Efficient, safe and compliant

End-to-end material handling solutions for bulk grain and agricultural production
Schenck Process Group – your global solutions provider

High-tech solutions for air filtration, conveying, weighing, material loading and unloading
Whether you are a local processor or a major exporter, you need material handling systems that are efficient, reliable and fast. You have a duty of care to your employees and you need to comply with the latest regulations on dust collection and explosion protection. In all cases, Schenck Process has the technical solutions and expertise to meet your needs. With a global team of more than 100 engineers we understand the complexities of agricultural bulk materials handling better than anyone, building customized end-to-end systems consisting of dust collectors, belt weighers, dust transfer systems or container loaders.

Precise solutions pay handsome dividends
A precise evaluation of your application can make a difference of up to 3–4 times the life of standard equipment and bring about huge energy efficiency gains. All materials are abrasive and potentially explosive, but when sizing explosion protection equipment it is essential to take multiple factors into account: gauging the parameters of the dust to ensure health and safety, enhance air quality and comply with regulations while maximizing throughput. These parameters differ significantly depending on the interstitial velocity, batch or continuous throughput as well as the product. Schenck Process will work with you to ensure that you get the optimum solution.
At Schenck Process, everything we do is centered on customer satisfaction. We follow a customer-focused eight-step process that allows our experienced project managers and their teams of engineers to design the most efficient, cost-effective system to meet your operational requirements – on budget and on time.

Schenck Process project methodology

Understanding needs Every project begins with your operation, your conditions, your application and your unique needs. We seek to understand the issues and problems that you are facing.

Testing/research Our TestCenters allow us to develop the most innovative solutions to solve any conveying, filtration, weighing or feeding challenge. Our database containing thousands of test records allows us to cross-reference previously handled materials, enabling quick identification of proven pneumatic conveying, filtration, weighing and feeding solutions.

Solution During this stage, we discuss the testing and research analysis with you. Using that information, a systems quote is prepared to meet your exact needs.

Design We discuss the proposal in greater detail with you in terms of initial and ongoing costs, energy consumption, delivery dates, project timetables and deadlines before agreeing and proceeding to the next step.

Build/deliver solution No matter where you are located in the world, our global network allows us to engineer, project manage and deliver a solution.

First-time start-up Our rapid start-ups with on-site engineers enable you to quickly get your system up and running.

Obtain benefits You realize maximum productivity with minimal disruption at the time of implementation.

Customer support Our knowledgeable Service Center personnel are available 24/7 to assist you with ongoing support after installation.
For more than 40 years Schenck Process has supplied state-of-the-art dust collection and dry bulk material handling systems to companies of all sizes, including some of the largest grain and agriculture processing plants and exporters throughout the world.

Our solutions take your raw materials from the initial unloading stage and move them all the way through to the final unloading area for shipment, both safely and cost-effectively.

We stay on top of evolving environmental regulations around the world. Our local and global market knowledge is available to help you source the right products for your application. With representatives sitting on several NFPA rule-making committees, we understand explosion protection requirements and help you select appropriate protection for your systems and facility.

Legend:
- Process step covered by the Schenck Process Group
Schenck Process has 22 production facilities on five continents, 130 agencies and more than 3,000 employees worldwide. A global infrastructure capable of delivering solutions on a supply-only or turnkey basis make Schenck Process the ideal choice for dust collection and material handling in grain and agriculture process applications anywhere in the world.

Material handling and dust removal solutions
Dust collection
Dust transfer
Central vacuuming
Pneumatic conveying
Container loading
Bulk material receiving
Weighing
Ducting and fan supply
Solving air pollution challenges

With an array of dust collectors that include cartridge, pulse jet, reverse air, HEPA and medium-pressure controlled cleaning systems, Schenck Process can solve virtually all industrial air pollution challenges.

Explosion protection for all dust collectors

Schenck Process helps customers to meet all of the applicable industry health and safety standards and requirements. Work with our team to provide the relevant material and application information, and we will assist you in determining what form of explosion protection best suits your specific process and facility needs.

MCF PowerSaver
Industrial air filtration
- Operates with medium-pressure cleaning air (7–9 psig)
- Total filter area available exceeds 23,000 ft² (2,137 m²)
- Cleaning capacities over 250,000 CFM
- Timing mechanism non-electrical – safe in dusty, explosive atmosphere
- Suited for use in high temperatures 500 °F (260 °C) and higher

Mac SpaceSaver
Air filtration
- The patented cleaning mechanism thoroughly pulses the cartridges using directed airflow
- Saves energy through more efficient use of compressed air
- Cartridge life is extended to reduce consumable costs
- Tool-free maintenance for changing the filter cartridge
- Quick release handles allow fast, tool-less removal of the entire blow pipe section

Baghouse parts and services
Full line of replacement parts and service needs
- Parts supplied for bin vents and filter and vacuum receivers
- Filter bags, cages, polipleets, cartridges, venturis, clamps, gaskets and explosion panels are available
- Baghouse maintenance, equipment repair and rebuilds, installations and start-ups
- Replace or upgrade filter bags, cartridges or cages
- Rebuild rotary airlocks and valves
## Filtration TestCenter

We can prove systems before equipment is installed. Our state-of-the-art filtration TestCenter features a particle emissions test system. We analyze results using varying air-to-cloth ratios and grain loading, with different configurations to build the most cost- and energy-efficient dust collectors for your applications.

## Baghouse services

No more worries about leaks or wasted energy/compressed air. The Schenck Process Baghouse Services Group provides Continuous Compliance Inspections (CCI), repair and ongoing periodic maintenance for baghouse and related dust collection equipment.

### Cyclone collectors

**Dust collection**
- Capable of handling heavy dust loads
- Designed to separate product from an air stream
- Easy to wash down and sanitize reducing the risk of cross-contamination
- No moving parts or maintenance
- Ideal for applications where high moisture and high material fat content is present

### Pulse jet filters

**Air filtration**
- Round, square, rectangular pulse jet filter models available
- Side-entry designed filters for low headroom applications
- Wide range of air volumes, access positions and air inlet arrangements
- Models available with either bag or cartridge filter media
- Easy access to filter media for quick maintenance

### Central vacuum systems

**Housekeeping**
- Effectively removes dust, dirt and spilled products that could present a hazardous situation
- System utilizes a variety of filter media, discharge and disposal options and filter cleaning methods
- Written emissions guarantees are available
- Multi-user and single-user options
- System is simple to use and helps provide a safe working environment
**Diverter valves**
Diverting conveyed air or gravity-flow products

- 22.5, 30 and 45 degree divert angles
- Available in line sizes from 2” (51 mm) to 12” (305 mm) with larger dimensions offered for gravity flow products
- Constructed in carbon steel, stainless steel, aluminum or cast iron
- Scale valves, plug style diverters, flapper style diverters and gravity flow diverters are available
- Operates as a weight controlled feeder, weight indicator and totalizer or can be used for batching

**Multi-duty (MD) airlock**
Versatile airlock for multiple applications

- Highly reliable, rugged design delivers low-maintenance service
- Universal airlock for metering dry bulk materials under feeding devices
- Sealed bearings require no lubrication and provide years of service
- Low mounting height is ideal for space-restricted applications

**Blower packages**
Engineered packages and replacement parts

- Valves: pressure relief valves and check valves
- Silencers and enclosures: reduce blower package noise
- Filters: inline air filters for 99% plus removal efficiency
- Pressure and vacuum gauges
- Blowers and motors for all industries
Weighing

Our wide range of weighing technologies provides grain and agricultural production operators multiple systems to meet their measuring needs. Belt scales for bulk weighing of grain handle flow rates up to 15,000 tons per hour. Weighfeeders designed for challenging process environments have very high feed-rate accuracies, and our load cells are perfect for weight measurements on hoppers, silos and containers.

Optimum space utilization

On-site evaluations and system planning optimize utilization of your plant space and layout. Our project managers specialize in complete design-build project integration. You can involve us at any stage in the design and development of your project. Our engineers are experienced in all aspects of system planning, design, testing and setup. They can handle everything from the financial analysis of alternative systems to start-up supervision and operator training.

MULTIDOS® DMO
Weighfeeder

- Direct multiple cell weighing system without levers or counterbalance weights
- A rugged weighfeeder for challenging processing environments
- Standard belt widths of 24” (610 mm) to 54” (1,372 mm) with feed-rate accuracies of ±1.2% over a 10 to 1 range
- Feed rates up to 500 tons per hour

Load cells
Bin weighing systems

- Ideal for weight measurement on hoppers, silos, containers, etc.
- Simple, rugged design providing highly accurate measurements
- Maintenance free
- Resistant to environmental forces

MULTIBELT®
Belt scales, bulk weighing of grain

- Measures and totalizes continuous flow rates up to 15,000 tons per hour
- Easily mounts on 18” to 60” (450 to 1,520 mm) wide CEMA idlers using only bolts
- Weighing accuracies up to ±0.5% are achievable
- Industrial packaged stainless-steel controller/indicator
**Metering**

The closed inline measuring systems of our mass flow and solids flow meters are perfect for continuously monitoring flow volumes and rates. They can be used to measure throughput and consumption or to balance and load powdered or granular bulk materials. Dust-tight housing reduces the risk of airborne materials.

**Feeding**

Schenck Process offers dry material feeders for every feeding application. Volumetric, gravimetric, vibratory, single or twin screws are all available technologies. Feed rates as low as 500 grams per hour and as high as 1,100 cubic feet per hour are possible.

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**MULTICOR® S**
Mass flow meter
- Continuous mass flow measurement based on the Coriolis principle
- Direct weighing technology eliminates outside forces on measuring and feeding accuracy
- Compact design is perfect for applications with limited space requirements
- Measuring accuracies of ±0.5%
- Dust-tight housing reduces the risk of airborne materials

**MULTISTREAM® B**
Solids flow meter
- Measures flow rate utilizing an impact plate
- Handles granular materials with a grain size of up to 1.2” (30mm)
- Dust-tight stainless steel housing
- Compact design provides space-saving integration
- Flow rates of up to 100 tons per hour are achievable

**AccuRate® series**
Volumetric feeding systems
- Proven volumetric feeding technology with installations throughout the world
- Food-grade and industrial vinyl hoppers available
- Quick disassembly for cleaning or material change
- Paddle agitation to the vinyl hopper gently massages materials into the feeding screw
- Feed rates from .000017 to 280 ft³ (.0005 to 7,928) per hour
Complete solutions for your requirements

Looking for after-sales solutions? Our extensive Process Advanced Service System (PASS) provides you with after-sales services – customized 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 comprised of 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 welcome the opportunity to provide you with individual consultation, either as part of a PASS contract or on an individual basis.

Whatever full service means to you – let’s create it together!

Our PASS service categories

- **PASS** Repair
- **PASS** Inspection
- **PASS** Management
- **PASS** Support
The Schenck Process Group is a global market leader in
weighing and feeding technology /// screening and separation systems for bulk materials /// dust collection and air filtration technology /// pneumatic and mechanical conveying solutions /// automation and diagnostic technology

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All specifications are subject to change.

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we make processes work