M&M Engineering's Boiler Tube Failure Handbook

Crack—In or near weld or attachment—Transverse



Locations	Waterwall
Boiler Type	Power
Industry	Electric Utility

Appearance	Catastrophic failure associated with weld overlay
Mechanism	Hydrogen damage
Comments	Hydrogen damage is an under-deposit corrosion mechanism. Weld overlay exacerbates hydrogen damage. High probability that other tubes are similarly affected. All affected tubes must be replaced.