

Pneumatic conveying remove plastic wrap from the production of children car seats to improve safety, productivity, and the working environment

The challenge

- This company located in France produces and distributes 20.000 children's seats for cars every day
- The mechanical conveying system is inefficient. It requires non-productive manual handling for the plastic trim and often needs to be shut down to be cleaned
- With 2.500 seats running through every conveying belt in a day every stop of the machines is quite costly
- There is an increased risk of accidents when human labor removes the plastic trim manually and especially when they have to remove plastic laying under the conveying belts
- The mechanical solution produces dust and not only becomes a hazard to the employee's health but also requires more maintenance in the production facility
- The process with the mechanical conveying belt and human task of bringing the waste to the container meant a reduced recovery for recycling with risk of contamination
- The production facility is less presentable to new customers

Facts

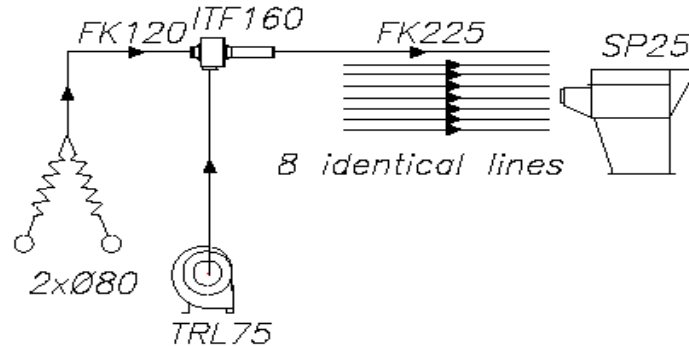
- Material: PE packaging film
- Thickness: 15 microns
- Waste size max: 1.000 mm x 150 mm
- Speed of production: 7 rounds/min or 400 rounds/hour
- Number of machines: 8 with two pick-up points to each
- Max. Transport distance: 60 m
- Max lift: 6 m
- Number of elbows: Five



In the old conveying solution plastic wrap often ended under the belt before being picked up and manually transported to the waste container

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The solution



- The Kongskilde solution consists of a Multiair 1075T blower and the inline Venturi system ITF 160 which together with the FK 80, FK 120 and OK160 piping secures efficient handling of the plastic trim from all eight conveying lines



The advantages and benefits

- The pneumatic solution is safe since no one has to clean or intervention in the machines, cleaning belts or collect plastic trim from the floor or from under the machines
- The Kongskilde solution increases productivity as the customer don't have use labor to remove the plastic trim and transport it to the container outside the factory
- A more continuously running of all eight conveying belts contributes to an even more efficient production
- Less need for maintenance of the pneumatic conveyor solution and even less need for cleaning the factory without the dust issues give a net cost saving
- More space around the machines improves safety and productivity contributing to better working conditions
- The removal of dust improves working conditions and makes the production lines more presentable
- Better recovery for recycling and elimination of external contamination in the compactor due to the closed system