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Standard Terminology of Glass and Glass Products[1]

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This standard has been approved for use by agencies of the Department of Defense.

1. Scope

1.1 This terminology defines terms generally used in the glass industry.

1.2 In some cases in which a usage is specific to a certain industry, that is spelled out within the definition. For completeness and historical purposes, terms that are outdated are listed as being archaic. The reader is cautioned that some companies or industries may define or use terms differently than the way these terms are defined within this terminology.

1.3 Other sources of glass glossaries are *Glass Association of North America's Glazing Manual*,[2] *Engineering Standards Manual for Tempered Glass*,[2] *Laminated Glass Design Guide*,[2] and ASTM Committee C-14 standards.

2. Referenced Documents

2.1 *ASTM Standards:*

C 148 Test Methods for Polariscopic Examination of Glass Containers[3]

C 336 Test Method for Annealing Point and Strain Point of Glass by Fiber Elongation[3]

C 338 Test Method for Softening Point of Glass[3]

C 598 Test Method for Annealing Point and Strain Point of Glass by Beam Bending[3]

C 1048 Specification for Heat-Treated Glass—Kind HS, Kind FT Coated and Uncoated Glass[3]

C 1172 Specification for Laminated Architectural Flat Glass[3]

3. Terminology

Abbé value—the reciprocal dispersive power, a value used in optical design, expressed mathematically as:

$$\textit{Abbé value} = (n_d - 1)/(n_F - n_C)$$

where n_d is the refractive index for the helium line at 587.6 nm and n_F and n_C are the refractive indices for the hydrogen lines at 486.1 and 656.3 nm, respectively. See synonymous term **nu-value** and related term **dispersion**.

acid polishing—the polishing of a glass surface by acid treatment.

air bells—bubbles of irregular shape formed generally during the pressing or molding operations in the manufacture of optical glass.

alabaster glass—a milky-white glass that diffuses light without fiery color.

alcove—a narrow channel to convey molten glass from refiner to forehearth or to the revolving pot where it is gathered by the Owens machine.

alkali—an industrial term for the oxide of sodium or potassium; less frequently of lithium.

ampoule—a glass container designed to be filled and sealed by fusion of the glass neck.

anneal—to attain acceptably low stresses, or desired structure, or both, in glass by controlled cooling from a suitable temperature.

annealing—a controlled cooling process for glass designed to reduce residual stress to a commercially acceptable level and modify structure.

annealing point (A.P.)—that temperature corresponding either to a specific rate of elongation of a glass fiber when measured by Test Method C 336, or a specific rate of midpoint deflection of a glass beam when measured by Test Method C 598. At the annealing point of glass, internal stresses are substantially relieved in a matter of minutes.

annealing range—the range of glass temperature in which stress in glass can be relieved at a commercially practical rate. For purposes of comparing glasses, the annealing range is assumed to correspond with the temperature between the annealing point (A.P.) and the strain point (St.P.).

antimony—an industrial term for an oxide of antimony.

arch, *n*—a part of a melter; a crown.

arch, *v*—to heat a pot in a pot arch.

arrest mark—See **dwell mark**.

arsenic—an industrial term for an oxide of arsenic.

aventurine—glass containing colored, opaque spangles of nonglassy material.

back wall—the wall at the charging end of a melter.

[1] This terminology is under the jurisdiction of ASTM Committee C14 on Glass and Glass Products and is the direct responsibility of Subcommittee C14.01 on Nomenclature and Definitions.

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[2] Glass Association of North America, 3310 S.W. Harrison, Topeka, KS 66611-2279.

[3] *Annual Book of ASTM Standards,* Vol 15.02.

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