

Saunton Sands Hotel

This delightful hotel that commands a wonderful view over Saunton Sands Bay in Devon, had reported regular failures of its water heaters through corrosion brought through its use of 'soft' water off Exmoor. Often the water carried with it vegetative debris which collected in the water heaters that then stained the water supply with a brownish deposit which was evident in the rooms.



The water heaters lasted for about 2 to 3 years and their efficiency declined as the debris increased which also coated the internal surfaces in the heaters. The heat transfer surfaces became hotter as the flame energy could not easily be transferred into the water and welds joining the cylinder floor to the cylinder walls crystallised and fractured, resulting in rusty water dripping onto the plant room floor.

The non-chemical solution was to use a physical cathodic corrosion protection device which was fitted onto the 'make-up' water line to the water heaters. This stopped all the steel of the water heaters being attacked by the soft water. The surface electrolytic currents that occur with corrosion between metals, itself stimulated by the soft water, had been referred it to a sizeable zinc anode within the KorrosionGUARD product, which was designed to be sacrificed instead. A large commercial filter was also fitted to eliminate the vegetable matter to



eliminate the water staining issue.

The water heaters now work as they should with life increased to their commercial expectancy and the water colour effect has been removed, leaving the hotel with a clean usable supply for its occupants.

Water heater asset protection achieved, energy efficiency was ensured and the hotel took a notable step to reducing its 'carbon footprint' as a consequence of this action.