Online Monitoring of Undercoating Corrosions
Utilizing Coupled Multielectrode Sensors

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San Antonio, Texas www.corrinstruments.com info@corrinstruments.com Phone: 210 748 4073

Test Results and Posttest Probe Appearances

- Carbon steel electrodes of probes were painted with different coatings
- Coatings in some areas of selected probes were mechanically damaged to simulate initial defects
- Probes immersed in simulated seawater

Coated Multielectrode Probes

- Coated probes put in brine
- Better coating
- Coatings with initial defects
- Poor coating
- Best coating

nanoCorr™ A-650 Analyzer

- Corr Instruments
- nanoCorr Model A-650 Coupled Multielectrode Sensor Analyzer was used to simultaneously measure the signals from 6 coated probes

- Rust observed on all defected areas after 7-day exposure
- Rust observed on defected areas after 7-day exposure
- Coating appeared intact after 14-day exposure
- Signal was significant even though coating appeared intact after 14-day exposure
- A small area of coating peeled off after 7-day exposure
- Coating appeared intact after 14-day exposure