

Silo-Components

Stanelle - always the best solution





STANELLE[®] office and production facility

Stanelle

more than forty-five years of experience

STANELLE Silos + Automation GmbH is the German brand for custom tailored problem services and solutions in silo technology and silo automation.

With more than 45 years of experience our company is the reliable and trusted partner you are looking for. As a powerhouse for innovations, we always deliver cutting edge technology for our clients. Optimize your productivity, cut costs and protect the environment – with Stanelle top-quality products made in Germany.

Through practice-oriented services and solutions, Stanelle products ensure a smooth and optimized material flow within your business. Competent experts support our clients in every phase of a project and guarantee a first class delivery. At Stanelle we have a simple taste: We are always satisfied with the best to exceed your expectations!

Our following program is supplemented beyond the shown by a multiplicity of special armatures and further components.



724 pallet storage positions on high racks

Dedusting technology

extremely long service lives

The Stanelle **PNEUFIX** type filter is suitable for dedusting applications on continuous and discontinuous pneumatic and mechanical charging and conveyor systems in **silos or bunkers**. The hallmark of PNEUFIX is its flexible application potential in addition to its rugged design.

Characterised by their ruggedness and extremely long service lives the Stanelle dedusting filters **STAFI** are suitable for filtering discontinuous air exhausted by the pneumatic charging of **silos** with powdery, dry bulk goods specifically on the building, stone, and clay sectors.



PNEUFIX



STAFI

high-quality materials

The mixer filter **MIXFI** is designed for the direct dedusting of **batch mixers**. During the design stages the focus was placed specifically on the problem-free return of filter dust to the mixer. The choice of high-quality materials and the optimal surface lining make this filter ideal for applications on virtually all sectors. The filter media exhibit long service lives.

The loader filter **BELFI** is used in particular in conjunction with a Stanelle JET LOADER for direct dedusting and dust recovery during loading processes on **silos vehicles and containers**. Owing to its compact design it can also be used to dedust air conveying passages, encapsulated conveyor belts, silos, and bunkers that are filled without pressurisation.



MIXFI



BELFI

Loading sets

For silo vehicles

The Stanelle **QUADRO** type jet loader is designed for loading **silo vehicles, closed containers, and rail cars** with dry, free flowing bulk goods.

The compact design with integrated winch motor and default sensor configuration is instrumental in cutting installation times, optimising the positioning, and enhancing the operating reliability.

Square interior buckets kept apart by two strong supporting belts protect the bellows from mechanical damage and centre the stream of bulk material. The hoisting lines arranged outside of the stream serve to stabilise the interior buckets for greater loader flexibility. The closure cone seals the discharge cone and so prevents the bulk goods from escaping into the environment and humidity and foreign bodies from entering the jet loader.

The Stanelle **TELE-RONDO** type jet loader is a specialised system for loading **silo vehicles** with heterogeneous bulk goods like e.g. dry mortar. Bulk goods of various weights and large free fall heights are associated with separation problems in standard loaders, leading to losses in quality. The separation of bulk goods in this category is prevented to the greatest possible extent when the TELE-RONDO is used. The TELE-RONDO discharge cone sets itself on the silo dome opening and the telescoping pipes enter the silo vehicle. Remaining is a free fall height of 20–40 cm only. This minimum free fall height and the telescoping pipes retracted by the level control serve virtually to eliminate the separation of the bulk material's components into their constituent weights.

high operating reliability

Silo vehicle and open-topped loading

The round, thick walled cast interior buckets (in steel, stainless steel, or plastic) of the Stanelle **RONDO 250** loader (bucket design) are extremely wear resistant.

For **loading silo vehicles** the RONDO 250 loader is fitted with a discharge cone. The optional dust skirt or a flexible dust dome virtually eliminates



optimised positioning

dust formation when bulk goods are loaded on **open-topped trucks, rail cars and containers.**

Open-topped loading of gravel

The Stanelle **RONDO 500 - 800 R** gravel loader (telescoping pipe design) is ideal for loading **open-topped road and rail vehicles as well as containers**

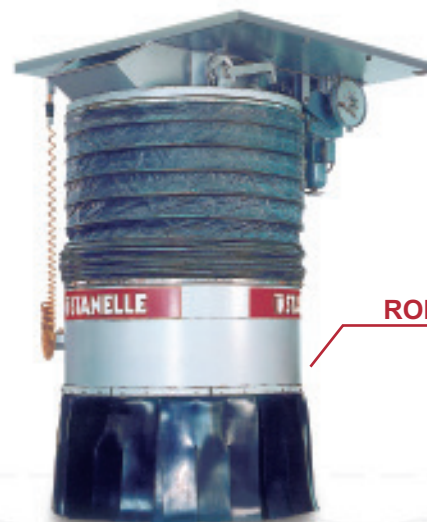
with broken materials of max. 200 mm through the respective nominal diameters. Special protective pipe inserts enhance the service lives, making this loader particularly ideal for applications with gravel and flint. The telescoping pipe version of the RONDO can be adapted to the conditions prevailing at our customers' locations (headroom, extended length, etc.). Mixtures of air and dust are drawn between the telescoping pipes and the bellows and introduced to the filter system.

Open-topped loading of ships

The **JBM 500** type loader is a specialised system for loading dry, free flowing bulk goods on ships.



RONDO -
round
interior buckets



RONDO 800

Discharge aids

for easy retrofits

The **air jet loosening system** is used to fluidise poorly flowing, dry, nonsticky, and powdery products. The advantage of this system is that the jets do not lie directly in the material stream and can be replaced from the outside.

The **cushion air loosening system** is used to fluidise poorly flowing, dry, nonsticky, and powdery products. This system is recommended for pulsed material discharge.

The Stanelle **discharge vibrating cage** functions as a discharge aid for poorly flowing, bridge building, dry, dustlike to granular bulk goods. The flanged design with 60° discharge can be easily attached or retrofitted to any silo or bunker.

The Stanelle **vibrating boom** functions as a discharge aid for bridge building, dry, powdery to granular bulk goods. It can be attached to square bunkers and special discharges and retrofitted easily to existing silos and bunkers. The vibrating boom can be fitted with variable vibration motors for precise actuation.



Discharge vibrating cage

Silo safety

combined design

The Stanelle **overpressure/vacuum flap** is a safety component for silos loaded with compressed air systems. During pneumatic loading processes the combined action of these flaps can compensate for both overpressure and vacuum generated by exhaust fans or collapsing cornices – and so prevent expensive damage to vessels.

The **silos overfill protection** is a self contained system. Ready to install in conjunction with the provided pinch valve, max sensor and end surge limiter this controller prevents the silo from overfilling and the silo's interior pressure from exceeding the max value. In addition the controller can also integrate the dedusting filter installed on the silo.

The various designs of our **level indicators** present our customers with a range of solutions tailored to their applications and media.

Overpressure/vacuum flap

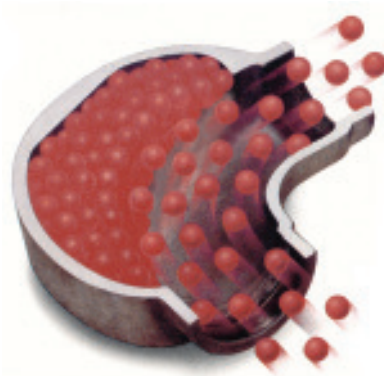


Conveyor pipe components

long service lives

The Stanelle **FLOW-BOW**[®] is designed as a low wear deflector of dry, nonclotting bulk goods when conveyed as a dense stream. It has a wide range of applications including powdery, splintery, and highly abrasive bulk goods like e.g. quartz sand, shotcrete, and basalt chips; even cocoa husks and slaughterhouse waste. Stainless steel (1.4408) designs are available for applications on the plastics and foodstuffs sectors.

The schematic shows the arrangement of wall thicknesses and the formation of cushions by a dense stream conveyed in the **FLOW-BOW**[®]; the result is the optimal wear protection for this bulk goods deflector.



FLOW-BOW[®]

Shutoff components

uncomplicated and rugged

The Stanelle **CONNEX pipe coupling system** is designed for maximum economy in the sealing and joining of conveyor pipelines.

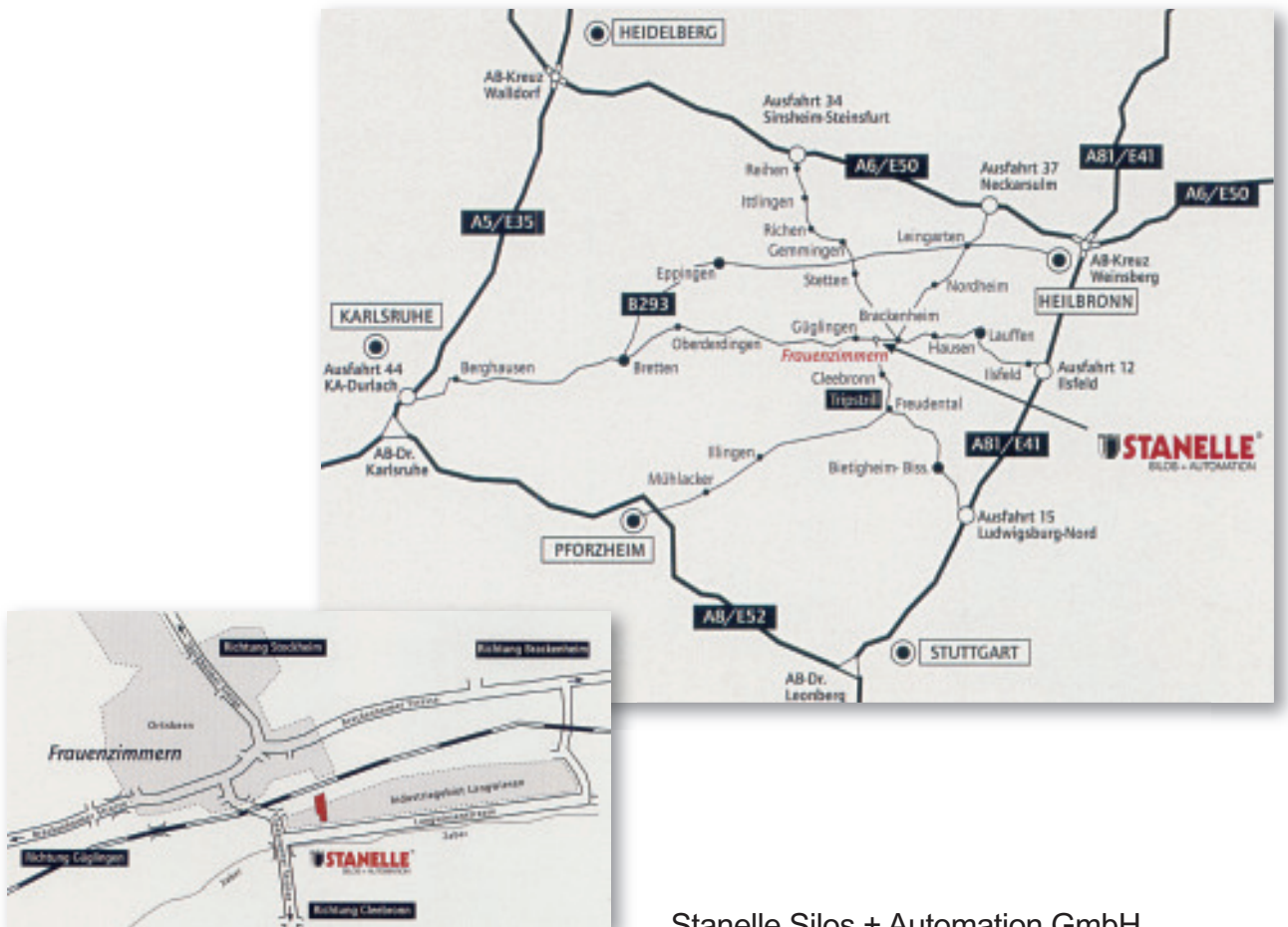
The Stanelle **pinch valve** is used as a shutoff component for pneumatic loading processes on silos. Installed in the charging line it frees the whole pipe cross section during filling. The thick rubber walls of the diaphragms ensure long service lives. The solenoid valve attached directly to the pinch valve reduces closing and opening times.

The **MF type flat gate** is attached to silo and vessel discharges and assures the optimal sealing of stored dusty and granular bulk goods up to 4 mm in size. This modular gate allows the installation of manual, pneumatic, or electric motors on the same base frame. The gate plate is guided over rollers sealed on both sides.

The Stanelle **round gate** functions as a shutoff component or sandwich fitting for hand wheel or pneumatic actuation. When the installed gate is pressurised on one side the pressure is directed on the plate and therefore on the case gasket for the optimal sealing properties.



How to find us



Stanelle Silos + Automation GmbH

Langwiesenstr. 6
D-74363 Güglingen

Telefon +49 7135 9530-0
Telefax +49 7135 9530-17

info@stanelle.de
www.stanelle.de