

Dedusting project

Dedusting of a spray dryer

Latex polymeric powder is produced in an Irish manufacturing plant. The product is gained as dry powder after a spray dryer. A downstream INFA-MINI-JET bag filter dedusts the gas flow. There is an explosion risk because of gaseous solvents within the exhaust air. Therefore, the filter is designed pressure shock resistant up to 9 bar g as well as all electric parts (solenoid valves, control unit, differential pressure switch) are protected for use within ATEX-zone 1 by pressure tight encapsulation.

The pressure shock resistant dust collecting bin should only be taken off when the manual shut-off valve at the discharge is closed. This is signaled by intrinsically safe limit switch. Split filter supporting cages are used because of the low ceiling height. The necessary height for changing filter bags is minimized thereby.

Technical data

Filter type		Bag filter AJM 1100-1400-17S, pressure shock resistant Dust collector with slewing device, hopper, shut-off valve and dust collecting bin
Volume flow	[m ³ /h]	1,650
Pressure shock resistance	[bar]	10
Filter area	[m ²]	17
Filter material		Polyester needle felt, antistatic



Pressure-capsulated control unit and solenoid valve box for ATEX zone 1