

# Clean Air Solution Report-RP8-2 Dust Collector



**Application: Robotic Weld  
Smoke-Aluminum Material**

**Location:  
Kansas**



A very large fabricator of aluminum products was faced with three issues; a growing concern over the health of their employees (days lost due to sickness), potential for OSHA air quality violations and the overall presentation of their facility for times when their customers walked through the facilities. Most of the concerns came from the large quantities of smoke and fumes being produced from 4 robotic welders and 6 manual welders. The fabricator already had an existing cartridge collector in place that was performing poorly due to improper duct design and because it emitted smoke through the filters during cleaning cycles.

Micro Air was approached by the distributor of the robotic welding equipment to provide a proposal on eliminating the weld smoke/fumes from the facility. The key to solving the end user's issues was determined to include a redesign of the capture hoods and integration of a Micro Air RP series dust collector. The previous system had failed in large part because the sticky nature of the aluminum fume was not accounted for in the air-to-cloth ratio, or amount of media provide per CFM.

Micro Air was selected as the supplier of choice because of the quiet and powerful Roto-Pulse filter cleaning system, a performance guarantee and ability to provide a turnkey installation. After the equipment was installed, the end user was extremely happy with not only with the long filter life and removal of smoke, but also because of the low sound levels as the collector was installed with a 30 HP motor/blower in the midst of several work cells.



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