



Torit® PowerCore® Helps Anchor Block Operate Smarter

INDUSTRY: Cement & Concrete

PROBLEM: The filter bags in the baghouse regularly plugged up, causing high pressure drop

SOLUTION: The new Torit PowerCore dust collector with PowerCore filter packs



The Torit PowerCore collector at Anchor Block is ducted to a 5,000-lb. concrete mixer that mixes very fine and abrasive sand, fly ash, aggregates and cement. The fine silica dust particles tend to coat and plug traditional filter bags, but not the PowerCore filter packs! After several months of use, the collectors pressure drop has stabilized at 1 "w.g.

Project Statistics

Airflow	1200 CFM*	2040 CMH**
Contaminant	Portland Cement Size range: 5 - 45 microns diameter	
Pressure Drop after 1200 hours (same filters)	2 inches water gauge	49.82 dekapascals
Dust Loading	10 pounds per hour	4.5 kilograms per hour

* CFM: cubic feet per minute ** CMH: cubic meters per hour

Smaller and smarter Torit® PowerCore® collectors with PowerCore filter packs were the answer to Anchor Block Company's chronic filter plugging problems and high pressure drop. Prior to beta testing Torit PowerCore in 2007, this Shakopee, Minnesota-based producer of standard concrete block, decorative masonry units, landscape retaining walls and paving stones endured frequent filter changes with its traditional baghouse dust collectors.

"The PowerCore filter packs have worked really well since the collector was installed," said Jay Battenberg, safety director at Anchor Block. "Every time I go by the collector the pressure gauge is hovering at the 1" mark. Our other collectors—baghouse and cartridge—never run that low."

Anchor Block was among the first to beta test a Torit PowerCore dust collector with PowerCore filter packs. The company was so impressed with its first Torit PowerCore collector, it installed a full-scale production unit in March 2008.

In the cement industry, a dust collector still running without filter plugging at very low pressure drop for more than three months is a rarity, Battenberg added. When the time comes to change the filter packs, Battenberg expects the process to be simple.

"It looks like it's going to be really easy to change the filter packs—even easier than a cartridge collector," said Battenberg. "There are a couple handles and the filters just sit in the collector. It almost looks like an air filter in a car."



The similarity to engine filters is no coincidence. While Torit PowerCore is only recently available in the industrial processing market Donaldson's PowerCore filter packs with Ultra-Web® technology have long been a mainstay in the engine market, providing higher filtration efficiency in high performance vehicles, construction, agriculture and medium/heavy duty transportation applications. Donaldson has more than 100 pending and issued patents on its PowerCore technology. ○

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