Softening cooling water for hot steel rolling with **Scale** watcherTM

The company

The Sidmar Group in Belgium is one of the world's largest high quality steel producers.

The process

Cooling water is used to solidify the liquid iron. This is achieved by spraying water through nozzles over and under the rolling table. The factory uses around 5000 m³ circulating water an hour to be cooled by its large cooling tower.



COOLING TOWER



SPRAY NOZZLES

The problem

Minerals deposited around the valves and on the roller table. If left untreated, the rollers would stop turning efficiently, leading to uneven steel plates being produced. To prevent this, Sidmar had undertaken regular scheduled maintenance to ensure an uninterrupted production process

The solution

An appropriately sized single **Scale** watcher^{\mathbb{M}} unit was installed on the 800 mm/32" circulation line of the cooling tower. During a nine month trial to compare the **Scale** watcher treated equipment against normal maintenance, the steel rollers treated by **Scale** watcher on one side of the mill were practically clean while on the other, untreated side, a thick layer of deposits had accumulated.



800 mm/32" pipe of circulated cooling water



Left side not treated

Conclusion

Such was the success of the trial that the **Scale** *watcher*^m system was immediately purchased by Sidmar and now ensures that the valves, roller table, the pipes and water-fed equipment remain virtually scale free.

Source

Scalewatcher NL BV, The Netherlands