

Challenges

A hot mill customer was currently using a competitive lubricant in its 6 stand 68" CSP hot mill with coil box. However, the current supplier's lubricant had what the mill considered to be a high oil cost and occasional bad scale problems. As a result, the hot mill was trialing all major oil suppliers to see if a better technology existed.

Since the mill had a dispersion system similar to Quaker's Mobile Industrial Application System (MIDAS), Quaker proposed using QUAKER QUAKEROL® HB-9, a high performance, cationic rolling lubricant.

Quaker wanted to show that by using QUAKER QUAKEROL® HB-9, there would be visible improvements in the following areas:

- Load reductions (reduction in oil concentration)
- Reduction in cost per ton
- Reduction in roll peeling
- Reduction in scaling defects

Providing Solutions

Since switching to QUAKER QUAKEROL® HB-9, the hot mill has seen drastic improvements in its operations in the following areas:

- Significant load reductions
- 2/3 reduction in cost per ton
- Significant reduction in scale defects
- Significant reduction in roll peeling

Product Description

QUAKER QUAKEROL® HB-9 is a blend of sulfurized 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 exhibits excellent dispersion characteristics in a wide range of water chemistries and is typically dispersed at 0.3% in water.

Process & Equipment Info

CSP HOT MILL WITH COIL BOX

Operation:	6 Stand 68" CSP Mill
Capacity:	2,400,000 tons per year
Lubrication:	Lubricant Applied on 3 Stands and 1 Roughing Mill
Application:	Custom Application System

Product and Process Expertise

When applied properly, roll-bite lubricants represent a very minor part of the costs in the steelmaking process, typically less than 1%. Investment in application and control equipment pays for itself quickly. The impact of roll-bite lubrication is usually a multiple of the fluid and equipment costs making the price virtually irrelevant. That is why Quaker focuses on developing products with the highest performance without compromise. Solutions that sharpen your competitive edge.