

**wima.**  
SCREENING MACHINES



**CLASSIFYING  
WASHING  
DEWATERING**



Sorting gravel  
by hand takes  
a lot of time -  
we have a better  
solution for you!

## Our advice:

WIMA Screening Machines  
are experts in classifying  
material with precision and  
can even work 24/7.



Screening  
Machines for  
the classification  
of gravel

---

# Classification and Dewatering with Screening Machines

## YOU WANT A PARTNER WITH MANY YEARS OF EXPERIENCE?

Today's WIMA team benefits from experience in Screening Machine construction since 1992. Process and design engineering, manufacturing, assembly and service are all part of our business.

## BEST MANUFACTURING QUALITY IS IMPORTANT TO YOU?

We pay attention to every detail of our products and supplier parts. This is how we guarantee the reliability and durability of our Screening Machines, even in very robust applications.

## YOU ARE LOOKING FOR A MACHINE THAT DIFFERS FROM THE STANDARD MODEL?

No problem! We replace your old Screening Machine in your factory. A team of experienced engineers will design a customized solution that fits into your existing steel construction. Time and cost intensive reconstruction works are not necessary anymore.

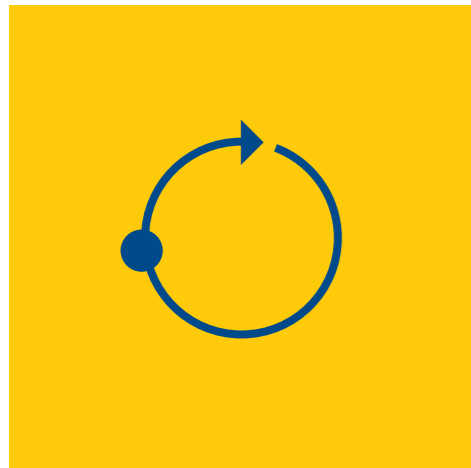
## DO YOU NEED A NEW SCREENING MACHINE?

WIMA Screening Machines are designed with single or multiple decks each offering up to 30m<sup>2</sup> of screen surface. They are available in 3 proven models as Circular, Linear and Elliptical Motion Vibrating Screens. Screening media of all established manufacturers can be used. Whether plastic, rubber, wire, finger screens, step grids or perforated plates, we have it all installed.



Elliptical Motion Vibrating Screen  
3,000 x 8,000 x 2

## Circular ...



Our standard machine for classifying gravel is a Circular Motion Vibrating Screen. This design is a simple, robust and cost-effective model for many applications. Depending on the requirements, the Screening Machine can be designed with single or multiple bearings.

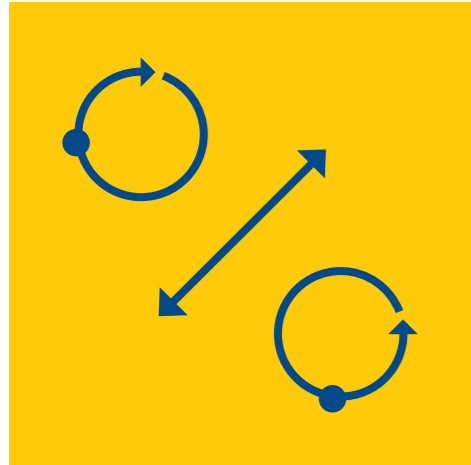


Circular Motion Vibrating Screen with double bearing

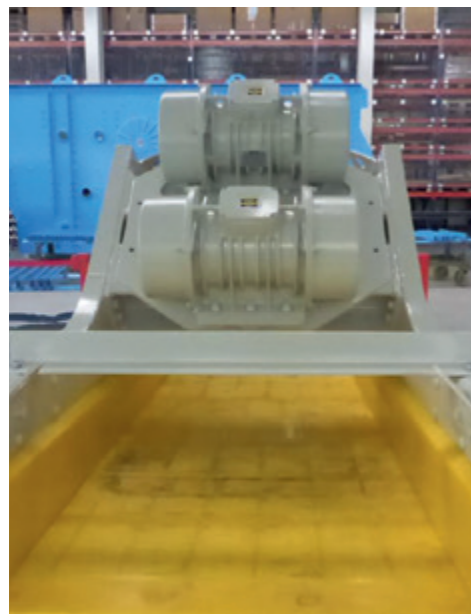


Circular Motion Vibrating Screen with single bearing (direct drive)

## ... Linear ...



In contrast to the Circular Motion Vibrating Screen, the counter-rotating unbalance exciters of the Linear Motion Vibrating Screen generate a directed oscillating movement. Since this type of vibration transports the material even without inclination of the machine, it is often used for dewatering tasks. Depending on the machine size and application, Linear Motion Vibrating Screens can be designed with vibration motors, double bearings or linear motion exciters.

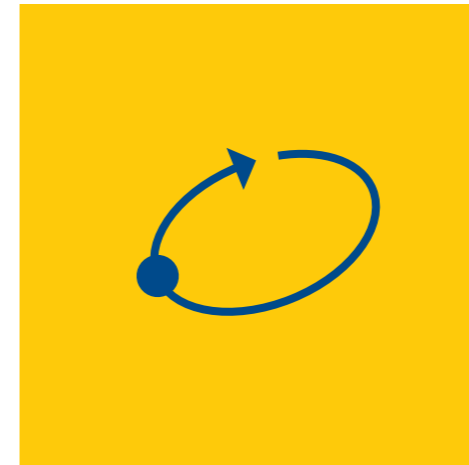


Linear Motion Vibrating Screen with vibration motors



Linear Motion Vibrating Screen with WIMA-double bearing

## ... Elliptical ...



The Elliptical Motion Vibrating Screen combines the advantages of the Circular and Linear Screening Machines. Shape and direction of oscillation are determined by the mass of the rotating unbalance weights as well as by the angular displacement between master and slave. Generally, a mechanical drive is installed. An electronically controlled variant is also available to handle frequently changing parameters.



Elliptical Motion Vibrating Screen with triple bearing 3,000 x 8,000 x 2

# Screen Housing

## MAKING IT FIT PRECISELY

All components are manufactured with the highest precision on our computer-controlled production facilities.

## MAKING IT HOLD PERFECTLY

All components are joined with secure and high-strength fasteners.

## MAKING IT SCREEN EFFICIENTLY

WIMA standard are offset longitudinal beams after every metre. This offers the great advantage of no continuous blind zones which ensures efficient screening.

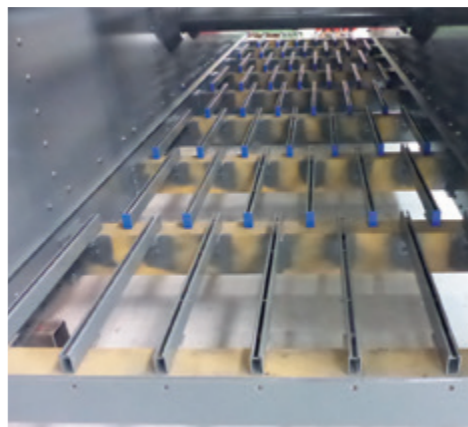
## MAKING THINGS EASIER ON SITE

Our wear components can be quickly and easily replaced.

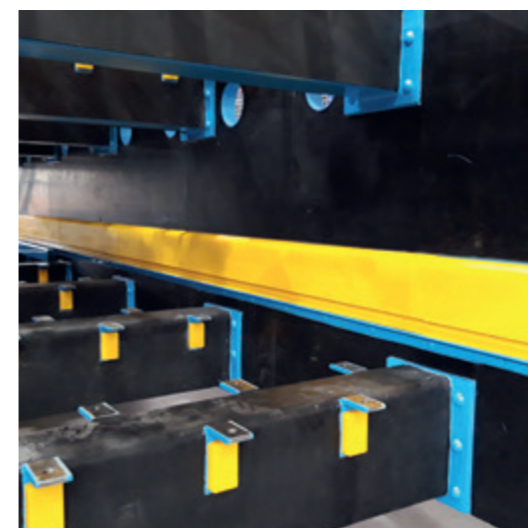
- Machine made components
- High-strength fasteners
- No blind zones
- Quick replacement of wear parts



Screening Machine on our WIMA test station



Offset longitudinal beams



Partial rubber coating of cross beams



Side protection strips (made of plastic, rubber or highly wear-resistant steel)

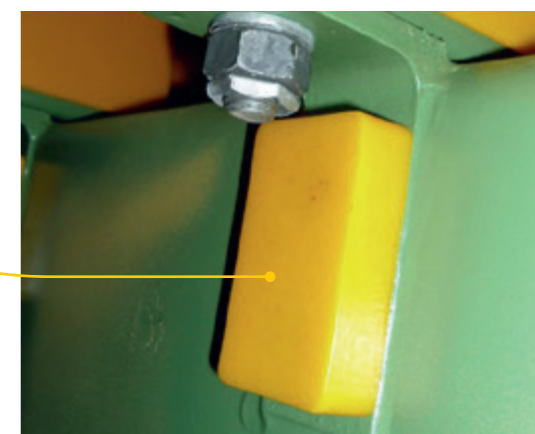


PU rivet protection inside the Screening Machine as wear protection

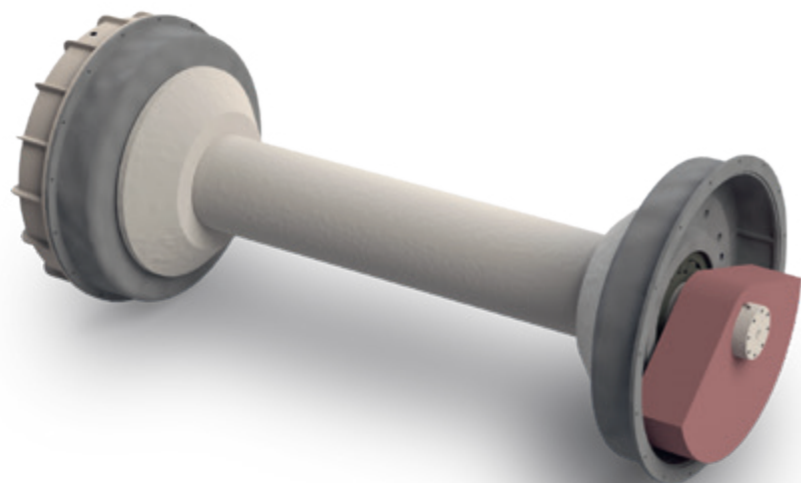
## Standard Wear and Corrosion Protection

### STANDARD EQUIPMENT INCLUDES:

- Partial rubber coating of cross beams
- Side protection strips (made of plastic, rubber or highly wear-resistant steel)
- Rivet protection for support angles of longitudinal beams
- Coating of min. 120 µm thickness and RAL colour of your choice



## Bearing



## Unbalance Exciter

The unbalance exciters consist of a solid shaft and the unbalance disks mounted on the sides. As a result, the unbalance is generated solely by the disks. Due to the external center of gravity of the unbalance disks, the total weight of the exciter is significantly reduced. Moreover, the weight reduction results in a lower load on the bearing and therefore an extension of the bearing service life.

- External centre of gravity for weight reduction of the exciter
- Weight reduction for reduced bearing load and longer service life

sectional view of unbalance exciter

## Oil Splash and Mist Lubrication

The bearing lubrication is an oil splash and mist lubrication. The oil is located in the two bearing housings. It is thrown up by the rotating unbalance disks and thus supplies the screen bearings with oil. There is no oil filling in the

shaft protection tube. It is impossible to overlubricate the bearings, they always receive the optimum amount of oil, and no oil units are required. As a result, maintenance and servicing costs are reduced.



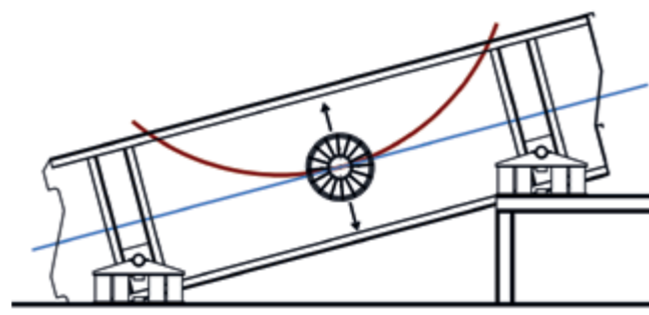
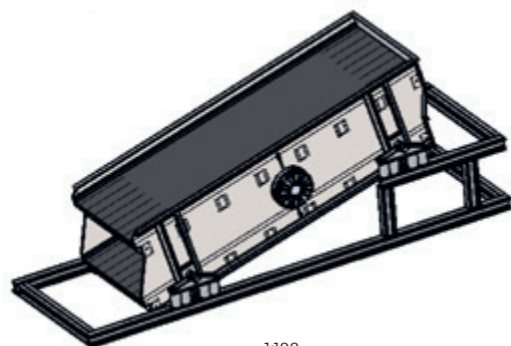
Screening Machine with single bearing ready for transport

## Multiple Bearings

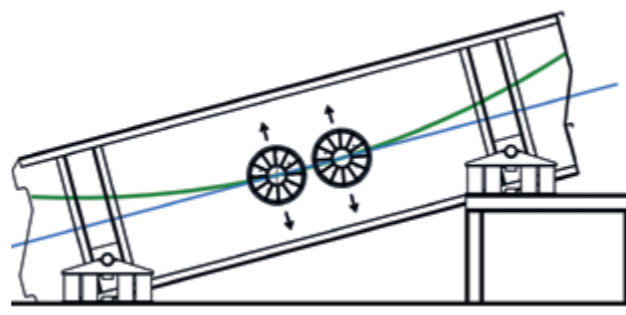
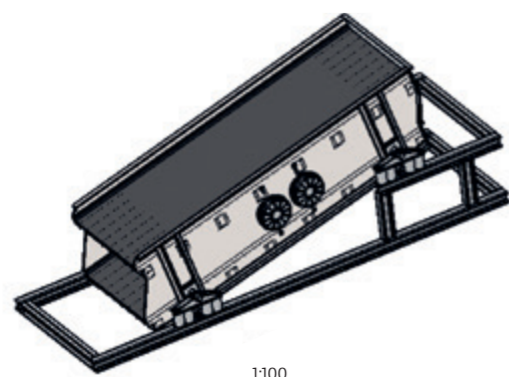
Multiple bearings are used when the purpose or weight of the machine requires it. Having multiple exciters results in much better force application to the sidewalls.

The load on the Screening Machine is lower and the service life is extended. Operation of the Screening Machine is smoother.

### Single Bearing



### Double Bearing



Screening Machine with Single Bearing



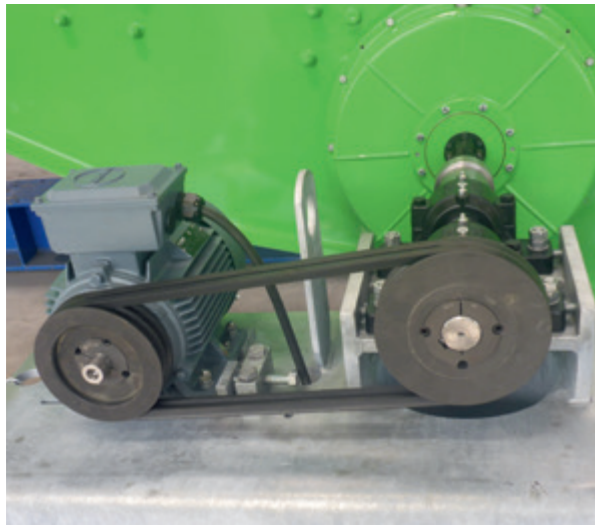
Screening Machine with Double Bearing



## Drive

The standard drive offered by WIMA is an electric motor with primary reduction gearing. Our motors are designed according to the application and the mains voltage situation.

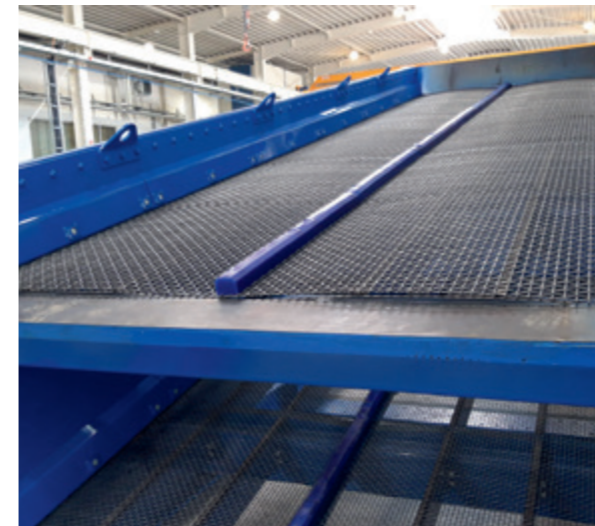
**Upon the customer's request, we also offer a direct drive with frequency converter.**



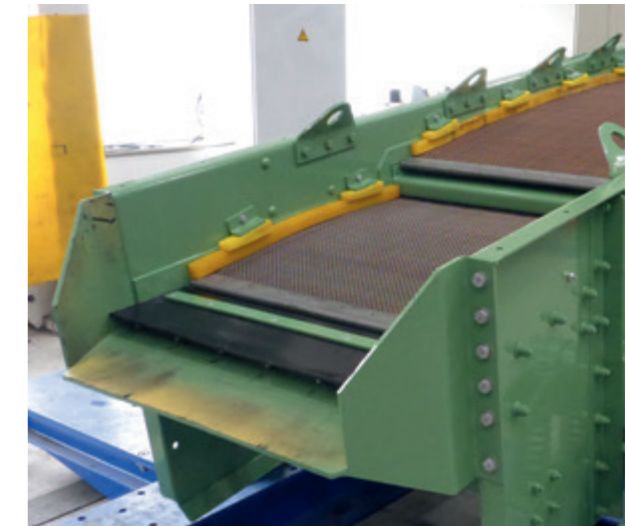
Drive with primary reduction gearing



Direct drive



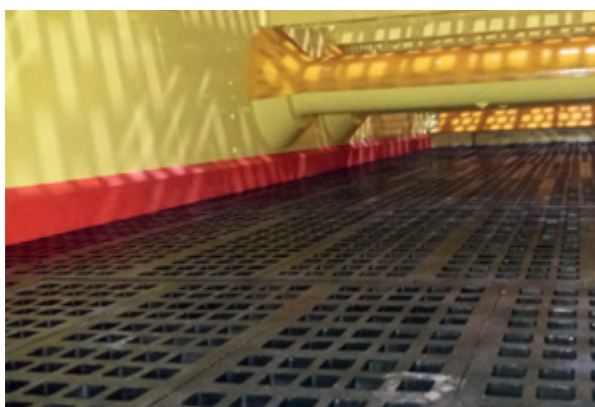
Cross tension screen lining



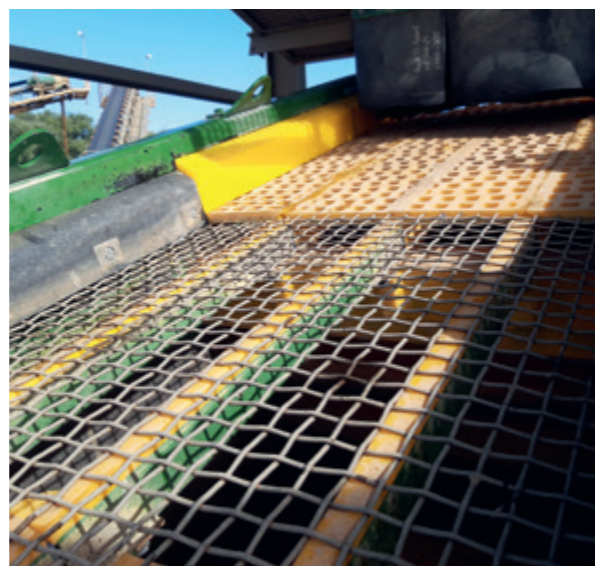
Longitudinal screen lining

## Screen Linings

Various systems from all established manufacturers are available. For certain applications, these systems can also be combined with each other.



Exchangeable screen lining (without screening material)



Exchangeable screen lining, first meter PU then wire



Finger screen lining



Step grids

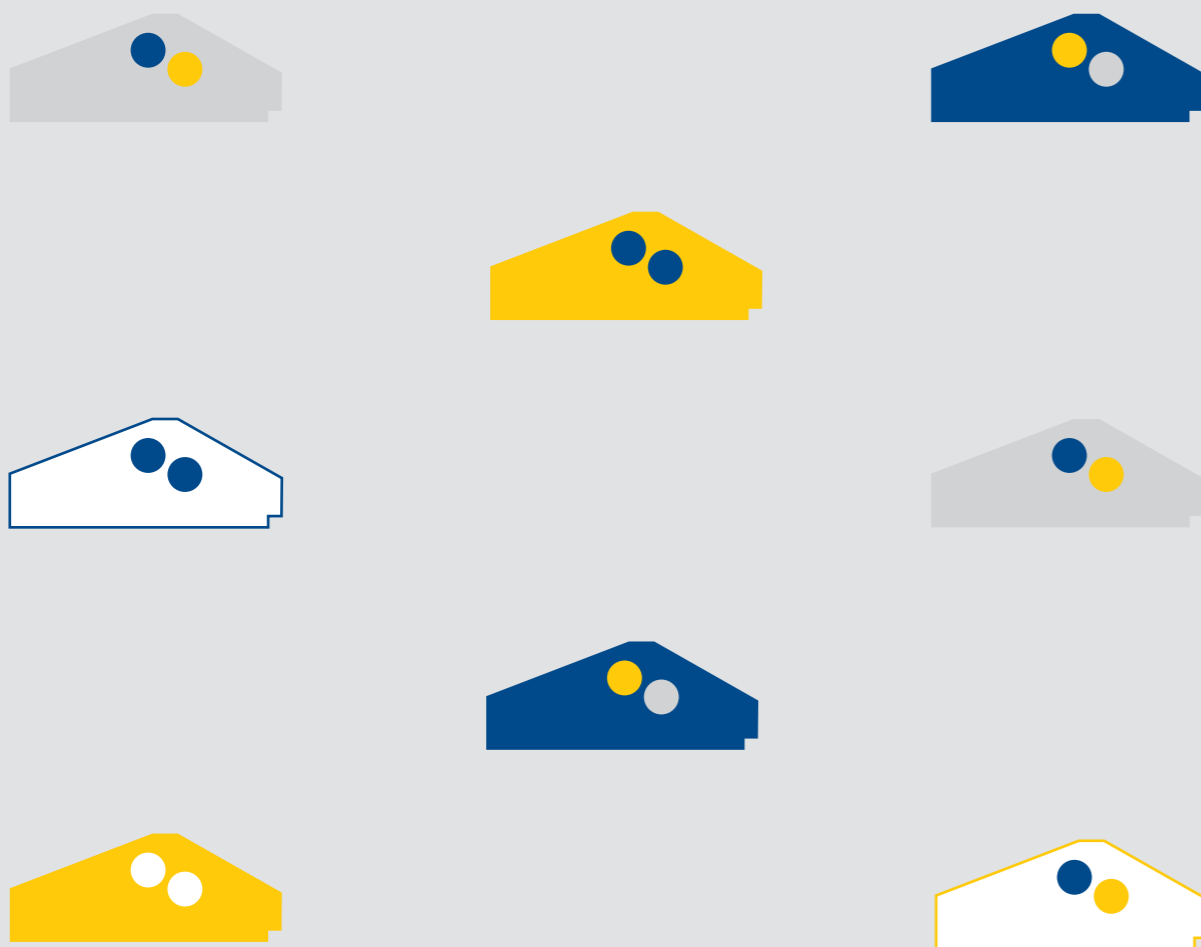


# Options



## Impact Field

- Supports material distribution across the width of the machine
- Absorbs impact energy of the feed material and protects the subsequent screen lining from premature wear



## Air Suspension

- To reduce vibrations in steel construction
- Integrated into the control system of the plant



WIMA Screening Machines can be equipped with air suspension instead of standard helical springs made of steel wire.



## Spraying System

Your WIMA Screening Machine can be equipped with a spraying system to wash the screening material.



The screening material accumulates in front of the water jet of the flat spray nozzles and is thus completely washed.

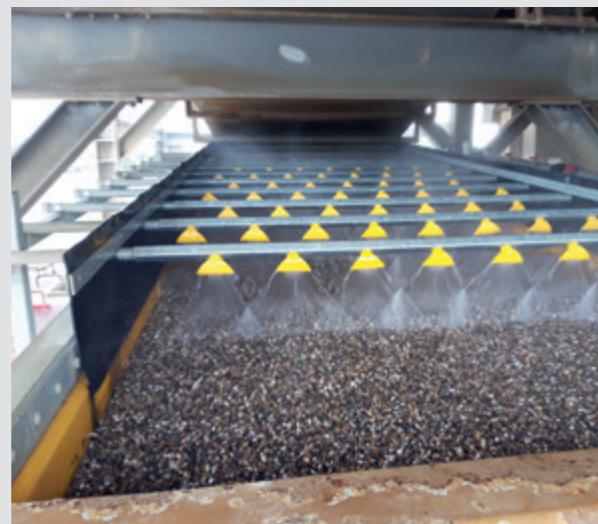


In lower and middle decks, shower pipes are provided with PU wear protection.

## Machine Monitoring

WIMA Screening Machines can be equipped with vibration, temperature and oil level sensors as well as bearing monitoring.

The galvanized spraying system is designed for individual adjustment of water flow in all pipes.



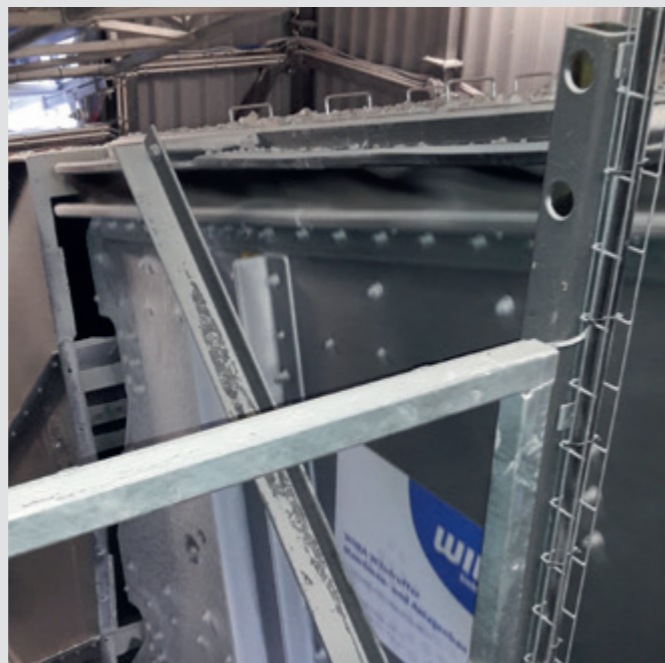
Spraying system with side mounted splash guards

## Dust Protection

By equipping our Screening Machines with dust protection covers, dust emissions can be reduced.



Dust protection with removable covers



## Optional Wear Protection



### Rubber coating of side walls

- rubber coating of side walls to protect the highly stressed machine parts

### PU rivet protection caps

### PU protection of cross beams

Optionally, cross beams are equipped with PU wear protection which can be exchanged quickly and easily.

### PU protection of longitudinal beams



PU = POLYURETHANE

## Customised Designs



In addition to standard dimensions, customised products are part of our daily business, e.g. to fit machines into your existing steel construction.



New Elliptical Screen (2,500 x 6,000 x 2) fitted into the existing steel construction

### Circular Motion Vibrating Screen

	width (mm)	length (mm)	drive power (kW)
1-Deck	900-3000	2000-8000	3 to 2x15
2-Deck	900-3000	2500-8000	4 to 2x30
2,5-Deck	1200-3000	4000-8000	11 to 2x30
3-Deck	1200-3000	4000-8000	11 to 3x30

### Linear Motion Vibrating Screen

	width (mm)	length (mm)	drive power (kW)
Dewatering screen 1 deck	600-3000	1500-8000	2x1.1 to 2x22
Dewatering screen 2 decks	1500-2700	5000-7000	2x7.5 to 2x22

### Elliptical Motion Vibrating Screen

	width (mm)	length (mm)	drive power (kW)
1-deck	1200-3000	4000-8000	2x5.5 bis 2x22
2-decks	1200-3000	4000-8000	2x5.5 bis 2x45
3-decks	1200-3000	4000-8000	2x7.5 bis 3x45

# The Complete System with WIMA



DENSITY SEPARATORS



SCREENING MACHINES



TWIN SHAFT LOG WASHERS

*wima.*



SAND TRAPS



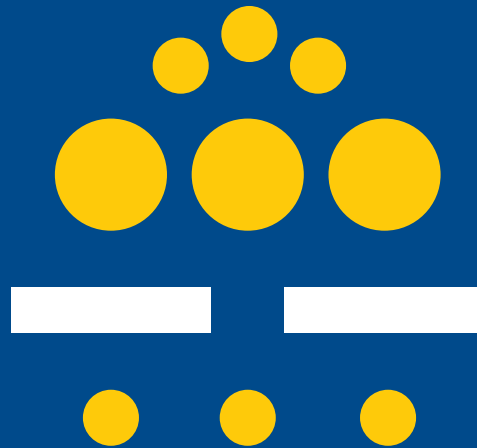
SERVICE



LAMELLA SEPARATORS



CONTRACT MANUFACTURING



WIMA Wilsdruffer Maschinen- und Anlagenbau GmbH  
Freiberger Straße 79 | 01723 Wilsdruff | GERMANY

Phone: +49 (35204) 659-0

E-Mail: [vertrieb@wima-maschinen.de](mailto:vertrieb@wima-maschinen.de)  
[www.wima-maschinen.de](http://www.wima-maschinen.de)

---

**wima.**