



Standard Terminology Relating to Non-ferrous Metals and Alloys¹

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1. Scope

1.1 To promote precise understanding and interpretation of standard, reports, and other technical writings promulgated by Committee B-02.

1.2 To standardize the terminology used in these documents.

1.3 To explain the meanings of technical terms used within these documents for those not conversant with them.

2. Significance and Use

2.1 The terms defined in this document are generic in respect to the standards under the jurisdiction of Committee B-02 on Nonferrous Metals and Alloys. The same terms may have different definitions in other ASTM technical committees.

2.2 Some definitions may differ within the committee because of limitations on items such as weights or dimensions. In such cases the terms will be more precisely defined in the *Terminology* section of the standards in which these terms are used.

3. Terminology

3.1 Terms and Their Definitions

average diameter, *n*—the average of the maximum and minimum outside the diameters, as determined at any one section of the pipe or tube.

bar, *n*—an elongated, forged or rolled metal product with uniform strength, length and section (such as rectangular, square, round, oval or hexagonal).

billet, *n*—a formed shape that may be further worked, or a solid, semifinished, round, or rectangular product that has been hot-worked by forging, rolling, or extrusion.

cathodic protection, *n*—protection of a metal from corrosion by making it a cathode through the galvanic sacrifice of a less noble metal or through an impressed electric current.

coiled sheet, *n*—sheet in coils with slit edges.

die casting, *n*—a casting process wherein molten metal is poured or injected under high pressure into the cavity of a metal mold and solidified; also, a product of such a process.

fineness, *n*—a measure of the purity of precious metals

expressed in parts per thousand.

flat sheet, *n*—sheet with sheared, silt, or sawed edges that has been flattened or leveled.

foundry casting, *n*—a casting process wherein a molten metal is poured by gravity into the cavity of a mold and solidified; also, a product of such a process.

galvanic anode, *n*—a metal electrode that sacrificially corrodes when coupled to a more noble metal in a conducting medium, thereby supplying a protective electric current to the more noble electrode.

graphite permanent mold casting, *n*—a metal object produced by introducing molten metal by gravity or low pressure into a graphite mold and allowing it to solidify.

heat, *n*—refer to melt.

ingot, *n*—a casting of simple shape suitable for hot-working or remelting.

liquidus, *n*—the lowest temperature at which an alloy under equilibrium conditions begins to freeze on cooling or is completely melted on heating.

lot, *n*—a quantity of metal made under conditions that, for sampling purposes, are considered uniform.

lot number, *n*—a unique alphanumeric designation for a lot that is traceable to manufacturing records.

melt, *n*—all the metal that, while molten, was held at the same time in the same holding vessel.

nominal wall, *n*—specified wall thickness with a published plus and minus tolerance from the specified thickness at any point.

permanent mold casting, *n*—a metal object produced by introducing molten metal by gravity or low pressure into a mold constructed of durable material, usually iron or steel, and allowing it to solidify. See also graphite permanent mold casting.

pig, *n*—an oblong or square mass of metal that has been cast while still molten into a mold that gives the metal its particular shape; most commonly used for lead and tin in weights that can be handled manually.

pipe, *n*—a tubular metal product, cast or wrought, of dimensions that conform to those referred to commercially as standard pipe sizes.

plate, *n*—a flat-rolled metal product of same minimum thickness and width arbitrarily dependent on the type of metal.

powder, *n*—particles of a solid characterized by small size, nominally within the range of from 0.1 to 1000 μm .

¹ This terminology is under the jurisdiction of ASTM Committee B-2 on Nonferrous Metals and Alloys and is the direct responsibility of Subcommittee B02.91 on Editorial and Terminology.

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