

Extending Life of Gears

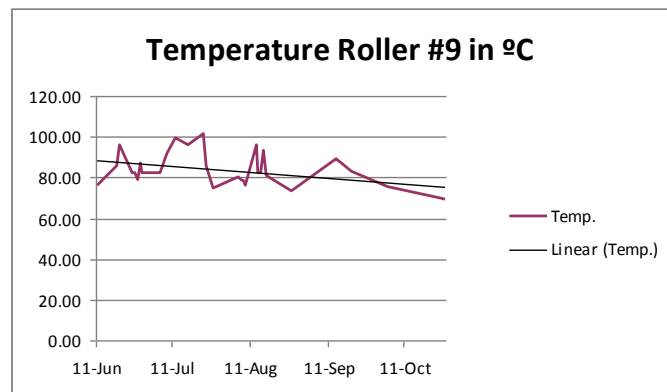
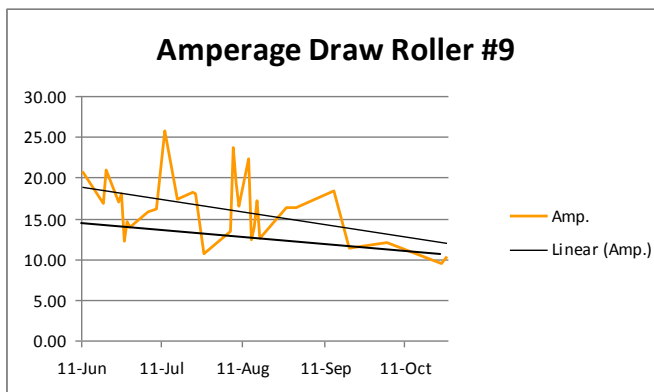
BEFORE

A large Steel Conversion plant in Mexico was suffering of short life of transmission gears. Transmissions of nail roller #9 were especially difficult; they had to be replaced every 4 months with cost in excess of \$5,000 per gear set. The plant personnel welcomed the idea of coating several gear transmissions to get more out of them.

AFTER

The plant management decided to coat with Rewitec several machines applying the coating to the gear oil. Nail roller #9 was closely monitored to evaluate the development of some key variables. The temperature and amperage draw were measured weekly.

The reduction of friction was so important that in few weeks the amperage drop to unexpected levels. Amperage readings had high variations due to the specific job of the machine, in average could be measured around 15% lower for the same job. from 14.5 down to 11 Amp. Temperature reading was in average over 10°C lower than before Rewitec from 85°C to 75°C, or 12 %.



BENEFITS

After 4 months of operation, the transmission of Roller #9 was running better than new. It felt smoother, with lower temperatures and loads. Temperature readings went down All other equipment coated with Rewitec showed similar results in terms of temperature.

Expectations are to redo the Rewitec coating every year in the most compromised equipment to achieve an extension of lifetime from 4 months to 4 years.

Under the assumption of reaching 4 years lifetime, the saving would be in excess of \$15,000 per year with a fraction of this invested in Rewitec coating.