



Designation: A902 – 17

Standard Terminology Relating to Metallic Coated Steel Products¹

This standard is issued under the fixed designation A902; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

1. Scope*

1.1 This standard is a compilation of terminology related to metallic coatings used in the steel industry, and to the steel on which the coatings are applied. Terms that are generally understood or adequately defined in other readily available sources are not included.

1.2 When a term is used in an ASTM document for which Committee A05 is responsible it is included herein only when judged, after review by Subcommittee A05.18, to be a generally usable term.

1.3 Definitions that are identical to those published by other ASTM committees or other standards organizations are identified with the ASTM standard designation (for example, Terminology B374) or with the abbreviation of the name of the organization.

1.4 A definition is a single sentence with additional information included in notes. The year the definition was adopted, or the year of latest revision, is appended. The responsible subcommittee reviews the definition for each term at five-year intervals, and prepares revisions as needed.

1.5 *This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.*

2. Referenced Documents

2.1 ASTM Standards:²

A641/A641M Specification for Zinc-Coated (Galvanized) Carbon Steel Wire

A924/A924M Specification for General Requirements for Steel Sheet, Metallic-Coated by the Hot-Dip Process

¹ This terminology is under the jurisdiction of ASTM Committee A05 on Metallic-Coated Iron and Steel Products and is the direct responsibility of Subcommittee A05.18 on Editorial and Terminology.

Current edition approved May 1, 2017. Published May 2017. Originally approved in 1990. Last previous edition approved in 2015 as A902 - 15. DOI: 10.1520/A0902-17.

² For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

B374 Terminology Relating to Electroplating

D6386 Practice for Preparation of Zinc (Hot-Dip Galvanized) Coated Iron and Steel Product and Hardware Surfaces for Painting

D7396 Guide for Preparation of New, Continuous Zinc-Coated (Galvanized) Steel Surfaces for Painting

3. Terminology

3.1 Definitions:

aluminized coating, *n*—a coating on steel consisting of either commercially-pure aluminum (Type 2) or aluminum-silicon alloy (Type 1), applied by the hot-dip process. (2005)

barb, *n*—*as related to barbed wire*, a short length of wire, with exposed ends cut on a bias to produce sharp points. (1995)

barbed wire, *n*—a fabricated wire product consisting of two line wires twisted to form a two-wire strand, into which 2-point or 4-point barbs are tightly wrapped and locked into place at specified intervals. (1995)

base metal, *n*—*as related to metallic-coated steel*, the steel to which the coating is applied, as distinguished from the coating metal. (1990)

batch coating, *n*—*of metallic coated steel products*, the process of discontinuous-sequential passage of steel articles through the various steps of the coating process, such as, cleaning, pickling, fluxing, and coating. (1995)

breaking strength, *n*—*as related to wire*, the maximum force developed prior to fracture during tension testing of wire and wire products.

DISCUSSION—In testing of stranded wire products, the maximum force may be developed after fracture of one or more individual wires. (1993)

carbon steel, *n*—steel having a maximum carbon content of 2.0 % and a composition conforming to the following: (1) no minimum content is specified for chromium, cobalt, columbium (niobium), molybdenum, nickel, titanium, tungsten, vanadium, zirconium, or any other element added to obtain a desired alloying effect; (2) the specified minimum and maximum values for copper do not exceed 0.35 % and 0.60 %, respectively; (3) the specified maximum for any of the following elements does not exceed these percentages: manganese 1.65 %, silicon 0.60 %, columbium (niobium)

*A Summary of Changes section appears at the end of this standard

0.015 %, vanadium 0.008 %, boron 0.0008 %, or titanium 0.025 %; and (4) the incidental content of the following elements does not exceed these percentages: nickel, 0.20 %; chromium, 0.15 %; and molybdenum, 0.06 %.

DISCUSSION—Carbon steels typically contain small quantities of certain residual elements from the feed materials. When the quantity of such retained elements exceeds the values listed in (4) above, the characteristics of the steel may differ from that of carbon steel without those elements to a degree that the steel may be unsatisfactory for the intended use. The composition limits stated in this definition shall not apply to stabilized steel. (2005)

chemical treatment, *n*—a passivating surface protectant normally applied to metallic coatings to retard the formation of corrosion products during shipment and storage (storage stain).

DISCUSSION—The corrosion-inhibiting characteristics of chemical treatments are limited. If chemically-treated material becomes wet in shipment or storage, the product should be used or dried immediately. Some types of chemical treatments may be inappropriate in certain applications because of possible undesirable effects on further processing, such as phosphatizing, spot welding, or painting. (2007)

commercial steel, *CS, n*—a metallic-coated steel sheet designation which includes carbon steel products intended for general fabrication applications involving little or no bending or forming. (2013)

DISCUSSION—The chemical composition requirements for this designation can be found in the appropriate sheet product specification.

continuous coating, *n*—of *metallic coated steel products*, the process of uninterrupted passage of long lengths of steel products, usually steel sheet, tube, pipe, or wire, through the various processing steps such as cleaning, annealing, and coating.

DISCUSSION—Continuous coating involves the use of equipment that is capable of joining long lengths of product without stoppage of the coating process. Continuous coating of preformed tube or pipe is limited to the outer surface, since the coating material cannot be supplied to the inner surface. (2006)

deep drawing steel, *DDS, n*—a metallic coated steel sheet designation which includes low carbon steel products intended for applications involving particularly severe forming or deep drawing.

DISCUSSION—The chemical composition requirements for this designation can be found in the appropriate sheet product specification. (2013)

delamination, *n*—as *related to metallic coated steel*, the separation of a coating (either full or partial thickness) from underlying layers; the separation can occur in small localized areas or large areas of surface.

DISCUSSION—*Flaking, peeling, and spalling* are colloquial terms sometimes used to describe the separation. (1997)

differentially coated sheet, *n*—metallic coated sheet with unequal specifications for the weight (mass) of metallic coating on each of the two surfaces. (2012)

electrolytic process, *n*—the application of a metallic coating on a steel product by passing an electric current through a chemical solution in which the product is immersed; the coating may be applied in a continuous process or a batch process. (1995)

extra deep drawing steel, *EDDS, n*—a metallic-coated steel sheet designation, which requires the use of non-aging, chemically-stabilized carbon steel intended for applications requiring maximum formability. (2013)

DISCUSSION—The chemical composition requirements for this designation can be found in the appropriate sheet product specification.

extra smooth sheet, *n*—product produced by cold rolling the metallic coated sheet with a small reduction in thickness to impart both the desired surface texture and resistance to stretcher strains and fluting. (Syn. **skin passed sheet**)

DISCUSSION—Extra smooth is frequently specified when fluting or stretcher strains may be a hazard. Extra smooth may not be available in all coating types or weights (masses). (2012)

fabricator, *n*—as *related to corrugated metal pipe*, (1) the organization that produces the finished pipe, or (2) for structural plate pipe, the organization that processes flat sheets and other items needed for the field assembly of the finished products. (1990)

flaking—See **delamination**. (1994)

forming steel, *FS, n*—a metallic-coated steel sheet designation which includes carbon steel products intended for applications involving moderate forming or mild drawing which might not be achieved by commercial steel. (2013)

DISCUSSION—The chemical composition requirements for this designation can be found in the appropriate sheet product specification.

galvanized coating, *n*—a coating of virtually pure zinc on steel, applied by various methods or processes including hot-dip processes and electrodeposition (electrolytic processes).

DISCUSSION—For hot-dipped galvanized coatings, the molten bath is typically at least 99 % zinc; as applied to the steel, the coating typically contains intermetallic layers of zinc-iron alloys adjacent to the steel surface. Other methods of applying the zinc coating include metal spraying (metallizing), sherardizing, vacuum deposition, and mechanical deposition, but there is not general agreement that all produce a “galvanized coating.” There is general agreement that the coating produced by application of zinc-rich paint is not a “galvanized coating.” (1999)

galvannealed coating, *n*—a coating on steel of zinc-based alloy, containing about 6 to 15 % iron, produced by hot-dip immersion in a high-zinc content coating bath, followed by heating the steel to induce diffusion alloying between the molten zinc coating and the steel. (1994)

heat, *n*—a specific lot of material representing a single melt of steel produced to a specified chemical analysis. (1991)

heat analysis, *n*—the chemical composition of a specific production lot of liquid steel. (2003)

DISCUSSION—The sample on which the analysis is performed is usually taken from the molten steel.

hot-dip process, *n*—the application of a metallic coating on a steel product by immersion of the product in the molten metal which forms the coating; the coating is applied in either a continuous process or a batch process. (2006)

DISCUSSION—Metallic coatings applied by the hot-dip process are characterized by the presence of an intermediate alloy layer which forms as a result of a metallurgical reaction between the steel surface and the molten metal.

inclusion control, *n*—the process of reducing the volume fraction of inclusions or modifying the shape of inclusions to improve formability, weldability, and machinability.

DISCUSSION—Inclusions, especially those elongated during the rolling process, create the conditions for initiating, and/or propagating cracks when the material is stretched or bent during the manufacture of a part. The adverse effects of inclusions are minimized by reducing the content of inclusions in the steel and/or by altering the shape of inclusions through the use of additions during the steelmaking process that change the elongated shape of the inclusions to less harmful, small, well-dispersed globular inclusions. (2008)

lot, *n*—a finite quantity of a given product, produced under conditions that are considered uniform for sampling purposes.

DISCUSSION—In the case of metallic-coated iron or steel products, the conditions which may be considered necessary for a single lot are similar units, coating at approximately the same time, in the same manner, in a single coating bath. Consideration must also be given to the uniformity of the iron or steel product to which the coating is applied, such as being from a single heat. For material sampled after shipment from the manufacturer's or coater's facility (where the heat or processing identification may have been lost), a lot would consist of all similar material in a given shipment. (2006)

manufacturer, *n*—*as related to corrugated metal pipe*, the organization that produces the metal sheet from which pipe is made. (1990)

mechanical polishing, *n*—*of metallic coatings*, the loosening and detachment of superficial, small particles of coating metal during processing or testing, due to mechanical abrasion. (1994)

minimum thickness, *n*—*of metallic-coated steel sheet*, an ordering designation which indicates that the applicable tolerance for thickness is all plus from the ordered thickness. (2013)

nominal thickness, *n*—*of metallic coated steel sheet*, an ordering designation which indicates that the applicable tolerance for thickness is divided equally, plus and minus from the ordered thickness. (2012)

oiled, *adj*—describing a coating applied to metallic coated steel sheet alone or in addition to chemical treatment for further protection against the onset of storage corrosion; the oil coating is intended as a corrosion inhibitor only and not as a rolling or drawing lubricant. (2001)

peeling—See **delamination**. (1994)

phosphatized, *adj*—pertains to the treatment, in a phosphate solution, of uncoated and metallic coated sheet to prepare the surface for painting without further treatment except normal cleaning. (Syn. **phosphated**, **phosphate coated**)

DISCUSSION—This is a surface treatment only and other characteristics of the metallic coating remain unchanged on phosphatized sheet. Additional information about this and other types of available surface treatments is presented in Appendix X2 of Specification **A924/A924M**. Cleaning procedures are described in Guides **D6386** and **D7396**. (2009)

powdering, *n*—*as related to metallic coatings*, microcracking and fine particle separation of generally brittle coatings when the coating is severely stressed. (2005)

product analysis, *n*—a chemical analysis of a specimen taken from the semi-finished product or the finished product. (2014)

purchaser, *n*—*as related to corrugated metal pipe*, the entity that contracts to buy the finished pipe. (2009)

sample, *n*—a portion of the material that represents the lot.

DISCUSSION—The sample may consist of one or more discrete units, or may be one or more portions selected from one or more large units (such as from a coil of wire or steel sheet). (2015)

seam, *n*—*in wire*, a longitudinal discontinuity that extends radially into the wire from its surface.

DISCUSSION—The discontinuity may appear as a crack. The discontinuity can develop during solidification, rolling, or the wire drawing operation as a result of dynamic strain aging. A seam originating in wire drawing is also known as a split. (1992)

skin passed sheet, *n*—Synonym for **extra smooth sheet**. (1991)

spalling—See **delamination**. (1997)

spangle, *n*—*in hot-dip coatings*, the crystalline structure that develops on a metallic-coated surface when the molten coating metal solidifies, especially on steel sheet and articles coated after fabrication.

DISCUSSION—The crystalline structure can range from large, very visible dendritic grains to small, equiaxed grains that are difficult to discern with the unaided eye. Variables that affect the crystal size and visibility include: steel substrate composition and prior treatment, coating bath composition, coating solidification rate and post coating processing such as temper rolling. (2005)

specimen, *n*—a portion of a sample on which a specific test or evaluation is performed. (2005)

stabilized steel, *n*—a steel which has been treated with one or more carbide- or nitride-forming elements such as titanium, vanadium, or columbium, to control the level of interstitial solute elements (carbon or nitrogen) in the steel. (2012)

DISCUSSION—Fully stabilized interstitial free (IF) steel is non-aging and has improved formability as compared to steel that has not been fully stabilized.

strand—See **wire strand**. (1995)

steel sheet designation, *n*—a title given to a steel sheet product, associated with unique requirements for chemical composition and with mandatory or nonmandatory (typical) mechanical properties; the specific titles include *commercial steel*, *drawing steel*, *deep drawing steel*, *extra deep drawing steel*, *forming steel*, *high strength-low alloy steel*, *high temperature steel*, *structural steel*, *bake hardenable steel*, *solution hardened steel*, *complex phase steel*, *dual phase steel*, and *transformation induced plasticity steel*.

DISCUSSION—These designations are abbreviated as *CS*, *DS*, *DDS*, *EDDS*, *FS*, *HSLAS*, *HTS*, *SS*, *BHS*, *SHS*, *CP*, *DP*, and *TRIP*, respectively. Designations *HSLAS*, *SS*, *BHS*, *SHS*, *CP*, *DP*, and *TRIP* have mandatory mechanical property requirements, and specifications for the other designations contain nonmandatory tabulations of typical mechanical properties. (2015)

structural steel, *SS*, *n*—a metallic coated steel sheet designation of products intended for applications requiring specified minimum mechanical properties.

DISCUSSION—Producers typically use carbon-manganese steels to achieve the required mechanical properties and the use of microalloys is limited by specified maximum values. Structural steel is available in several grades and classes. The chemical composition requirements for this designation can be found in the appropriate sheet product specifications. (2013)

temper, *n*—as related to metallic-coated steel wire, stiffness or resistance to bending, typically described by reference to tensile strength.

DISCUSSION—Temper is usually described by terms such as *soft*, *medium*, and *hard*, with related tensile strengths as shown in a specification, such as Specification **A641/A641M**. (1990)

wire, *n*—a single continuous length of metal, generally with a circular cross section, that is cold drawn from wire rod or bar.

DISCUSSION—Wire is distinguished from cold-drawn bar by being in the form of a coil or spool. (1994)

wire rod, *n*—a hot-rolled, single continuous length of metal, generally of circular cross section, hot wound or laid into irregular coils, considered a semifinished product, primarily intended for wire drawing. (1994)

wire rope, *n*—a number of wire strands laid helically about an axis. (1994)

wire strand, *n*—a number of wires laid helically about an axis; with or without a center wire. (2006)

Zn-5Al-MM coating, *n*—zinc alloy coating containing nominally 5 % aluminum and a maximum of 0.1 % mischmetal, which is applied to steel wire, steel tubing, or steel sheet by the hot-dip process. (2006)

3.2 Abbreviations:

BHS—bake hardenable steel

CP—complex phase steel

CS—commercial steel

DDS—deep drawing steel

DP—dual phase steel

DS—drawing steel

EDDS—extra deep drawing steel

EPP—electro-plasma processing

EPT—electro-plasma technology

FS—forming steel

HSLAS—high strength-low alloy steel

HTS—high temperature steel

SHS—solution hardened steel

SS—structural steel

TRIP—transformation induced plasticity steel

Zn-5Al-MM—zinc-5 % aluminum-mischmetal alloy

4. Keywords

4.1 definitions; metallic-coated steel materials; steel products – metallic coated; terminology

APPENDIXES

(Nonmandatory Information)

X1. RECOMMENDED KEYWORDS FOR COMMITTEE A05 STANDARDS

X1.1 The following keywords are recommended for use as determined appropriate by the subcommittee responsible for the standard. Other keywords may be used as necessary.

X1.1.1 *General for All Standards:*—
aluminum coatings

coatings—aluminum

coatings—55 % aluminum-zinc alloy

coatings—metallic

coatings—zinc

coatings—zinc-5 % aluminum alloy

coatings—zinc-5 % aluminum-mischmetal

galvanized coatings [see *zinc coatings*]

steel products—metallic coated

zinc coatings

zinc-5 % aluminum alloy coatings

X1.1.2 *Related to Testing:*

coating thickness

coating weight [mass]

X1.1.3 *Related to Steel Sheet:*

aluminum coatings—steel sheet

coatings—composite

coatings—polymer

coatings—zinc-5 % aluminum-mischmetal

coatings—zinc-5 % aluminum-magnesium

electrodeposited coatings

metallic coated steel sheet

polymer coated steel sheet

polymer coatings

steel sheet—aluminum coated

steel sheet—55 % aluminum-zinc alloy coated

steel sheet—polymer coated

steel sheet—zinc coated (electrolytic process)

steel sheet—zinc coated (hot dip process)

steel sheet—zinc-5 % aluminum-mischmetal coated

steel sheet—zinc-5 % aluminum-magnesium coated

zinc coatings—steel sheet

X1.1.4 *Related to Steel Wire:*

aluminum coatings—steel wire products
 copper clad steel wire
 fencing material
 fences/fencing—chain link
 fences/fencing—farm/field
 metallic coated steel wire
 steel wire—aluminum coated
 steel wire—copper clad
 steel wire—zinc coated
 steel wire—zinc-5 % aluminum-mischmetal coated
 steel wire rope
 steel wire strand
 zinc coatings—steel wire products

X1.1.5 Related to Steel Fabricated Products:

coatings—zinc
 steel hardware—zinc coated
 steel products—metallic coated
 zinc coatings—steel products

X1.1.6 Related to Steel Pipe:
 corrugated steel sewer/drain pipe
 culvert pipe
 drainage pipe
 polymer coated steel pipe
 polymer coatings
 sewer and drainage pipe
 steel pipe—corrugated
 steel pipe—sewers/drainage systems
 storm sewer/drainage pipe
 structural design

X2. TERMINOLOGY SPECIFIC TO INDIVIDUAL COMMITTEE A05 STANDARDS

X2.1 The following terms are defined in individual standards under the jurisdiction of Committee A05, and are applicable only to the specific document (or documents) in which the term is defined. Definitions are not necessarily the same when a term is listed in two or more documents.

X2.2 Referenced Documents

X2.2.1 *ASTM Standards:* A123/A123M Specification for Zinc Hot-Dip Galvanized Coatings on Iron and Steel Products

A116 Specification for Metallic-Coated, Steel-Woven Wire Fence Fabric

A143 Practice for Safeguarding Against Embrittlement of Hot-Dip Galvanized Structural Steel Products and Procedure for Detecting Embrittlement

A153/A153M Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware

A390 Specification for Zinc-Coated Galvanized Steel Poultry Fence Fabric Hexagonal and Straight Line

A475 Specification for Zinc-Coated Steel Wire Strand

A586 Specification for Zinc-Coated Parallel and Helical Steel Wire Structural Strand

A653/A653M Specification for Steel Sheet, Zinc-Coated Galvanized or Zinc-Iron Alloy-Coated Galvannealed by the Hot-Dip Process

A740 Specification for Hardware Cloth (Woven or Welded Galvanized Steel Wire Fabric)

A742/A742M Specification for Steel Sheet, Metallic Coated and Polymer Precoated for Corrugated Steel Pipe

A754/A754M Test Method for Coating Weight Mass of Metallic Coatings on Steel by X-Ray Fluorescence

A755/A755M Specification for Steel Sheet, Metallic Coated by the Hot-Dip Process and Prepainted by the Coil-Coating Process for Exterior Exposed Building Products

A760/A760M Specification for Corrugated Steel Pipe, Metallic-Coated for Sewers and Drains

A761/A761M Specification for Corrugated Steel Structural Plate, Zinc-Coated, for Field-Bolted Pipe, Pipe-Arches, and Arches

A762/A762M Specification for Corrugated Steel Pipe, Polymer Precoated for Sewers and Drains

A792/A792M Specification for Steel Sheet, 55% Aluminum-Zinc Alloy-Coated by the Hot-Dip Process

A796/A796M Practice for Structural Design of Corrugated Steel Pipe, Pipe-Arches, and Arches for Storm and Sanitary Sewers and Other Buried Applications

A798/A798M Practice for Installing Factory-Made Corrugated Steel Pipe for Sewers and Other Applications

A807/A807M Practice for Installing Corrugated Steel Structural Plate Pipe for Sewers and Other Applications

A809 Specification for Aluminum-Coated (Aluminized) Carbon Steel Wire

A818 Specification for Coppered Carbon Steel Wire

A824 Specification for Metallic-Coated Steel Marcellled Tension Wire for Use With Chain Link Fence

A849 Specification for Post-Applied Coatings, Pavings, and Linings for Corrugated Steel Sewer and Drainage Pipe

A855/A855M Specification for Zinc-5 % Aluminum-Mischmetal Alloy-Coated Steel Wire Strand

A875/A875M Specification for Steel Sheet, Zinc-5 Aluminum Alloy-Coated by the Hot-Dip Process

A929/A929M Specification for Steel Sheet, Metallic-Coated by the Hot-Dip Process for Corrugated Steel Pipe

A930 Practice for Life-Cycle Cost Analysis of Corrugated Metal Pipe Used for Culverts, Storm Sewers, and Other Buried Conduits

A964/A964M Specification for Corrugated Steel Box Culverts

A974 Specification for Welded Wire Fabric Gabions and Gabion Mattresses (Metallic Coated or Polyvinyl Chloride (PVC) Coated)

A975 Specification for Double-Twisted Hexagonal Mesh Gabions and Revet Mattresses (Metallic Coated Steel Wire or Metallic Coated Steel Wire with Polyvinyl Chloride (PVC) Coating)

A978/A978M Specification for Composite Ribbed Steel Pipe, Precoated and Polyethylene Lined for Gravity Flow Sanitary Sewers, Storm Sewers, and Other Special Applications

A979/A979M Specification for Concrete Pavements and Linings Installed in Corrugated Steel Structures in the Field

A998/A998M Practice for Structural Design of Reinforcements for Fittings in Factory-Made Corrugated Steel Pipe for Sewers and Other Applications

A1003/A1003M Specification for Steel Sheet, Carbon, Metallic- and Nonmetallic-Coated for Coldformed Framing Members

A1004/A1004M Practice for Establishing Conformance to the Minimum Expected Corrosion Characteristics of Metallic, Painted-Metallic, and Nonmetallic-Coated Steel Sheet Intended for Use as Cold Formed Framing Members

A1019/A1019M Specification for Closed Rib Steel Pipe with Diameter of 36 in [900 mm] or Less, Polymer Precoated for Sewers and Drains

A1030/A1030M Practice for Measuring Flatness Characteristics of Steel Sheet Products

A1042/A1042M Specification for Composite Corrugated Steel Pipe for Sewers and Drains

A1057/A1057M Specification for Steel, Structural Tubing, Cold Formed, Welded, Carbon, Zinc- Coated (Galvanized) by the Hot-Dip Process

A1059/A1059M Specification for Zinc Alloy Thermo-Diffusion Coatings (TDC) on Steel Fasteners, Hardware, and Other Products

A1063/A1063M Specification for Steel Sheet, Twin-Roll Cast, Zinc-Coated (Galvanized) by the Hot- Dip Process

A1068 Practice for Life-Cycle Cost Analysis of Corrosion Protection Systems on Iron and Steel Products

A1072/A1072M Specification for Zinc-5% Aluminum (Hot-Dip) Coatings on Iron and Steel Products

A1074 Specification for Hot Tin and Hot Tin/Lead Dip on Ferrous and Non-Ferrous Metals

A1079 Specification for Steel Sheet, Complex Phase (CP), Dual Phase (DP) and Transformation Induced Plasticity (TRIP), Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process

A1093/A1093M Specification for Electrolytic Plasma Treatment Processing of Conductive Materials

X2.3 Terms marked with a double asterisk (**) in X2.4 are also defined in 3.1 of Terminology A902. The definition in the other document(s) listed is not necessarily the same as the definition in Terminology A902.

X2.4 Terms:

acrylic—A755/A755M, A1057/A1057M

aluminum-coated (aluminized) wire—A809

aluminum coating type 1—A1003/A1003M

aluminum coating type 2—A1003/A1003M

annealed coppered wire—A818

annealed-in-process wire—A818

anode—A1093/A1093M

applied potential—A1093/A1093M

aqueous plasma—A1093/A1093M

arch—A761/A761M, A796/A796M, A807/A807M

average coating thickness—A123/A123M, A153/A153M, A1072/A1072M

averaging time—A754/A754M

bake hardenable steel—A653/A653M

bare spots—A153/A153M

bedding—A796/A796M, A798/A798M, A807/A807M

black—A123/A123M, A1072/A1072M

bottom side—A755/A755M

box culvert—A761/A761M, A964/A964M

branch pipe—A998/A998M

buckle (ridge, quarter, center)—A1030/A1030M

camber—A1030/A1030M

carbon steel**—A809, A818

cathode—A1093/A1093M

chalking—A755/A755M

chick fence fabric—A390

coating sequence—A1003/A1003M

coating thickness grade—A123/A123M, A1072/A1072M

coil coater—A1003/A1003M

coil coating—A755/A755M

coil set/reverse coil set—A1030/A1030M

common costs—A930, A1068

complex phase (CP) steel—A1079

composite—A978/A978M

continuous stay fixed knot joint—A116

contractor—A979/A979M

conversion coating—A755/A755M

coppered steel wire—A818

corrosion protection project—A1068

cross-corrugations—A964/A964M

crossbow/reverse crossbow—A1030/A1030M

crown—A964/A964M

de-dimpled —A1057/A1057M	intermediate wires —A116
deltoid shape —A978/A978M	invert —A796/A796M, A798/A798M, A807/A807M
differentially coated** —A653/A653M, A1063/A1063M	lacing wire —A974, A975
discount rate —A930, A1068	lining —A849, A979/A979M
double-twisted wire mesh —A975	main pipe —A998/A998M
drainage project —A930	maintenance cost —A930
dross inclusions —A153/A153M	malleable casting —A153/A153M
dual phase (DP) steel —A1079	manufacturer** —A742/A742M, A760/A760M, A761/A761M, A762/A762M, A849, A929/A929M, A1019/A1019M, A1042/A1042M
edge wire —A975	marcelling —A824
electrolyte —A1093/A1093M	material category —A123/A123M, A1072/A1072M
embrittlement —A143/A143M	material service life —A930, A1068
engineer —A979/A979M	mesh size —A740
epoxy —A755/A755M	micro-roughness —A1093/A1093M
extruded liner —A978/A978M	mil —A755/A755M
fabricator** —A742/A742M, A760/A760M, A761/A761M, A762/A762M, A849, A929/A929M, A979/A979M, A1019/A1019M, A1042/A1042M	minimized coating structure —A760/A760M, A762/A762M, A875/A875M, A929/A929M
fade —A755/A755M	minimized spangle —A653/A653M, A1063/A1063M
fastener —A975	multi-specimen article —A123/A123M, A1072/A1072M
fittings —A998/A998M	netting —A390
flat plate —A761/A761M	outer wires (of strand) —A586
fluorocarbon —A755/A755M	paint —A755/A755M
full center —A1030/A1030M	pavement —A979/A979M
future costs —A930, A1068	paving —A849
gabion —A974, A975	pipe —A761/A761M, A796/A796M, A798/A798M, A807/A807M
gabion mattress —A974	pipe, horizontal ellipse —A761/A761M
gloss —A755/A755M	pipe, vertically elongated —A761/A761M
gross dross inclusions —A123/A123M, A1072/A1072M	pipe-arch —A761/A761M, A796/A796M, A798/A798M, A807/A807M
hard drawn wire —A818	plasma —A1093/A1093M
hardware cloth —A740	plasma reactor —A1093/A1093M
haunch —A796/A796M, A798/A798M, A807/A807M, A964/A964M	plastisol —A755/A755M
high strength-low alloy steel —A653/A653M, A1063/A1063M	polyester —A755/A755M
high temperature steel —A792/A792M	polyurethane —A755/A755M
hinge joint —A116	post coating —A849
individual measurement —A153/A153M	poultry-and-garden fence fabric —A390
inflation —A930, A1068	primer —A755/A755M
initial cost —A930, A1068	producer —A1003/A1003M
inspection lot —A153/A153M	

project design life —A930, A1068	specimen coating thickness —A123/A123M, A153/A153M, A1072/A1072M
purchaser** —A742/A742M, A760/A760M, A761/A761M, A762/A762M, A849, A929/A929M, A979/A979M, A1019/A1019M, A1042/A1042M	spiral binder —A974
purlins and girts —A1003/A1003M	standards —A754/A754M
red rust —A1004/A1004M	stiffener —A974, A975
red rust stains —A1004/A1004M	stiffeners —A964/A964M
regular coating structure —A760/A760M, A762/A762M, A875/A875M, A929/A929M	strand** —A475, A855/A855M
regular spangle —A653/A653M, A792/A792M, A1063/A1063M	structural plate —A761/A761M
rehabilitation cost —A930, A1068	structural tubing —A1057/A1057M
reinforcement —A998/A998M	substrate —A754/A754M
replacement cost —A930	surface morphology —A1093/A1093M
resample —A1003/A1003M	temper** —A809
response time —A754/A754M	terminal value —A930
retest —A1003/A1003M	terne metal —A308/A308M
revet mattress —A975	terne-coated sheet —A308/A308M
rise —A964/A964M	test article —A123/A123M, A1072/A1072M
roll former —A755/A755M, A1003/A1003M	thermo-diffusion coating —A1059/A1059M
salts —A1093/A1093M	threaded areas —A153/A153M
sample** —A123/A123M, A153/A153M, A754/A754M, A1072/A1072M	time constant —A754/A754M
sectional —A1074	top and bottom wires —A116
selvedge wire —A975	top side —A755/A755M
shell —A964/A964M	transformation induced plasticity (TRIP) steel —A1079
significant surface —A1074	undercoat —A1074
silicone polyester —A755/A755M	underplating —A1074
single-specimen article —A123/A123M, A1072/A1072M	underpass —A807/A807M
solid-solution hardened steel or solution hardened steel —A653/A653M	unit weight —A964/A964M
span —A964/A964M	vehicular underpass —A761/A761M
spangle-free —A653/A653M, A1063/A1063M	wash coat —A755/A755M
special shape —A761/A761M	wavy edge —A1030/A1030M
specimen** —A123/A123M, A1072/A1072M	welded wire fabric —A974
	x-ray fluorescence —A754/A754M
	zinc mixture —A1059/A1059M
	zinc powder —A1059/A1059M
	zinc-iron alloy —A653/A653M, A1079



SUMMARY OF CHANGES

Committee A05 has identified the location of selected changes to this standard since the last issue (A902 - 15) that may impact the use of this standard. (Approved May 1, 2017.)

(1) Section 3.1: Deleted definition of the term *terne coating* and added abbreviations *EPP* and *EPT*.

(2) Appendix X1.1.3: Deleted keywords that contained the word *terne*.

(3) Appendix X2.2: Deleted A308/A308M from list of referenced documents.

(4) Appendix X2.4: Deleted three terms included in A308/A308M and added ten terms included in A1093/A1093M.

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