

ASTM Volume 03.02, August 2025

G46-21 Standard Guide for Examination and Evaluation of Pitting Corrosion

G37-98(2021) Standard Practice for Use of Mattsson's Solution of pH 7.2 to Evaluate the Stress-Corrosion Cracking Susceptibility of Copper-Zinc Alloys

G39-99(2021) Standard Practice for Preparation and Use of Bent-Beam Stress-Corrosion Test Specimens

G186-05(2021) Standard Test Method for Determining Whether Gas-Leak-Detector Fluid Solutions Can Cause Stress Corrosion Cracking of Brass Alloys

G119-09(2021) Standard Guide for Determining Synergism Between Wear and Corrosion

G50-20 Standard Practice for Conducting Atmospheric Corrosion Tests on Metals

G105-20 Standard Test Method for Conducting Wet Sand/Rubber Wheel Abrasion Tests

G200-20 Standard Test Method for Measurement of Oxidation-Reduction Potential (ORP) of Soil

G220-20 Standard Practice for Replacing Saturated Calomel Reference Electrode (SCE) for Measuring Electrode Potentials

G57-20 Standard Test Method for Measurement of Soil Resistivity Using the Wenner Four-Electrode Method

G218-19 Standard Guide for External Corrosion Protection of Ductile Iron Pipe Utilizing Polyethylene Encasement Supplemented by Cathodic Protection

G32-16(2021)e1 Standard Test Method for Cavitation Erosion Using Vibratory Apparatus

R0006 Condensed Metric Practice Guide for Corrosion (This is not an ASTM Publication)

G129-21 Standard Practice for Slow Strain Rate Testing to Evaluate the Susceptibility of Metallic Materials to Environmentally Assisted Cracking

G44-21 Standard Practice for Exposure of Metals and Alloys by Alternate Immersion in Neutral 3.5 % Sodium Chloride Solution

R0071 Standard Method of Test for Exfoliation Corrosion Susceptibility in 7XXX Series Copper-Containing Aluminum Alloys (Exco Test) (This is not an approved ASTM standard; available as PDF, only)

G204-21 Standard Test Method for Damage to Contacting Solid Surfaces under Fretting Conditions

G31-21 Standard Guide for Laboratory Immersion Corrosion Testing of Metals

G188-05(2021) Standard Specification for Leak Detector Solutions Intended for Use on Brasses and Other Copper Alloys

G38-01(2021) Standard Practice for Making and Using C-Ring Stress-Corrosion Test Specimens

G64-99(2021) Standard Classification of Resistance to Stress-Corrosion Cracking of Heat-Treatable Aluminum Alloys

G5-14(2021) Standard Reference Test Method for Making Potentiodynamic Anodic Polarization Measurements

G100-89(2021) Standard Test Method for Conducting Cyclic Galvanostaircase Polarization

G165-99(2017) Standard Practice for Determining Rail-to-Earth Resistance

G168-17 Standard Practice for Making and Using Precracked Double Beam Stress Corrosion Specimens

G148-97(2018) Standard Practice for Evaluation of Hydrogen Uptake, Permeation, and Transport in Metals by an Electrochemical Technique

G91-11(2018) Standard Practice for Monitoring Atmospheric SO₂ Deposition Rate for Atmospheric Corrosivity Evaluation

G96-90(2018) Standard Guide for Online Monitoring of Corrosion in Plant Equipment (Electrical and Electrochemical Methods)

G182-13(2018) Standard Test Method for Determination of the Breakaway Friction Characteristics of Rolling Element Bearings

G194-08(2018) Standard Test Method for Measuring Rolling Friction Characteristics of a Spherical Shape on a Flat Horizontal Plane

G76-18 Standard Test Method for Conducting Erosion Tests by Solid Particle Impingement Using Gas Jets

G60-01(2018) Standard Practice for Conducting Cyclic Humidity Exposures

G81-97a(2018) Standard Test Method for Jaw Crusher Gouging Abrasion Test

G140-02(2019) Standard Test Method for Determining Atmospheric Chloride Deposition Rate by Wet Candle Method

B117-19 Standard Practice for Operating Salt Spray (Fog) Apparatus

G1-03(2017)e1 Standard Practice for Preparing, Cleaning, and Evaluating Corrosion Test Specimens

G85-19 Standard Practice for Modified Salt Spray (Fog) Testing

G69-20 Standard Test Method for Measurement of Corrosion Potentials of Aluminum Alloys

G101-04(2020) Standard Guide for Estimating the Atmospheric Corrosion Resistance of Low-Alloy Steels

G33-99(2020) Standard Practice for Recording Data from Atmospheric Corrosion Tests of Metallic-Coated Steel Specimens

G202-12(2020) Standard Test Method for Using Atmospheric Pressure Rotating Cage

G203-10(2020) Standard Guide for Determining Friction Energy Dissipation in Reciprocating Tribosystems

G211-14(2020) Standard Test Method for Conducting Elevated Temperature Erosion Tests by Solid Particle Impingement Using Gas Jets

G84-89(2020) Standard Practice for Measurement of Time-of-Wetness on Surfaces Exposed to Wetting Conditions as in Atmospheric Corrosion Testing

G192-08(2020)e1 Standard Test Method for Determining the Crevice Repassivation Potential of Corrosion-Resistant Alloys Using a Potentiodynamic-Galvanostatic-Potentiostatic Technique

G199-09(2020)e1 Standard Guide for Electrochemical Noise Measurement

G107-95(2020)e1 Standard Guide for Formats for Collection and Compilation of Corrosion Data for Metals for Computerized Database Input

G116-99(2020)e1 Standard Practice for Conducting Wire-on-Bolt Test for Atmospheric Galvanic Corrosion

G48-11(2020)e1 Standard Test Methods for Pitting and Crevice Corrosion Resistance of Stainless Steels and Related Alloys by Use of Ferric Chloride Solution

G52-20 Standard Practice for Exposing and Evaluating Metals and Alloys in Surface Seawater

G78-20 Standard Guide for Crevice Corrosion Testing of Iron-Base and Nickel-Base Stainless Alloys in Seawater and Other Chloride-Containing Aqueous Environments

G92-20 Standard Practice for Characterization of Atmospheric Test Sites

G82-98(2021)e1 Standard Guide for Development and Use of a Galvanic Series for Predicting Galvanic Corrosion Performance

G189-07(2021)e1 Standard Guide for Laboratory Simulation of Corrosion Under Insulation

G206-17(2021)e1 Standard Guide for Measuring the Wear Volumes of Piston Ring Segments Run against Flat Coupons in Reciprocating Wear Tests

G181-21 Standard Test Method for Conducting Friction Tests of Piston Ring and Cylinder Liner Materials Under Lubricated Conditions

G65-16(2021) Standard Test Method for Measuring Abrasion Using the Dry Sand/Rubber Wheel Apparatus

G73-10(2021) Standard Test Method for Liquid Impingement Erosion Using Rotating Apparatus

G111-21a Standard Guide for Corrosion Tests in High Temperature or High Pressure Environment, or Both

B611-21 Standard Test Method for Determining the High Stress Abrasion Resistance of Hard Materials

G30-22 Standard Practice for Making and Using U-Bend Stress-Corrosion Test Specimens

G217-16(2022) Standard Guide for Corrosion Monitoring in Laboratories and Plants with Coupled Multielectrode Array Sensor Method

G195-22 Standard Guide for Conducting Wear Tests Using a Rotary Platform Abraser

G97-18(2022) Standard Test Method for Laboratory Evaluation of Magnesium Sacrificial Anode Test Specimens for Underground Applications

G139-05(2022) Standard Test Method for Determining Stress-Corrosion Cracking Resistance of Heat-Treatable Aluminum Alloy Products Using Breaking Load Method

G209-14(2022) Standard Practice for Detecting μ -phase in Wrought Nickel-Rich, Chromium, Molybdenum-Bearing Alloys

G123-00(2022)e1 Standard Test Method for Evaluating Stress-Corrosion Cracking of Stainless Alloys with Different Nickel Content in Boiling Acidified Sodium Chloride Solution

G193-22 Standard Terminology and Acronyms Relating to Corrosion

G142-98(2022) Standard Test Method for Determination of Susceptibility of Metals to Embrittlement in Hydrogen Containing Environments at High Pressure, High Temperature, or Both

G77-17(2022) Standard Test Method for Ranking Resistance of Materials to Sliding Wear Using Block-on-Ring Wear Test

G133-22 Standard Test Method for Linearly Reciprocating Ball-on-Flat Sliding Wear

G174-22 Standard Test Method for Measuring Abrasion Resistance of Materials by Abrasive Loop Contact

G47-22 Standard Test Method for Determining Susceptibility to Stress-Corrosion Cracking of 2XXX and 7XXX Aluminum Alloy Products

G112-22 Standard Guide for Conducting Exfoliation Corrosion Tests in Aluminum Alloys

G110-92(2022)e2 Standard Practice for Evaluating Intergranular Corrosion Resistance of Heat Treatable Aluminum Alloys by Immersion in Sodium Chloride + Hydrogen Peroxide Solution

G103-97(2023)e1 Standard Practice for Evaluating Stress-Corrosion Cracking Resistance of Low Copper 7XXX Series Al-Zn-Mg-Cu Alloys in Boiling 6 % Sodium Chloride Solution

G102-23 Standard Practice for Calculation of Corrosion Rates and Related Information from Electrochemical Measurements

G59-23 Standard Test Method for Conducting Potentiodynamic Polarization Resistance Measurements

G180-23 Standard Test Method for Corrosion Inhibiting Admixtures for Steel in Concrete by Polarization Resistance in Cementitious Slurries

G109-23 Standard Test Methods for Determining Effects of Chemical Admixtures on Corrosion of Embedded Steel Reinforcement in Concrete Exposed to Chloride Environments

G87-02(2023) Standard Practice for Conducting Moist SO₂ Tests

G106-89(2023) Standard Practice for Verification of Algorithm and Equipment for Electrochemical Impedance Measurements

G134-17(2023) Standard Test Method for Erosion of Solid Materials by Cavitating Liquid Jet

G210-13(2023) Standard Practice for Operating the Severe Wastewater Analysis Testing Apparatus

G35-23 Standard Practice for Determining the Susceptibility of Stainless Steels and Related Nickel-Chromium-Iron Alloys to Stress-Corrosion Cracking in Polythionic Acids

G223-23 Standard Test Method for Measuring Friction and Adhesive Wear Properties of Lubricated and Nonlubricated Materials Using the Twist Compression Test (TCT)

G108-23 Standard Test Methods for Electrochemical Reactivation (EPR) for Detecting Sensitization of AISI Type 304 and 304L Stainless Steels

G98-23 Standard Test Method for Galling Resistance of Materials

G49-85(2023)e1 Standard Practice for Preparation and Use of Direct Tension Stress-Corrosion Test Specimens

G51-23 Standard Test Method for Measuring pH of Soil for Use in Corrosion Evaluations

G164-99(2023) Standard Test Method for Determination of Surface Lubrication on Flexible Webs

G198-17(2023) Standard Test Method for Determining the Relative Corrosion Performance of Driven Fasteners in Contact with Treated Wood

G99-23 Standard Test Method for Wear and Friction Testing with a Pin-on-Disk or Ball-on-Disk Apparatus

G162-23 Standard Practice for Conducting and Evaluating Laboratory Corrosion Tests in Soils

G143-23 Standard Test Method for Measurement of Web/Roller Friction Characteristics

G187-23 Standard Test Method for Measurement of Soil Resistivity Using the Two-Electrode Soil Box Method

G66-23 Standard Test Method for Visual Assessment of Exfoliation Corrosion Susceptibility of 5XXX Series Aluminum Alloys (ASSET Test)

G34-23 Standard Test Method for Exfoliation Corrosion Susceptibility in 2XXX and 7XXX Series Aluminum Alloys (EXCO Test)

G205-23 Standard Guide for Determining Emulsion Properties, Wetting Behavior, and Corrosion-Inhibitory Properties of Crude Oils

G58-85(2023) Standard Practice for Preparation of Stress-Corrosion Test Specimens for Weldments

G158-23 Standard Guide for Three Methods of Assessing Buried Steel Tanks

G146-24 Standard Practice for Evaluation of Disbonding of Bimetallic Stainless Alloy/Steel Plate for Use in High-Pressure, High-Temperature Refinery Hydrogen Service

G157-24 Standard Guide for Evaluating Corrosion Properties of Wrought Iron- and Nickel-Based Corrosion Resistant Alloys for Chemical Process Industries

G3-14(2024) Standard Practice for Conventions Applicable to Electrochemical Measurements in Corrosion Testing

G16-13(2024) Standard Guide for Applying Statistics to Analysis of Corrosion Data

G61-86(2024) Standard Test Method for Conducting Cyclic Potentiodynamic Polarization Measurements for Localized Corrosion Susceptibility of Iron-, Nickel-, or Cobalt-Based Alloys

G71-81(2024) Standard Guide for Conducting and Evaluating Galvanic Corrosion Tests in Electrolytes

G150-18(2024) Standard Test Method for Electrochemical Critical Pitting Temperature Testing of Stainless Steels and Related Alloys

G215-17(2024) Standard Guide for Electrode Potential Measurement

G176-03(2024) Standard Test Method for Ranking Resistance of Plastics to Sliding Wear Using Block-on-Ring Wear Test—Cumulative Wear Method

G196-24 Standard Test Method for Galling Resistance of Material Couples

G137-24 Standard Test Method for Ranking Resistance of Plastic Materials to Sliding Wear Using a Block-On-Ring Configuration

G171-24 Standard Test Method for Scratch Hardness of Materials Using a Diamond Stylus

G219-24 Standard Guide for Determination of Static Coefficient of Friction of Test Couples Using an Inclined Plane Testing Device

G115-24 Standard Guide for Measuring and Reporting Friction Coefficients

G36-24 Standard Practice for Evaluating Stress-Corrosion-Cracking Resistance of Metals and Alloys in a Boiling Magnesium Chloride Solution

G41-24 Standard Practice for Determining Cracking Susceptibility of Metals Exposed Under Stress to a Hot Salt Environment

G67-24a Standard Test Method for Determining the Susceptibility to Intergranular Corrosion of 5XXX Series Aluminum Alloys by Mass Loss After Exposure to Nitric Acid (NAMLT Test)

G184-06(2024) Standard Practice for Evaluating and Qualifying Oil Field and Refinery Corrosion Inhibitors Using Rotating Cage

G185-06(2024) Standard Practice for Evaluating and Qualifying Oil Field and Refinery Corrosion Inhibitors Using the Rotating Cylinder Electrode

G161-24 Standard Guide for Corrosion-Related Failure Analysis

G208-12(2024) Standard Practice for Evaluating and Qualifying Oilfield and Refinery Corrosion Inhibitors Using Jet Impingement Apparatus

G28-24 Standard Test Methods for Detecting Susceptibility to Intergranular Corrosion in Wrought, Nickel-Rich, Chromium-Bearing Alloys

G132-24 Standard Test Method for Pin Abrasion Testing

G75-24 Standard Test Method for Determination of Slurry Abrasivity (Miller Number) and Slurry Abrasion Response of Materials (SAR Number)

G40-24 Standard Terminology Relating to Wear and Erosion

G170-24 Standard Guide for Evaluating and Qualifying Oilfield and Refinery Corrosion Inhibitors in the Laboratory