

## STANDARD PRACTICES

Designation	Title	Item Number
NACE No. 1/SSPC-SP 5	White Metal Blast Cleaning (RP0494-2006)	21065
NACE No. 2/SSPC-SP 10	Near-White Metal Blast Cleaning (RP0594-2006)	21066
NACE No. 3/SSPC-SP 6	Commercial Blast Cleaning (RP0694-2006)	21067
NACE No. 4/SSPC-SP 7	Brush-Off Blast Cleaning (RP0794-2006)	21068
NACE No. 6/SSPC-SP 13	Surface Preparation of Concrete (RP0397-2003)	21082
NACE No. 8/SSPC-SP 14	Industrial Blast Cleaning (RP0299-2006)	21088
NACE No. 10/SSPC-PA 6	Fiberglass-Reinforced Plastic (FRP) Linings Applied to Bottoms of Carbon Steel Aboveground Storage Tanks (RP0202-2002)	21093
NACE No. 11/SSPC-PA 8	Thin-Film Organic Linings Applied in New Carbon Steel Process Vessels (RP0103-03)	21099
NACE No. 12/AWS C2.23M/SSPC-CS	Specification for the Application of Thermal Spray Coatings (Metallizing) of Aluminum, Zinc, and Their Alloys and Composites for the Corrosion Protection of Steel	21100
NACE No. 13/SSPC-ACS-1	Industrial Coating and Lining Application Specialist Qualification and Certification	21122
SP0169-2013	(formerly RP0169) Control of External Corrosion on Underground or Submerged Metallic Piping Systems	21001
RP0170-2012	Protection of Austenitic Stainless Steels and Other Austenitic Alloys from Polythionic Acid Stress Corrosion Cracking During Shutdown of Refinery Equipment	21002
SP0472-2010	(formerly RP0472) Methods and Controls to Prevent In-Service Environmental Cracking of Carbon Steel Weldments in Corrosive Petroleum Refining Environments	21006
SP0572-2007	(formerly RP0572) Design, Installation, Operation, and Maintenance of Impressed Current Deep Groundbeds	21007
SP0273-2007	(formerly RP0273) Handling and Proper Usage of Inhibited Oilfield Acids	21009
SP0274-2011	High-Voltage Electrical Inspection of Pipeline Coatings	21010
RP0375-2006	Wax Coating Systems for Underground Piping Systems	21013
SP0575-2007	(formerly RP0575) Internal Cathodic Protection Systems in Oil-Treating Vessels	21015
SP0775-2013	(formerly RP0775) Preparation, Installation, Analysis, and Interpretation of Corrosion Coupons in Oilfield Operations	21017
SP0176-2007	(formerly RP0176) Corrosion Control of Steel Fixed Offshore Platforms Associated with Petroleum Production	21018
SP0177-2014	(formerly RP0177) Mitigation of Alternating Current and Lightning Effects on Metallic Structures and Corrosion Control Systems	21021
SP0178-2007*	(formerly RP0178) Fabrication Details, Surface Finish Requirements, and Proper Design Considerations for Tanks and Vessels to Be Lined for Immersion Service	21022
SP0181-2006	(formerly RP0181) Liquid-Applied Internal Protective Coatings for Oilfield Production Equipment	21025
RP0281-2004	Method for Conducting Coating (Paint) Panel Evaluation Testing in Atmospheric Exposures	21026
SP0185-2007	(formerly RP0185) Extruded Polyolefin Resin Coating Systems with Soft Adhesives for Underground or Submerged Pipe	21029
SP0285-2011	(formerly RP0285) External Corrosion Control of Underground Storage Tank Systems by Cathodic Protection	21030

\* A plastic visual comparator for on-site use by field personnel may also be purchased with this standard.

SP0186-2007	(formerly RP0186) Application of Cathodic Protection for External Surfaces of Steel Well Casings	21031
SP0286-2007	(formerly RP0286) Electrical Isolation of Cathodically Protected Pipelines	21032
SP0386-2007	(formerly RP0386) Application of a Coating System to Interior Surfaces of Covered Steel Hopper Rail Cars in Plastic, Food, and Chemical Service	21033
SP0187-2008	(formerly RP0187) Design Considerations for Corrosion Control of Reinforcing Steel in Concrete	21034
RP0287-2002	Field Measurement of Surface Profile of Abrasive Blast-Cleaned Steel Surfaces Using a Replica Tape	21035
SP0387-2006	(formerly RP0387) Metallurgical and Inspection Requirements for Cast Galvanic Anodes for Offshore Applications	21036
SP0487-2007	(formerly RP0487) Considerations in the Selection and Evaluation of Rust Preventatives and Vapor Corrosion Inhibitors for Interim (Temporary) Corrosion Protection	21037
SP0188-2006	(formerly RP0188) Discontinuity (Holiday) Testing of New Protective Coatings on Conductive Substrates	21038
SP0288-2011	Inspection of Lining Application in Steel and Concrete Equipment	21039
SP0388-2014	(formerly RP0388) Impressed Current Cathodic Protection of Internal Submerged Surfaces of Carbon Steel Water Storage Tanks	21040
SP0189-2013	(formerly RP0189) On-Line Monitoring of Cooling Waters	21041
SP0290-2007	(formerly RP0290) Impressed Current Cathodic Protection of Reinforcing Steel in Atmospherically Exposed Concrete Structures	21043
SP0390-2009	(formerly RP0390) Maintenance and Rehabilitation Considerations for Corrosion Control of Atmospherically Exposed Steel-Reinforced Concrete Structures	21044
SP0490-2007	(formerly RP0490), Holiday Detection of Fusion-Bonded Epoxy External Pipeline Coatings of 250 to 760 $\mu\text{m}$ (10 to 30 mils)	21045
SP0590-2007	(formerly RP0590) Prevention, Detection, and Correction of Deaerator Cracking	21046
SP0690-2009	(formerly RP0690) Standard Format for Collection and Compilation of Data for Computerized Material Corrosion Resistance Database Input	21047
SP0191-2008	(formerly RP0191) The Application of Internal Plastic Coatings for Oilfield Tubular Goods and Accessories	21048
RP0291-2005	Care, Handling, and Installation of Internally Plastic-Coated Oilfield Tubular Goods and Accessories	21049
RP0391-2001	Materials for the Handling and Storage of Commercial Concentrated (90 to 100%) Sulfuric Acid at Ambient Temperatures	21050
SP0491-2012	(formerly RP0491-2003) Worksheet for the Selection of Oilfield Nonmetallic Seal Systems	21051
SP0192-2012	(formerly RP0192) Monitoring Corrosion in Oil and Gas Production with Iron Counts	21053
SP0292-2012	(formerly RP0292) Installation of Thin Metallic Wallpaper Lining in Air Pollution Control and Other Process Equipment	21054
SP0492-2006	(formerly RP0492) Metallurgical and Inspection Requirements for Offshore Pipeline Bracelet Anodes	21056
SP0592-2006	(formerly RP0592) Application of a Coating System to Interior Surfaces of New and Used Rail Tank Cars in Concentrated (90 to 98%) Sulfuric Acid Service	21057
RP0692-2003	Application of a Coating System to Exterior Surfaces of Steel Rail Cars	21058
SP0892-2007	(formerly RP0892) Coatings and Linings over Concrete for Chemical Immersion and Containment Service	21060
RP0193-2001	External Cathodic Protection of On-Grade Carbon Steel Storage Tank Bottoms	21061
SP0294-2006	(formerly RP0294) Design, Fabrication, and Inspection of Storage Tank Systems for Concentrated Fresh and Process Sulfuric Acid	21063

	and Oleum at Ambient Temperatures	
RP0394-2002	Application, Performance, and Quality Control of Plant-Applied, Fusion-Bonded Epoxy External Pipe Coating	21064
SP0195-2007	(formerly RP0195) Recommended Practice for Corrosion Control of Sucker Rods by Chemical Treatment	21069
SP0295-2008	(formerly RP0295) Application of a Coating System to Interior Surfaces of New and Used Rail Tank Cars	21070
SP0395-2013	(formerly RP0395) Fusion-Bonded Epoxy Coating of Steel Reinforcing Bars	21071
RP0495-2003	Guidelines for Qualifying Personnel as Abrasive Blasters and Coating and Lining Applicators in the Rail Industries	21072
SP0196-2011	(formerly RP0196) Galvanic Anode Cathodic Protection of Internal Submerged Surfaces of Steel Water Storage Tanks	21077
SP0296-2010	(formerly RP0296) Detection, Repair, and Mitigation of Cracking of Existing Petroleum Refinery Pressure Vessels in Wet H <sub>2</sub> S Environments	21078
SP0197-2009	(formerly RP0197) Standard Format for Computerized Electrochemical Polarization Curve Data Files	21080
SP0297-2012	(formerly RP0297) Maintenance Painting of Electrical Substation Apparatus Including Flow Coating of Transformer Radiators	21081
RP0497-2004	Field Corrosion Evaluation Using Metallic Test Specimens	21083
SP0198-2010	(formerly RP0198) The Control of Corrosion Under Thermal Insulation and Fireproofing Materials—A Systems Approach	21084
SP0298-2007	(formerly RP0298) Sheet Rubber Linings for Abrasion and Corrosion Service	21085
SP0398-2006	(formerly RP0398) Recommendations for Training and Qualifying Personnel as Railcar Coating and Lining Inspectors	21086
SP0199-2009	(formerly RP0199) Installation of Stainless Chromium-Nickel Steel and Nickel-Alloy Roll-Bonded and Explosion-Bonded Clad Plate in Air Pollution Control Equipment	21087
RP0399-2004	Plant-Applied External Coal Tar Enamel Pipe Coating Systems: Application, Performance, and Quality Control	21089
SP0499-2012	(formerly TM0299) Corrosion Control and Monitoring in Seawater Injection Systems	21237
SP0100-2014	(formerly RP0100-2004) Cathodic Protection to Control External Corrosion of Concrete Pressure Pipelines and Mortar-Coated Steel Pipelines for Water or Waste Water Service	21090
SP0200-2008	(formerly RP0200) Steel-Cased Pipeline Practices	21091
RP0300/ISO 16784-1	Pilot-Scale Evaluation of Corrosion and Fouling Control Additives for Open Recirculating Cooling Water Systems	21092
SP0102-2010	In-Line Inspection of Pipelines	21094
SP0302-2007	(formerly RP0302) Selection and Application of a Coating System to Interior Surfaces of New and Used Rail Tank Cars in Molten Sulfur Service	21095
RP0402-2002	Field-Applied Fusion-Bonded Epoxy (FBE) Pipe Coating Systems for Girth Weld Joints: Application, Performance, and Quality Control	21096
ANSI/NACE SP0502-2010	Pipeline External Corrosion Direct Assessment Methodology	21097
RP0602-2002	Field-Applied Coal Tar Enamel Pipe Coating Systems: Application, Performance, and Quality Control	21098
RP0303-2003	Field-Applied Heat-Shrinkable Sleeves for Pipelines: Application, Performance, and Quality Control	21101
SP0403-2008	(formerly RP0403) Avoiding Caustic Stress Corrosion Cracking of Carbon Steel Refinery Equipment and Piping	21102
RP0104-2004	The Use of Coupons for Cathodic Protection Monitoring Applications	21105
SP0204-2008	(formerly RP0204) Stress Corrosion Cracking (SCC) Direct Assessment Methodology	21104
RP0304-2004	Design, Installation, and Operation of Thermoplastic Liners for Oilfield Pipelines	21103
RP0105-2005	Liquid-Epoxy Coatings for External Repair, Rehabilitation, and Weld Joints on Buried Steel Pipelines	21106
SP0205-2010	(formerly RP0205) Recommended Practice for the Design, Fabrication, and Inspection of Tanks for the Storage of Petroleum	21107

	Refining Alkylation Unit Spent Sulfuric Acid at Ambient Temperatures	
SP0106-2006	Control of Internal Corrosion in Steel Pipelines and Piping Systems	21111
SP0206-2006	Internal Corrosion Direct Assessment Methodology for Pipelines Carrying Normally Dry Natural gas (DG-ICDA)	21112
SP0107-2007	Electrochemical Realkalization and Chloride Extraction for Reinforced Concrete	21113
SP0207-2007	Performing Close-Interval Potential Surveys and DC Surface Potential Gradient Surveys on Buried or Submerged Metallic Pipelines	21121
SP0407-2013	Format, Content, and Guidelines for Developing a Materials Selection Diagram	21123
SP0507-2014	NACE/PODS Standard Practice, External Corrosion Direct Assessment (ECDA) Integrity Data Exchange (IDX) Format (New)	21124
SP0108-2008	Corrosion Control of Offshore Structures by Protective Coatings	21126
SP0208-2008	Internal Corrosion Direct Assessment Methodology for Liquid Petroleum Pipelines	21127
SP0308-2008	Inspection Methods for Corrosion Evaluation of Conventionally Reinforced Concrete Structures	21128
SP0408-2008	Cathodic Protection of Reinforcing Steel in Buried or Submerged Concrete Structures	21133
SP0508-2010	Methods of Validating Equivalence to ISO 8502-9 on Measurement of the Levels of Soluble Salts	21134
SP0109-2009	Field Application of Bonded Tape Coatings for External Repair, Rehabilitation, and Weld Joints on Buried Metal Pipelines	21143
SP0110-2010	Wet Gas Internal Corrosion Direct Assessment Methodology for Pipelines	21146
SP0210-2010	Pipeline External Corrosion Confirmatory Direct Assessment	21148
SP0111-2011	Coating Technical File in Accordance with the IMO Performance Standard for Protective Coatings	21153
NACE/ASTM G193-12d	Standard Terminology and Acronyms Relating to Corrosion1	21137
WJ-1: SP0212-2012	Joint Surface Preparation Standard Waterjet Cleaning of Metals—Clean to Bare Substrate (WJ-1)	21158
WJ-2: SP0312-2012	Joint Surface Preparation Standard Waterjet Cleaning of Metals—Very Thorough Cleaning (WJ-2)	21155
WJ-3: SP0412-2012	Joint Surface Preparation Standard Waterjet Cleaning of Metals—Thorough Cleaning (WJ-3)	21156
WJ-4: SP0512-2012	Joint Surface Preparation Standard Waterjet Cleaning of Metals—Light Cleaning (WJ-4)	21157
SP0112-2012	Corrosion Management of Atmospherically Exposed Reinforced Concrete Structures	21166
SP0113-2013	Pipeline Integrity Method Selection	21171
SP0213-2013	Definition of Set Soluble Salt Levels by Conductivity Measurements	21172
SP0313-2013	Guided Wave Technology for Piping Applications	21174
SP0214-2014	Inspection, Cleaning, and Remediation Technology for Water Piping in Buildings	21176

## TEST METHODS

Designation	Title	Item Number
TM0169/G31-12a-2012	Laboratory Immersion Corrosion Testing of Metals	21200
TM0172-2001	Determining Corrosive Properties of Cargoes in Petroleum Product Pipelines	21204
TM0173-2005	Methods for Determining Quality of Subsurface Injection Water Using Membrane Filters	21205
TM0174-2002	Laboratory Methods for the Evaluation of Protective Coatings and Lining Materials on Metallic Substrates in Immersion Service	21206
TM0374-2007	Laboratory Screening Tests to Determine the Ability of Scale Inhibitors to Prevent the Precipitation of Calcium Sulfate and Calcium Carbonate from Solution (for Oil and Gas Production Systems)	21208
TM0177-2005	Laboratory Testing of Metals for Resistance to Sulfide Stress Cracking and Stress Corrosion Cracking in H <sub>2</sub> S Environments	21212
TM0183-2006	Evaluation of Internal Plastic Coatings for Corrosion Control of Tubular Goods in an Aqueous Flowing Environment	21213
TM0284-2011	Evaluation of Pipeline and Pressure Vessel Steels for Resistance to Hydrogen-Induced Cracking	21215
TM0384-2002	Holiday Detection of Internal Tubular Coatings of Less Than 250 µm (10 mils) Dry Film Thickness	21216
TM0185-2006	Evaluation of Internal Plastic Coatings for Corrosion Control of Tubular Goods by Autoclave Testing	21217
TM0186-2002	Holiday Detection of Internal Tubular Coatings of 250 to 760 µm (10 to 30 mils) Dry-Film Thickness	21218
TM0187-2011	Evaluating Elastomeric Materials in Sour Gas Environments	21220
TM0190-2012	Impressed Current for Laboratory Testing of Aluminum Alloy Anodes	21221
TM0192-2012	Evaluating Elastomeric Materials in Carbon Dioxide Decompression Environments	21222
TM0193-2000	Laboratory Corrosion Testing of Metals in Static Chemical Cleaning Solutions at Temperatures Below 93°C (200°F)	21223
TM0194-2014	Field Monitoring of Bacterial Growth in Oil and Gas Systems	21224
TM0294-2007	Testing of Embeddable Impressed Current Anodes for Use in Cathodic Protection of Atmospherically Exposed Steel-Reinforced Concrete	21225
TM0296-2002	Evaluating Elastomeric Materials in Sour Liquid Environments	21227
TM0197-2002	Laboratory Screening Test to Determine the Ability of Scale Inhibitors to Prevent the Precipitation of Barium Sulfate or Strontium Sulfate, or Both, from Solution (for Oil and Gas Production Systems)	21228
TM0297-2008	Effects of High-Temperature, High-Pressure Carbon Dioxide Decompression on Elastomeric Materials	21229
TM0397-2012	Screening Tests for Evaluating the Effectiveness of Gypsum Scale Removers	21230
TM0497-2012	Measurement Techniques Related to Criteria for Cathodic Protection on Underground or Submerged Metallic Piping Systems	21231
TM0198-2011	Slow Strain Rate Test Method for Screening Corrosion-Resistant Alloys (CRAs) for Stress Corrosion Cracking in Sour Oilfield Service	21232
TM0298-2003	Evaluating the Compatibility of FRP Pipe and Tubulars with Oilfield Environments	21233
TM0498-2014	Evaluation of the Carburization of Alloy Tubes Used for Ethylene Manufacture	21235
TM0199-2013	Standard Test Method for Measuring Deposit Mass Loading ("Deposit Weight Density") Values for Boiler Tubes by the Glass-Bead-Blasting Technique	21236
TM0499-2009	Immersion Corrosion Testing of Ceramic Materials	21239
TM0101-2012	Measurement Techniques Related to Criteria for Cathodic Protection on Underground or Submerged Metallic Tank Systems	21240
TM0102-2002	Measurement of Protective Coating Electrical Conductance on Underground Pipelines	21241

TM0104-2004	Offshore Platform Ballast Water Tank Coating System Evaluation	21243
TM0204-2004	Exterior Protective Coatings for Seawater Immersion Service	21244
TM0304-2004	Offshore Platform Atmospheric and Splash Zone Maintenance Coating System Evaluation	21245
TM0404-2004	Offshore Platform Atmospheric and Splash Zone New Construction Coating System Evaluation	21246
TM0105-2012	Test Procedures for Organic-Based Conductive Coating Anodes for Use on Concrete Structures	21247
TM0106-2006	Detection, Testing, and Evaluation of Microbiologically Influenced Corrosion (MIC) on External Surfaces of Buried Pipelines	21248
TM0108-2012	Testing of Catalyzed Titanium Anodes for Use in Soils or Natural Waters	21252
TM0208-2013	Laboratory Test to Evaluate the Vapor-Inhibiting Ability of Volatile Corrosion Inhibitor Materials for Temporary Protection of Ferrous Metal Surfaces	21253
TM0109-2009	Aboveground Survey Techniques for the Evaluation of Underground Pipeline Coating Condition	21254
TM0111-2011	Slow Strain Rate Test Method of Evaluation of Ethanol Stress Corrosion Cracking in Carbon Steels	21255
TM0211-2011	Durability Test for Copper/Copper Sulfate Permanent Reference Electrodes for Direct Burial Applications	21257
TM0112-2012	Test to Determine the Potential Corrosion Effects of Ballast Water Treatment Systems on Ballast Tanks	21258
TM0212-2012	Detection, Testing, and Evaluation of Microbiologically Influenced Corrosion on Internal Surfaces of Pipelines	21260
TM0113-2013	Evaluating the Accuracy of Field-Grade Reference Electrodes	21265

## MATERIAL REQUIREMENTS

Designation	Title	Item Number
MR0174-2007	Recommendations for Selecting Inhibitors for Use as Sucker-Rod Thread Lubricants	21300
NACE MR0175/ ISO 15156- 1-2009*	Materials for use in H <sub>2</sub> S containing environments in oil and gas production—Part 1: General principles for selection of cracking-resistant materials	21307
NACE MR0175/ ISO 15156- 2-2009*	Materials for use in H <sub>2</sub> S containing environments in oil and gas production—Part 2: Cracking-resistant carbon and low alloy steels, and the use of cast irons	21307
NACE MR0175/ ISO 15156- 3-2009*	Materials for use in H <sub>2</sub> S containing environments in oil and gas production—Part 3: Cracking resistant CRAs (corrosion-resistant alloys) and other alloys	21307
MR0175/ISO 15156-2009 Part 2 Circular 1	Petroleum and Natural Gas industries — Materials for use in H <sub>2</sub> S-containing environments in oil and gas production — Part 2: Cracking-resistant carbon and low alloy steels, and the use of cast irons Technical Circular 1	21308
MR0175/ISO 15156-2009 Part 3 Circular 1	Petroleum and Natural Gas industries — Materials for use in H <sub>2</sub> S-containing environments in oil and gas production — Part 3: Cracking-resistant CRAs (corrosion-resistant alloys) and other alloys Technical Circular 1	21308
MR0175/ISO 15156-2009 Part 3 Circular 2	Petroleum and Natural Gas industries — Materials for use in H <sub>2</sub> S-containing environments in oil and gas production — Part 3: Cracking-resistant CRAs (corrosion-resistant alloys) and other alloys Technical Circular 2	21308

<p>NACE MR0175/ISO 15156 Addenda Package</p>	<p>MR0175-ISO 15156-Part 1 Technical Circular 1 (2014)          Petroleum and natural gas industries —Materials for use in H2S-containing environments in oil and gas production — Part 1: General principles for selection of cracking-resistant materials          TECHNICAL CIRCULAR 1 (NEW)</p> <p>MR0175-ISO 15156-Part 2 Technical Circular 2 (2014)          Petroleum and natural gas industries —Materials for use in H2S-containing environments in oil and gas production — Part 2: Cracking-resistant carbon and low-alloy steels, and the use of cast irons Industries.          TECHNICAL CIRCULAR 2 (NEW)</p> <p>MR0175-ISO 15156-Part 3 Technical Circular 3 (2014)          Petroleum and natural gas industries —Materials for use in H2S-containing environments in oil and gas production — Part 3: Cracking-resistant CRAs (corrosion-resistant alloys) and other alloys.          TECHNICAL CIRCULAR 3 (NEW)</p> <p>MR0175-ISO 15156-Part 3 Technical Circular 4 (2014)          Petroleum and natural gas industries —Materials for use in H2S-containing environments in oil and gas production — Part 3: Cracking-resistant CRAs (corrosion-resistant alloys) and other alloys.          TECHNICAL CIRCULAR 4 (NEW)</p>	<p>21308</p>
<p>MR0176-2012</p>	<p>Metallic Materials for Sucker-Rod Pumps for Corrosive Oilfield Environments</p>	<p>21303</p>
<p>MR0103-2012</p>	<p>Materials Resistant to Sulfide Stress Cracking in Corrosive Petroleum Refining Environments</p>	<p>21305</p>

\*Nationally adopted international standard based on MR0175.