

## Challenges

A major producer of automotive-quality steel needs to increase the surface roughness of its galvanized sheet in order to meet its automotive customer's specification. The company uses an in line temper mill with high roughness rolls in order to meet this specification.

Because of zinc transfer to the rolls and rapid reduction of their roughness, the mill was only able to run one or two coils per set of rolls and brushing was required to remove zinc deposits.

The company was looking for improvement in:

- **Roll life**
- **Mill downtime**
- **Brush life**

Quaker introduced QWERL® 263 wet temper solution.

## Providing Solutions

The introduction of QWERL® 263 resulted in:

### Total Benefits Equal To 26 Times Wet Temper Cost

<b>Total Annual Cost for QWERL® 263</b>	\$24,000
<b>Operational Savings:</b>	
52% reduction in roll changes	\$275,200
Elimination of delays due to brush changes	\$343,200
67% reduction in water consumption	\$12,300
<b>Total Annual Benefit:</b>	<b>\$630,700</b>

### Other Benefits

- Lower waste treatment costs due to water reduction.
- Improved transfer of roughness to sheet surface.
- No adverse effects on downstream processes.
- Capability of achieving desired surface roughness with smoother rolls.

## Product Description

QWERL® 263 is diluted in water and applied to in-line temper mill rolls as a solution to remove solid contaminants from the roll and strip surface. It is designed with good trapped water corrosion prevention and compatibility with rust preventive oils. QWERL® 263 also provides lubrication for typical extensions up to 1.5%.

## Product & Process Expertise

Temper fluids represent a very minor part of the total steel processing cost. Typically less than 1%. This case illustrates the importance of the correct selection of the temper fluid. The impact of the fluid can be a multiple of its costs, making the price of a temper fluid insignificant. That is why Quaker focuses on developing fluids with the highest performance without compromise. Fluids that sharpen your competitive edge.