Durable, robust and extremely reliable under the toughest of conditions.

Schenck Process Group – competence in mining industries
Acting locally to support your needs, the Schenck Process Group is working where you are.

With a global network of Locations and alliance partners, the name Schenck Process is synonymous throughout the world with process solution expertise and proven engineered technology for weighing, feeding, screening, handling and automation.

Our key skills include process system design, feeding and transfer of bulk materials, controlling flows of material, recording flows of goods, weighing goods and automating transport processes.

Members of the Schenck Process Group are:
Complete solutions for your requirements

Looking for after-sales solutions? Our extensive Process Advanced Service System (PASS) provides you with after-sales services – customised to your specific requirements.

The framework of our PASS program is designed with you in mind. With the guidance of our experienced after-sales team, you can create PASS packages comprising original spare and wear parts, various services and high quality components to meet your needs.

PASS is based on a modular principle – you can pick and choose any individual PASS product or a combination of products. Four categories help to easily find appropriate PASS products.

We will happily provide you with individual consultation, either as part of a PASS contract or on individual enquiry.

Whatever Full Service means to you – let’s create it together!
**Experts in screens and beyond.**
Schenck Process – experts in bulk material handling

Schenck Process vibratory screening equipment can handle the bulk materials used in mining – whether large lumps or fine particles, wet or dry, for iron ore, coal, precious metal ores and all kinds of base metal ores.

Solving technological problems is our speciality. Our application-specific solutions include heavy-duty weighing technology as well as static weighing technology – from conveying, screening, drying and cooling to de-watering. We assist in all processes from planning through to the construction of plant sections and reliable controls to the connection to data systems.

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**Application example:**
**Iron ore site**

Legend:
- Process step covered by the Schenck Process Group
- * Schenck Process in cooperation with Sandvik
Every year our coal preparation plants help to free around 10 million tonnes of raw coal from impurities – our contribution to environmentally-friendly energy production.

Exploration and preparatory work in mines requires outstanding technology and materials. Schenck Process solutions are used where others fail.

Schenck Process offers applications and solutions including:
- modular coal preparation plants
- screening and separating systems
- filter and train loading systems
- scales and exploration systems for the coal, iron ore and precious & base metals industries
Application example:

**Base metal plant with high pressure grinding rolls (HPGR)**

Legend:

- Process step covered by the Schenck Process Group

* Schenck Process in cooperation with Sandvik
Application example:

**Coal preparation plant**

Legend:
- Process step covered by the Schenck Process Group
**LinaClass® linear vibrating screens – universal application, high performance**

**Accurate classification of different materials:**
Do you need to classify ore, coal, coke, base metals or rock reliably in large quantities? Then you need solutions which can be specially adapted in order to achieve the high quality required.

**Our solutions:**
Schenck Process linear vibrating screens fulfil all these requirements perfectly. They can handle the largest quantities of materials and classify them to a high level of accuracy. Driven by robust DF force exciters, they are specially adapted to the widest range of requirements.

**Flat-deck screen machine:**
The classic version for the classification of all bulk solids suitable for screening. All common screen panels can be used. Available as a single or double deck machine.

**Banana-type screen machine:**
This machine takes its name from the banana-like arrangement of the screen panels. This enables the screening of larger quantities of material with a high content of fine particles. The advantage in comparison to the conventional screening machine: a much larger feed quantity with the same screen area. Available as a single or double deck screen machine.

**Scalping screens/product screens:**
For the automatic loading and unloading of crushers.

**Drainage screen machine:**
A variant of the single and double deck linear vibrating screen machine for the washing, drainage, cleaning, preliminary classification, wet screening or screening out of foreign bodies.

**Further benefits:**
Ease of maintenance, long working life, maximum availability, reliable and consistent quality.
Vibration isolation technology second to none
A countermass isolation frame ensures the maximum level of vibration isolation from the vibrating screen. This makes the plant structure a more people friendly environment and reduces the dynamic loads produced by the screen resulting in less material needed in the support structure, a lower-cost plant and fewer greenhouse gases for the plant construction.

HuckBolted construction
Over 1000 HuckBolts® in the sideplates but no welds, the sideplate has no residual welding stress and no material discontinuities to compromise the fatigue strength of the machine. This important feature contributes to the exceptionally long service life typical of Schenck Process machines.

Economical, smooth running
The Directional Force Exciter ranges from Schenck Process make the ideal drivers for linear motion vibrating screens. Oil lubrication and optimised roller bearing and gear pairing ensure smooth running, longer exciter working life, resulting in outstanding economy.

Thicker deck rails
Schenck Process machines are designed to carry the weight of ultra heavy duty deck media with extra high sideliners. This means longer service life, less maintenance and a lower production cost per tonne.

In order to perfectly adapt screening machines to individual challenges, Schenck Process has developed the screen panels, making it a one-stop shop for quality and safety.

Screen panels

Increase production with larger, not more machines
Using fewer yet larger machines reduces upfront plant build cost, lower greenhouse gas emissions and shorter leadtime resulting in lower power consumption, less maintenance and fewer wear parts. 3 m, 3.6 m 4.3 m or even 5 m wide machines are the basis of the Schenck Process range of widebody vibrating screening machines that can be supplied with matched vibrating feeders to optimise material withdrawal from bins and feed presentation onto the screen.

Maintenance-free
Maintenance-free shafts between exciters mean more production and less downtime.

Tuned for optimum productivity
Schenck Process drive systems are designed to allow us to tune the run speed of your machine for optimum performance.
Individual solutions for the most extreme conditions

Preparation in coal mining, the processing of non-ferrous metals, and applications in mining require technology and materials capable of withstanding the most extreme conditions.

Schenck Process solutions prevail where others give up. Our products are durable, indestructible and extremely reliable under the most difficult conditions.
**DF exciters**
- Economic and powerful exciter for high performance
- Long service life and extremely calm operation
- Minimum maintenance requirements
- Optimum, application-orientated graduation of exciters
- Low operation noise level
- 98% availability
- Ideal for use in continuous operation

**Screen panels**
- Panels made from highly wear-resistant polyurethane, system panels and steel panels
- Maximum dimensional accuracy through mechanical rework
- Shore hardesses of 55 to 90 Shore A

**Vibrating feeder**
- Straight or diverging pan
- Directed-force exciters
- Reliable and proven designs
- Several liner material available
**CONiQ®**

Condition monitoring
- Maximize machine life
- Prevent breakdowns
- Immediate detection in case of failure
- Optimize machine operation (inspection)
- Measure mechanical vibration and temperature of exciters
- Measure 6D motion of screen or feeder
- Generate characteristic values
- Configurable alarming
- Suitable for local environmental conditions
- Minimized cabling

**Vibrating feeder**
- Straight or diverging pan
- Directed-force exciters, unbalance motors or magnetic exciters
- Reliable and proven designs
- Several liner material available

**MULTIBELT®**

Belt weighing
- Precise mass flow measurement
- Standard and tailor-made design
- Accuracy up to ±0.25%
- Optional legal-for-trade execution
Train loader (TLO)
Train loading system
- Feed rate up to 6,000 t/h for coal and up to 12,000 t/h for iron ore
- Suitable also for other bulk materials
- Turn-key supply
- High process safety, availability and operational reliability

MultiTrain® TrainLoadOut
Dynamic weighing of rail vehicles
- Increased average wagon load
- Optimised loading performance – no overload
- Improved rail logistics efficiency
- Management of roll back and data transmission
- Train loader (TLO) interface
- Calculating the front/rear and right/left load distribution in the wagon

Mechanical conveying and MoveMaster®
Bulk conveying
- Tube belt conveyor
- U belt conveyor
- Corrugated belt conveyor
- Smooth material handling
- Horizontal transport and elevating
- Maintenance optimised design
- En-masse chain conveying