

Filtering out Cooling Problems for Tyre Company

Cooper Tire and Rubber Company, producers of the well-known Avon Tyre brand in Melksham, Wiltshire, turned to a local company when they were having problems with their cooling water.

Cooling water is taken straight from the River Avon, through a coarse screen and is used throughout the factory for many cooling processes. The water then returns to the river so cannot be treated in any way which would hurt the delicate environmental balance of the river.

One line using the river water is an extruder which uses the cooling water, mixed with heated water, to create water in a narrow temperature range to keep the rubber quality to very a specific tolerance. The system was fitted with Y strainers to protect it, but it was still suffering with silt build up, which required constant attention.

A Phoenix Filter, type C, was fitted for a trial period, to see if any improvement would be found after filtering at 75 microns. These were subsequently changed for 50 microns, and a coarse pre-filter fitted, at 3mm, to filter out sticks and other large organic debris that was found to be entering the filter. This combination worked so well that the Y strainers are no longer checked, as they were not found to be blocked again.

Philip Schneider, Maintenance Manager at the Melksham plant: “The TC Filters have provided us with clean river water and as a result our heat exchangers operate more efficiently. Maintenance to the heat exchangers and associated pipe-work has greatly reduced with very little maintenance or down time compared to our previous system prior to adding the TC Filters. We have also used the TC Filters in other roles at Coopers and they are providing successful solutions to our dirty water problems. We are also looking at other problem areas where these filters will be a solution to the challenge of providing clean process water to the factory”. A further filter was purchased from TC Filters to help filter the cooling water on a separate extrusion line, this time on a recirculating system.

