



CASE STUDY: Dramatic Dust Collection Improvements and Energy Savings for Trimjoist

TRIMJOIST

\$8,000
in monthly
energy savings

20 tons
of material
collected/day

100s of ft
of inefficient conveyor
belt eliminated

Background

Trimjoist Corporation is an American manufacturer of engineered wood floor truss systems for the construction industry. The company is known for introducing the first trimmable floor truss system and is the only corporation with a patent on a trimmable floor joist.

Location: Columbus, MS

Employees: 75

Annual Revenue: \$12.5 million

Facilities: 90,000 square feet

Equipment: Ultimizer Saw, MJ Rip Saw, OSB Rip Saw, Crosscut Saw, OSB Edger, and Router

Products Featured

Ducting Design Service
20HP Direct Drive Dust Collectors
Air Locks

THE CHALLENGE

After a fire damaged some of its facility, including a 175HP custom-built dust collector, Trimjoist needed to get their saw department back up and running as quickly as possible. Knowing it would take months for their former supplier to build a new custom collector, they began searching for a more ready-to-install solution.

THE SOLUTION

After much research, Trimjoist decided on purchasing four 20HP Direct Drive collectors with Air Locks from Oneida Air Systems. Their decision was based on the durability of Oneida Air's made in America systems, the company's many positive reviews, and the technical knowledge of the sales team.

By taking advantage of Oneida Air's ductwork design service, Trimjoist was able to achieve an efficient ducting layout with minimal static pressure loss. The design called for the new collectors to each service a dedicated saw station and connect to one main duct run, with material terminating into fully enclosed trailers. The captured waste would then be transferred daily to a mill to be recycled into MDF board.

THE RESULTS

Despite Oneida Air's assurances that their four 20HP collectors (equivalent to 80HP total) could match, and in fact exceed, the performance of their old 175HP collector, Barry Sanford—President, CEO, and owner of Trimjoist—still had some reservations. Trimjoist's material of choice is kiln-dried southern pine. Could the new dust

collectors handle such an abrasive material, day-in and day-out?

"I was initially a bit apprehensive, thinking the spec CFM on the [Oneida Air] collectors might be more marketing hype than heft. But I'm glad to report I'm getting the CFM advertised and we're having no pickup issues," says Sanford.

During operation, the four Direct Drive systems collect an average of 40,000 lbs. (approximately 20 tons) of material in an eight-hour period, with the units running non-stop.

"I couldn't be happier with the performance of these collectors," says Sanford. "I know I made the right decision."

With the collectors in place, Trimjoist's employees began reporting less saw dust in the air and on the floor, allowing for a cleaner, healthier work environment than experienced with the old collector.

In addition to efficiencies in material processing and better indoor air quality for staff, the new Direct Drive collectors and ducting eliminated the need for hundreds of feet of temperamental conveyor belt, which had served to transport the old collector's waste out of the building. Their new setup has yielded the company untold man-hours saved for their maintenance team and less unexpected downtime for the production staff.

One welcome surprise for Trimjoist was the energy savings achieved from replacing their 175HP collector with four 20HP units. Post install, the company discovered they were saving \$8000 a month in electricity costs with the new units!

Trimjoist was back up and running at full speed in no time thanks to Oneida Air Systems' expert Ductwork Design Service and the high-efficiency



Oneida Air Systems' 20HP Direct Drive Dust Collector installed at Trimjoist's facility.

performance from their Direct Drive dust collectors. Following the installation, Sanford was so impressed with the quality and performance of their industrial collectors, he decided to buy one of Oneida Air's Mini Gorilla collectors for his personal workshop. He reports that product has more than met his expectations as well.

The solution to improving your dust collection is only a phone call away. Contact Oneida Air Systems for a free needs assessment at (800) 732-4065, Mon-Fri 8am-5:30pm EST.