NEW DUST COLLECTOR ALLOWS SIGN MANUFACTURER TO BRING WORK IN-HOUSE

The Dee Sign Company is one of the leading real estate yard sign manufacturers in the United States. At their Cincinnati, OH headquarters, Dee Sign provides thousands of signs and frames across the U.S., Canada, Mexico and Singapore. The signs are made from hardboard, steel, aluminum, corrugated plastic and polyethylene, depending on the real estate agents’ needs.

“We were most impressed with United Air Specialists because they could customize to our specific needs, one of which was the huge volume of dust.”
– Craig Dixon, Dee Sign Chief Operating Officer

FOCUS: The Dee Sign Company

CHALLENGE: Design a customized system to collect excessive dust

SOLUTION: BDC Series Dust Collector

IMPACT:
• Removes dust buildup
• Saves money on maintenance
• Saves time
• Ensures workers’ safety

CHALLENGE
One of Dee Sign’s largest customers requested a new look for their signs. After determining that they couldn’t find a satisfactory source to produce pre-cut boards for these new signs, Dee Sign executives decided to cut the signs themselves. Since they would now be cutting 10 to 15 pieces of fiberboard at a time, several hazardous situations arose:

• Abundance of dust disposal because sawing a large amount of fiberboard at once creates very fine sub-micron particles, which can be hazardous when inhaled.
• Saw is located next to paint finishing area; the sawdust could damage the sign’s finish.
• Sawdust is potentially an explosive material.

Dee Sign had to invest in a CNC beam saw and an effective dust collection system.

SOLUTION
United Air Specialists (UAS) solved Dee Sign’s problem with the BDC pulse-jet dust collector that met the sign manufacturer’s specific needs in handling vast amounts of dust. The BDC was selected because it offers a choice of four media options, including one that was perfect for capturing submicron particles – 6 in. pleated bags. UAS recommended the BDC be installed outside the facility, on a structural steel support over top of a 30-yard roll-off box.

Dust continually empties into the roll-off box, which has a custom-made sheet metal cover to protect it from wind, rain and snow. Since the BDC captures the very fine dust particles at the source, it prevents dust from escaping into the paint finishing area. To avoid potential explosions, UAS recommended the optional Pressure Relief Panel and a Flamex spark detection system in the ducting.

In addition, the BDC is easier for Dee Sign to maintain. Instead of a system that requires workers to crawl inside to clean the unit, the BDC offers a tube sheet that slides out, reducing the time it takes to change filters and ensuring employee safety.

IMPACT
UAS has met and exceeded Dee Sign’s expectations. Employees breathe cleaner air because the BDC removes dust particles from the atmosphere; the dust no longer contaminates the paint; and Dee Sign saves money that would have been spent on expensive maintenance costs. Without the dust collector, Dee Sign employees would spend more time sweeping and cleaning their equipment. “All that dust would just create havoc for our product,” said Dixon. “It (BDC) just makes our signs better.”

Clean air. It’s what we do.™