

## Challenges

A major producer of diesel engines was experiencing severe rusting of cast iron engine heads during production. This resulted in an additional processing step to remove rust and scale prior to assembly steps.

Quaker Chemical introduced FERROCOTE® 118 DC, a water-soluble, interim corrosion preventive. Application of this product virtually eliminated rejects due to rust and scale.

## Providing Solutions

The use of FERROCOTE® 118 DC resulted in:

- **Reduction of 250 heads per day being rejected for rust (1500 total production) to an average of one**
- **Virtual elimination of the rust removal processing step resulting in decreased chemical usage and labor costs**
- **Elimination of foam and bacterial growth in the application system**
- **System life increase of 14%**
- **Elimination of undesirable amine compounds**

## Customer Reference

- Bosch
- Cummins
- General Motors
- NTN
- Timken

## OEM Reference

- Ransohoff

## Product Description

FERROCOTE® 118 DC is a water-soluble corrosion preventive for interim protection, suitable for all steel and cast iron alloys. It may be applied via immersion or spray application, resulting in protection provided by a light oil film.

## Process & Equipment

### Ransohoff Washer

<b>Parts:</b>	Diesel Engine Head
<b>Part Alloy:</b>	Cast Iron
<b>Cleaner/Rust Preventive:</b>	3-6% v/v concentration
<b>Operation:</b>	In process cleaning and corrosion preventive application

## Product & Process Expertise

Corrosion preventive fluids are designed to protect metal parts during storage and transport during the manufacturing process. Proper selection and application of the fluid can result in substantial cost benefits. Typically, metalworking lubricants represent a very minor part of the cost in a metalworking process, typically less than 1%. The impact of a 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.