

CASE STUDY

Transforming Dusty to Dust-Free: The Inspiring Journey of One Company



Wood dust was a concern for KATERRA from the very beginning. Although no longer in operation, KATERRA manufactured composite panels and cross-laminated timber (CLT). More specifically, they supply engineered floor and wall systems for office buildings with large commercial applications. In short, they created enormous sheets of paneling.

And that meant a lot of dust.

Dust infiltrated every bit of the 275,000-square-foot facility they operated in. KATERRA had already conducted its Dust Hazard Analyses (DHAs), so they knew the types of dust they had and the hazards inherent to them.

Cory Frashofski managed the panel processing portion of the facility, where most of the dust was created. Despite proper installation, the existing dust collectors only captured some of the dust they produced. Every panel they cut created a plume of wood dust that went into the rafters and would migrate to all parts of the facility.

// We had huge dust issues. It was an open environment mill, so there were no partition walls in between processes. We had dust from the CNCs ending up on the front end of the factory and created additional clean up hours for departments other than ours. //

- Cory Frashofski

The dust migration started to cause tension amongst employees as panel processing caused more clean-up for other facility areas. They gained a reputation for their fugitive dust, and a mentality of "keep *your* dust on *your* side" began to creep into the work culture.



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Air Quality Concerns

The dust that Cory's panel processing portion generated tended to stay in the air longer than other dust, creating poor air quality. Because the dust had a moisture content of 12% and lower, it was incredibly light. Just like a feather, it falls to the ground far slower than a bowling ball. The working environment was unpleasant and potentially unsafe, with the light, dry dust lingering in the air. To mitigate this, they had to provide respirators for the employees working in panel processing.

After installing SonicAire fans, air quality dramatically improved in the mill. When dust reaches the high-velocity air stream created by SonicAire's BarrierAire technology, the fans force the dust particles to stick together, become too heavy to float, and fall back to the ground. From there, it's a simple matter of sweeping up and discarding; no more accumulation and no more migrating to other areas of the mill.

When we spoke with Cory, his face lit up when he talked about how he and his associates no longer had to wear respirators at work. He said, "Before the fans, the guys had to shave daily to wear the respirators. Well, you know how millwrights love their beards. They were so happy when they no longer had to wear the hot, clunky respirators and could breathe easily."

Working with SonicAire

KATERRA heard of SonicAire through word of mouth. Other mills they'd come across had been clients, and with a quick search, they began their journey to a compliant and safe facility.

Initially, SonicAire's engineers created a full-coverage design with six fans for KATERRA. However, they began by only installing two. When Cory requested they start with fewer until they had a better proof of concept and their budget freed up, SonicAire's engineers worked with KATERRA to create a plan that still managed the bulk of their dust. Over time, the company continued working with SonicAire to purchase additional fans and fine-tune their placement to maximize efficiency.

Cory claims SonicAire's customer service was responsive and friendly. He said it wasn't a typical sales interaction where the clients are handed a fan and never hear from the company again. From the beginning of the process to ongoing support, SonicAire genuinely wanted to understand the facility, what they do, what they struggle with, and what their fans would need to accommodate.

// Being a standardized product is great, but there is a lot of information that went into selecting which fans were suitable for our needs. //

- Cory Frashefski

Dust is Done.

With SonicAire fans, KATERRA no longer accumulates wood dust in the rafters and can keep the dust contained to the section it belongs to. This containment led to a more amicable employee culture and a better working environment.

The SonicAire solution was clearly the right choice for KATERRA. But convenience doesn't stop with mere effectiveness. It's also effortless. When we asked Cory if he'd experienced any maintenance issues or problems with the fans, he claimed he never had any. The fan operation is quiet enough that they're barely heard, even with all their machinery off.

That's how we know that the equipment is effective and doing its job; we forget that it's there.

- Cory Frashefski



The SonicAire Compliance Guarantee

We're so confident in our products' ability to solve your problems that we now offer you the [SonicAire Compliance Guarantee*](#). As long as SonicAire fans are correctly installed and maintained according to our engineers' layout/engineering recommendations, they will eliminate the need for housekeeping in hard-to-reach overhead spaces. And if they don't, we'll provide a full refund on the cost of fans or reimburse the cost of any imposed fine, whichever is less.



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