

Brochure

HP FurnOKare 2.0 Product Brochure

Deposition of lower thermal conductivity material such as particulate matter, coke, metal impurities and fouling material on heater tubes is common phenomena in the high temperature boilers and furnaces. As the thickness of the scales increases, the heat exchange between flue gases and metal surface of the heater tubes and which ultimately reduces the temperature of the crude oil flowing inside the heater tube. In order to maintain the desired crude oil temperature and optimum skin temperature, it is necessary to provide additional amount of energy that result in consumption more amount of fuel oil. In order to avoid additional amount of energy required for maintaining the optimum skin temperature, effective and periodic removal of scales is essential.

The deposit in the form of scale is not desired, since they are poor conductors of heat, cause reduced efficiency, and are often responsible for burned tubes or plates. The main problems caused by furnace scales are hampering the heat transfer efficiency of the tubes which in turn increase the furnace duty leading to huge energy losses. This will gradually lead to an increase in furnace arch temperature/reduction in the coil outlet temperature (COT) which will lead to decline in the unit throughput.

In order to address the effectiveness and sustenance the new generation formulation HP FurnOKare 2.0 has been developed and demonstrated successfully at HPCL VR.

