Product overview
Washing.
Drying.
Cooling.
Screening.
Sorting.
**Tumbler Screening Machines TSM / tsi**
- Classification/safety screening/de-dusting of bulk materials of all industry branches
- Especially suitable for fine screening and precise classifications up to 6 fractions
- Modular system
- Diameter 600 mm to 2,900 mm
- Mild steel and stainless steel
- ATEX type certificate
- Wide range of screen cleaning systems available

**Rectangular Tumbler Screening Machines QTS**
- Mode of operation is identical to round Tumbler Screening Machines
- Classification up to 5 fractions
- Modular System
- Dimensions QTS 200 and QTS 240 for transport on a trailer or container
- Mild steel
- Clamping screens

**Vibratory Screening Machines VRS**
- Screening machines of the VRS series are suitable for the economical processing of almost all bulk solids with fine to medium and coarse grains.
- Versatile use
- Dry- and wet screening
- Classification up to 4 fractions
- Protective- and control screening
- Dedusting
- Dewatering
Screening Machines

**Safety Screening Machines D**
- Type series VIBRALL with 2 motors
- Diameter 500 to 1,800 mm
- Mild steel and stainless steel
- ATEX type certificate
- Centric in- and outlet for installation in pipework

**Gyratory Screening Machines ARSM**
- For dry bulk materials of all kind
- Screening areas from 2 m² to 12.5 m² per deck
- ATEX type certificate
- Feed rates up to 350 m³/h possible

**Circular Motion Screens SMO-K**
- Circular Motion Screen that operates according to the ejection principle
- Dry- and wet screening
- Separating cuts from medium fine to rough
- Robust and maintenance friendly design
- Mild steel and stainless steel
**Pharmaceutical Screening Machines**
- Available with tumbler or vibratory screens
- Gentle product treatment
- Individual adaptation to the application
- Large variety of options
- Complete pharmaceutical documentation

**Screening Plants**
- Supply of package units
- Individual integration of screening machines into the process
- Engineering and consulting services
Sizers

**Mogensen Sizer**
- Mogensen Sizer in multi-deck design for all types of bulk material
- Screening dry products at high output rates
- Up to 7 fractions
- Operating widths of 0.5 to 3 metres
- Compact, dust-tight design

**Fine Sizer**
- Screening of products which are difficult to screen from 0.1 mm
- Direct excitation of the screen mesh
- Minimum transmission of dynamic forces
- Variable adjustment of amplitude, frequency and inclination
- Low drive rating

**Combination Sizer**
- For screenings with a very wide grain distribution, from fine particles to coarse pieces of material
- The special solution for the exact separating cut, also for bulk materials which are difficult to screen
- Bar systems in the upper area and screen mesh in the lower area

**Circular and Linear Vibratory Screens**
- Single-deck and double-deck version
- Various machine widths and screen lengths
- For “sharp” screening
- Compact design
- Dustproof design
Bar Sizer
- Absolutely reliable for coarse separation
- Extremely robust design
- Guaranteed long-term, trouble-free operation, with no costs for power or maintenance
- Operating widths of 1 to 5 metres
- Easy charging by wheel loader

Vibratory Bar Sizer
- Non-clogging screening of heavily contaminated bulk materials
- Design widths of 0.5 to 2.5 metres and lengths up to 7 metres
- Robust, infinitely-variable screening bar attachments

MSort AF, AK
- Fine sorting from 1 mm, with the highest accuracy (type AK)
- Sorting of dry bulk materials in grain sizes ranging between 2-30 mm
- Sorting of glass, PET, minerals, sea and rock salt by colour
- All-metal detection, optional

MSort AL
- Sorting of dry bulk materials in grain sizes ranging between 8-60 mm, performance up to 50 t/h
- Sorting of flat glass in colours and CSP, performance up to 30 t/h
Optoelectronic and X-ray Sorting Systems

**MSort AX**
- Sorting of contaminated recycling glass, grain sizes ranging between 6-60 mm
- CSP and sorting of colours, performance up to 25 t/h
- All-metal detection, optional

**MSort AS**
- Sorting of bulk material in grain sizes ranging between 15-80 mm
- Sorting of minerals in colours, performance up to 120 t/h
- Designed for rugged conditions in recycling and mining

**MSort AT**
- Design as for MSort AS with double-sided viewing for the detection of coadunate minerals
- For higher efficiency

**MSort AG**
- Sorting of bulk material in grain sizes ranging between 80-250 mm
- Sorting of minerals in colours, performance up to 300 t/h
- Designed for rugged conditions in recycling and mining

**MSort AH**
- Design as for MSort AG with double-sided viewing for the detection of coadunate minerals
- For higher efficiency

**MSort AQ**
- Sorting of bulk material in grain sizes ranging between 10-40 mm
- Material detection by X-ray transmission method
- Sorting of lead crystal and glass ceramic, performance exceeding 25 t/h
- Sorting of plastics from recycling glass
**Densimetric Tables Type M**
- Separation of products with a high density and grain sizes up to 80 mm
- Special robust design to separate crushed minerals or metals
- Possibility to install an extractor hood and ducts to fully or partially re-circulate the air

**Densimetric Tables Type FM**
- Separation of low-density products and medium particle sizes
- Robust design with wear parts for severe operating conditions

**Compact Sand Washing Units**
- Hydro cyclone sand washing machines
- Higher performance to obtain top-quality sand
- Treatment and cleaning of dirty washing water

**Sand Removal Units**
- Recycling of bentonite sludge recovered in special foundation and tunnelling jobs
- Separation of the sand carried when extracting to allow bentonite sludge to be reused
Thickeners

- Treatment of the sludge generated in the washing processes of sand, sugar beets, sugar cane, etc.
- Recovery of water for its recirculation
- Flocculant preparation systems and automatic dosage

Fine Particle Recovery Unit

- Recovery of fine sand by hydro cyclones
- Optional dewatering unit
- Complete range of sand modules: industrial sand, fine sand and clay
- Production increase by recovery and mist of fine sands
- Decrease of the rejection amount in the thickening process and protection of the water treatment plants
- Elevation of water for evacuation by gravity

Vibrating Distributors Type TMS

- Lateral feed and distribution crossways to 1, 2 or 3 machines
- Capacities up to 300 t/h

Dewatering Units

- Elimination of water in excess in the materials after washing units to obtain stronger pulp concentration
- For sand outputs from 20 to 300 t/h
# Fluidised Bed Plants/Rolling Bed Driers/Granulators

## Vibration Driers/Coolers WS-V-T/K
- Wide range of applications for bulk and powders in all branches
- Two-mass-resonance systems
- Free oscillating systems
- Food, chemicals, fertilizer, minerals, plastics

## Fluidised Bed Driers/Coolers with Heat Exchangers WS-HF-T/K
- Maximum throughput in combination with minimum energy consumption
- Indirect heat transfer by immersed heat exchanger bundles
- Salt and soda production, potato granules, animal fodder

## Static Fluidised Bed Driers/Coolers WS-T/K
- For bulk material and powders with a regular granulometry

## Rolling Bed Drier WB-T
- For low temperature drying and effective waste heat recovery and utilization
- Wood chips, green waste cuttings
- Organic residuals
- Sugar beet pulp and bagasse
- Alternative fuels

## Granulator for Filter Cake
- Pelletising of thixotropic filter cake for effective drying
- Titanium dioxide, hydroxides
Fluidised Bed Plants/Drums for Heated Calcination

**Dispersion Drier FL-T**
- Concurrent flow principle
- Gentle short time drying
- For powders, flours and fibres
- For starches, potato granules, sodium sulphate, grass fibre, chitosan, plastic sheet shred

**Fluidised Bed Spray Granulators WS-GT**
- Drying of suspensions and solutions
- Production of free flowing granules and agglomerates
- For yeast, fine chemicals, special fertilizers, industrial effluents, urea granulation

**Suspension and Paste Drier WS-IB-T**
- Drying of suspensions, pastes, solutions and filter cakes
- Production of ultrafine dry powder, free of agglomerates
- For pigments, hydroxides, silicon dioxide, chemical effluents

**Drums for Direct Heated Calcination**
- High temperature applications
- Directly heated by means of gas or oil burners
- Calcination of clay, zeolites, silicate powder, cement, etc.
**Drum Driers TTD, TT, TT-TR**
- MOZER system
- Single, Double, Triple shell driers
- Minerals, sand, slag, ores, coal, clay and bentonite
- Chemicals and fertilizer
- Organic residuals, waste recycling and secondary fuel, rejects
- Special model for groceries like cocoa, rice, sugar, etc.

**Drum Driers/Coolers TK and TK+**
- MOZER system
- For gravel, silica sand, natural sand, limestone
- TK for an optimum of energy efficiency with air cooling
- TK+ for highest energy efficiency by evaporation cooling

**Drying and Cleaning Drums TRH**
- MOZER system
- Drying and cleaning of contaminated limestone
- Replacement of limestone washing plants

**Drying and Label Removing of glass**
- Label and mud remover for sorting of glass
- Processing of used glass and recycling
Drum Driers and Coolers

**Drum Driers and Coolers**

**Grain Heater**
- Thermal treatment of granules and pellets
- Batch-wise operation
- Mineral granules, proppants etc.

**Indirect Rotary Drum Cooler Type RKT**
- High temperature applications 800-1,200 °C
- Product flow inside the pipes
- Heat recovery from and for calcination processes
- Titanium dioxide, magnesium hydroxide, aluminium hydroxide

**Indirect Rotary Drum Cooler Type KTR**
- For low temperature applications 100-500 °C
- Product flow outside the air or water cooled tubes
- Cooling of gypsum, slag powder

**Drums for Indirectly Heated Calcination**
- Indirect tube bundle, optional heat exchangers
- Indirectly heated by means of gas or oil burners
- Indirectly heated by means of electricity
- Zeolites, silicate powder, titanium dioxide
**Batch Drier WS-CA**
- For granulation and agglomeration
- Design according to GMP/FDA regulations
- Top-spray, bottom-spray, side-spray
- With or without inert gas circuit
- Explosion-proof design
- Including qualification for FDA validation

**“WURSTER”-Coater WS-T-C**
- Coating of particles and pellets

**Continuous Fluid Bed Drier WS-T**
- Design according to GMP/FDA regulations
- With or without inert gas circuit
- Explosion-proof design
- Including qualification for FDA validation
- For pharmaceutical raw materials, groceries, fine chemicals

**Vibration Batch Drier WS-V-CT**
- For smaller quantities of solids
- For very difficult products regarding fluidisation
- Gelatine and alginate capsules
- Especially for long drying times

**CD Dryer®**
- Contact dryer for suspensions and solutions
- For pigments, salt solutions, chemical effluents, hydroxide slurries, ceramics, gelatin, brewery wastewater, etc.
- Compact dimensions and special efficiency
- Steam heated
Test facility

Oftentimes, only testing reveals the optimum solution. Our technical centre is at your disposal for carrying out tests. Series of tests can be carried out on both, long- and short-decked screening machines or on circular sieves.

Sizer F1516

- Control screening is effected by a customized F1516

Sizer G2034 for feed pellets and flakes

- A compact Mogensen screen for size separations of various products
- Separation of products with a grain size ranging between 0.1 and 20 mm
- Powered by a single vibrator for elliptical motion
- Width: 0.5/1/1.5/2 metres
- From 1 to maximum 5 decks

Mogensen Sizer type SEL

- Mogensen long-decked screen for large capacities and high screening efficiency
- Separation of products with a grain size ranging between 0.1 and 30 mm
- Powered by two vibrating motors for linear motion
- Width: 1/1.5/2 metres
- From 1 to maximum 5 decks
**General Engineering**

Together with you we develop the concept, we realize your ideas and implement your know-how. We support you during all phases of the project:

- Conception
- Basic engineering
- Detail engineering
- Delivery
- Transport
- Erection
- Start-up
- After Sales
- Optimization
- From package units to turnkey projects
- Co-responsibility for large-scale-projects

We co-operate with your approved partners – for cost-effective, fast and unbureaucratic solutions.

**Production of complete turn-key plants**

- Minerals
- Fertilizer
- Foodstuff
- Fine chemicals
- Processing glass for recycling

**Control Systems and Visualization**

- For new installations
- For existing installations
- Various control systems available
Engineering/Plant Construction

Screening Plants
- For coarse materials
- For fine materials
- Safety screening
- Difficult challenges can be met by combining our technologies

Packing Plants
- Inline packing plants
- Rotating packing plants
- Paper and plastic bags
- Big bag filling

Breaking Plants/Grind Plants
- For preparing further processing steps
- Hard and robust design
- Minerals, recycling material

Service
- Spare parts
- Repair and maintenance
- Modernization, retrofit and service of existing systems
- Process consulting
- Energetic consulting

Test Centre and Laboratories
- For experimental investigations, product design and demonstrations
- All technologies of drying, cooling and screening of the portfolio
- Semi-scaled sizes for best scale up
- Contract screening and drying