

Challenges

A major tube and pipe manufacturer was having difficulty getting the approval needed to obtain business at a transplant automotive company because of the amount of scale on the tubes coming from their stretcher line. To combat the problem, they rented a descale unit which showed that they could create the needed quality, but would have to invest in redesigning their mill to accept a permanent descaler.

To help the manufacturer avoid the expense of a major redesign and continued maintenance on a descaler, Quaker recommended QUAKER QUAKEROL® HB-16, a highly concentrated, high performance cationic rolling lubricant.

In addition to QUAKER QUAKEROL HB-16, Quaker proposed the use of Quaker's Mobile Industrial Dispersion Application System (MIDAS) to achieve the full benefits of QUAKER QUAKEROL® HB-16. Quaker wanted to show that by using QUAKER QUAKEROL® HB-16 and installing a MIDAS unit, the customer would achieve the following benefits:

- **Reduced rolled in scale**
- **Higher quality**
- **Elimination of the need for a descale unit**
- **Improved roll life**
- **Lower energy costs**

Providing Solutions

Since using QUAKER QUAKEROL® HB-16 in production and placing a permanent MIDAS unit on the first 6 stands of the Stretcher mill, our customer has seen drastic improvements in its operations in the following areas:

- **Significant rolled in scale reduction**
- **Three to four times roll life (concentration dependent)**
- **Qualification for a new transplant automotive customer**
- **No need for a mill redesign/descale unit**

Product Description

This product is a blend of highly effective EP additives and esters, and petroleum oils. A combination that provides high temperature and extreme pressure lubrication, and anti-wear properties for load reductions and improved roll life in the hot rolling of steel strip and structural shapes.

This product was specifically designed for very high temperature processes where surface roughness and roll life are extremely critical factors.

Process & Equipment

Operation:	20 stand Stretch Reduction Mill
Capacity:	200,000 tons per year
Lubrication:	Applied in the first six entry stands
Application:	Mobile Industrial Dispersion Application System (MIDAS)

Product & Process Expertise

When applied properly, roll bite lubricants represent a very minor cost in the tube making process, less than a 1% investment in application, control equipment and lubrication pays for itself very quickly. The impact of roll bite lubrication is usually an exponential multiple of the fluid and equipment costs making the investment virtually irrelevant. That is why Quaker focuses on developing products with the highest performance without compromise.

