



Designation: E2987/E2987M – 17

Standard Terminology for Sustainable Manufacturing¹

This standard is issued under the fixed designation E2987/E2987M; 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 The standard includes terminology applicable to sustainable manufacturing.

1.2 The values stated in either SI units or inch-pound units are to be regarded separately as standard. The values stated in each system may not be exact equivalents; therefore, each system shall be used independently of the other. Combining values from the two systems may result in non-conformance with the standard.

1.3 *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. Significance and Use

2.1 The terminology included in this standard is intended to provide definitions for sustainable manufacturing terms. This standard is intended to be referenced by other sustainable manufacturing standards.

2.2 The terms defined in this standard are those which have specific meaning in the context of sustainable manufacturing. Terms that have more general application, or for which the dictionary definition is applicable, are not included.

2.3 Terms having application only within a specific standard, or having meaning unique to the context of that

¹ This terminology is under the jurisdiction of ASTM Committee E60 on Sustainability and is the direct responsibility of Subcommittee E60.13 on Sustainable Manufacturing.

Current edition approved Oct. 15, 2017. Published November 2017. Originally approved in 2016. Last previous edition approved in 2016 as E2987/E2987M-16. DOI: 10.1520/E2987_E2987M-17.

This standard is subject to revision at any time by the responsible technical committee and must be reviewed every five years and if not revised, either reapproved or withdrawn. Your comments are invited either for revision of this standard or for additional standards and should be addressed to ASTM International Headquarters. Your comments will receive careful consideration at a meeting of the responsible technical committee, which you may attend. If you feel that your comments have not received a fair hearing you should make your views known to the ASTM Committee on Standards, at the address shown below.

This standard is copyrighted by ASTM International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA 19428-2959, United States. Individual reprints (single or multiple copies) of this standard may be obtained by contacting ASTM at the above address or at 610-832-9585 (phone), 610-832-9555 (fax), or service@astm.org (e-mail); or through the ASTM website (www.astm.org). Permission rights to photocopy the standard may also be secured from the Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923, Tel: (978) 646-2600; <http://www.copyright.com/>

standard, are defined or explained in the terminology section of the individual standard, and are not included here.

3. Referenced Documents

3.1 *ASTM Standard:*

E2114 [Terminology for Sustainability Relative to the Performance of Buildings](#)

4. Terminology

4.1 *Terms and Definitions:*

indicator, *n*—quantitative value or qualitative information derived from a set of parameters that provides information about the state of a phenomenon.

DISCUSSION—An example of a common indicator is CO₂ equivalent emissions.

DISCUSSION—An indicator can be used as a reference for decision-making.

DISCUSSION—This definition is consistent with the definition in Terminology E2114.

process data unit, *n*—smallest element of a unit manufacturing process for which discrete data are collected.

unit manufacturing process, *n*—the individual operation or subset of operations necessary to convert, modify, or add value from a defined initial state to a defined end state.

DISCUSSION—A unit manufacturing process can consist of multiple process data units. Examples of unit manufacturing processes include, but are not limited to: casting, machining, surface treatment, mixing, and preparation for shipping.

5. Keywords

5.1 manufacturing; process; product; sustainability; terminology