

Title: Thermax and Liquid Crystal for Heavy Duty Conveyor

Sector: Engineering

Introduction/Project

One of the world's largest coal handling organisations, operating 2 coal terminals, runs continuously 24 hours a day. With a ship-loading capacity of 25 million tonnes per annum and 88 million tonnes per annum respectively, these terminals receive, assemble and load coal for export to customers around the world. Coal is emptied from bottom-dumping wagons, then transported on a series of conveyors to the stockpile areas. Stacking machines discharge the coal onto stockpile locations and it is then reclaimed from the stockpiles by bucket-wheel reclaimers and carried on a dedicated system of conveyors to the ship-loaders.



Aim:

A recent problem with running temperatures on the bearings of the heavy duty conveyors has led this company needing to monitor the equipment.

Solution:

By using a combination of reversible and non-reversible strips, they are able to monitor both the maximum temperature reached by the bearings, and the current running temperature as a form of TPM (total preventative maintenance). This has applications in all heavy industrial factories where continuous running is imperative, so breakdowns have to be avoided and maintenance planned for well in advance.

