

## Challenges

A major producer of electrical grade steel wanted to temper all silicone bearing steel in one pass. The mill was designed without tension bridles making the required one-pass, 8% extensions impossible with their existing temper mill fluid.

The company was looking for:

- High extensions (8%)
- One pass rolling
- Excellent shape control

Quaker introduced QWERL® 9000, a product designed to perform this difficult temper rolling application in one pass.

## Product Description

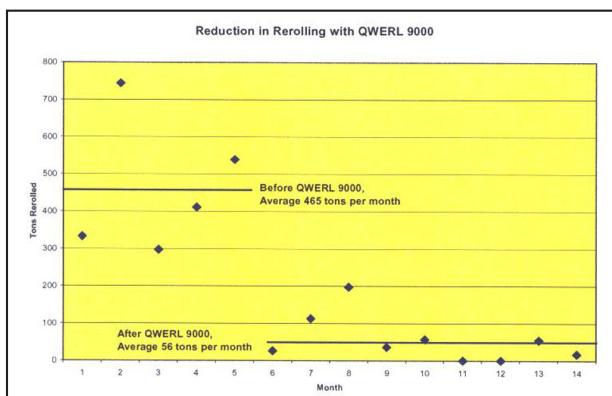
QWERL® 9000 is based on synthetic esters and advanced emulsification technology. This combination allows temper mill operators to make large extensions and hard grades of steel. This product can be used on electrical, high carbon, high strength and drawing quality steels.

## Providing Solutions

The introduction of QWERL® 9000 resulted in:

### Savings Equal To 1.7 Times Additional Fluid Costs

Annual cost of previous fluid per year	\$63,000
Annual cost after introduction of QWERL® 9000	\$165,000
Annual cost reduction from reducing to one-pass	\$272,000
<b>Total Savings per Year:</b>	<b>\$170,000</b>



## Other Benefits

- Reduced yield loss
- Increased roll life
- Increased mill capacity

## Process & Equipment Information

**Operation:** 2-stand temper mill without tension bridles

**Capacity:** 1,000,000 tons per year

## Product and 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.