



Ultra-Web® Cartridge Filters Cut Maintenance Costs While Cutting Steel

INDUSTRY: Metalworking: cutting 3/4" steel with a plasma cutter.

PROBLEM: Short life (3 to 6 weeks) from Farr GoldCone filters.

SOLUTION: Donaldson® Torit® Ultra-Web® filters, with patented nanofibers, help them cut costs while they cut steel.

When this manufacturer of railroad locomotives installed its new plasma cutter for cutting 1/2" to 3/4" thick plate steel, they expected that the dust and swarf generated from the cutter would be difficult to collect. What they didn't expect was having to service the dust collector that came with the plasma cutter every three weeks!

"It's tough dust," commented the maintenance manager. "It contains ragged metal pieces along with oily smoke, and the temperature runs around 190°F." The company has two 8-hour shifts, and the plasma cutter runs about 5 hours per shift. The Farr Gold Series®* dust collector that was supplied with the plasma cutter just couldn't keep up.

The railroad manufacturer did downtime cleaning, but after 6 weeks, the maintenance crew could no longer get the collector to pulse the pressure drop down from 6-inches water gauge to the targeted 4-inches water gauge.

Rather than replace the entire dust collector, the maintenance manager decided to upgrade the filters to Ultra-Web® from Donaldson® Torit®. Ultra-Web has patented nanofibers that form a web-like structure to capture dust. The web keeps the dust, even submicron particulate, on the surface of the filter media rather than in the depth of the media. This enables easier dust release during the pulse-cleaning cycle.

So far, the Ultra-Web cartridge filters have worked eight times longer than the Farr filters! *And* not only are the filters lasting longer, the collector is running at a lower pressure drop, directly reducing energy usage.

This manufacturer now buys fewer filters, energy consumption is reduced, and the maintenance time and production downtime are cut.

"We're happy!" the maintenance manager reports. ○



Plasma Cutter Application: Dust collector energy consumption and filter maintenance time were substantially reduced by replacing the Farr GoldCone filters with Donaldson Torit Ultra-Web filters.

Gold Series is a registered trademark of Farr Air Pollution Control.

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