

Designation: A1087/A1087M - 21

Standard Practice for Using Hand Calipers to Measure the Width of Steel Sheet¹

This standard is issued under the fixed designation A1087/A1087M; 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 practice covers procedures for measuring the width of steel sheet when decimal, not fraction, tolerances are indicated. The methods described are designed and intended for use in the laboratory, mill situations, and general use.
- 1.2 The flat steel product shall conform to all the requirements of the appropriate specifications as follows: Specifications A917 and A924/A924M.
- 1.3 Quantitative limits are not addressed and are established in the general requirements, or individual product specifications, or both; or when applicable, as agreed to between supplier and user.
- 1.4 *Units*—This specification is applicable to orders in either inch-pound units or SI units. Values in inch-pound and SI units are not necessarily equivalent. Within the text, SI units are shown in brackets. Each system shall be used independently of the other.
- 1.5 This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety, health, and environmental practices and determine the applicability of regulatory limitations prior to use.
- 1.6 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

A902 Terminology Relating to Metallic Coated Steel Products

A917 Specification for Steel Sheet, Coated by the Electrolytic Process for Applications Requiring Designation of the Coating Mass on Each Surface (General Requirements)

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

3. Terminology

3.1 *Definitions:* See Terminology A902 for definitions of general terminology.

4. Significance and Use

- 4.1 This practice provides procedures commonly used for measuring the width of steel sheet products under the jurisdiction of ASTM Committees A01 and A05 and their subcommittees as designated by a purchaser in a purchase order or contract when decimal, not fraction, tolerances are indicated.
- 4.2 The ability to accurately measure width using hand calipers is critical in determining if product meets decimal specifications. The definitions and procedures for measuring width characteristics of steel sheet products are provided so that purchasers and suppliers have common definitions and measuring procedures for width measurements. The intention of these definitions and measuring methods is not to provide dimensional specifications for width characteristics, but rather common procedure(s) for quantifying width values. For determining compliance with width specifications, references are provided to appropriate ASTM standards.
- 4.3 This practice may be used by other ASTM Committees and other standards writing bodies for the purpose of measuring the width of metal sheet products when decimal, not fraction, tolerances are indicated.

5. Apparatus

- 5.1 Calipers used for width measurement shall be constructed with parallel blades so the sheet can be placed between them for measurement. The outside blades of a caliper are used to measure the width of steel sheet; inside blades of a caliper are used to measure internal dimensions of non-sheet products. Calipers can be electrical digital, dial or analog with vernier scale, as shown in the photographs. See Fig. 1 and Fig. 2.
 - 5.2 Unlock the caliper and if electrical digital, turn it on.

¹ This test method is under the jurisdiction of ASTM Committee A05 on Metallic-Coated Iron and Steel Products and is the direct responsibility of Subcommittee A05.07 on Methods of Testing.

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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.