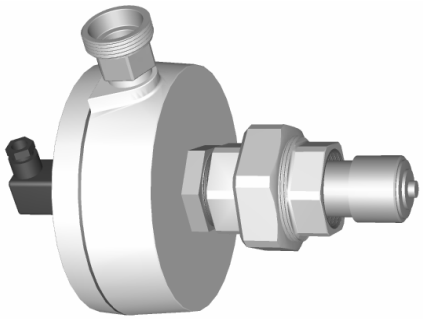
ALBRECHT - Pulsors



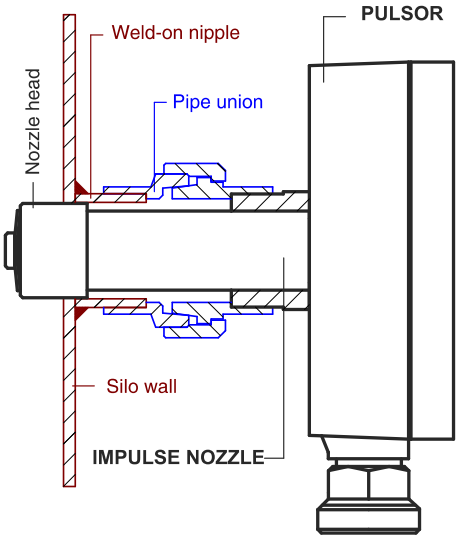
Discharge Aids for Silos

ALBRECHT Pulsors are pneumatic discharge aids to prevent blockages, caking, arching (bridging) and ratholing in silos and dust bunkers. The Pulsors generate a fast sequence of short compressed air pulses, which are blown into the bulk material at high pressure via metal-sealing and non-return flow nozzles.

Fields of Application

The Pulsors are suited for all cohesive bulk solids:

- in the building materials industry **(lime, gypsum, cement products)**
- in the chemical industry **(polymers, pigments, basic chemicals)**
- in power plants and waste incineration plants **(filter dust, fly ash)**



Functional Principle

The fast switching on and off of the air flow, which takes place about five times per second, is the reason for the special effect of the Pulsors:

The **pulsating air flow** achieves a considerably **higher degree of efficiency** than with continuously injected compressed air.

By means of the pulsors consolidations in the bulk material and caking on the walls are effectively eliminated, and thus bridging and ratholing prevented.

Due to the special design of the nozzles, the injected compressed air flows parallel to the container wall. This reduces wall friction, the air is distributed homogeneously in the bulk material and the bulk material also flows into the wall area of the silo. This reduces core flow and product segregation.

Installation

The Pulsors can easily be **retrofitted** to any existing silo, as they are installed **from the outside**.

The Pulsor with its impulse nozzle is mounted to the silo via a weld-on pipe nipple and a taper seat pipe union. The nozzle protrudes through the welding nipple and the concentrically drilled through wall about 15 mm into the silo.

Three different Pulsor types are available, which differ in air consumption and effective range.

Operation

Immedially after opening the compressed air supply, the mechanical air chopping starts, and pulses of compressed air are generated with a frequency of approx. 5 Hz. A solenoid valve connected upstream is used for switching on and off the Pulsor. The solenoid valve is activated at regular intervals for approx. 1 s by a clock generator. Dry compressed air of 4 - 8 bar is required for operation.

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