

# NACE International Glossary of Corrosion-Related Terms 2010





## **ABRASION RESISTANCE**

See NACE/ASTM G 193-10a.

## **ABRASIVE**

See NACE/ASTM G 193-10a.

## **ABRASIVE BLAST CLEANING**

See NACE/ASTM G 193-10a.

## **ACCELERATOR**

See NACE/ASTM G 193-10a.

## **ACRYLIC**

See NACE/ASTM G 193-10a.

## **ACTIVATOR**

See NACE/ASTM G 193-10a.

## **ACTIVE**

See NACE/ASTM G 193-10a.

## **ACTIVE-PASSIVE CELL**

See NACE/ASTM G 193-10a.

## **ADDUCT CURING AGENT**

See NACE/ASTM G 193-10a.

## **ADHESION**

See NACE/ASTM G 193-10a.

## **AERATION CELL**

See NACE/ASTM G 193-10a.

## **AGING**

Change in metallurgical properties that generally occurs slowly at room temperature (natural aging) and more rapidly at higher temperature (artificial aging).

## **AIR DRYING**

See NACE/ASTM G 193-10a.

## **AIRLESS SPRAYING**

See NACE/ASTM G 193-10a.

## **ALKYD**

See NACE/ASTM G 193-10a.

## **ALLIGATORING**

See NACE/ASTM G 193-10a.

## **ALLOY STEEL**

An iron-based alloy containing carbon (usually less than 2.5%) and manganese (usually not less than 0.25%) that contains specified minimum quantities for one or more alloying elements other than manganese, silicon, and copper, and that does not specify a minimum chromium content greater than or equal to 10%.

## **AMPHOTERIC METAL**

See NACE/ASTM G 193-10a.

## **ANAEROBIC**

See NACE/ASTM G 193-10a.

## **ANCHOR PATTERN**

See NACE/ASTM G 193-10a.

## **ANION**

See NACE/ASTM G 193-10a.

## **ANNEAL**

Heat to and hold at a temperature appropriate for the specific material and then cool at a suitable rate, for such purposes as reducing hardness, improving machinability, or obtaining desired properties.

## **ANODE**

See NACE/ASTM G 193-10a.

## **ANODE CAP**

See NACE/ASTM G 193-10a.

## **ANODE CORROSION EFFICIENCY**

See NACE/ASTM G 193-10a.

## **ANODIC INHIBITOR**

See NACE/ASTM G 193-10a.

## **ANODIC POLARIZATION**

See NACE/ASTM G 193-10a.



## **ANODIC PROTECTION**

*See NACE/ASTM G 193-10a.*

## **ANODIZING**

*See NACE/ASTM G 193-10a.*

## **ANOLYTE**

*See NACE/ASTM G 193-10a.*

## **ANTIFOULING**

*See NACE/ASTM G 193-10a.*

## **ATMOSPHERIC ZONE**

*See NACE/ASTM G 193-10a.*

## **ATTENUATION**

*See NACE/ASTM G 193-10a.*

## **AUGER ELECTRON SPECTROSCOPY**

*See NACE/ASTM G 193-10a.*

## **AUSTENITE**

*See NACE/ASTM G 193-10a.*

## **AUSTENITIZING**

Forming austenite by heating iron or iron-based alloys to a temperature in the transformation range (partial austenitizing) or above the transformation range (complete austenitizing).

## **AUXILIARY ELECTRODE**

*See NACE/ASTM G 193-10a.*

**BACKFILL**

See NACE/ASTM G 193-10a.

**BARCOL HARDNESS**

See NACE/ASTM G 193-10a.

**BARRIER COATING**

See NACE/ASTM G 193-10a.

**BEACH MARKS**

See NACE/ASTM G 193-10a.

**BETA CURVE**

See NACE/ASTM G 193-10a.

**BINDER**

See NACE/ASTM G 193-10a.

**BITUMINOUS COATING**

See NACE/ASTM G 193-10a.

**BLAST ANGLE**

See NACE/ASTM G 193-10a.

**BLISTER**

See NACE/ASTM G 193-10a.

**BLOWDOWN**

See NACE/ASTM G 193-10a.

**BLUSHING**

See NACE/ASTM G 193-10a.

**BRACELET ANODE**

See NACE/ASTM G 193-10a.

**BRAZE (VERB)**

Join metals by flowing a thin layer (of capillary thickness) of a lower-melting-point nonferrous filler metal in the space between them.

**BRINELL HARDNESS**

Hardness value, measured in accordance with ISO 6506-1 or ASTM E 10, normally using a 10 mm diameter tungsten carbide ball and force of 29.42 kN.

**BRITTLE FRACTURE**

See NACE/ASTM G 193-10a.

**BRUSH-OFF BLAST  
CLEANED SURFACE**

See NACE/ASTM G 193-10a.

**BURNISH**

Process of smoothing surfaces using frictional contact between the material and some other hard pieces of material (e.g., hardened steel balls).



## **CALCAREOUS COATING**

See NACE/ASTM G 193-10a.

## **CALCAREOUS DEPOSIT**

See NACE/ASTM G 193-10a.

## **CARBON STEEL**

- (1) Alloy of carbon and iron containing up to 2% carbon and up to 1.65% manganese and residual quantities of other elements, except those intentionally added in specific quantities for deoxidation (usually silicon and/or aluminum).
- (2) An iron-based alloy containing carbon (usually less than 2.0%) and manganese (usually not less than 0.25%) with no specified minimum quantity for any alloying element other than manganese, silicon, and copper, and that contains only an incidental amount of any element other than carbon, silicon, manganese, copper, sulfur, and phosphorus.

## **CARBURIZING**

*The absorption and diffusion of carbon into iron or an iron-based alloy in contact with a suitable carbonaceous environment at elevated temperature.*

## **CASE HARDENING**

See NACE/ASTM G 193-10a.

## **CASEIN PAINT**

See NACE/ASTM G 193-10a.

## **CAST IRON**

*Iron-carbon alloy containing approximately 2% to 4% carbon.*

## **CASTING**

*Metal that is obtained at or near its finished shape by the solidification of molten metal in a mold.*

## **CATALYST**

See NACE/ASTM G 193-10a.

## **CATHODE**

See NACE/ASTM G 193-10a.

## **CATHODIC CORROSION**

See NACE/ASTM G 193-10a.

## **CATHODIC DISBONDMENT**

See NACE/ASTM G 193-10a.

## **CATHODIC INHIBITOR**

See NACE/ASTM G 193-10a.

## **CATHODIC POLARIZATION**

See NACE/ASTM G 193-10a.

## **CATHODIC PROTECTION**

See NACE/ASTM G 193-10a.

## **CATHOLYTE**

See NACE/ASTM G 193-10a.

## **CATION**

See NACE/ASTM G 193-10a.

## **CAVITATION**

See NACE/ASTM G 193-10a.

## **CELL**

See NACE/ASTM G 193-10a.

## **CEMENTATION**

See NACE/ASTM G 193-10a.

## **CEMENTITE**

*Microstructural constituent of steels composed of iron carbide ( $\text{Fe}_3\text{C}$ ).*

## **CHALKING**

See NACE/ASTM G 193-10a.

## **CHECKING**

See NACE/ASTM G 193-10a.

## **CHEMICAL CONVERSION COATING**

See NACE/ASTM G 193-10a.

## **CHEVRON PATTERN**

See NACE/ASTM G 193-10a.

## **CHIPPING**

See NACE/ASTM G 193-10a.



## **CHLORIDE STRESS CORROSION CRACKING**

See NACE/ASTM G 193-10a.

## **CLEAVAGE FRACTURE**

A type of fracture, usually observed in crystalline materials, which is transgranular and results in bright, reflecting facets on the cleaved surface. (It is typically associated with a brittle fracture.)

## **COAT**

See NACE/ASTM G 193-10a.

## **COATING**

See NACE/ASTM G 193-10a.

## **COATING SYSTEM**

See NACE/ASTM G 193-10a.

## **COLD CRACKING**

Cracking occurring at low temperatures. (See cracking.)

## **COLD LAP**

See NACE/ASTM G 193-10a.

## **COLD SHUT**

See NACE/ASTM G 193-10a.

## **COLD WORKING**

Deforming metal plastically under conditions of temperature and strain rate that induce strain hardening, usually, but not necessarily, conducted at room temperature.

## **COMMERCIAL BLAST CLEANED SURFACE**

See NACE/ASTM G 193-10a.

## **COMPRESSIVE STRENGTH**

The maximum compressive stress a material is capable of withstanding without fracture or excessive flattening based on the load applied to its original cross-sectional area.

## **CONCENTRATION CELL**

See NACE/ASTM G 193-10a.

## **CONCENTRATION POLARIZATION**

See NACE/ASTM G 193-10a.

## **CONDUCTIVE COATING**

See NACE/ASTM G 193-10a.

## **CONDUCTIVE CONCRETE**

See NACE/ASTM G 193-10a.

## **CONDUCTIVITY**

See NACE/ASTM G 193-10a.

## **CONTACT CORROSION**

See NACE/ASTM G 193-10a.

## **CONTINUITY BOND**

See NACE/ASTM G 193-10a.

## **CONTINUOUS ANODE**

See NACE/ASTM G 193-10a.

## **CONVERSION COATING**

See NACE/ASTM G 193-10a.

## **COPPER SULFATE TEST**

See NACE/ASTM G 193-10a.

## **CORROSION**

See NACE/ASTM G 193-10a.

## **CORROSION FATIGUE**

See NACE/ASTM G 193-10a.

## **CORROSION INHIBITOR**

See NACE/ASTM G 193-10a.

## **CORROSION POTENTIAL ( $E_{CORR}$ )**

See NACE/ASTM G 193-10a.

## **CORROSION RATE**

See NACE/ASTM G 193-10a.



## **CORROSION RESISTANCE**

See NACE/ASTM G 193-10a.

## **CORROSION-INHIBITIVE PIGMENT**

A pigment that, when formulated into a liquid coating material, has the property of minimizing corrosion of the metal substrate to which the coating is applied.

## **CORROSIVENESS**

See NACE/ASTM G 193-10a.

## **COUNTER ELECTRODE**

See NACE/ASTM G 193-10a.

## **COUNTERPOISE**

See NACE/ASTM G 193-10a.

## **COUPLE**

See NACE/ASTM G 193-10a.

## **CRACKING**

Fracture of metal along an irregular path producing a discontinuity similar to a ragged edge.

## **CRACKING (OF COATING)**

See NACE/ASTM G 193-10a.

## **CRATER**

See NACE/ASTM G 193-10a.

## **CRAZING**

See NACE/ASTM G 193-10a.

## **CREEP**

See NACE/ASTM G 193-10a.

## **CREEP STRENGTH**

That stress which, when applied to a material at a specific elevated temperature, will cause a specified amount of elongation.

## **CREVICE CORROSION**

See NACE/ASTM G 193-10a.

## **CRITICAL HUMIDITY**

See NACE/ASTM G 193-10a.

## **CRITICAL PITTING POTENTIAL ( $E_P$ , $E_{PP}$ )**

See NACE/ASTM G 193-10a.

## **CURING**

See NACE/ASTM G 193-10a.

## **CURING AGENT**

See NACE/ASTM G 193-10a.

## **CURING TIME**

See NACE/ASTM G 193-10a.

## **CURRENT**

See NACE/ASTM G 193-10a.

## **CURRENT DENSITY**

See NACE/ASTM G 193-10a.

## **CURRENT EFFICIENCY**

See NACE/ASTM G 193-10a.

**DC DECOUPLING DEVICE**

See NACE/ASTM G 193-10a.

**DEALLOYING**

See NACE/ASTM G 193-10a.

**DECOMPOSITION  
POTENTIAL**

See NACE/ASTM G 193-10a.

**DECOMPOSITION  
VOLTAGE**

See NACE/ASTM G 193-10a.

**DEEP GROUNDBED**

See NACE/ASTM G 193-10a.

**DELAMINATION**

See NACE/ASTM G 193-10a.

**DEPOLARIZATION**

See NACE/ASTM G 193-10a.

**DEPOSIT CORROSION**

See NACE/ASTM G 193-10a.

**DEZINCIFICATION**

See NACE/ASTM G 193-10a.

**DIELECTRIC COATING**

See NACE/ASTM G 193-10a.

**DIELECTRIC SHIELD**

See NACE/ASTM G 193-10a.

**DIFFERENTIAL AERATION  
CELL**

See NACE/ASTM G 193-10a.

**DIFFUSION-LIMITED  
CURRENT DENSITY**

See NACE/ASTM G 193-10a.

**DISBONDMENT**

See NACE/ASTM G 193-10a.

**DISCONTINUITY**

- (1) An interruption in the normal physical structure or configuration of a coating such as cracks, laps, seams, inclusions, porosity, or holidays. A discontinuity may or may not affect the usefulness of the coating.
- (2) A condition in which the electrical path of a structure is interrupted by a device that acts as a dielectric or insulating fitting.

**DISSIMILAR METALS**

See NACE/ASTM G 193-10a.

**DOUBLE LAYER**

See NACE/ASTM G 193-10a.

**DOUBLER PLATE**

See NACE/ASTM G 193-10a.

**DRAINAGE**

See NACE/ASTM G 193-10a.

**DRIVING POTENTIAL**

See NACE/ASTM G 193-10a.

**DRY FILM THICKNESS**

See NACE/ASTM G 193-10a.

**DRY SPRAY**

See NACE/ASTM G 193-10a.

**DRY TO HANDLE**

See NACE/ASTM G 193-10a.

**DRY TO RECOAT**

See NACE/ASTM G 193-10a.

**DRY TO TOUCH**

Stage of drying or curing of an applied coating at which time it becomes tack-free.

**DRYING**

See NACE/ASTM G 193-10a.

**DRYING OIL**

See NACE/ASTM G 193-10a.





### **DRYING TIME**

Time required for an applied coating to reach the desired stage of cure, hardness, or nontackiness.

### **DUCTILE CAST IRON**

Cast iron that has been treated while molten with an element (usually magnesium or cerium) that spheroidizes the graphite (also called nodular cast iron).

### **DUCTILE FRACTURE**

Fracture that is accompanied by noticeable plastic deformation.

### **DUCTILITY**

The ability of a material to withstand significant plastic deformation prior to fracture. (It is often measured by the elongation or reduction in the cross-sectional area of a tensile test specimen.)

### **DUPLEX STAINLESS STEEL**

Stainless steel whose microstructure at room temperature consists primarily of a mixture of austenite and ferrite (also called austenitic/ferritic stainless steel).



## **ELASTIC DEFORMATION**

See NACE/ASTM G 193-10a.

## **ELASTIC LIMIT**

See NACE/ASTM G 193-10a.

## **ELASTICITY**

See NACE/ASTM G 193-10a.

## **ELECTRICAL INTERFERENCE**

See NACE/ASTM G 193-10a.

## **ELECTRICAL ISOLATION**

See NACE/ASTM G 193-10a.

## **ELECTRO-OSMOSIS**

See NACE/ASTM G 193-10a.

## **ELECTROCHEMICAL CELL**

See NACE/ASTM G 193-10a.

## **ELECTROCHEMICAL EQUIVALENT**

See NACE/ASTM G 193-10a.

## **ELECTROCHEMICAL POTENTIAL**

See NACE/ASTM G 193-10a.

## **ELECTRODE**

See NACE/ASTM G 193-10a.

## **ELECTRODE POTENTIAL**

See NACE/ASTM G 193-10a.

## **ELECTROKINETIC POTENTIAL**

See NACE/ASTM G 193-10a.

## **ELECTROLYTE**

See NACE/ASTM G 193-10a.

## **ELECTROLYTIC CLEANING**

See NACE/ASTM G 193-10a.

## **ELECTROMOTIVE FORCE SERIES**

See NACE/ASTM G 193-10a.

## **ELLIPSOMETRY**

See NACE/ASTM G 193-10a.

## **EMBRITTLEMENT**

See NACE/ASTM G 193-10a.

## **EMF SERIES**

See NACE/ASTM G 193-10a.

## **ENAMEL**

See NACE/ASTM G 193-10a.

## **END EFFECT**

See NACE/ASTM G 193-10a.

## **ENDURANCE LIMIT**

See NACE/ASTM G 193-10a.

## **ENVIRONMENT**

See NACE/ASTM G 193-10a.

## **ENVIRONMENTAL CRACKING**

See NACE/ASTM G 193-10a.

## **EPOXY**

See NACE/ASTM G 193-10a.

## **EQUILIBRIUM POTENTIAL**

See NACE/ASTM G 193-10a.

## **EROSION**

See NACE/ASTM G 193-10a.

## **EROSION-CORROSION**

See NACE/ASTM G 193-10a.

## **EXCHANGE CURRENT DENSITY**

See NACE/ASTM G 193-10a.

## **EXFOLIATION CORROSION**

See NACE/ASTM G 193-10a.

## **EXTERNAL CIRCUIT**

See NACE/ASTM G 193-10a.



## **FATIGUE**

See NACE/ASTM G 193-10a.

## **FATIGUE STRENGTH**

See NACE/ASTM G 193-10a.

## **FAULT CURRENT**

See NACE/ASTM G 193-10a.

## **FEATHER EDGING**

See NACE/ASTM G 193-10a.

## **FEATHERING**

See NACE/ASTM G 193-10a.

## **FERRITE**

See NACE/ASTM G 193-10a.

## **FERRITIC STEEL**

See NACE/ASTM G 193-10a.

## **FERRITIC STAINLESS STEEL**

Stainless steel whose microstructure at room temperature consists predominantly of ferrite.

## **FIBERGLASS-REINFORCED PLASTIC**

See NACE/ASTM G 193-10a.

## **FILIFORM CORROSION**

See NACE/ASTM G 193-10a.

## **FILM**

See NACE/ASTM G 193-10a.

## **FINISH COAT**

See NACE/ASTM G 193-10a.

## **FISH EYE**

See NACE/ASTM G 193-10a.

## **FORCED DRAINAGE**

See NACE/ASTM G 193-10a.

## **FOREIGN STRUCTURE**

See NACE/ASTM G 193-10a.

## **FOULING**

See NACE/ASTM G 193-10a.

## **FRAC TOGRAPHY**

See NACE/ASTM G 193-10a.

## **FRACTURE MECHANICS**

See NACE/ASTM G 193-10a.

## **FREE MACHINING**

See NACE/ASTM G 193-10a.

## **FRETTING CORROSION**

See NACE/ASTM G 193-10a.

## **FURAN**

See NACE/ASTM G 193-10a.



## **GALVANIC ANODE**

See NACE/ASTM G 193-10a.

## **GALVANIC CORROSION**

See NACE/ASTM G 193-10a.

## **GALVANIC COUPLE**

See NACE/ASTM G 193-10a.

## **GALVANIC CURRENT**

See NACE/ASTM G 193-10a.

## **GALVANIC SERIES**

See NACE/ASTM G 193-10a.

## **GALVANIZED COATING**

See NACE/ASTM G 193-10a.

## **GALVANIZING**

See NACE/ASTM G 193-10a.

## **GALVANOSTATIC**

See NACE/ASTM G 193-10a.

## **GENERAL CORROSION**

See NACE/ASTM G 193-10a.

## **GRAIN**

An individual crystal in a solid metal or alloy in which the atoms are arranged in an orderly pattern.

## **GRAIN BOUNDARY**

The irregular junction of two adjacent grains in a metal.

## **GRAPHITIC CORROSION**

See NACE/ASTM G 193-10a.

## **GRAPHITIZATION**

See NACE/ASTM G 193-10a.

## **GRAY CAST IRON**

Cast iron that displays a gray fracture as a result of the presence of flake graphite.

## **GRIT**

See NACE/ASTM G 193-10a.

## **GRIT BLASTING**

See NACE/ASTM G 193-10a.

## **GROUND BED**

See NACE/ASTM G 193-10a.





## **HALF CELL**

See NACE/ASTM G 193-10a.

## **HALF-CELL POTENTIAL**

See NACE/ASTM G 193-10a.

## **HAND TOOL CLEANING**

See NACE/ASTM G 193-10a.

## **HARDENER**

See NACE/ASTM G 193-10a.

## **HARDNESS**

Resistance of metal to plastic deformation, usually by indentation.

## **HEAT-AFFECTED ZONE**

See NACE/ASTM G 193-10a.

## **HEAT TREATMENT**

See NACE/ASTM G 193-10a.

## **HIGH-PRESSURE WATER CLEANING**

See NACE/ASTM G 193-10a.

## **HIGH-PRESSURE WATERJETTING**

See NACE/ASTM G 193-10a.

## **HIGH-TEMPERATURE HYDROGEN ATTACK**

See NACE/ASTM G 193-10a.

## **HOLIDAY**

See NACE/ASTM G 193-10a.

## **HOLIDAY DETECTION**

See NACE/ASTM G 193-10a.

## **HOT WORKING**

Deforming metal plastically at such a temperature and strain rate that recrystallization takes place simultaneously with the deformation, thus avoiding any strain hardening. (Contrast with cold working.)

## **HOT-DIP GALVANIZING**

See NACE/ASTM G 193-10a.

## **HYDROGEN BLISTERING**

See NACE/ASTM G 193-10a.

## **HYDROGEN EMBRITTLEMENT**

See NACE/ASTM G 193-10a.

## **HYDROGEN-INDUCED CRACKING**

See NACE/ASTM G 193-10a.

## **HYDROGEN OVERVOLTAGE**

See NACE/ASTM G 193-10a.

## **HYDROGEN STRESS CRACKING**

See NACE/ASTM G 193-10a.



## **IMPACT RESISTANCE**

*Ability of a material to resist deformation from impact.*

## **IMPINGEMENT CORROSION**

*See NACE/ASTM G 193-10a.*

## **IMPRESSED CURRENT**

*See NACE/ASTM G 193-10a.*

## **IMPRESSED CURRENT ANODE**

*See NACE/ASTM G 193-10a.*

## **IMPULSE DIELECTRIC TEST**

*See NACE/ASTM G 193-10a.*

## **INCLUSION**

*See NACE/ASTM G 193-10a.*

## **INORGANIC ZINC-RICH COATING**

*See NACE/ASTM G 193-10a.*

## **INSTANT-OFF POTENTIAL**

*See NACE/ASTM G 193-10a.*

## **INTERCRYSTALLINE CORROSION**

*See NACE/ASTM G 193-10a.*

## **INTERDENDRITIC CORROSION**

*See NACE/ASTM G 193-10a.*

## **INTERFERENCE BOND**

*See NACE/ASTM G 193-10a.*

## **INTERFERENCE CURRENT**

*See NACE/ASTM G 193-10a.*

## **INTERGRANULAR CORROSION**

*See NACE/ASTM G 193-10a.*

## **INTERGRANULAR STRESS CORROSION CRACKING**

*See NACE/ASTM G 193-10a.*

## **INTERNAL OXIDATION**

*See NACE/ASTM G 193-10a.*

## **INTUMESCENCE**

*See NACE/ASTM G 193-10a.*

## **ION**

*See NACE/ASTM G 193-10a.*

## **IR DROP**

*See NACE/ASTM G 193-10a.*

## **IRON ROT**

*See NACE/ASTM G 193-10a.*

## **ISOCORROSION**

*Refers to lines on a graph or chart that show constant corrosion behavior with changing composition.*



## **KNIFE-LINE ATTACK**

*See NACE/ASTM G 193-10a.*



## **LAMELLAR CORROSION**

See NACE/ASTM G 193-10a.



## **LANGELIER SATURATION INDEX**

See NACE/ASTM G 193-10a.

## **LATEX PAINT**

See NACE/ASTM G 193-10a.

## **LEVELING**

The process whereby a wet coating flows out after application so as to minimize any surface irregularities produced by the process of application.

## **LIFTING**

See NACE/ASTM G 193-10a.

## **LINE CURRENT**

See NACE/ASTM G 193-10a.

## **LINING**

See NACE/ASTM G 193-10a.

## **LIQUID METAL CRACKING**

See NACE/ASTM G 193-10a.

## **LONG-LINE CURRENT**

See NACE/ASTM G 193-10a.

## **LOW-ALLOY STEEL**

Steel with a total alloying element content of less than approximately 5%, but more than specified for carbon steel.

## **LOW-CARBON STEEL**

See NACE/ASTM G 193-10a.

## **LOW-PRESSURE WATER CLEANING**

See NACE/ASTM G 193-10a.

## **LUGGIN PROBE**

See NACE/ASTM G 193-10a.



## **MALLEABLE CAST IRON**

White cast iron that is thermally treated to convert most or all of the cementite to graphite (temper carbon).

## **MARTENSITE**

See NACE/ASTM G 193-10a.

## **MARTENSITIC STEEL**

Steel in which a microstructure of martensite can be attained by quenching at a cooling rate fast enough to avoid the formation of other microstructures.

## **METAL DUSTING**

See NACE/ASTM G 193-10a.

## **METALLIZING**

See NACE/ASTM G 193-10a.

## **MILL SCALE**

See NACE/ASTM G 193-10a.

## **MIST COAT**

A thin tack coat, applied as a mist of spray, used to improve adhesion of a new coat to an existing partially cured coat.

## **MIXED POTENTIAL**

See NACE/ASTM G 193-10a.

## **MODULUS OF ELASTICITY**

See NACE/ASTM G 193-10a.



## **NATURAL DRAINAGE**

See NACE/ASTM G 193-10a.

## **NEAR-WHITE METAL BLAST CLEANED SURFACE**

See NACE/ASTM G 193-10a.

## **NEGATIVE RETURN**

See NACE/ASTM G 193-10a.

## **NERNST EQUATION**

See NACE/ASTM G 193-10a.

## **NERNST LAYER**

See NACE/ASTM G 193-10a.

## **NITRIDING**

Case hardening process in which nitrogen is introduced into the surface of metallic materials (most commonly ferrous alloys). Typical processes include, but are not limited to, liquid nitriding, gas nitriding, and ion or plasma nitriding.)

## **NOBLE**

See NACE/ASTM G 193-10a.

## **NOBLE METAL**

See NACE/ASTM G 193-10a.

## **NOBLE POTENTIAL**

See NACE/ASTM G 193-10a.

## **NODULAR CAST IRON**

See ductile cast iron.

## **NORMALIZING**

See NACE/ASTM G 193-10a.

## **NOTCH PROPAGATION**

The increase in depth or length of a cut, nick, or scratch in a material when the material is stressed.



## **OPACITY**

See NACE/ASTM G 193-10a.

## **OPEN-CIRCUIT POTENTIAL**

See NACE/ASTM G 193-10a.

## **ORANGE PEEL**

See NACE/ASTM G 193-10a.

## **ORGANIC ZINC-RICH COATING**

See NACE/ASTM G 193-10a.

## **OVERVOLTAGE**

See NACE/ASTM G 193-10a.

## **OXIDATION**

See NACE/ASTM G 193-10a.

## **OXIDATION-REDUCTION POTENTIAL**

See NACE/ASTM G 193-10a.

## **OXYGEN CONCENTRATION CELL**

See NACE/ASTM G 193-10a.





# P

## **PAINT**

See NACE/ASTM G 193-10a.

## **PAINT SYSTEM**

See NACE/ASTM G 193-10a.

## **PARTING**

See NACE/ASTM G 193-10a.

## **PASSIVATION**

See NACE/ASTM G 193-10a.

## **PASSIVATION POTENTIAL**

See NACE/ASTM G 193-10a.

## **PASSIVE**

See NACE/ASTM G 193-10a.

## **PASSIVITY**

See NACE/ASTM G 193-10a.

## **PATINA**

See NACE/ASTM G 193-10a.

## **PEELING**

Detachment or partial detachment of a coating from the substrate or undercoat.

## **pH**

See NACE/ASTM G 193-10a.

## **PHOSPHATING**

See NACE/ASTM G 193-10a.

## **PICKLING**

See NACE/ASTM G 193-10a.

## **PICKLING SOLUTION**

See NACE/ASTM G 193-10a.

## **PIGMENT**

See NACE/ASTM G 193-10a.

## **PINHOLE**

See NACE/ASTM G 193-10a.

## **PIPE-TO-ELECTROLYTE POTENTIAL**

See NACE/ASTM G 193-10a.

## **PIPE-TO-SOIL POTENTIAL**

See NACE/ASTM G 193-10a.

## **PIT**

A metal surface anomaly consisting of a cavity, usually round in shape, with depth equal to or greater than the diameter at the opening. (Contrast with crater.)

## **PITTING**

See NACE/ASTM G 193-10a.

## **PITTING FACTOR**

See NACE/ASTM G 193-10a.

## **PLASTIC DEFORMATION**

See NACE/ASTM G 193-10a.

## **PLASTICITY**

See NACE/ASTM G 193-10a.

## **POLARIZATION**

See NACE/ASTM G 193-10a.

## **POLARIZATION**

## **ADMITTANCE**

See NACE/ASTM G 193-10a.

## **POLARIZATION CELL**

See NACE/ASTM G 193-10a.

## **POLARIZATION CURVE**

See NACE/ASTM G 193-10a.

## **POLARIZATION DECAY**

See NACE/ASTM G 193-10a.

## **POLARIZATION**

## **RESISTANCE**

See NACE/ASTM G 193-10a.



**POLARIZED POTENTIAL**

See NACE/ASTM G 193-10a.

**POLYESTER**

See NACE/ASTM G 193-10a.

**POSTWELD HEAT TREATMENT**

See NACE/ASTM G 193-10a.

**POTENTIAL-pH DIAGRAM**

See NACE/ASTM G 193-10a.

**POTENTIODYNAMIC**

See NACE/ASTM G 193-10a.

**POTENTIOKINETIC**

See NACE/ASTM G 193-10a.

**POTENTIOSTAT**

See NACE/ASTM G 193-10a.

**POTENTIOSTATIC**

See NACE/ASTM G 193-10a.

**POT LIFE**

See NACE/ASTM G 193-10a.

**POULTICE CORROSION**

See NACE/ASTM G 193-10a.

**POURBAIX DIAGRAM**

See NACE/ASTM G 193-10a.

**POWER TOOL CLEANING**

See NACE/ASTM G 193-10a.

**PRECIPITATION HARDENING**

See NACE/ASTM G 193-10a.

**PRIMARY PASSIVE POTENTIAL**

See NACE/ASTM G 193-10a.

**PRIME COAT**

See NACE/ASTM G 193-10a.

**PRIMER**

See NACE/ASTM G 193-10a.

**PROFILOMETER**

See NACE/ASTM G 193-10a.

**PROTECTIVE COATING**

See NACE/ASTM G 193-10a.



**QUENCHED AND TEMPERED**

Quench hardened and then tempered.



**REDUCTION**

See NACE/ASTM G 193-10a.

**REFERENCE ELECTRODE**

See NACE/ASTM G 193-10a.

**REFERENCE HALF-CELL**

See NACE/ASTM G 193-10a.

**REINFORCEMENT**

See NACE/ASTM G 193-10a.

**RELATIVE HUMIDITY**

See NACE/ASTM G 193-10a.

**REMOTE EARTH**

See NACE/ASTM G 193-10a.

**RESIDUAL STRESS**

Stress present in a component free of external forces or thermal gradients.

**RESIN**

See NACE/ASTM G 193-10a.

**RESISTIVITY**

See NACE/ASTM G 193-10a.

**REST POTENTIAL**

See NACE/ASTM G 193-10a.

**REVERSIBLE POTENTIAL**

See NACE/ASTM G 193-10a.

**RIMMED STEEL**

See NACE/ASTM G 193-10a.

**RISER**

See NACE/ASTM G 193-10a.

**ROCKWELL C HARDNESS**

Hardness value, measured in accordance with ISO 6508-1 or ASTM E 18, obtained using a diamond cone indenter and a force of 1.471 N.

**RUN**

See NACE/ASTM G 193-10a.

**RUST**

See NACE/ASTM G 193-10a.

**RUST BLOOM**

See NACE/ASTM G 193-10a.



## **SACKING**

See NACE/ASTM G 193-10a.

## **SACRIFICIAL ANODE**

See NACE/ASTM G 193-10a.

## **SACRIFICIAL PROTECTION**

See NACE/ASTM G 193-10a.

## **SAG**

See NACE/ASTM G 193-10a.

## **SCALING**

See NACE/ASTM G 193-10a.

## **SCANNING ELECTRON MICROSCOPE**

See NACE/ASTM G 193-10a.

## **SENSITIZING HEAT TREATMENT**

See NACE/ASTM G 193-10a.

## **SHALLOW GROUNDBED**

See NACE/ASTM G 193-10a.

## **SHELF LIFE**

See NACE/ASTM G 193-10a.

## **SHIELDING**

See NACE/ASTM G 193-10a.

## **SHOP COAT**

See NACE/ASTM G 193-10a.

## **SHOT BLASTING**

See NACE/ASTM G 193-10a.

## **SHOT PEENING**

See NACE/ASTM G 193-10a.

## **SIGMA PHASE**

See NACE/ASTM G 193-10a.

## **SLIP**

See NACE/ASTM G 193-10a.

## **SLOW STRAIN RATE TECHNIQUE**

See NACE/ASTM G 193-10a.

## **SLUSHING COMPOUND**

See NACE/ASTM G 193-10a.

## **SOLID SOLUTION**

Single crystalline phase containing two or more elements.

## **SOLUTION HEAT TREATMENT**

See NACE/ASTM G 193-10a.

## **SOLVENT CLEANING**

See NACE/ASTM G 193-10a.

## **SPALLING**

See NACE/ASTM G 193-10a.

## **SPARK TEST**

See NACE/ASTM G 193-10a.

## **SPECULAR GLOSS**

Reflection of light in one path, as from a mirror, as opposed to diffuse reflection in all directions.

## **SPLASH ZONE**

See NACE/ASTM G 193-10a.

## **SPREADING RATE**

See NACE/ASTM G 193-10a.

## **STAINLESS STEEL**

Steel containing 10.5% or more chromium, possibly with other elements added to secure special properties.

## **STANDARD ELECTRODE POTENTIAL**

See NACE/ASTM G 193-10a.

## **STANDARD JETTING WATER**

See NACE/ASTM G 193-10a.



**STEEL SHOT**

See NACE/ASTM G 193-10a.

**STEP POTENTIAL**

See NACE/ASTM G 193-10a.

**STEPWISE CRACKING**

See NACE/ASTM G 193-10a.

**STRAY CURRENT**

See NACE/ASTM G 193-10a.

**STRAY-CURRENT  
CORROSION**

See NACE/ASTM G 193-10a.

**STRESS CORROSION  
CRACKING**

See NACE/ASTM G 193-10a.

**STRESS RELIEVING  
(THERMAL)**

See NACE/ASTM G 193-10a.

**STRUCTURE-TO-  
ELECTROLYTE POTENTIAL**

See NACE/ASTM G 193-10a.

**STRUCTURE-TO-SOIL  
POTENTIAL**

See NACE/ASTM G 193-10a.

**STRUCTURE-TO-  
STRUCTURE POTENTIAL**

See NACE/ASTM G 193-10a.

**SUBMERGED ZONE**

See NACE/ASTM G 193-10a.

**SUBSURFACE CORROSION**

See NACE/ASTM G 193-10a.

**SULFIDATION**

See NACE/ASTM G 193-10a.

**SULFIDE STRESS CRACKING**

See NACE/ASTM G 193-10a.

**SURFACE POTENTIAL  
GRADIENT**

See NACE/ASTM G 193-10a.

**SURFACE PROFILE**

See NACE/ASTM G 193-10a.

**SWEEP BLAST CLEANED  
SURFACE**

See NACE/ASTM G 193-10a.



## **TACK COAT**

See NACE/ASTM G 193-10a.

## **TAFEL PLOT**

See NACE/ASTM G 193-10a.

## **TAFEL SLOPE**

See NACE/ASTM G 193-10a.

## **TAPE ADHESION TEST**

See NACE/ASTM G 193-10a.

## **TARNISH**

See NACE/ASTM G 193-10a.

## **TEMPERING**

Heat treatment by heating to a temperature below the lower critical temperature for the purpose of decreasing the hardness and increasing the toughness of hardened steel, hardened cast iron, and sometimes normalized steel.

## **THERMAL SPRAYING**

See NACE/ASTM G 193-10a.

## **THERMOGALVANIC CORROSION**

See NACE/ASTM G 193-10a.

## **THERMOPLASTIC**

A material capable of being repeatedly softened by heat and hardened by cooling.

## **THERMOPLASTIC COATING**

See NACE/ASTM G 193-10a.

## **THERMOSET**

See NACE/ASTM G 193-10a.

## **THERMOSET COATING**

See NACE/ASTM G 193-10a.

## **THROWING POWER**

See NACE/ASTM G 193-10a.

## **TOPCOAT**

See NACE/ASTM G 193-10a.

## **TOUCH POTENTIAL**

See NACE/ASTM G 193-10a.

## **TOUGHNESS**

The ability of material to absorb energy and deform plastically before fracturing.

## **TRANSPASSIVE REGION**

See NACE/ASTM G 193-10a.

## **TUBERCLE**

See NACE/ASTM G 193-10a.

## **TUBERCULATION**

See NACE/ASTM G 193-10a.



## ULTIMATE TENSILE STRENGTH

See NACE/ASTM G 193-10a.



## ULTRAHIGH-PRESSURE WATERJETTING

See NACE/ASTM G 193-10a.



## UNDERFILM CORROSION

See NACE/ASTM G 193-10a.

## UPSET

A metallurgical term meaning a hot deformation process to cause a dimensional change; in this case a thickening of metal by compressive forces.

## URETHANE

A coating binder, formed by reaction of an isocyanate and a polyol (hydroxyl-containing material) that produces a tough, durable, glossy protective coating with good chemical resistance.



## VEHICLE

See NACE/ASTM G 193-10a.

## VICKERS HARDNESS

Hardness value, measured in accordance with ISO 6507-1 or ASTM E 92, obtained using a diamond pyramid indenter and one of a variety of possible applied loads.

## VOID

See NACE/ASTM G 193-10a.



## WASH PRIMER

See NACE/ASTM G 193-10a.

## WATER CLEANING

See NACE/ASTM G 193-10a.

## WATERJETTING

See NACE/ASTM G 193-10a.

## WEIGHT COATING

See NACE/ASTM G 193-10a.

## WELD (VERB)

Join two or more pieces of metal by applying heat and/or pressure with or without filler metal, to produce a union through localized fusion of the substrates and solidification across the interfaces.

## WELD DECAY

See NACE/ASTM G 193-10a.

## WELD METAL

That portion of a weldment that has been molten during welding.

## WELDMENT

That portion of a component on which welding has been performed, including the weld metal, the heat-affected zone (HAZ), and the adjacent parent metal.

## WET FILM GAUGE

See NACE/ASTM G 193-10a.

## WET FILM THICKNESS

See NACE/ASTM G 193-10a.

## WET SPONGE TEST

See NACE/ASTM G 193-10a.

## WHITE CAST IRON

Cast iron that displays a white fracture as a result of the presence of cementite.

**WHITE METAL BLAST  
CLEANED SURFACE**

See *NACE/ASTM G 193-10a*.

**WORKING ELECTRODE**

See *NACE/ASTM G 193-10a*.

**WRINKLING**

Formation of a surface appearance in a coating resembling the skin of a prune, usually caused by application shortcomings.

**WROUGHT**

See *NACE/ASTM G 193-10a*.



**YELLOWING**

Development of a yellow color or cast.

**YIELD POINT**

See *NACE/ASTM G 193-10a*.

**YIELD STRENGTH**

See *NACE/ASTM G 193-10a*.







THE CORROSION SOCIETY

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