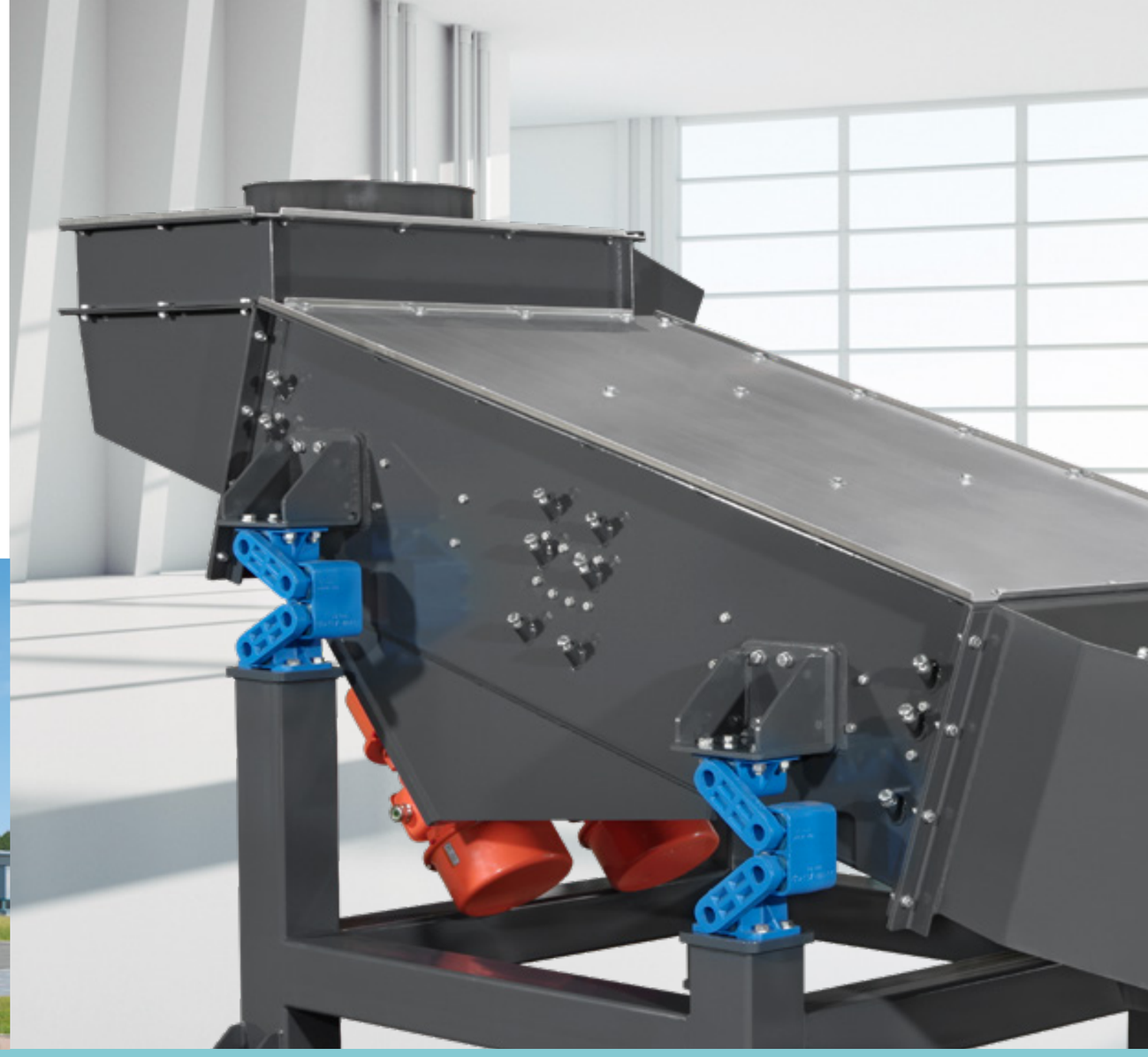
About S&F GmbH

The family-owned company established in 1990 supplies screening machines and conveying systems around the world to meet the specific requirements of different industries and customers. The company takes pride in its excellent, personal service and in the expertise of its employees. All machines are extensively tested and optimised at S&F for the various tasks. The result: bespoke, long-lasting and service-friendly solutions.

- **Screening machines and systems**
- **Separating and screening plants**
- **Dosing and conveying plants**
- **Project planning**
- **Assembly and spare part service**



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Vibrating screens

AVS Series

S&F GmbH Siebmaschinen & Fördertechnik
Screening machines and materials handling technology

Vibrating screens
AVS Series

AVS model S&F vibrating screens reliably screen and size free-flowing, dry and granular bulk materials in a wide range of industries. The compact drive system, the high-quality vibrating components and the robust design ensure especially smooth running, the best separation results and long, low-maintenance running times. Screening machines in the AVS series offer screen sizes from 0.3 to 6.0 m² and throughputs up to 80 m³/h, depending on the materials involved.

Function description:

Unsorted material mixtures are fed evenly to the feed hopper of the vibrating screen using a conveying system or some other feeding equipment. The feed material to be screened is then spread apart by the vibrations in the feed area of the screening machine and flows into the inclined screen area.

Two unbalance motors running synchronously in opposite directions generate sinusoidal tossing motions of the screening machine

The two attached unbalance motors – which are operated synchronously in opposing directions – generate a directed, linear vibrating movement of the screen box. The sinusoidal tossing movement guarantees synchronous running of the machine and uniform screening of the bulk material. The screen box is supported by high-grade, rubber-cushioned vibrating components with a high degree of lateral stability. The fed material is constantly in motion due to the directed vibration of the screen box and flows toward the outlet.

Screenings modified by changing the vibration frequency and the incline of the screening machine

Changing the unbalance masses when at a standstill enables the preset amplitude, or the vibration frequency, to be adjusted. This enables optimum adjustment to the material properties of the screenings. The screenings smaller than the screen holes fall down; and, if required, reach the next screen level. This procedure repeats until all of the material has been screened. The fractioned material is then removed via appropriate outlet openings, discharged by appropriate discharge devices and taken on to subsequent processes.

Application areas:

Vibrating screens are used in the wood industry (palletisation), the recycling industry, the chemical industry (fertiliser industry, plastics industry, automotive industry), the animal feed industry, the glass industry, ceramics industry, construction materials industry, in foundries and in many other industries.

Materials to be screened:

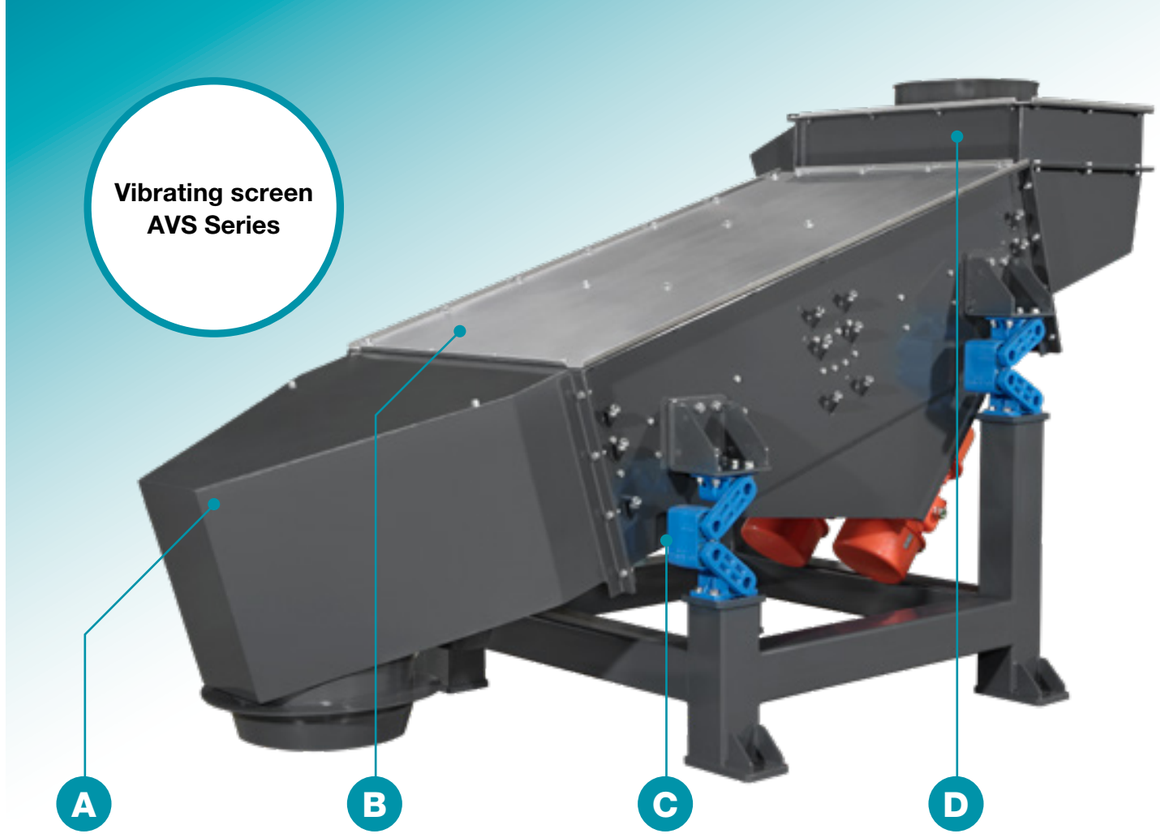
S&F vibrating screens screen and size dry granular and free-flowing bulk material, such as pellets (wood chips, plastic pellets), granules, quartz sand, sand, plastic granules, broken glass, scrap cable, electrical scrap and much more.

Advantages of S&F vibrating screens:

- **High screening capacity in tight spaces** due to the compact design and machine parameters configured to the job in hand.
- **High efficiency,** as up to four fractions can be handled in a single work process in a compact space.
- **High separation precision and screening accuracy** due to directed vibratory motion and screening parameters finely tuned to material properties and application.
- **Low maintenance and easy to repair** due to a low number of wear parts, the use of maintenance-free and durable vibration components, as well as additional high-quality components and materials.
- **Low noise pollution** due to an energy-efficient and low-noise drive system and attenuated, rubber-cushioned components which dissipate interfering structure-borne noise and ensure for quiet machine operation.
- **Favourable price–performance ratio** due to simple mechanical structure and long service life of the components installed.
- **Low dynamic loads** due to use of high-quality and maintenance-free rubber-cushioned vibrating components with a high degree of insulation.
- **Rapid screen replacement** with simple screening attachment systems and standardised screening frames.
- **Material inlet and outlet positions freely configurable** simplifying the design of the overall system.
- **A wide variety of screening coatings can be used** letting you respond quickly to different material parameters.
- **Different fractions in a single work process** ensuring that a defined end product is created even in confined spaces.
- **Can be integrated in existing plant systems** thanks to its compact design and custom configuration options.

Accessories and options:

- Sub-structure
- “Double-decker” configuration
- Cover hood (screening machine in sealed, dust-tight design)
- Dedusting nozzles
- Screen cleaning (rubber ball cleaning system)
- Frequency converter for controlling the screening result
- Round ports (JACOB piping system)
- Flexible inlet and outlet collars (compensators)
- Wear-resistant lining
- ATEX design
- Special materials
- Special paint



Exceptional economic efficiency.
Up to four fractions possible with low spatial requirements. Low proportion of maintenance and wear parts ensure for long and low-maintenance running times.

Exceptionally powerful.
The generously sized unbalance motors which perform directed vibrations process up to 80 m³/h with low spatial requirements depending on the feed material.

Low-maintenance, durable vibrating components.
The attenuated, low-maintenance vibrating components with a high insulating effect dissipate interfering structure-borne noise and ensure for low-noise operation.

Best screening results for granular and grain-shaped bulk materials.
Can be used in a wide range of screening applications, such as sizing screening, fine, medium and coarse screening, over-length and oversize material screening, as well as protective screening.

Technical Data:

Machine model	AVS-30	AVS-50	AVS-75	AVS-100	AVS-150	AVS-200	AVS-300
Screen surface length [mm]	800	1,000	1,000	1,250	1,500	2,000	2,500
Screen surface width [mm]	400	500	750	800	1,000	1,000	1,200
Screen surface [m²]	0.3	0.5	0.75	1.0	1.5	2.0	3.0
Screening capacity (material-dependent) [m³/h] *	5 – 10	7.5 – 15	12.5 – 20	15 – 25	20 – 40	30 – 55	40 – 75
No. of fractions	2 – 3	2 – 3	2 – 3	2 – 3	2 – 3	2 – 4	2 – 4
Total length [mm]	1,400	1,600	1,800	2,100	2,600	3,100	3,700
Total width [mm]	700	800	1,050	1,150	1,550	1,550	1,850
Total height [mm]	1,000	1,100	1,200	1,250	1,500	1,700	1,900
Drive output [kW]	2 x 0.62	2 x 0.62	2 x 0.65	2 x 1.15	2 x 1.6	2 x 2.2	2 x 2.5
Unbalance motor speed [rpm]	1,500	1,500	1,500	1,500	1,000 | 1,500	1,000 | 1,500	1,000 | 1,500
Total weight [kg]	~ 320	~ 400	~ 550	~ 850	~ 1,200	~ 1,600	~ 2,100

* Output specifications are dependent on the material properties of the screenings (bulk weight, grain size, material moisture content), screen usage, mesh width, amplitude, no. of screen fractions, machine incline, separation precision, etc.

Subject to technical amendments. | All approximate specifications. | Excerpt from our model list. Additional models upon request. | Version: 06/2018

Machines for material separation