

Pneumatic conveying systems removes hot foil edge trims from stamping machines with higher productivity and greatly reduced risk of emergency stop

The challenge

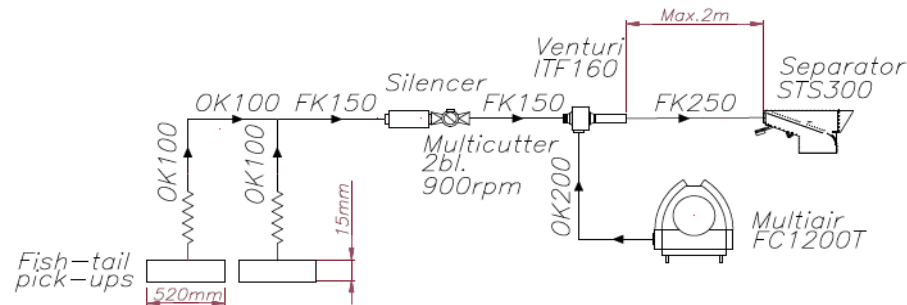
- The company in Germany is market leader in stamping machines and delivers to clients around the world
- The handling of the edge trims affects the productivity. It's a complicated process to handle the edge trims from a hot foil stamping machine. The setup is a tedious process which requires human intervention, and the rolls have to be changed during production at high runs
- The trim is usually rewound onto individual rolls after the stamping process and have to be removed manually
- The customer wants a 24/7 production since it's costly and takes time to set up each production line
- In this case, the customer will have up to 15 pieces in one production which complicates the situation even more
- There is always a risk that extraordinary thin trim ends up in the machines and not at the rolls and it requires an emergency stop and a skilled workforce to sort the trim that caused a stop

Facts

- Material: Hot foil, endless trim
- Number of machines: One
- Number of endless trim: 15 pcs.
- Pick-up: Two
- Max trim speed: 3210m/h
- Max trim width: 15 mm
- Material thickness: 21 μ
- System specifications: Conveying distance: 40 m

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The solution



- With the MultiAir FC 1200T and the ITF160 Venturi, the up to 15 edge trims is sucked up. The endless trim is conveyed further in two OK100 flexhoses conveyor lines. Both OK100 conveyor lines are transferred to a standard FK150 conveyor line. The trims are cut by a multicutter and end up in an STS300 static separator



The advantages and benefits

- The Kongskilde solution increases productivity as the customer don't need first to spend manual labor time on the setup and later removing the full rolls with edge trims
- As there is no longer need for installing rewinders for the carrier material, the machine fitting time is reduced by as much as half
- The reduction of unproductive labor time provided with the automatic and continuous transfer of edge trim directly out of the production facilities to an outside container also minimizes the liability related to transporting the full rolls with forklift through the plant
- The noise reduction contributes to a better working environment
- Since the winding is omitted there are fewer manufacturing faults. Production cost is considerably reduced as well as the productivity increases
- Pay-back time is expected to be less than ten months