

Challenges

A major Tube and Pipe manufacturer was struggling with the following issues:

- Premature corrosion on the pipe before leaving the warehouse
- Loss of revenue and profits due to end user warranty claims
- Coating film flow issues due to additive restraints
- Low coating film builds

There was also an opportunity for the manufacturer to sell more tonnage if they had a better coating with more flexibility, and greater corrosion protection. If successful this same solution could be applied at their sister mill.

The manufacturer worked with Quaker to identify problems throughout their process. With Quaker's knowledge of the complete Tube and Pipe manufacturing processes from front to back, they were able to recognize the following issues:

- Heavy mill oil on incoming steel impacting coating adhesion
- Gummy deposits on the tube forming/welding operations causing appearance and dirt issues on the end product
- Inability of washer to overcome coolant issues leading to marginal cleaning performance
- Vacuum issues affecting coating application

Quaker proposed the Tube & Pipe manufacturer convert to QUAKERCOAT® 036 UV, a custom formulation that would not only help overcome the identified issues, but also provide a more flexible coating to meet the needs of the sister mill and help gain the additional sales.

Providing Solutions

Working with Quaker service personnel the manufacturer was able to better manage the mill oil on incoming steel, and based on recommendations from Quaker, converted to a more compatible coolant, and an improved cleaner and dewatering aid.

As a result the manufacturer was able to achieve the following results:

- Elimination of warranty claims due to corrosion issues
- Elimination of gunk deposits
- Better surface and drier pipes
- Increased sales from the addition of a more flexible coating - QUAKERCOAT® 036 UV
- Improved quality and consistency among their mills sharing customers
- Reduced costs with low coating film builds

Additionally, Quaker was able to bring these same process fluids and operating parameters to another mill within the corporation, which eliminated the time spent trying to troubleshoot problems due to multiple fluid suppliers. Quaker also instituted routine service visits to ensure operators questions and concerns were operated on a timely basis.

Product Description

QUAKERCOAT® 036 UV is a high gloss 100% UV curing, permanent protective coating intended for use as a corrosion inhibiting coating on metal tube and pipe surfaces. QUAKERCOAT® 036 UV is a zero-VOC coating that complies with current environmental regulations on volatile solvent contents for paints and varnishes.

Benefits

- Instant curing
- Excellent corrosion protection
- Good adhesion and flexibility
- High gloss film
- Excellent hardness
- High resistance to impact

Process & Equipment

Part:	Seamless Pipe
Concentration:	No dilution
Line Speed:	150 ft./ min.
Pressure:	60-70 psi vacuum
Operation:	Vacuum applied pipe coating

Product & Process Expertise

Quaker is a worldwide developer, producer and marketer of custom formulated Tube & Pipe process chemicals and coatings. From first coil to final cut, Quaker is capable of providing process chemicals for all operations in ERW and Seamless mills, and delivers the in-depth process expertise to help maximize your productivity.

Quaker's product line includes hydraulic lubricants, high-temperature greases, cleaners, forming & sizing coolants, drawing & forming compounds, sawing lubricants, hydrotesting compounds, corrosion preventives and a complete line of high-value coatings (including solvent, water-based and UV coatings).