

AWS A3.0M/A3.0:2010
An American National Standard



Standard Welding Terms and Definitions

**Including Terms for Adhesive
Bonding, Brazing, Soldering,
Thermal Cutting, and
Thermal Spraying**



American Welding Society



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**Approved by the
American National Standards Institute
July 1, 2009**

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Soldering, Thermal Cutting, and Thermal Spraying**

12th Edition

Supersedes AWS A3.0:2001

Prepared by the
American Welding Society (AWS) A2 Committee on Definitions and Symbols

Under the Direction of the
AWS Technical Activities Committee

Approved by the
AWS Board of Directors

Abstract

This standard is a glossary of the technical terms used in the welding industry. Its purpose is to establish standard terms to aid in the communication of welding information. Since it is intended to be a comprehensive compilation of welding terminology, nonstandard terms used in the welding industry are also included. All terms are either standard or nonstandard. They are arranged in word-by-word alphabetical sequence.



American Welding Society

550 N.W. LeJeune Road, Miami, FL 33126

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Standard Welding Terms and Definitions

Including Terms for Adhesive Bonding, Brazing, Soldering, Thermal Cutting, and Thermal Spraying

1. Scope

The purpose of this document is to establish standard terms and definitions to aid in the communication of information related to welding, adhesive bonding, brazing, soldering, thermal cutting, and thermal spraying. The standard terms and definitions published in this document should be used in the oral and written language associated with these related processes.

Whenever A3.0 is mentioned in this document, it refers to the latest edition, A3.0M/A3.0:2010.

When terms from A3.0 are included in the glossary of other documents, it is intended that the definitions be identical to those in A3.0, except that the references may be changed if appropriate.

It is one of the goals of the Definitions Subcommittee that A3.0 encompass all terms, not adequately defined in the dictionary, directly related to welding or allied fields. Both standard and nonstandard jargon, as well as dialect and vernacular terms, are accepted for inclusion in A3.0.

Since this document is a comprehensive compilation of terminology, nonstandard terms are included with cross-references to the corresponding standard terms. **Boldface** type indicates standard terms, lightface type indicates nonstandard terms. Terms for standard welding processes and for standard welding process variations are followed by their standard letter designations.

For the user's convenience, a vertical line in the margin next to a term indicates that a revision, i.e., modification, addition, or correction, has been made. A single line denotes a minor change to an existing definition. A double line denotes a new term or a major change. Terms for standard processes and standard process variations are followed by their standard letter designation. All terms are arranged in word-by-word alphabetical sequence.

The principles applied by the Definitions Subcommittee for the creation of terms and definitions in A3.0 are described in Informative Annex C.

This standard makes use of both the International System of Units (SI) and U.S. Customary Units. The latter are shown within brackets ([]) or in appropriate columns in tables and figures. The measurements may not be exact equivalents; therefore, each system must be used independently.

Safety and health issues and concerns are beyond the scope of this standard, and therefore are not fully addressed herein. Safety and health information is available from other sources, including, but not limited to, ANSI Z49.1, *Safety in Welding, Cutting, and Allied Processes*, and applicable federal and state regulations.

2. Normative References

The following standards contain provisions which, through reference in this text, constitute mandatory provisions of this AWS standard. For undated references, the latest edition of the referenced standard shall apply.

American Welding Society (AWS) document:¹

AWS A1.1, *Metric Practice Guide for the Welding Industry*; and

Other document:

Webster's Third New International Dictionary of the English Language, Unabridged.²

¹ AWS standards are published by the American Welding Society, 550 N.W. LeJeune Rd., Miami, FL 33126.

² *Webster's Third New International Dictionary of the English Language, Unabridged* is published by Merriam-Webster, Incorporated, Springfield, MA. It is available at most bookstores.