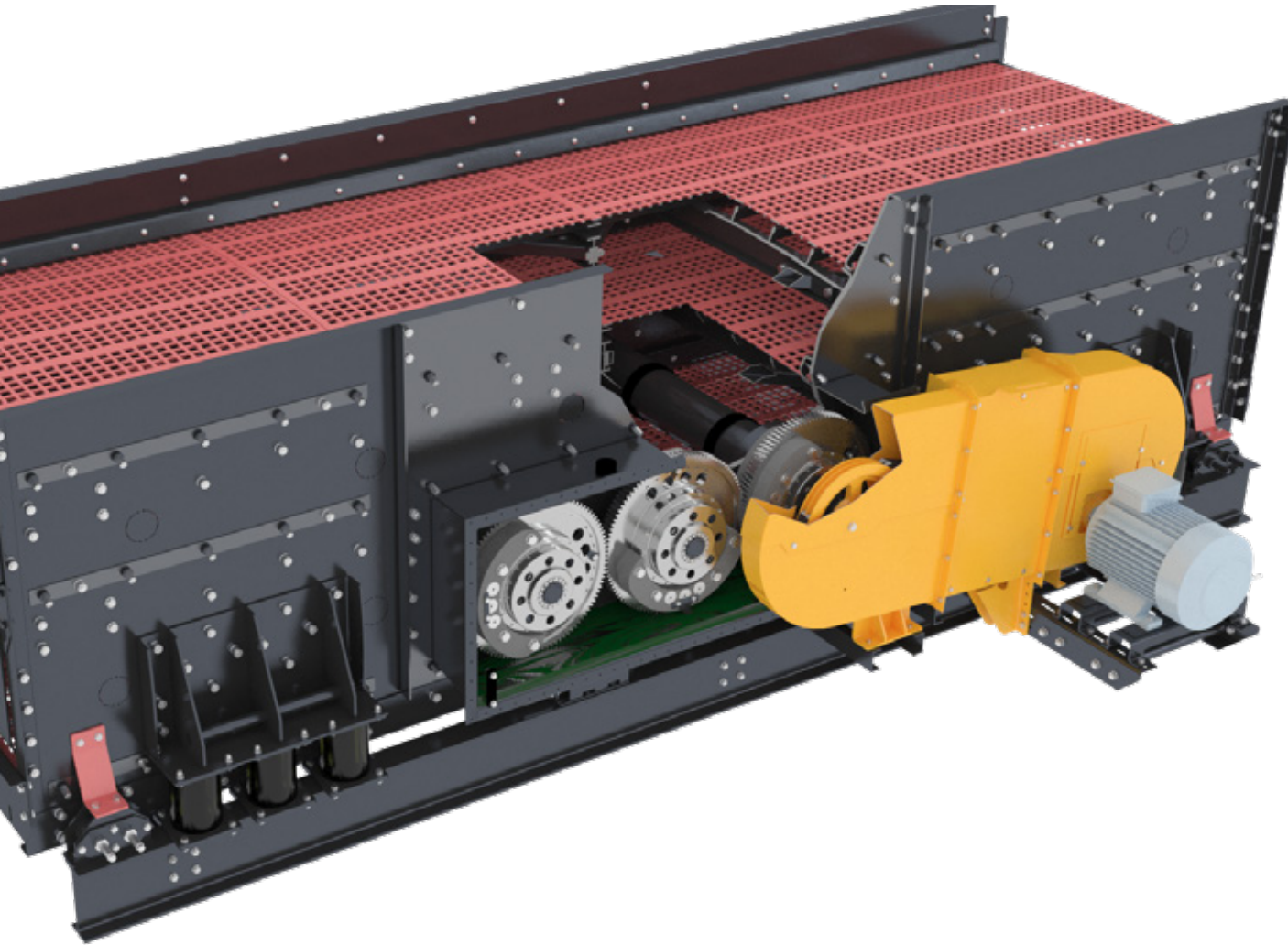
The washing system has been designed for complete reliability with;

- Replaceable nozzles,
- Inclinable perforated tubes that can adjust the angle of the jets,
- An adjustable valve per spray pipe,
- Sealing boots along the side plates,
- Perforated rubber tubes,

## WIRE CLOTH STRETCHING SYSTEM

Screen meshes are fastened to the screen body by means of screen clamps and sheet bars, after being well stretched at the edges by the tension sheet. Thus, any slackening of the screen meshes during the screening process is prevented.





## MOUNTING ARRANGEMENT

The mounting arrangement of MEKA Horizontal Screens is with coiled springs or with reinforced rubber springs depending on the application.

Coiled spring is used when there is no threat of corrosion or abrasion, when there are plenty of opportunities for maintenance and spring replacement, and when loss of time due to problems caused by spring fracture is not an issue.

Rubber spring should be used when there is a risk of corrosion or abrasion, when there are limited opportunities for maintenance and spring replacement, and where any halt in production will result in significant costs.

Additional benefits;

- Lower operation noise,
- Increase safety for operators
- Smoother shut down of the screen

## BEARINGS AND LUBRICATION

Self aligning taper roller bearings are used to withstand the high thrust and radial loads under which the drive shafts of the triple drive system operate. The roller bearing lubrication is carried out by oil lubrication in an oil bath, which reduces operating temperature for increased bearing life and results in low maintenance.



### TECHNICAL DATA

Models	Dimensions (ft)	Dimensions (mm)	Number of Decks	Weight (kg-approximate)	Weight (lbs-approximate)	Power (kW)	Power (HP)	Speed (RPM)
MHS 1848/2	6x16	1830x4877	2	9124	20115	30	40	675-875
MHS 1848/3	6x16	1830x4877	3	10874	23973	37	50	675-875
MHS 1860/2	6x20	1830x6069	2	9576	21111	30	40	675-875
MHS 1860/3	6x20	1830x6069	3	11326	24970	37	50	675-875
MHS 2148/2	7x16	2134x4877	2	10045	22145	37	50	675-875
MHS 2148/3	7x16	2134x4877	3	11795	26004	37	50	675-875
MHS 2160/2	7x20	2134x6069	2	10675	23534	37	50	675-875
MHS 2160/3	7x20	2134x6069	3	12425	27392	45	60	675-875
MHS 2448/2	8x16	2438x4877	2	10991	24231	37	50	675-875
MHS 2448/3	8x16	2438x4877	3	12741	28089	45	60	675-875
MHS 2460/2	8x20	2438x6069	2	11517	25391	37	50	675-875
MHS 2460/3	8x20	2438x6069	3	13267	29249	45	60	675-875



## MEKA IS A PROFESSIONAL SOLUTION

Meka has developed and manufactured crushing-screening machines, washing equipment, stationary and mobile crushing and screening plants, recycling plants for concrete and asphalt, and concrete batching plants for a great number of customers. Today, there are more than 2,000 Meka plants in over 65 countries on four continents contributing to the construction of a better world. Meka is preferred by global leaders such as Holcim, Lafarge, Cemex, and Heidelberg, and our brand is acknowledged as “the choice of professionals” worldwide.





# MEKA

CRUSHING  
SCREENING AND  
CONCRETE BATCHING  
TECHNOLOGIES

#### HEAD OFFICE

Camlica Mah. Anadolu Bulvari  
147. Sokak Atlas Is Merkezi  
No:5/9 Gimat ANKARA - TURKEY  
+90 312 397 91 33-34-35  
Fax: +90 312 397 10 34  
sales@mekaglobal.com

[www.mekaglobal.com](http://www.mekaglobal.com)