

SYSTEM TO CLEAN REGRIND PLASTIC MATERIAL WAS PAID BACK IN 6 MONTHS AT A SUB-SUPPLIER TO THE AUTOMOTIVE INDUSTRY

/ THE CHALLENGE /

- The factory located in the US produces door panels, bumpers, moldings, HVAC ducts, fluid systems etc. to the automotive industry
- The company had severe working environment problems with dust all over the factory
- The company also had difficulties separating dust from the regrind material. Only 30% of the regrind material was reused

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/ THE FACTS /

- Material: HDPE Regrind
- Bulk density: <35 lbs./ft3
- Particle size: 3/8"
- Rate: ~650 lbs./hr. (295 gram/hr)
- Number of machines: 30+ individual machine
- Side grinders that all require AirWash units



• **Before** the Kongskilde system was installed, the material was transported from the grinder to the hopper with a "material through fan". The material through fan further damaged the material and created additional dust. Only a small percentage of dust was collected in the filter bags.

/ THE SOLUTION /

- The Kongskilde system consists of the AirWash 50 with K-200 dust collector. Material inlet from grinder is transported through OK pipes with 160 mm diameter, while outlets to dust collector is OK pipes with 200 mm diameter
- The AirWash double cleaner system virtually removes all dust from the regrind material, and the output is ready for reuse in the blow moulding process
- The AirWash 50 comes with a blower MTD25 4,0 kW motor and a standard frame
- The dust is collected in the K-200 bags. The dust bags must be emptied weekly/bi-weekly depending on the material and grinding process



/ THE ADVANTAGES AND BENEFITS /

- The payback of the Kongskilde system was 6 months
- After installing the Kongskilde system, the reuse of grinded material increased from 30% to 80%, leading to significant financial savings
- Eliminating dust from the regrind material improved product quality and reduced the need of frequent cleaning of machines and tools
- Work environment improved through significant reduction of dust from the factory indoor environment, and the need to wash slippery floors was reduced

