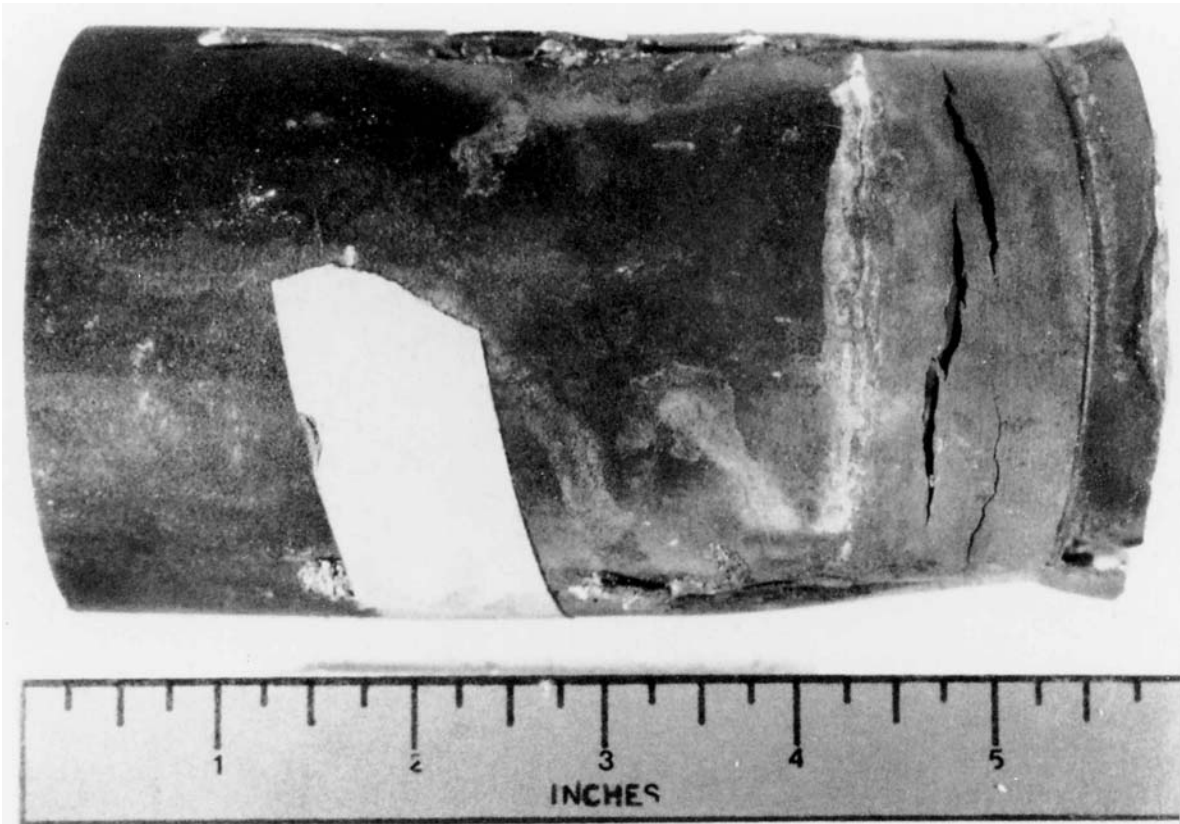


M&M Engineering's Boiler Tube Failure Handbook



Crack—Near or in weld or attachment



Locations	Riser tube at rolled connection in drum
Boiler Type	Industrial/Power
Industry	Common

Appearance	Transverse cracking in the rolled portion of tube where it is inserted into the drum
Mechanism	Caustic induced stress corrosion cracking
Comments	Stresses are introduced into the tube by the rolling operation. If these rolled connections leak-by, caustic from the boiler treatment concentrates in the crevice and leads to failure.

