# DCH-1 – DRY & WET GRINDING DUST MACHINE-O-MATIC



> CASE STUDY

### THE LOCAL EXHAUST & VENTILATION COMPANY®



#### APPLICATION

**Machine-O-Matic** needed an exhaust solution for four (4) dry grinders and one (1) wet grinder for machining parts made from (two grinders work at the time):

- Zinc Permold ZA5 alloy
- · Cast with brass or steel inserts
- · Zinc die cast #3 alloy

## SOLUTION

Source Capture: - The dust is captured at source by specially designed and very well oriented small local hoods.

**Convey/Transport of dust:** - Once captured the dust is transported flexible and rigid duct system at 3500 - 4000 FPM (NFPA Guideline). The duct is fully welded and sealed.

**Exhaust:** - The heart of this solution is the DCH-1 Cartridge Collector using washable & replaceable filter cartridges to filter the dust. The dust settles inside the "Hopper" and the cleaned air is re-circulated back into the facility saving heat and energy.

## DESCRIPTION

One (1) DCH-1 Cartridge Collector

One (1) Duct system – Ø4" hose + STD. spiral18 gauge duct - 2.0D radius elbows fittings and blast gates

Four (4) Small local hoods mounted on the grinding wheel's shroud

One (1) Modified grinding wheel shroud to serve as local hood for the dry grinder

One (1) Installation and start-up by LEV-CO

### INDUSTRY

Machine-O-Matic, a division of Beaver Machine Corporation, has been in the manufacturing business of producing high and low volume aluminum and zinc castings for over 40 years.

## **TESTIMONIAL**

"We were looking for a simple and efficient solution to exhaust our wet and dry grinders. LEV-CO came up with a turn-key solution: - suction + contaminant transport + filtration. They designed and installed a solution that works seamlessly with our process, a good job overall!"

Detlef LANGE, Tool Room Manager, MACHINE-O-MATIC



