Technik dosing

Claudius Peters Flow Control Gate

Technology you can trust...
Reliability for all Applications

About

Claudius Peters Technologies GmbH, Germany and Claudius Peters Technologies S.A., France are part of the technologies division of Claudius Peters Group GmbH. The corporate headquarters is in Buxtehude, Germany, near Hamburg, which offers technologies in the field of materials handling and processing, providing turnkey and semi-turnkey systems to a wide range of industries. Claudius Peters Group GmbH is a wholly owned subsidiary of Langley Holdings plc, a privately controlled UK engineering group, with regional offices in the Americas, Europe, China and the Far East.

Applications

The flow control gate can be used where bulk materials need to be extracted from silos and bins whilst being reliably metered and controlled. It has proved its reliability, especially in the cement, building materials, aluminium and similar areas such as self-unloading bulk carriers.

A range of sizes, roller configurations and drive systems, are available for metering a wide spectrum of materials ranging from powders to coarser bulk solids.

Year after year, hundreds of new Claudius Peters Flow Control Gates have been supplied to materials handling plants worldwide, their functional design and rugged construction operate under the harshest working conditions imaginable. Experience gained from each application flows back into the product development programme, and standardised components such as drives, bearings and position indicators have more than proved their worth in the materials handling sector.

Functions

Claudius Peters Flow Control Gates for bulk materials -
- reliable dust-tight shut-off
- suitable for coarse and fine-flow operations
- precise, process-orientated control of material flow

The Claudius Peters Flow Control Gate seal is completely dust-tight - even when silo pressures are high. During operation the roller is adjusted to the required throughput - while the aeration bottom ensures that materials passing through the gate remains fluidised. The size and shape of the roller cross-section is custom designed for each application and throughput.
Optimal Drive Adaptability

**Type of drives**
Claudius Peters has the ideal drive for virtually every application. Manual operation, pneumatic and electric drives are available. Our pneumatic swivel drives are available with all shut-off positioning and controlling functions, variable roller speeds and emergency shut-off in case of power failure. Manual emergency operation is made possible by deaerating the pneumatic cylinder. The electric torque motor drives feature the ability to withstand a stalled condition without any damage of the motor. After clearing the blockage the device can return to normal operation, with opening and closing times of 5 - 70 sec. depending on gear drive.

- **Maximum volume flow with positioning of the roller for preset through-puts: typically for bulk loading of cement.**
- **Infinitely variable control of high throughputs with linear characteristics providing high degrees of accuracy: typically for a flowmeter.**
- **Infinitely variable control of mid-range throughputs with linear characteristics providing high degrees of accuracy: typically for a belt weigher.**

**Claudius Peters Claw Breaker**
The Claudius Peters Claw Breaker is used to break up lumps which may have formed through hydration in silos or bins. It is installed in the discharge area in front of the flow control gates. A rotor with crushing arms, mounted radially on the shaft, breaks up such lumps by forcing them against a grid. Operational safety is guaranteed by an overload switch with reversing function.
Advantages

The Flow Control Gate is a major component in the Claudius Peters aeroslide programme. It is robust and has a high degree of resistance to wear. The highest safety and operating standards are attained by a linkage-free design with all moving parts fully encapsulated. Short opening and shutting times make the Claudius Peters Flow Control Gate the ideal device for a variety of shut-off, metering and control duties:

- Positions ranging from totally closed to fully open (0 and 100 %) are freely selectable
- Precise, continuous control in combination with the metering device used: belt weigher, flowmeter, etc.

Its compact, modular construction, directly connected pneumatic or electric drives, and easy-to-change cassette seals, reduce servicing costs while ensuring easy serviceability. All flow control gate types are equipped with an emergency shut-off device.