

# Rust Veto 310

## Water based rust preventive

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Corrosion issue  
elimination

Waste reduction

Process innovation

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# The Plant and situation

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The company, based in Coventry, is a successful power train components supplier.

Part of a global Group, the company competes against businesses in China and India to produce high quality components for customers including Jaguar, Land Rover, Renault, Ford and BMW.

The standard drive shaft bracket fits all Ford engines and is shipped globally.



- Parts : cast iron drive shaft brackets previously machined using Hocut 795 H are fed to final wash.
- 2 Tristar Vixen tunnel wash systems with 500 litre sumps running at 49°C perform final wash and corrosion protection for Ford drive shaft bracket parts.
- Product requirement : cleanliness to Ford spec and corrosion protection for minimum six weeks in indoor and outdoor environments.
- KAS were using Castrol Aqua 2 at 3-4% concentration and constantly had corrosion issues with parts both before and after shipping. This led to high costs in returns and rework.
- Washer sump life was very poor with the Aqua 2 solution requiring weekly change-out of both 500 litre sumps leading to high product usage and cost.



# Solution

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- A site survey was carried out to identify all wash systems and their individual requirement in terms of cleanliness, customers' specific requirements and product performance.
- Our application specialists recommended Rust Veto 310 to replace the problematic Castrol Aqua 2.
- Technical discussions were held with company Business Unit and Quality Managers to ensure they all understood the proposals and were comfortable to take the process change forward to Ford.
- Both systems were converted to Rust Veto 310 at 3% in mains water at 220ppm hardness.
- Regular testing and reporting of wash solution condition was provided as part of the validation programme:
  - Weekly check of solution strength by refractometer.
  - Weekly cleanliness check by millipore and dry weight measurement.
  - Weekly report to communicate condition and cleanliness to all key company personnel.

Account Manager Kevin Lambdon says 'we have products and expertise in cleaners and corrosion preventives to match any of our competitors, especially in our core sectors. We used that expertise at this company to be innovative in solving problems that a competitor was unable to deal with'.

A good example of innovative thinking and applying technical expertise to successfully use a corrosion preventive in a washer system.



# The Benefits

## Economics

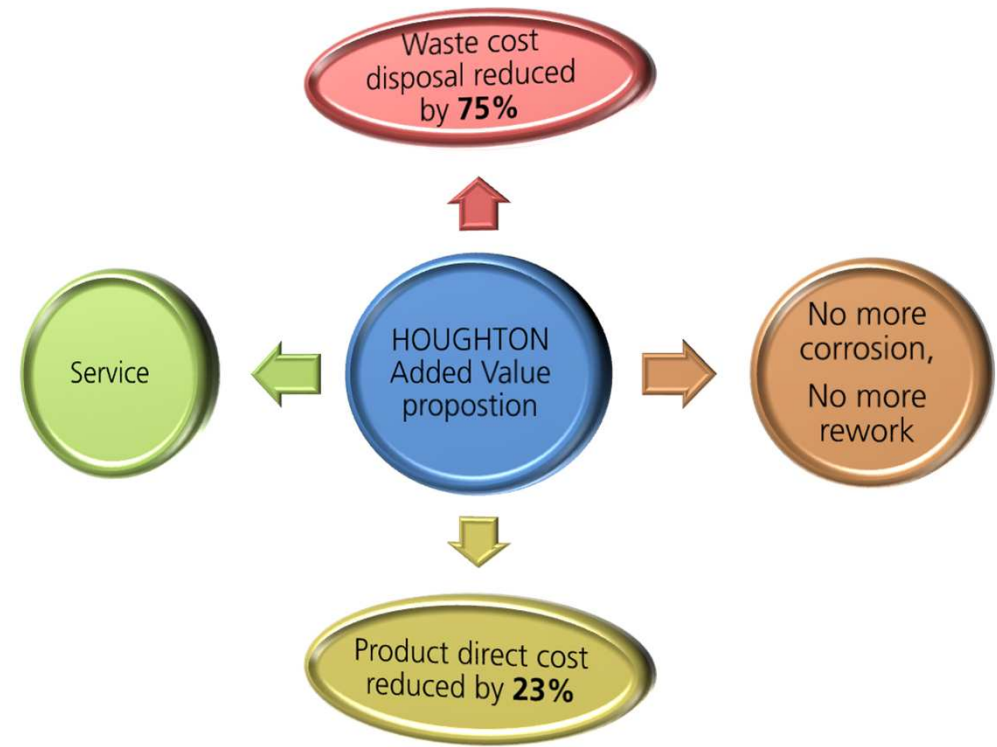
- A fourfold increase in tank life from 1 week to 4 weeks reducing waste cost disposal
- Rust Veto 310 @ a lower price per liter to replace Castrol Aqua 2.
- Reduced product usage giving a projected cost saving of approx £6k per annum.
- No corrosion of parts reducing rework

## Quality

- Improved cleanliness of parts with consistent measurements of 6 micrograms per 100 ml of fluid (Ford specification is less than 10 micrograms per 100 ml of fluid).

## Customer Intimacy

- The project has strengthened the partnership between this company and ourselves. And has increased the reliance on our Fluidcare services to support critical areas.
- The project has convinced the customer of the value of working closely with Houghton, taking full advantage of our application and product knowledge.



**HSE and Service improved**

**Energy saving**

