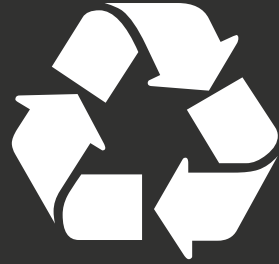




**JOEST**

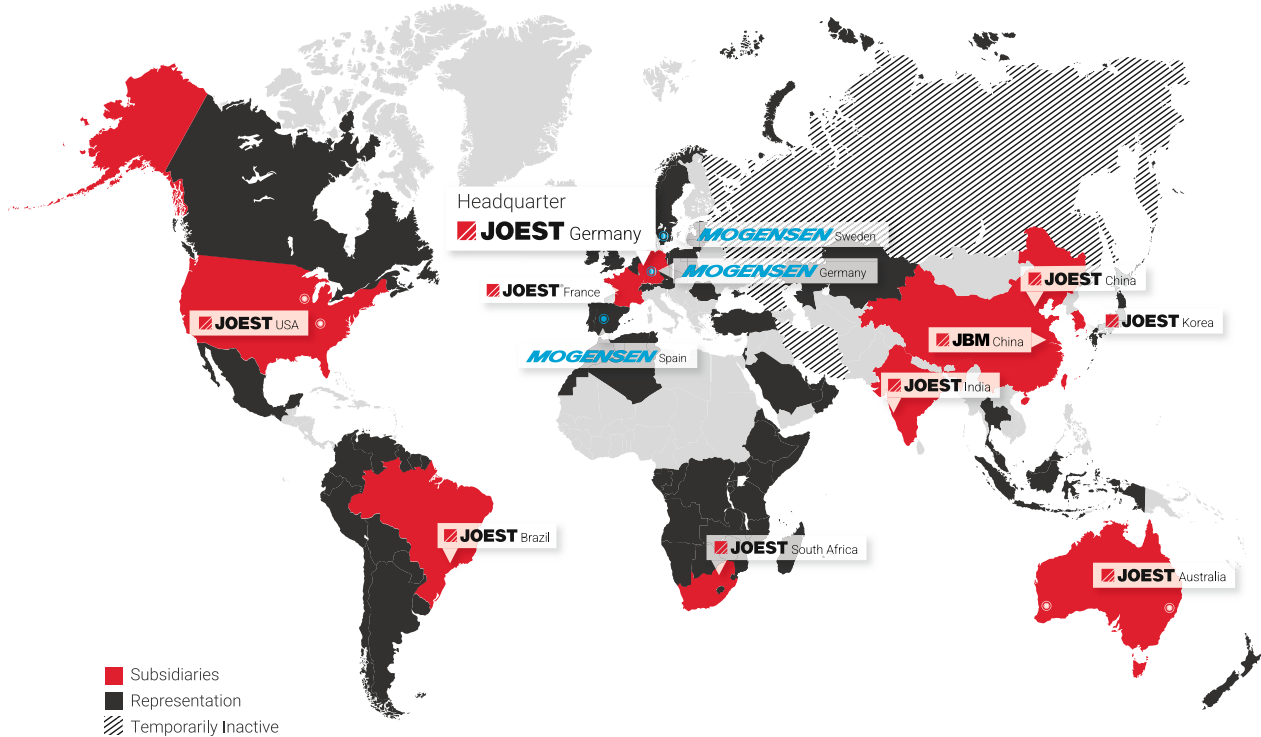
YOUR  
PARTNER  
FOR  
**RECYCLING**



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# **JOEST group**



Our Members:  **JOEST**  **MOGENSEN**

Our Brands:  **JVM**  **GOESSLING**

# WE BUILD SOLUTIONS.

Oscillation and classification technology is at the heart of our offering for the recycling industry. The products range from glass and plastic to slag and all kinds of metals. For products that are difficult to screen or convey, special machines are available, such as the Finger Cascade Screen TopSpin, the Flip-Flow Screen OSCILLA Classic or the Feeder Flex-Feed.

Our wide range of products also includes Feeders for

shredders, sorting and classification technology as well as the EXTROVIB Hopper Discharge System.

JOEST is a medium-sized company that operates with a high degree of flexibility. Fulfilling almost all customer requirements is made possible by our experience in the field of vibration technology and, above all, thanks to the creativity and innovative strength of our engineers.

**“By coming to us, clients get everything from a single source: From sales and manufacturing to commissioning and after sales service.”**

Dr. Marcus Wirtz, Managing Partner, JOEST group

# APPLICATIONS

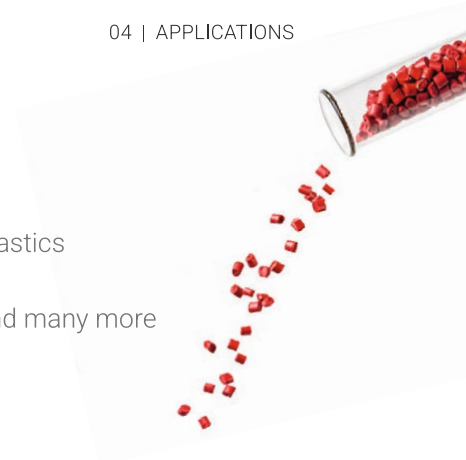
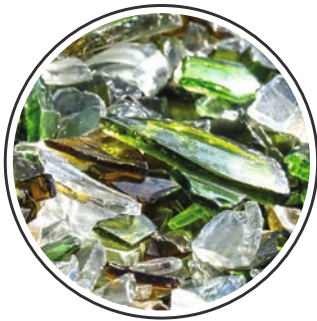
From pre-separation, sifting, separation and classification to conveying and dosing, there are no limits to the design of the treatment processes with JOEST products. By combining these technologically proven

products with upstream and downstream plant technology, a wide range of specific system solutions for a variety of applications is created.



## JOEST SOLUTIONS FOR

- ✓ Household and Industrial Waste
- ✓ Construction Rubble
- ✓ Electronic Waste
- ✓ Slag
- ✓ Shredder Waste
- ✓ Tire Recycling
- ✓ Glass
- ✓ ASR
- ✓ Plastics
- ✓ and many more



# CONVEYING & FEEDING

Discharging, conveying, feeding and dosing as well as hopper discharge systems for large and small capacities – JOEST vibratory troughs with in-house drive technology are available in both standard and individual versions.

Whether unbalance motors, exciters or magnetic vibrators: JOEST drive technology enables the selection of the best drive system for every task with optimal drive type and drive size.



HOPPER DISCHARGE

SYSTEM **EXTROVIB**





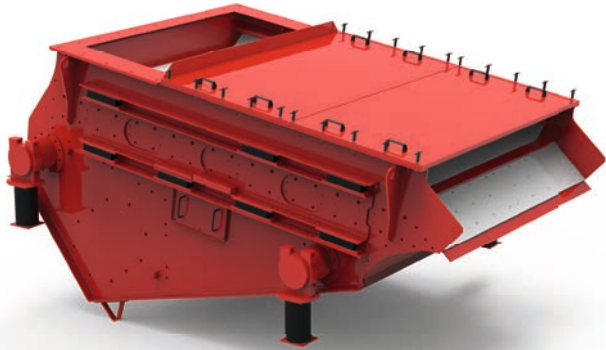
## VIBRATING FEEDER

- ✓ Wear resistant
- ✓ Long service life
- ✓ Client customizable

## VIBRATING FEEDER FOR EQUIPMENT FEED

- ✓ High availability
- ✓ Good material distribution across the entire width
- ✓ High level of standardization with many additional options





- ✓ Prevention of adhesion and caking
- ✓ Less effort required to remove adhesions and caking
- ✓ Closed design
- ✓ Loosening of the material
- ✓ Very suitable for clay and sticky material

VIBRATING FEEDER

FLEX-FEED



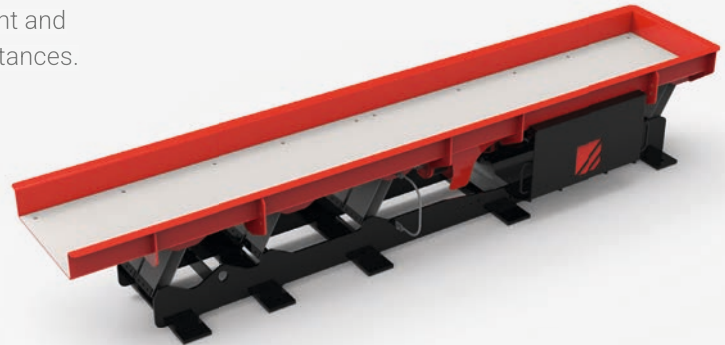


RESONANCE

## VIBRATING FEEDER

With and without mass compensation for efficient and product-friendly conveying over short or long distances.

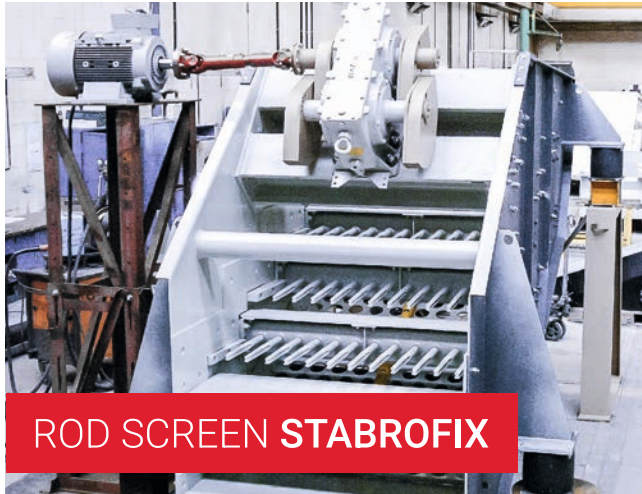
- ✓ Gentle material transport
- ✓ Low dynamic loads
- ✓ High availability



# PRE-CLASSIFICATION

The screen decks and machine design of the JOEST Coarse Separators feature robust designs, in accordance with the feed grain size and feed quantity. This

ensures the maximum possible throughput and extremely durable machines.



## FINGER CASCADE SCREEN

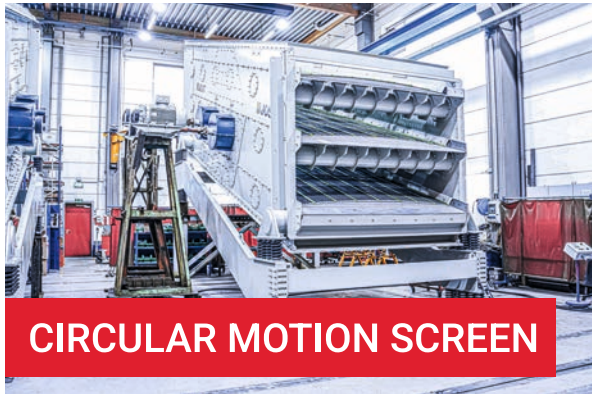
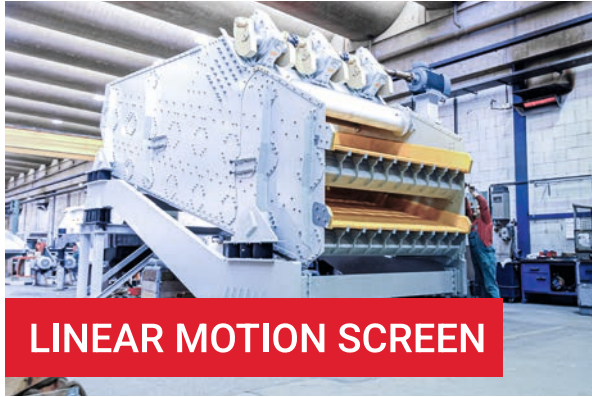
### TOPSPIN

- ✓ Optimal product circulation
- ✓ Almost clog free screening
- ✓ Screening of challenging material



## COARSE SEPARATOR **GRIZZLY**

- ✓ Disturbance-free operation due to conically opening screen
- ✓ Low maintenance design
- ✓ Self-cleaning screen deck



# CONVENTIONAL CLASSIFICATION

Screening is one of the most important steps in material processing and determines the quality of the output. For a wide variety of tasks, the right screen type must be selected in combination with the optimal screen deck. Starting with pre-screening all the way to the fine fraction.

**Circular Motion Screens** are the most commonly used machines. The focus here is on virtually clog-free screening and high throughputs.

**Linear Motion Screens** can be designed as a flat deck or as a „banana“ type with one or more screen deck inclinations. High throughput rates in combination with high-precision screening are the main features here.

# FLIP FLOW SCREENS OSCILLA FAMILY

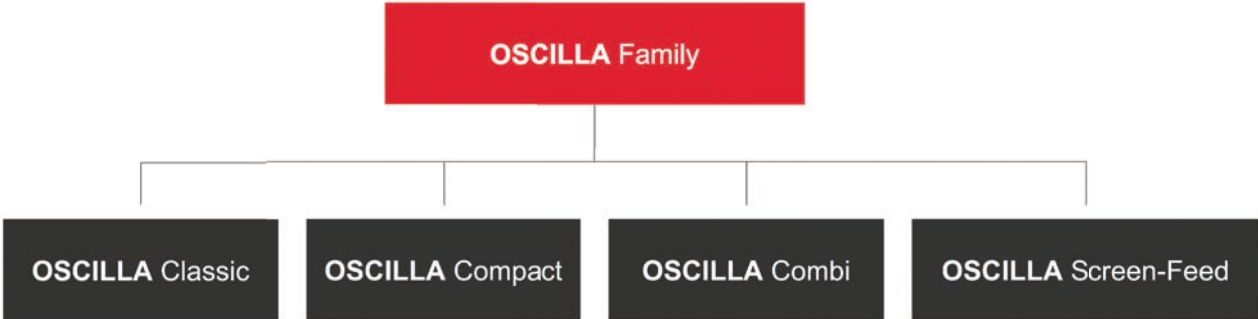
For the screening of **challenging** and **inhomogeneous** material, a special screening technology is required. It works almost clog-free and loosens the material so that fine-grain separation is possible.

Conventional screens are typically not capable of this performance – which is why **JOEST Flip-Flow Screens from the OSCILLA Family** are used here. Typical separation cuts range from 0.5 to 40 mm.

- ✓ Best material loosening and thus higher screening efficiency due to acceleration values > 50 G
- ✓ Energy efficient due to optimized oscillating weight
- ✓ In-house drive production

- ✓ Reduced maintenance costs and high availability due to boltless clamped screen mat design and good accessibility of the spring elements
- ✓ Fully bolted design





*Classic Flip-Flow Screen*

*Compact Flip-Flow Screen*

*Combined Flip-Flow Screen*

*Flip-Flow Screen-Feeder*





## OSCILLA CLASSIC

For the **OSCILLA Classic**, the base frame is set in a circular motion. This excites the inner frame, resulting in a superimposed oscillation. The material is hereby accelerated at very high rates which promotes material loosening and transport on the screen deck.

## OSCILLA COMPACT

The **OSCILLA Compact** is designed with a slider crank drive. In this case, the inner frame is excited, and the machine's outer frame serves as a counter-weight.



## OSCILLA COMBI

The **OSCILLA Combi** is a combination of the OSCILLA Classic flip-flow screen deck with any type of conventional screen deck. These are used to lighten the load on the flip-flow screen deck, to limit the maximum grain size or to create an additional separating cut.



## OSCILLA SCREEN-FEED

In the case of the **OSCILLA Screen-Feed**, a feeding unit is combined with an OSCILLA screen deck to ensure that downstream sorting and classifying technology can work more efficiently and with a higher precision, even with challenging materials.

# SIFTING, SORTING & SEPARATING

The **J-Flow** is a compact gravity classifier with an internal air circuit that separates heavy materials from light materials in the airflow. The J-Flow is used for post-cleaning of metal fractions (ASR preparation) in order to separate residual films, textiles, lint, dust, foam, polystyrene and other lightweight parts. The aim of this screening is to ensure that almost no metals are lost.

- ✓ Modular system with optional feeder or screen
- ✓ Continuously adjustable air volume
- ✓ Low geometrical footprint and implementation costs



**J-FLOW** AIR SEPARATOR

## VIBRATION AIR SEPARATOR **AIR VIBE**

The **JOEST AirVibe** is mainly used for dry sorting of coarse bulk materials in the recycling industry with a grainsizes of up to 300 mm. The feed material is sorted into the desired material groups based on different solid densities, shapes and surface areas.

Due to the combination of crossflow screening and ballistic sorting, very high precision cuts are achievable.



- ✓ Can be used for coarse material up to 300 mm
- ✓ Modular design
- ✓ Compact, easy-to-integrate all-in-one solution

## ZIG-ZAG AIR SEPARATOR

The **JOEST Zig-Zag Air Separator** leads the material through an airtight feeding device into the zig-zag-shaped classifier channel. Here, the light-weight fraction is separated from the heavy fraction using the multi-crossflow sifting method.

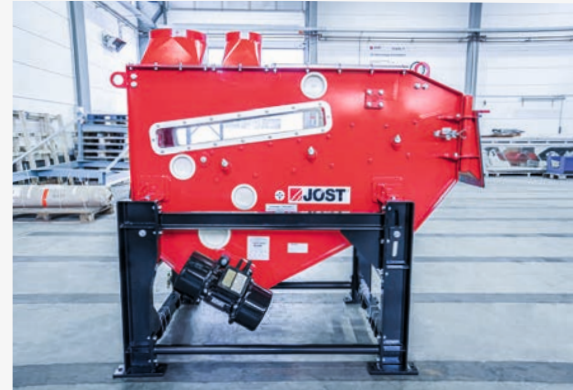
The light-weight particles are carried along by the air flow. The heavy particles fall through the airflow and are discharged at the base of the classifier.

- ✓ High precision due to multi-stage crossflow screening
- ✓ No exhaust air due to recirculation of process air
- ✓ Maintenance hatches ensure quick cleaning of the classifier



The **Separation Table** is suitable for all surface-dry, free-flowing bulk materials with a grain size of up to approx. 10 mm. The material is spread across the entire width of the machine via an oscillating product infeed. Due to the combined effect of the vibrating table and the air flow through the sieve plate from below, the friction between the particles is largely eliminated.

- ✓ Very high precision
- ✓ Consistent operating conditions and ease of use
- ✓ Good accessibility and easy cleaning



**SEPARATION TABLE**

# AUTOMATION TECHNOLOGY

## CONTROLS & REGULATION

- ✓ PLC by Siemens and Allen-Bradley
- ✓ Intuitive operation thanks to industrial HMI solutions
- ✓ Individual recipe management based on expert knowledge
- ✓ Modern drive technology and regulation procedures
- ✓ High process safety and traceability
- ✓ Control and monitoring of third-party systems

## INDUSTRY 4.0

- ✓ Holistic monitoring of machine and plant parameters
- ✓ Remote maintenance and IoT Gateways
- ✓ Dashboard analysis and remote access
- ✓ Integration to higher order controllers or ERP-systems





## AUTOMATION TECHNOLOGY

- ✓ State of the art electronic design with EPLAN P8
- ✓ Switch systems for extreme conditions (e.g. ATEX) or country specific standards (e.g. UL)
- ✓ Verified and validated security technology according to DIN EN ISO 13849-1 & 2
- ✓ Individual software services based on a proven standard
- ✓ Worldwide commissioning and training

MADE TO  
MEASURE

We offer worldwide commissioning and training

with our own personnel that is well familiar

with the JOEST product portfolio.

## SYSTEM SOLUTIONS

- Holistic approach to processes and logistic
- Reduction of interfaces for clients
- Cross-functional collaboration between different establishments

## STANDARDIZATION

- Proven plant concepts for various applications
- Predefined and proven SPS operation
- Matrix of widths and heights for commonly used machines

# PRODUCT PORTFOLIO

## SCREENING

- Dosing Screens
- Dewatering Screens
- Flip-Flow Screens OSCILLA Family
  - OSCILLA Classic
  - OSCILLA Combi
  - OSCILLA Screen-Feed
- Finger Cascade Screen Topspin
- GRIZZLY
- Coarse Separators
- Circular Motion Screens
- Linear Motion Screens
- Magnetic Drive Screens
- Linear Flip-Flow Screens
- Finger Rod Screen GRECCO
- Finger Rod Screen Strabrofix
- Finger Rod Screen Stabroflex
- MOGENSEN MSizer
  - MSizer Compact
  - MSizer Extend
  - MSizer Giant

## FEEDING & CONVEYING

- Hopper Discharge Feeders
- Hopper Discharge System ExtroVib
- Hopper Discharge Devices
- Small Dosing Feeders
- Vibrating Trough Type Feeders
- Vibrating Tube Type Feeders
- OSCILLA Flex-Feed
- Spiral Conveyors
- Resonance Conveyors
  - One-Mass-System
  - Mass compensated
  - Two-Mass-System
- MOGENSEN Feeders

## SORTING & SEPARATING

- Zig-Zag Air Separator
- Cone Classifiers
- Separation Tables
- Vibration Air Separator AirVibe
- J-Flow Air Separator
- MOGENSEN GSort R

## DOSING

- Small Screens
- Small Dosing Feeders





A member of the

 **JOEST group**

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