

Challenges

A major automotive producer was using a cleaner/corrosion preventive on the Input Carrier Washer. The solution did not give adequate rust prevention and left behind a sticky residue. This automotive producer was looking for a product that would reduce the scrap rate by inhibiting rust and not leave a sticky residue.

Quaker Chemical introduced QUAKERCLEAN® 624 MPC liquid alkaline type cleaner/corrosion preventive into this operation. The product improved part quality and reduced the high scrap rate. It also resulted in a total chemical cost savings for the year.

Providing Solutions

Changing to the QUAKERCLEAN® 624 MPC reduced high scrap rates by 4,778 pcs and resulted in total cost savings of \$49,070.

The following tables provide a comparison of the scrap rate results using the previous fluid versus QUAKERCLEAN® 624 MPC.

	Baseline Scrap Rate	QUAKERCLEAN® 624 MPC Scrap Rate
Scrap/Month for Input Washer	1,121 pcs	722 pcs
Scrap for the Year	13,452 pcs	8,674 pcs
Total Cost/Year in Scrap	\$138,152	\$89,082

Customer Reference

- Chrysler
- GM
- JTEKT
- NTN Bower
- Robert Bosch
- SRS
- Volvo

OEM Reference

- Graper
- Ransohoff
- Valiant

Product Description

QUAKERCLEAN® 624 MPC was developed as a multi-purpose liquid alkaline product designed to provide excellent cleaning in spray and immersion wash applications. The product is approved and in use by automotive manufacturers around the U.S.

This versatile product is used to clean and protect metal surfaces in one step. This simplifies operations and keeps inventory costs low, and imparts short-term corrosion protection to the metal surface when not rinsed. The mild alkalinity is safe for use on both ferrous and non-ferrous metals.

This single product can be used for two applications, which reduces inventory and costs. The moderate pH of the product is very compatible and the low foaming technology means no excess foam generation at temperatures up to 150°F. This means less product consumption and lower costs. Its hard-water compatibility and imperceptible film on parts facilitates gauging and the handling of parts which leads to fewer rejects and lower costs.

Process & Equipment

Part:	Input Carrier
Part Alloy:	Steel
System Size:	1,000 gallon Ransohoff Washer
Fluid Temperature:	160°F - 200°F
Blow off Temperature:	130°C
Wash Pump Pressure:	35-40 psi
Water Hardness:	100 ppm

Product & Process Expertise

Metalworking lubricants represent a very minor part of the costs in a metalworking process, typically less than 1%. This case illustrates the importance of correct fluid selection. The impact of the fluid can be a multiple of its costs, making the price of a metalworking fluid insignificant. That is why Quaker focuses on developing fluids with the highest performance without compromise, fluids that sharpen your competitive edge.