

Machines, Modules and Conveyor Technology.

Highest efficiency and profitability.



Separate Raw Materials.

With machines and modules from TST!

More than 20 years ago, the Bavarian family business Trenso-Technik had already recognized the fundamental challenge for the future: conserve resources, reclaim valuable raw materials and save energy in doing so. The result of setting this goal: pioneering solutions by Trenso-Technik to separate and sort bulk materials.

TST offers a variety of screening machines, separating tables, wind sifters, dosing systems and conveyor technologies. As single machines in modules or as complete systems, Trenso-Technik offers a solid basis for a high-yield, valuable investment in the future.

Sorting and separation of bulk goods or pre-shredded products proceeds on the basis of a special dry separation process.

The separation and sorting machines are part of this process:

- Wind sifters
- Separating tables
- and screening machines

The advantages of this technology are today more important than ever. We continue to set new standards, whether with the zigzag sifter or the wind sifter, or with the use of various separating tables or screening machines. We do it in a way that saves energy, is environmentally friendly and does not produce waste water. Of course, we can also offer the corresponding trough chain conveyors, bucket conveyors, conveying units, elevators or cyclones to go along with all our products.

We ensure value is maintained through durability and reliability, with high-quality materials, precision workmanship and modern technology. Trenso-Technik can connect with any desired technology supplier for the integration of complementary machine technology.

Existing processing plants can also be optimized through the addition of TST technology, sustainably increasing value creation as well as the quality of the end product.

Modules:

The modules offered can include any complementary system in addition to the core TST components. These include shredding and grinding technology, magnet and eddy current separation as well as inductive and sensor-protected sorting technologies.

Upon request, all components can be directed by specially developed control technology and software.



Screening technology featuring density sorting, conveyor technology and steel construction



Separating table unit feat. conveyor technology and steel construction



Zigzag sifter unit feat. conveyor technology and steel construction



Machines:

We constantly develop our separating and sorting machines in order to fulfill specific customer requirements and to guarantee optimum efficiency, separation purity and durability.

Core components are screening technology, wind sifting technology and density sorting technology. Each process is individually and optimally tailored to the relevant materials and specific customer requirements.

It is only in this way that the ideal result of up to 100% material purity can be guaranteed.

Density sorting technology



Separating table TTS

Wind sifting technology



Cross-flow sifter QSS



Zigzag sifter ZZS

Screening technology



Screening machine SIK



Vibrating screen SSM

Dispensing/conveyor technology



Screw conveyors, dosing tanks

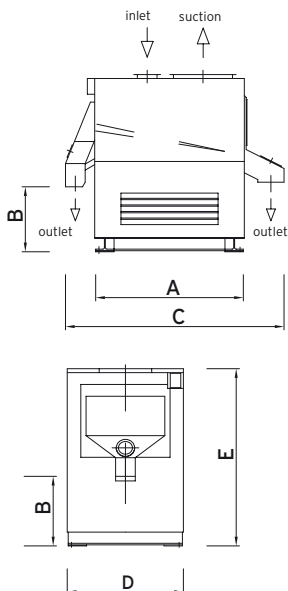
TTS Separating Table

For the separation of bulk goods of varying specific weights.

Machine:

The machine separates varying bulk materials according to their specific weight and shape. Products must be able to be poured, and dampness should not exceed a certain limit.

Take advantage of our technology center, which can be used for practical experiments as a basis for selecting the required machine size.



The machine is available in four sizes. Upon request, up to three machines can be assembled in a common base frame.

Functionality:

The feed material flows through the inlet to the distributor device and onto the working screen, which is driven by an excenter. The inclination of the screen is adjustable. Air is driven through the feed material by an exhaust ventilator fitted under the screen. Thus, the lighter parts are fluidized and separated from the heavier parts.

Depending on the movement and angle of the screen as well as the air flow rate, the heavier parts are transported upwards towards the heavy fraction outlet and the lighter parts downwards to the light fraction outlet. The strength of the exhaust ventilator can be controlled electronically.

Waste air can be cleaned by a filter system downstream and can be fed back into the machine (recirculating air operation).

Type	A	B	C	D	E
TTS 300/1000/1	1125	535	1560	570	1350
TTS 300/1000/2	1125	535	1560	1110	1350
TTS 300/1000/3	1125	535	1560	1675	1350
TTS 600/1000/1	1125	500	1680	870	1350
TTS 600/1000/2	1125	500	1680	1710	1350
TTS 600/1000/3	1125	500	1680	2560	1350
TTS 900/1000/1	1125	500	1680	1170	1350
TTS 900/1000/2	1125	500	1680	2310	1350
TTS 900/1000/3	1125	500	1680	3460	1350
TTS 900/1200/1	1325	530	1900	1170	1380

Extract from our product range, further models are available upon request.

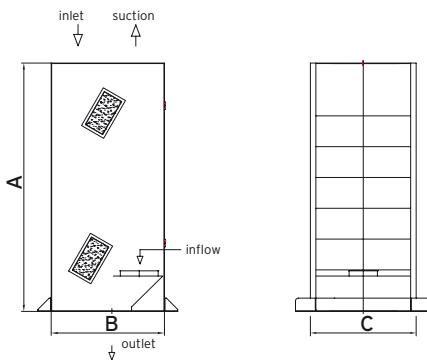
ZZS Wind Sifter

For the separation of bulk materials of varying specific weight.

Machine:

The machine separates varying bulk materials according to their specific weight, shape and size.

Take advantage of our technology center, which can be used for practical experiments as a basis for selecting the required machine size.



The machine is available in various heights, widths and depths.

Functionality:

The feed material is fed into the zigzag channel and distributed through the entire cross-section of the sorting channel. The sorting air generated by the fan flows through the sorter from the bottom to the top; this causes the material to be flooded by air and separated.

The product must cross through the air flow at every bend in the sorting channel and subsequently collides against the opposite wall of the sorter. This causes the material with a higher density to drop to the bottom in the sorting channel due to centrifugal force. Lightweight material is sucked out of the sorting channel via the upwards-directed air flow.

The depth of the air sifter can be adjusted; as a result, it can be operated in extract air or in air recirculation mode. The extracted air is cleaned in a downstream filtration system or by a cyclone filter.

Type	A	B	C
ZZS 115/400/6	1495	700	500
ZZS 115/500/6	1495	700	600
ZZS 180/600/4	1620	1085	720
ZZS 180/800/4	1620	1085	920
ZZS 250/1000/3	1600	1360	1120
ZZS 250/1200/3	1600	1360	1320

Extract from our product range, further models are available upon request.

QSS Airstream separator

For the separation of bulk material of varying specific weights.



Machine:

The machine separates coarse bulk material according to its shape and size.

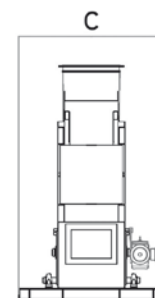
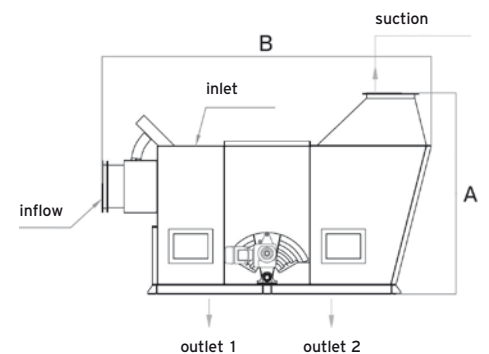
Take advantage of our technology center, which can be used for practical experiments as a basis for selecting the required machine size.

Functionality:

The feed material is fed into the cross-flow sifter's chute and distributed across the sifter's entire cross-section. The sifting air generated by the fan flows through the sifter horizontally across the whole length of the machine. This causes the material to be diverted and thus separated according to its specific weight.

Material with a higher density sinks more quickly as a result of gravity and is fed out via outlet 1. Medium-weight products are diverted by a horizontally-directed airstream and fed out via outlet 2. Lightweight material is picked up by the airstream and separated by suction. Cross-cuts are controlled by air dampers, the positioning of the inflow shaft and the amount of air.

The wind sifter can be operated in extract air or in air recirculation mode. The extracted air is cleaned in a downstream filtration system or by a cyclone filter.



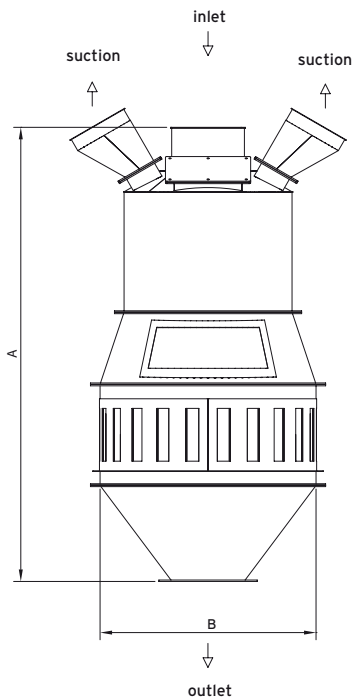
The machine is available in various widths and lengths.

Type	A	B	C
QSS 450 - 500	2100	3450	1300
QSS 450 - 750	2100	3450	1550
QSS 450 - 1000	2100	3450	1800
QSS 450 - 1250	2100	3450	2050
QSS 450 - 1500	2100	3450	2300

Extract from our product range, further models are available upon request.

KSS Wind Sifter

For the separation of bulk materials of varying specific weights.



Machine:

The machine is used primarily for dedusting of various bulk materials.

Take advantage of our technology center, which can be used for practical experiments as a basis for selecting the required machine size.

The machine is available in various widths and lengths.

Functionality:

The feed material is fed into the inlet channel and distributed evenly by the distribution cone through the entire cross-section. The sifting air, which is sucked out from around the sifter and from underneath, flows through the feed material, flushing through it and separating it.

Material with a higher density sinks more quickly as a result of gravity. Lightweight material is sucked out of the separating channel via the air flow, which is directed upwards. Separation of the product is controlled by dampers and suction holes.

The wind sifter can be operated in extract air or in air recirculation mode. The extracted air is cleaned in a downstream filtration system or by a cyclone filter.

Type	A	B
KSS 450	1450	450
KSS 900	1890	900
KSS 1350	2230	1350
KSS 1800	2680	1800

Extract from our product range, further models are available upon request.



SIK and SIS Screening Machines

For the screening of granular and farinaceous products.

Functionality of the SIK:

The material to be screened is guided into a free-swinging screening box via a distribution device. This is hung on wires from a stable steel frame and is dustproof.

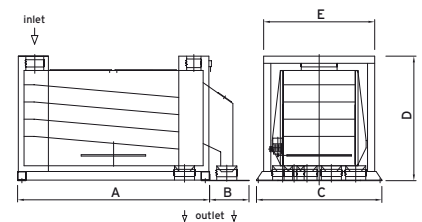
Screens are built into screening boxes and can either be removed from above or pulled out from the front. The covering ranges from coarse perforated sheets to finely-woven mesh. Rubber-ball cleaning ensures that the screen surface remains open. The screening box is set to horizontally vibrate through an electrical drive.

Depending on the material, screen angle, number of strokes and speed are freely variable, such that throughput is optimized and an exact classification of materials is achieved. A feature of the screener is its external outlets that allow easy access.

Additionally, the screen can be connected to an aspiration system. Wind sifters and magnets are available to be directly added on to the unit.

Type	A	B	C	D	E
SIK 500 / 1200-2	1830		1250	1360	1050
SIK 750 / 1200-2	1830		1500	1360	1300
SIK 750 / 1800-2	2080	550	1500	1360	1300
SIK 750 / 1800-4	2080	550	1500	1740	1300
SIK 1000 / 1800-2	2080	550	1750	1360	1550
SIK 1000 / 1800-4	2080	550	1750	1740	1550
SIK 1000 / 2400-2	2680	550	1750	1360	1550
SIK 1000 / 2400-4	2680	550	1750	1740	1550
SIK 1500 / 2400-2	2680	550	2250	1360	2050
SIK 1500 / 2400-4	2680	550	2250	1740	2050
SIK 2000 / 3000-2	3280	550	2745	1420	2540
SIK 2000 / 3000-4	3280	580	2745	1780	2540

Extract from our product range, further models are available upon request.



The machine is available in various widths and lengths. According to requirement, 1 to 4 screen layers are built in.



SIK and SIS Machines:

The machines sort bulk materials into various grain sizes through their variable screens. Products must be able to be poured and dampness should not exceed a certain limit.

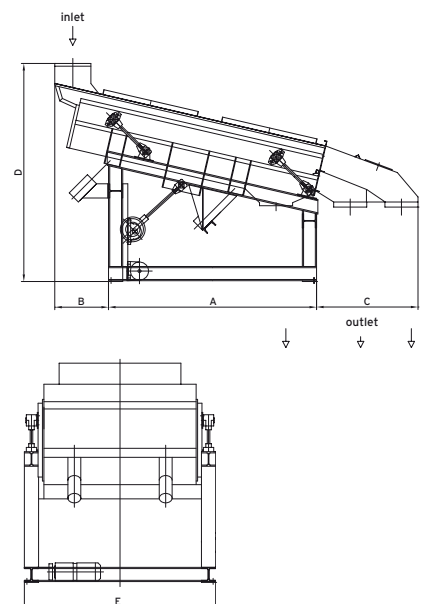
Take advantage of our technology center, which can be used for practical experiments as a basis for selecting the required machine size.

Functionality of the SIS:

The material to be screened is fed into the screening box via a distribution device. This is hung with flexible joints from a stable steel frame and is dustproof.

Screens are built into screening boxes and can either be removed from above or pulled out from the front. The covering ranges from coarse perforated sheets to finely-woven mesh. Rubber-ball cleaning ensures that the screen surface remains open. The screening box is driven to vibrate diagonally by an excenter. Depending on the material, number of strokes and speed are freely variable, such that throughput is optimized and an exact classification of materials is achieved. A feature of the screener is its external outlets that allow easy access.

Additionally, the screen can be connected to an aspiration system. Wind sifters and magnets are available to be directly added on to the unit.



The machine is available in various widths and lengths.

Type	A	B	C	D	E
SIS 500/1200/1	1120	200	350	1290	880
SIS 1000/2400/1	2050	1000	550	1920	1385
SIS 1500/2400/1	2050	1000	550	1920	1885
SIS 1500/2400/2	2050	1000	550	2170	1885
SIS 2000/2400/1	2050	1000	550	1920	2385
SIS 2000/2400/2	2050	1000	550	2170	2385

Extract from our product range, further models are available upon request.

Conveying and Dosing Technology

Mechanical transport processes

For horizontal, diagonal or vertical transport. Our services include everything from individual consultation, design and parts production to complete installation and startup. Our extensive experience, in particular with difficult bulk materials, guarantees optimized and efficient system technology.

Bucket Elevators



For the vertical transport of bulk materials in powder or granular form. Bucket elevators are available in normal or stainless steel construction.

Special models:

- Stainless steel and plastic bucket design
- Various belt designs
- Various wear-protection solutions as required
- Electronic monitoring
- Design as per ATEX guidelines

Screw Conveyors



For the horizontal or diagonal transport of bulk materials in powder or granular form. With the appropriate configuration, process engineering considerations such as dosing, mixing, cooling, loading etc. can be applied. Screw conveyors can also be used for products that do not flow easily.

Special models:

- Screw shaft and screw trough available in normal steel, stainless steel or Hardox
- Various wear-protection solutions as required
- Electronic monitoring
- Design as per ATEX guidelines

Pneumatic Transport Processes

For bulk materials in powder and granular form, conveyed via suction or pneumatic pressure. Our services include everything from individual consultation, design and parts production to complete installation and startup. Our extensive experience, in particular with difficult bulk materials, guarantees optimized and efficient system technology.

Cyclones



For separating products or dust particles from the pneumatic volume flow

Special models:

- Stainless steel or Hardox
- Various wear-protection solutions as required
- Split design
- With spiral exhaust hood
- With vortex shell
- Design as per ATEX guidelines

Rotary Valves



Conveyor Belts



For the horizontal or diagonal transport of powdered, granular or coarse bulk materials, particularly suitable for abrasive or sensitive products. Available in a variety of designs such as flat belt, troughed belt, buckled conveyor or belt feeder.

Special models:

- Completely encapsulated with detachable floor
- Stainless steel
- Reinforced design
- Belt quality
- Design as per ATEX guidelines

Trough Chain Conveyors



For the horizontal or diagonal transport of powdered, granular or coarse bulk materials. Trough chain conveyor are available in normal steel as standard.

Special models:

- Completely encapsulated
- Stainless steel
- Reinforced design
- Chain quality
- Design as per ATEX guidelines

For dust, powdered or granular bulk materials, for dosing and shut-off with containers or cyclones.

Special models:

- Stainless steel
- Various wear-protection solutions as required
- Design as per ATEX guidelines

Blowers



We will calculate and deliver the best conveying unit for the task you set.

Our comprehensive knowledge about this processing technology ranges from radial fans to rotary piston blowers and side channel compressors

For over 20 years, Trenso-Technik has been offering the most advanced separating and sorting technology, along with professional advice and planning for individualized solutions - in an efficient and cost saving manner. Preparation and recycling will continue to be demanding areas in the future. Commodities reclaimed can be put back into the production process, and form an energy-saving alternative to the use of disappearing resources.

Trenso-Technik: Obtaining raw materials. Increasing quality!

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