

Chemical Degreasing

During the milling process, pipes and tubes are often treated with a slushing oil following manufacture to preserve and protect piping prior to delivery to construction sites. These slushing oils are typically 5-10 weight oil that can generally be removed with light detergent and warm water. Fabrication and preservative oils are typically present in high concentrations on condensate system metal surfaces. Deaerator internals, condenser tube surfaces, and gland steam condenser surfaces are also likely sources of oil and grease.



Failure to remove oils prior to HRSG operation can result in priming of boiler water, which can result in damage to steam drum internals and carryover of

dirty boiler water into the superheater. Thermal degradation products of mineral, animal or vegetable oils can be acidic and increase corrosion of HRSG surfaces. Partial removal of oils from these metal surfaces may result in localized pitting corrosion and the compromise of tube walls.

BES&T's chemical degreasing process utilizes a proprietary emulsion that scrubs these oils from the interior surfaces of all treated systems. The oil removal capacity of these detergent emulsions is typically sufficient that one volume of solution may be used to clean several systems, with re-heating between each section. Micro emulsions can be formulated to be effective degreasing agents over a wide pH range. This ability allows these solutions to be used simultaneously with mild pickling agents. The ability to degrease and pickle metal solutions with a single volume greatly reduces time and wastewater generation.

