

# Smoot Dispersion Reduces Downtime

## CASE STUDY: Customized Coolant Eliminates Costly Smoot Problem

### Challenge

One of the world's leading manufacturers of automotive and diesel engines discovered their coolant was leaving an unsightly residue on machined engine parts as well as washed parts. The result of this smoot problem led to unplanned downtime to clean out the sumps of the CNC machines and the part washers, and led to unexpected increased costs due to excessive waste hauling and overtime.

This Tier One supplier contacted Brighton Labs to consult on their issue. The Brighton Labs team made an on-site visit, reviewed the customer's system, saw for themselves the smoot problem, and took samples of the coolant back to the lab.



### Solution

In the lab, the Brighton Labs team analyzed the coolant's molecular properties and put it through a series of 15 tests to determine an appropriate solution to prevent the smoot from occurring.

As a result of the testing, the Brighton Labs team developed a customized coolant that met this company's specifications for lubricity, odor, foam, and rust protection without the smoot build-up.

### Results

Brighton Labs customized coolant solution eliminated the smoot problem, leading to increased productivity and profitability for the manufacturer.

Smoot was no longer clinging to engine parts, equipment, or overloading the part washers. This allowed the manufacturer to get production back on schedule to meet their goals and budgets.

More parts were able to be moved through the system increasing profitability.

Costs were reduced:

- Downtime was reduced, saving money and helping the company meet its production goals.
- Maintenance and disposal costs were reduced since there was no need to continuously clean out the sumps.

- Coolant usage was reduced since their systems didn't need to be cleaned out and recharged as often.

And, from an environmental perspective, this leading manufacturer of diesel and automotive engines was able to meet EPA standards for clean water and clean air in a manufacturing plant (volatility).

