

Twefontein Sawmills convert to Maxiflo

Maxiflo steam traps boost performance of kilns.

Maxiflo steam traps, an exclusive development of Industrial Steam Products (ISP), was introduced to Dries Saaman of Hans Merensky Holdings, by local representatives in September 2007. After evaluating the product, it was decided to test the Maxiflo on a compartment kiln at Twefontein Sawmill in Sabie.

Steam traps are automatic valves which drain condensate from coils, while retaining the live steam for future use. What's unique about the Maxiflo to other traps is that it has no moving parts.

Following the successful test, the balance of Twefontein was converted to the "Proudly South African" accredited Maxiflo, during the December 2007 shutdown. A total of 150 Maxiflo traps were installed on steam distribution lines and all 21 kilns, including two large TFD progressive kilns.

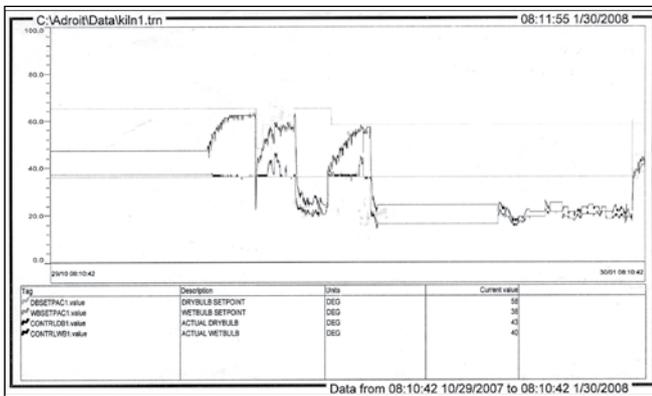
On start-up of the sawmill in January, the results of the Maxiflo conversion were undisputed. According to operating personnel, temperature profiles of kilns had generally improved, which resulted in reduced batch cycles of up to 20%. Less downgrading of wood was also reported.

Maxiflo traps improve performance by employing ISP's propriety "ejector technology" which draws condensate from heat transfer surfaces and thrusts it out, faster than any other type of trap.

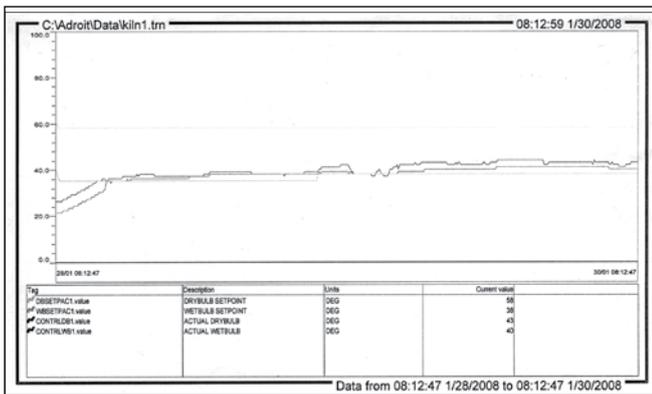
Steam usage in the mill was also substantially reduced after the conversion, as illustrated by lower flash steam visible at condensate vents.

To date, no spares or replacement units have been required at Twefontein. This comes as no surprise, as Maxiflo traps have been in continuous operation for eighteen years without any maintenance required, other than a periodic cleaning of the strainer mesh.

For this reason, ISP's guarantees are based on fact, rather than probability.



Temp profile before Maxiflo



Temp profile after Maxiflo

The stainless steel Maxiflo traps were installed shortly thereafter by ISP's specialised installation crew, who have numerous conversions under their belt. All ten main steam heating coils as well as the five booster coils on the kiln were all changed over to Maxiflo.

After the installation, an on-site Maxiflo presentation and product training was given by Mike Louw, to production and maintenance personnel at Twefontein.

The kiln was tested over a three-month period in which outstanding results were recorded. These included faster ramp-up times and improved temperature profiles over batch cycles.



Before Maxiflo conversion



After Maxiflo conversion