

Maximum accuracy for stringent requirements

**SAP feeding
and conveying**

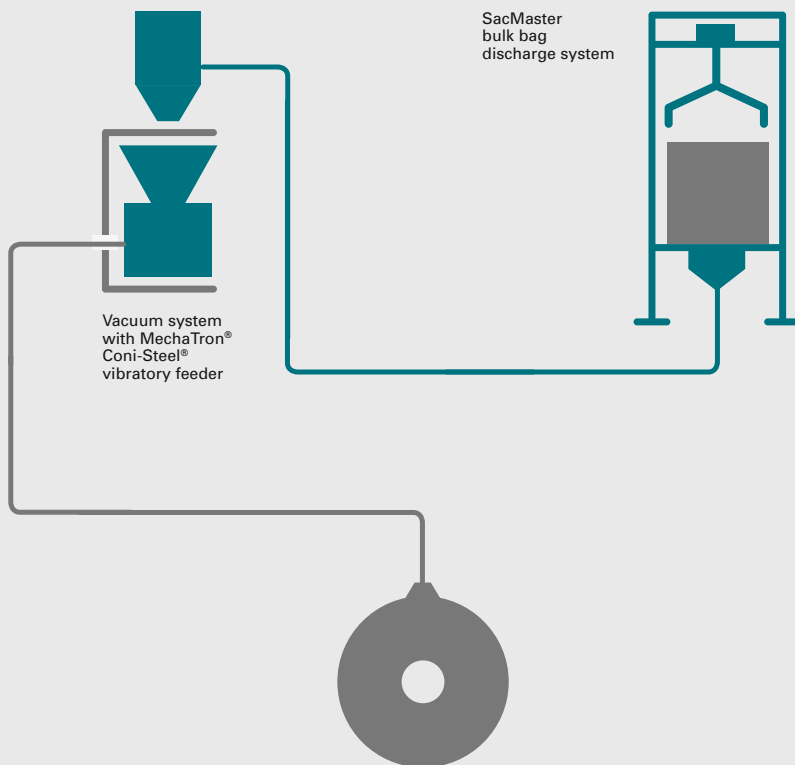


» **Accurate feeding right from the start (low reject rate)**

» **Minimum maintenance**

» **Plug-and-play feeding system**

» **Commercial feasibility**





The dry facts

SCENCK PROCESS HAS THE PERFECT SOLUTION FOR STRINGENT REQUIREMENTS

Superabsorbent polymers (SAPs) are used in many different applications. As a versatile solution for absorbing liquids, they are mainly used in diapers but are also utilized in other segments such as adult hygiene, wound treatment, and expanding fibers. The powdered polymers swell on contact with aqueous media to form a gel, which binds and securely holds the liquid even under pressure. This remarkable property allows manufacturers to make diapers increasingly thin while improving liquid absorption and retention.

Products containing SAPs, such as diapers, are manufactured in a continuous automated process. The precise, even, and level application of the polymers at high speed on the nonwoven material in the production lines is especially critical. The quality of the end product depends to a large extent on the precision and consistency of the SAP feeder. The key factor in the cost-efficient production of SAP products is the economical use of the polymer. It's not just accuracy that matters, but also throughput and reject rates.



Constant mass flow and very user-friendly? No problem!

Our gravimetric MechaTron® Coni-Steel® vibratory feeder delivers highly accurate and consistent feeding of superabsorbent polymers. High-performance filters ensure a clean and safe working environment. The pulsation-free material discharge and contact-free drive technology – which requires no drive shaft, seals, or other wearing parts – takes the feeding technology in this loss-in-weight feeding system to a whole new level.

The result: cost-efficient feeding with accuracy better than $\pm 0.5\%$ and the highest possible quality.

The MechaTron® Coni-Steel® vibratory feeder is optimized for the specific requirements of SAP feeding with a Schenck Process pneumatic conveying system. Its robust design with an independent feeder frame actively counters external vibrations. All systems are operated from a single control unit, the DISOCONT® Tersus. For ease of use, operation is reduced to the bare minimum and designed to be extremely user-friendly.

Accurate, reliable feeding is combined with minimum maintenance, maximum feed rates, and stable precision – even at very low delivery rates. And all this with a very low drive output. The high-efficiency pump requires less compressed air and energy, which makes this a particularly economical investment.

The complete system for feeding and pneumatic conveying is very easy to install and integrate in existing systems. Put into position, connect, and it's ready to operate!

Our all-in-one solution

MECHATRON® CONI-STEEL® VIBRATORY FEEDER WITH PNEUMATIC CONVEYING SYSTEM

- » Feed rates of 0,3–1500 l/h or 700 kg/h with a minimum of 1:80 without the feeding devices having to be replaced
- » Stable accuracy, even at very low feed rates
- » Highly robust
- » Low drive output
- » ATEX version also available
- » Easy operation with just one control system





Optimum feed result,
low-maintenance
operation,
easy to clean

Another ideal solution for SAP feeding is the ProFlex® C 500 loss-in-weight screw feeder.

Vertical hopper walls make maximum use of virtually every millimeter and positively impact bulk material flow. The ProFlex® C system is available in three models that cover feed rates up to 6,000 dm³/h. A MULTI-POINT weighing system reduces accuracy errors as a result of vibration or movement.

An agitation drive with connecting rods and robust bearings ensures that only minimum maintenance is required. The hoppers are easy to clean, and only two easily accessible sides are needed for service work.

Smart feeding solution

PROFLEX® C 500 LOSS-IN-WEIGHT FEEDER

- » **Very simple planning due to a variable arrangement of the motor and discharge side**
- » **Low-maintenance operation as a result of robust agitation drive bearings**
- » **MULTI-POINT weighing system with two DMS load cells – robust weighing system, virtually free from interference with a high natural frequency**
- » **Feed rates of up to 6,000 dm³/h**





All Schenck Process feeders in a pneumatic conveying system are offered in a variety of configurations, which can be combined to create an ideal solution for your SAP application. We deliver solutions to suit your individual needs. Please contact us to learn what we can offer you as an integrated process and technology provider.

Smart dosing and feeding solutions

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