

CASE STUDY: METALWORKING RECLAIM SAVES \$400,000 ANNUALLY



Metalworking reclaim saves \$400,000 annually.

A transmission component supplier was losing large amounts of metalworking fluid before the fluid could reach the existing purification system that would keep it from becoming unnecessary waste.

The supplier had 48 independent machine tools, each equipped with its own sump and each performing tasks that produced a high volume of metalworking fluid.

It was inefficient to purify the fluids at 48 separate machines and the centralized system was unable to keep up with the demand. Therefore, new fluids were being pumped in to maintain purity levels. As a result, the individual machines were overflowing with metalworking fluid that was draining into the waste treatment system.

The customer's initial approach to the situation was to increase each machine's sump capacity. This not only required a large investment, but it would be difficult to scale as operational demands changed.

Trucent engineers were brought in to

review the situation. The recommendation was to install two centrifugal technologies that acted as a single, centralized reclamation system for collection, purification, and return of the fluid for reuse.

Trucent installed two TOP 1020 units. These purification modules draw coolant from the current in-ground flumes, remove the solid and liquid contaminants, and return clean coolant back to the individual machines for reuse. Trucent maintains and adjusts the equipment for optimal purification.

"Re-engineering the customer's purification system showed a customerdocumented 60% decrease in coolant concentrate usage," said Dave Semersky, Director of Fluid Purification at Trucent.

Overview

SITUATION

Automotive supplier was using 60% more metalworking fluid than required.

SOLUTION

Separation technology experts engineered a solution using two purification modules to enhance the performance of the customer's existing purification system.

RESULT

Re-engineered metalworking fluid purification system saved \$400k annually, and reduced waste and tooling issues.

ANNUAL COST SAVINGS PRODUCED: \$400,000

Documentation by the facility also showed a decrease in waste treatment and water usage. Tooling savings totaled over \$30,000 in the first four months of operation.

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Dave Semersky, Director of Fluid Purification Trucent