

Automotive Manufacturing : Reducing Energy Usage Cleaning Automotive Components QH EXOMAX™ 5378

The Challenge

A global Automotive components supplier was looking to replace their cleaner and reduce energy usage. The customer turned to Quaker Houghton for a cleaner that could:

- Run at a lower temperature than the competitive product in order to reduce energy usage
- Provide equal performance at a more economical price point

The Solution

The customer was using a competitive aqueous, mild alkaline industrial process cleaner to wash die lube from transmission components. This product had to be heated to 140°F in order to successfully clean the parts. Quaker Houghton recommended QH EXOMAX™ 5378 as a replacement because it is an effective, low residue, alkaline spray cleaner with short-term rust protection. Comparison studies were conducted in a lab environment showing that QH EXOMAX™ 5378 could clean as effectively as the previous product but at a lower temperature (100°F). The cost to heat the washers was estimated to be \$48,000 per year and after switching to QH EXOMAX™ 5378, the spend was approximately \$30,000 per year.

Creating Sustainable Value

Quaker Houghton focuses on providing customer solutions that reduce waste, energy, water usage and chemical consumption, while improving operational processes, tool life and the health and safety of workers. We are committed to creating a positive social, environmental and economic impact on our world. By converting to QH EXOMAX™ 5378, the customer was able to reduce the washers running temperature, and therefore decrease energy usage resulting in a savings for the customer.

The Benefits

By switching to QH EXOMAX™ 5378, the customer was able to:

- Maintain part cleanliness while operating at a lower temperature
- Save approximately \$18K per year through reduced energy usage

Process and Equipment

PRODUCT TITLE	PRODUCT INFORMATION
Parts	Transmission Components
Material	Steel
Machine	Ransohoff Washers
System size	500 gallons
Concentration	3.0 – 5.0%
Filtration	Bag
Operations	Washing Die Lubricant

The Product

QH EXOMAX™ 5378 is a non-MEA, non-nitrited, low residue, alkaline spray cleaner with short-term in-plant rust protection. QH EXOMAX™ 5378 presents no barrier to subsequent coating and has proven to be an excellent alternative to the use of solvent emulsion cleaners.

