ENSIS PL 1608
Oil based Prelube

Corrosion protection performance
Forming properties
Thixotropic oil
The Plant and Situation

The plant manufactures precision steel strip, offering alloyed and micro-alloyed high yield cold-rolled low and high carbon steel strips and stripping process, over thickness ranges between 0.2 and 6 mm, widths from 20mm to 750mm and outer diameters between 850 and 1800 mm with different surface finishes.

End users industries are automotive components, oil, gas, chemical, power generating industry and waste heat recovery systems. They export 80% of their production to countries like France, Germany, Italy, Turkey and South Africa (some rust issue may occur at this destination).

Customer used a classic rust preventive oil based but they needed to improve quality of their product because they experienced some problems of dirty areas and crying coils, arriving with a non uniform film at their customers.
The Process and Solution

- Reception of Hot rolled steel followed by an Acid Pickling.
- Protection with our Houghto-Roll ARDC (compatible with our rolling fluid). 30% of the production is sold as it and 70% goes to the cold rolled line. Product is applied via a brush. They do not measure the quantity but are able to maintain the same quantity with their system.
- Cold rolling with Rollub 889 AR at 5% in RO water.
- Batch Annealing.
- Skin Pass, dry.
- Final protection with Ensis PL 1608, applied at ambient temperature (no control on it), application is made drop by drop at a 10g/m² rate on 1 side only. Depending on roughness of the coil the quantity may vary (high roughness means more oil) but no control of layer thickness.
- Packaging : plastic bag on standard and VCI plastic for some specific grade and customers.
- Storage : outside, length vary a lot and can last several months.
The Benefits

Economics

- Oil savings thanks to Ensis PL 1608 thixotropy that make the oil stay where it has been applied
- More uniform film which increases corrosion protection
- Prelube properties may add value to the steel plant provided they succeed in selling it at their own customer who are used to degreased before the forming operation.
- Cleaner area which prevent from too often floor washing and increase workers safety.

Customer intimacy

- It has enable us to propose better solution and increase our SoW.

THIXOTROPY BRINGS MAJOR IMPROVEMENT

CUSTOMER INTIMACY FOR SOW IMPROVEMENT