

ChemScan[®]

PROCESS ANALYZERS

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ChemScan[®] Method Summary #66 Copper in Cooling or Boiler Water

Copper Analysis

Dissolved copper in cooling water bleed or in boiler blowdown is an indication of corrosion to the copper surfaces within heat exchange and water circulation piping. Standard laboratory analysis techniques include atomic absorption spectrometry, inductively coupled plasma and colorimetric methods using reagents.

ChemScan Analytical Method

Copper is one of the metals that will form a natural coordination compound in water with the metal ion at the center of the structure. This structure will absorb light in the ultraviolet wavelength range without assistance from reagents or other chemicals. The ChemScan Process Analyzer System can be used to detect and measure dissolved copper in concentrations of 1.0 ppm or more. Concentrations down to 25 ppb can be detected in pure media using a long path length flow cell.