

Putting the Brakes on Coolant Costs

Substantial benefits for brake manufacturer specializing in cast iron.

This case study explores the transformation of a heavy-duty brake manufacturer that specializes in cast iron substrates. The company operates 24 CNC machines and utilizes a 5,000-gallon central coolant system that relies on city water. Initially, the manufacturer employed a chemical manager to oversee coolant operations, maintaining an average concentration of 23%.

After a detailed discussion with Michael Rhoades, a sales representative from Chemetall, a comprehensive line audit was performed, along with benchmark analysis of the existing coolant to assess its performance compared to alternatives.

The analysis led to the selection of **Tech Cool® 35058** as the optimal coolant solution for the manufacturer.



Annual total costs reduced from \$450,000 to \$180,000



Tech Cool 35058 features

A unique premium machining fluid

Developed specifically for applications requiring superior micro-finish on ferrous substrates

No chlorine, sulfur, boron or phosphorus compounds

Safe on ferrous alloys

Product uses a unique blend of additives resulting in exceptional sump life

This strategic decision resulted in significant operational improvements, including **a reduction in coolant concentration from 23% to 8%, translating to a remarkable 60% decrease in annual coolant costs.**

Additional benefits included increased tool life, extended coolant sump life, decreased labor and maintenance needs, enhanced operational efficiency, and the elimination of foaming issues.

Ultimately, the transition to Chemetall's coolant solutions yielded substantial financial benefits, **the annual total costs reduced from \$450,000 to \$180,000, with \$150,000 annual savings coming from decreasing coolant concentrations using Tech Cool 35058, plus a cost reduction of \$120,000 by eliminating the service contract.**

These numbers showcase the impactful results of this partnership.

Realize real cost savings. Save energy. Increase sustainability.

Previous process

Average incumbent 23% coolant concentration costing \$330,000 annually

Onsite Chemical Manager costing \$120,000 annually

Chemetall process improvements

Tech Cool 35058 operates effectively at 8% coolant concentration costing \$180,000 annually

No manager needed, Chemetall always available with expert technical support

Reproducible Quality with Precision Pretreatment

expect more — expertise



expect more — efficiency



expect more — innovation



expect more — collaboration



expect more — discovery



expect more — support



Cut it. Clean it. Coat it. Control it. Conserve it.

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