

# CASE STUDY: COMBUSTIBLE DUST CLEANING | MAJOR AUTO MANUFACTURER



**Major car manufacturer with large production plants in the Midwest and throughout the world:**

When this major car manufacturer came to us, we had the answer to their problem. The problem started when this car company started switching the body frame of some of their more popular car styles from a steel to an aluminum body frame. Aluminum is a lighter material and better for fuel economy and for the environment, which was a major reason for the switch. However, the company started to see small smolders and fires in their ceiling and rafters near their production areas, grinding areas, and weld areas and they couldn't figure out why. As it turns out, the aluminum material they were using was lighter and more fuel efficient but it was also generating a combustible and flammable dust.

This same material that was creating a safer and more fuel-efficient car was also creating a fire hazard for the manufacturing facilities and putting their employees at risk. The company contacted Hughes Environmental and asked us to come up with a plan and approach to clean their combustible dust and to keep the dust at a manageable and safe level. Hughes came up with a plan to address the cleaning of ceiling and rafters of the facility, as well as to discover and point out to the customer that the dust was accumulating inside their ductwork, as well as their ceiling and rafters. Hughes works closely with the EHS manager at multiple facilities for this car manufacturer, to assess the level of accumulated dust and to determine the frequency of the facility cleanings.



For combustible dust cleaning, the typical approach that Hughes would use would be to vacuum surfaces, use intrinsically safe vacuums, grounding wires, static proof hoses, and use the NFPA recommended approach for cleaning combustible dust. This approach was particularly important to the customer, as they wanted to make sure that the approach to cleaning the combustible dust was done in the safest way possible.

The end result is a safer and cleaner facility for their employees which is their top priority