

# **Screening technology** SCREENING, CLASSIFYING, DEWATERING



## **Screening solutions from AVITEQ** PLANT ENGINEERING WITH A SPECIAL TOUCH

Entropy is a natural law. But the vibrating screens from AVITEQ counteract it and create order. They reliably separate small from large, heavy from light, solid from liquid, and mixtures of different shapes or materials as well. Depending on the bulk material, the desired task – dewatering, screening or classifying – and the available space, AVITEQ offers a variety of conventional solutions.

When it comes to difficult separation tasks or demanding work environments, our engineers have around 70 years of experience in the development of a customized solutions. Based on a database of over 1,000 bulk materials and results of numerous experimental tests, we know what is feasible and will quickly meet your objectives. The results are mainly found in the following sectors:

• Recycling, environment, glass

- Construction, quarries, pits, mining, cement
- Chemicals, plastics, pharmaceuticals
- Food, animal food
- Steel production, foundry technology



### LINEAR VIBRATING SCREENS

Linear motion vibrating screens differ from other screening systems mainly via their linear oscillating motion and compact design. Very low mounting heights can be achieved by means of horizontal installing. Due to the large selection of screen insert types, the linear vibrating screens from AViTEQ can be used almost universally. They are usually equipped with a maximum of 3 screen decks. We use unbalance motors, unbalance exciters or magnetic vibrators as drive.

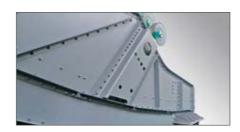
- length up to 9,000 mm
  width up to 4,000 mm
- flow rate up to 750 m<sup>3</sup>/h



### **GRIZZLY SCREENS**

Grizzly screens from AViTEQ are characterized by great robustness and durability. They serve as a discharge unit with an integrated screening function below the silo or bunker discharge, as feed units upstream of crushers, conveyor belts, screening, or for loading or simple screening. Depending on the task, the units are protected with wear plates at the inlet section and have two or three bar grate levels. Each bar grate insert is tapered in the conveying direction. This increases the gap, and prevents the bulk materials from becoming wedged:

length up to 6.000 mm
width up to 2,500 mm
flow rate up to 1,500 m<sup>3</sup>/h



**BANANA SCREENS** 

Banana screens are particularly suitable for the screening of large flow rates with a high separating cut. In most cases, they are individually designed to suit our customers' requirements. Banana screens are characterized by their very rugged construction and the banana-like arrangement of the screen panels, and they are typically driven by exciters.

length up to 10,800 mm
width up to 4,500 mm
flow rate up to 4,000 m<sup>3</sup>/h



### **DEWATERING SCREENS**

Dewatering screens are used to separate liquid-solid mixtures. The aim of the preliminary separation of liquids is to do away with subsequent processing stages of the bulk material. The most important example here is the energy savings in drying processes. Depending on the grain size and grain shape (round or crushed) up to 12% of residual moisture can be saved with dewatering screens from AViTEQ. For this purpose, the choice of screen inserts is crucial. Our dewatering screens are constructed according to requirements with single- or multi-deck designs.

length up to 5,000 mm
width up to 2,800 mm
flow rate up to 200 m<sup>3</sup>/h

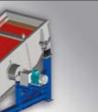
### CIRCULAR VIBRATING SCREENS

Circular vibrating screens classify coarsegrained bulk materials (5.0 to 300 mm), to provide protective screening and dewatering. The indirect excitation of the entire screening mesh moves the screening frame and generates a circular oscillation with low acceleration of screened material. Higher transport speeds can be adjusted by inclinating of the screening surface between 15° to 30°. Classification can be performed on a wet or dry basis. The circular-motion vibrating screen is powered via a propeller shaft by an electric motor. A simple and inexpensive alternative is vibrating with only one drive, which is mounted above the rigid screening frame.

### **VIBRATING SCREENS**

Vibrating screens from AViTEQ screen small amounts of oversize or undersize grain, separate impurities and foreign materials, or sort bulk materials into different grain sizes. And they do this with different fractions at the same time. The drives are unbalance motors, unbalance exciters or magnetic vibrators that provide linear vibration in the upper part of the rigid screen frame. They are usually built with an inclination. Extra-long perforated plates with stepped fields ("Stufix screens") additionally break up the screening bulk.

- length up to 9,000 mm
- width up to 4,000 mm
- flow rate up to 750 m<sup>3</sup>/h



These screens work with circular or elliptical paths of oscillation, and are used preferably for less abrasive screening materials with lower bulk density.

- length up to 9,000 mm
- width up to 4,000 mm
- flow rate up to 750 m<sup>3</sup>/h



## Made by AViTEQ IN DEMAND WORLDWIDE



We are there for you, around the world, and in over 30 countries locally. Talk to us, become a customer, and find out exactly what quality and service Made by AVITEQ means. We always keep our contact information up-to-date for you at:





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