

Conveying of plastic trim laminated with aluminum and removal of dust from the lamination process secures production speed

The challenge

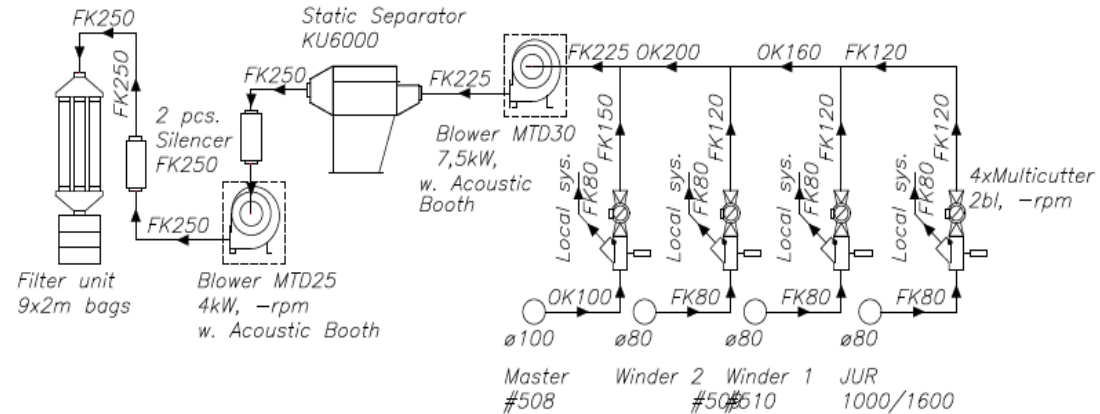
- This company located in Poland is a supplier of flexible packing material
- The lamination of plastic film generates a high amount of dust which affects the air release in the storage area
- The amount of dust in the production facilities must be reduced, to ensure a safe and healthy working environment
- The solution must provide safe and smooth removal of the trims coming from the four slitters. The conveying air will after the trims have been discharged in big bags be blown to a filter unit for de-dusting before being released in the stock area
- The factory must be presentable to new customers

Facts

- Material: Plastic Foil laminated with aluminum
- Thickness: 30 microns
- Suction points: One from each of the 4 slitters to be combined in one main pipe
- Trim width: 5-20 mm
- Number of machines: 4 with one cutter to each machine
- Conveying distance: H: max 30 m V: max 4,5 m, 4 bends
- Speed of machines: 400-600 m/min

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The solution



- The solution is a central system for four slitters
- The four pipes coming from the slitter is combined in one main pipe, and the material is sucked through an open rotor blower and blown into a KU 6000 static separator
- Each slitter has a cutter, which makes it possible to connect more slitters into one system After the static separator, there is installed a filter to remove any dust coming from cutting the trims
- The need to balance pressure inside the static separator and the filtration of air coming out from the static separator is managed by an MTD25 open rotor blower

The advantages and benefits

- Kongskilde supplies a trim removal system, which guarantees full production speed with your slitter lines, without worrying about trim blockage
- When dust from conveying is eliminated in the factory, the company minimizes the liability to slippery floors, reduces the need for cleaning and experiences less sick leave which all contributes to higher productivity
- The noise reduction is of significant importance for the health of the workers by the conveying lines
- The pipes mounted in the ceiling saves space at the floor
- Relatively low power consumption reduce production costs

