

Sieving & Milling & Mixing





VIBRO ENERGY SIEVES

There are occasions where you need to make sure that there are no impurities in your material and other occasions where you need to classify your product into different fractions. We have a full range of Vibrating Energy Separators and rotating inline security screeners for dry and wet separation.

Technical details:

Capacities from I kg/h to 50 t/h.

INLINE MILLING

Milling of wet or dry ingredients and products is possible to do in a contained way, minimizing dust and product exposure by using our in-line cone mills.

Technical details:

The mills can be connected with split valves or placed directly in-line for active transport through the equipment with vacuum transport systems. Capacities from I kg/h to 100 t/h.

INLINE SIEVING

The feed product falls into a sifting chamber where impurities are separated by centrifugal acceleration. Used for inline police-screening or to remove lumps.

Technical details:

Wide variety of options available, 360° discharge, user friendly design and easy to clean. Capacities up to 100 t/h are possible.



HAMMER MILLS

Typical applications are: coarse grinding and chopping of dry material, de-lumping of agglomerated wet or dry material, pulverizing, solid blending, granulating compacted materials. Size reduction for median PSD range 50 -150 microns.

Technical details:

Capacities from 50 g to 100 t/h. A wide range of blades and screens is available. cGMP, CIP/WIP, ATEX and product containment system design available.



GRAVIMETRIC CONTINUOUS BLENDERS

Gravimetric blenders consist of one to eight ingredient feeders and a microprocessorbased controller. They are designed to continuously meter raw materials accurately into a central station hopper.

Technical details:

One to eight ingredient feeders, from 9 kg/h to 13.607 kg/h.

Drying & Dewatering



FILTER PRESS

For solid/liquid separation using the principle of pressure drive, provided by a slurry pump. Basic components are the frame, filter plate pack, closing device, and optional additional features.

Technical details:

Sizes 250×250 to $2,600 \times 2,600$ mm and filtration pressures up to 60 bar. Available from simple manual to fully automated equipment designs. Maximum degree of automation, also with extremely sticky filter cake.



DECANTER CENTRIFUGE

A decanter centrifuge separates solid materials from liquids in slurry and is therefore used in several processing industries. Constant separation results, even at fluctuations in the volumetric flow, the process conditions, or the product characteristics.

Technical details:

Absolute pressures from 0 to 8 bar, temperatures from -90° C to +200° C. CIP cleaning possible.



DYNAMIC CROSS FLOW FILTER

The DCF system works with overlapping rotating ceramic filter discs, which generate a turbulent flow of the feed towards the filter surface and minimize clogging and cake building on the filter.

Technical details:

High filtration throughput and handling also high viscous products. Filtration ratings from 7 nm to 2 um. Suitable for SIP and filtration in dead-end mode.



FLUID BED DRYERS

Fluid Bed Dryers can be used to process all kinds of granular products with a wide range of grain sizes and are used for example drying, cooling, baking, pasteurizing and much more (food, minerals, chemicals, etc.)

Technical details:

The particles can be dried to > 90% dry solids (DS), the exhaust gas flow is extremely low (approximately 100-200 m3/h).



BELL DRYERS

The Krauss-Maffei helix dryer achieves efficient mixing and drying of friable bulk goods by using the helix mixer, a top-driven, central mixer.

Technical details:

Materials of construction are Stainless steel, Nickel-based alloys or special materials and standard sizes range between 2 and 4500 l in both mobile and stationary design.

Charging & Emptying



BIG BAG & SMALL SACK STATIONS

Stations are used to automatically empty Big Bags and small sacks in a dust-free and safe way. Filling Stations are used to automatically fill Big Bags.

Technical details:

Stations in different materials, for different demands and different designs (hygienic version) for tailor made solutions are available.



VOLUMETRIC FEEDERS

Volumetric feeding for accurate metering of bulk solids is achieved using a spiral helix, rotary valve, rotating agitator, vibrating tray or cylindrical stator.

Technical details: Feed Rates up to 45 m3. Robust, easy cleaning, high feed accuracy and low maintenance costs are some advantages.



GRAVIMETRIC FEEDERS

Gravimetric feeders using load cells for a high and safe feeding accuracy. They are used for powders, granules, fibres, flavours, pigments and liquids.

Technical details: Feed rates from 0,2 dm3. Robust, easy cleaning, high feed accuracy and low maintenance costs are some advantages.



BELT FEEDER

The Belt Feeder is excellent for very gentle conveying of different products for applications like flakes, agglomerated or free flowing products.

Technical details:

Throughput from 0,01-80 m3/h. Possible to change the belt in a few minutes without a tool.



VIBRO FEEDER

Vibro feeder for transport of coarse and fragile products. Applications for large capacity range, fragile and abrasive products, light and coarse material and fibres.

Technical details:

Capacity range from 1 to 10.000 l/h. No rotating parts, gentle operation, easy cleaning and no component wear.

Transport / Filter / Service



VACUUM CONVEYING TECHNOLOGY

Simple and modular package vacuum conveying systems for dust free conveying of powders, granules and most bulk solids.

Technical details:

Throughputs up to 6800 kg/h, cleaning in place are possible.





PRESSURE CONVEYING TECHNOLOGY

A continuous product conveying technology for all kind of different powders with low investments costs, simple design and easily extending possibilities.

Technical details:

2-200 kW blowers available.

CARTRIDGE DEPTH FILTER LENTRICULAR SHEETS & BAG FILTERS

Prefiltration or final filtration liquid filter provide a high efficiency removal of spoilage organisms and yeast removal providing economic stabilization of the product.

Technical details:

Capture of particles is throughout the depth of the media, larger particles being retained in the outer prefiltration layers, whilst the inner graded density media provides accurately defined retention under wide extremes of operating conditions. Micron rating from 0, 2μ m and up. Material: PP, GF, PES, Cellulose and more.



COMPONENTS

All kinds of rotary, discharge, split butterfly and diverter valves plus slide gates are available.

Technical details:

Different materials and special valves (hygienic, heavy duty and blowing valves).



TEST UNITS

When making the decision on what powder processing equipment to use, we always recomment to perform tests to evaluate the technology as well as to find out capacities and needs for conceptual changes in the system. Therefore we have at Thurne Teknik several rental machines for making trials on your site. Contact our offices for more information about rental proposals and schedules.

TEST FACILITIES

All our main suppliers offer professional test centres where the customer has the possibility to send a sample or even join the test for all kinds of products and demands.



Some equipment may not be available from Thurne Teknik in certain geographical areas.

SOLUTIONS WITH PROCESS UNDERSTANDING.

As we are continuously improving our product program, we can today offer an enlarged delivery program suiting all different kinds of applications within the Food Industry. Our equipment covers the processes of feeding and emptying, transport, sieving and milling, mixing and drying.

All equipment is designed for the various applications in the Food Industry and all our partners within this field are dedicated to the customers' high demands on quality.

We are proud to present our partners below:





coperion confidence through partnership



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