

THIS MONTH: CORROSION IN THE CHEMICAL PROCESSING INDUSTRY

MMP MATERIALS PERFORMANCE

DECEMBER 2009

CORROSION PREVENTION AND CONTROL WORLDWIDE

Preventing Environmental Cracking of Stainless Steels

Corrosion Inhibition in a Sour Gas Pipeline

Niobium Stabilized Alloys in Steam Hydrocarbon Reforming

Special Feature:

2009 MP Subject and Author Index

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About the Cover

An inspector uses a handheld x-ray fluorescence (XRF) analyzer to check weld chemistry on an existing piping system as part of a retroactive positive materials identification (PMI) program. XRF spectroscopy technology, first used in the 1960s, analyzes the composition of a sample by measuring the spectrum of the fluorescent x-rays emitted by the different elements in the sample when it is bombarded with high-energy x-rays. Using handheld XRF spectroscopy technology, nondestructive PMI testing of piping and components can be done in situ without shutting down process equipment or sending material samples off site. See p. 18 for an article on this topic. Photo courtesy of Thermo Fisher Scientific.



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