

American National Standard

*for Power Tools –
Power-Driven Brushing Tools –
Safety Requirements for
Design, Care, and Use*



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ANSI®
B165.1-2013
Revision of
ANSI B165.1-2010

American National Standard
for Power Tools –

**Power-Driven Brushing Tools –
Safety Requirements for
Design, Care, and Use**

Sponsor

American Brush Manufacturers Association

Approved September 30, 2013

American National Standards Institute, Inc.

American National Standard

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Published by

American Brush Manufacturers Association
736 Main Ave., Suite 7, Durango, CO 81301-5479

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Printed in the United States of America

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Foreword (This foreword is not part of American National Standard ANSI B165.1-2013.)

In an endeavor to react with sensitivity to the safety of those associated with power-driven brushes, this standard has as its primary objective the prevention of injuries to those who use them. It would do so by establishing the requirements for the design, care, and use of power-driven brushing tools, excluding those brushing tools constructed with wood, plastic, or composition hubs or cores.

Information contained in this standard is designed to assist machine operators and their supervisors in maintaining and operating all types of brushing equipment, including portable power tools.

The Safety and Standards Committee of the American Brush Manufacturers Association (ABMA) recognizes that it has an obligation to reflect, within this standard, the balanced best interests of the manufacturers and users. To assist in the interpretation of the requirements of this standard, responsibilities have been assigned to brush manufacturers, brushing machine manufacturers, and brush users. This assignment of responsibilities shows that safety must be a cooperative effort shared equally by each of these sectors.

This standard is a revision of *American National Standard for Power Tools - Power-driven brushing tools - Safety requirements for design, care and use*, ANSI B165.1-2010. The original 1991 standard was developed after it was recognized that there was a need for a safety standard for power-driven brushes. To develop the standard, the Industrial Division of ABMA established a Safety and Standards Committee, which worked cooperatively with the Society of Manufacturing Engineers (SME).

Prior to publication of the 1991 standard, SME canvassed a large number of interested, concerned, and representative industry associations, government agencies, societies, institutions, foundations, and commissions to ensure the development of a consensus. After approval, the Standard was published by SME in 1991 with the co-sponsorship of the ABMA and the cooperative help of the American National Standards Institute (ANSI).

During the past three years, the 2010 standard served the best interests of those most affected or influenced by its use. In accordance with the revisions of the American National Standards Institute's five-year periodic review procedure, this Standard has been reviewed, revised, and updated through the Canvass Method. The standard was reaffirmed in 2000 and revised in 2005 and 2010.

Suggestions for improvement of the standard are welcomed. They should be sent to the American Brush Manufacturers Association, 736 Main Ave, Suite 7, Durango, CO 81301-5479.

The following organizations recognized as having an interest in the standardization of power-driven brushing tools were contacted prior to the approval of this standard. Inclusion in this list does not necessarily imply that the organization concurred with the submittal of the proposed standard to ANSI.

Alliance of American Insurers
American Association of Industrial Management
American College of Occupational and Environmental Medicine
American Dental Association
American Federation of Labor and Congress of Industrial Organizations (AFL-CIO)
American Foundry Society
American Insurance Association
American Iron and Steel Institute
American Petroleum Institute
American Society for Testing and Materials
American Society of Safety Engineers
American Textile Machinery Association
American Welding Society
Association for Manufacturing Technology
Canadian Vehicle Manufacturers Association
CNA Insurance
Consumer Product Safety Commission
Consumer Testing Laboratories, Inc.
European Brush Manufacturers Association (FEIBP)
FM Global
Gallagher Bassett Services, Inc
Gases and Welding Distributors Association
GE ERC
Industrial Supply Association
International Association of Ironworkers
International Association of Machinists
International Safety Equipment Association
National Association for Surface Refinishing
National Association of Dental Laboratories
National Hardwood Lumber Association
National Restaurant Association
National Safety Council
Power Tool Institute
Society of Automotive Engineers
Society of Manufacturing Engineers
Society of the Plastics Industry
Triodyne Incorporated
Underwriters Laboratories
Unified Abrasives Manufacturers Association
Union of Needletrades, Industrial and Textile Employees
United Autoworkers Union
United Brotherhood of Carpenters and Joiners of America
United Steelworkers of America
U.S. Department of Labor - OSHA
U.S. General Services Administration

Explanation of Standard Format

This standard uses a two-column format to provide both specific requirements and supporting information.

The left column, designated "Standard Requirements" is confined solely to these requirements and is printed in bold type. Where supporting photographs or sketches are required, they are designated as "figures."

The right column, designated "Explanatory Information" contains only information that is intended to clarify the standard. This is not a part of the standard. Where supplementary photographs or sketches are required, they are designated as "illustrations."

The information contained in E4.3 illustration 2 is not part of this American National Standard (ANS) and has not been processed in accordance with ANSI's requirements for an ANS. As such, illustration 2 may contain material that has not been subjected to public review or a consensus process. In addition, it does not contain requirements necessary for conformance to the standard.

Operating rules (safe practices) are not included in either column unless they are of such nature as to be vital safety requirements, equal in weight to other requirements or guides to assist in compliance with the standard.

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American National Standard for Power Tools –

Power-Driven Brushing Tools – Safety Requirements for Design, Care, and Use

Standard Requirements

1 Scope

The purpose of this standard is to establish the rules and specifications for safety that apply in the design, use, and care of power-driven brushing tools. It includes specifications for shanks, adapters, flanges, collets, chucks, and safety guards and rules for the proper storage, handling, mounting, and use of brushes. It embraces configurations of brushing tools whose functional performance is accomplished by power-driven operation. Covered are brushing tools whose brushing elements are made up of ferrous wire, nonferrous wire, plastic, abrasive filaments, vegetable fibers, animal hair, or other materials, and brushes fabricated with any combination of such elements.

Brushing tools whose primary function is vehicle or train washing, carpet sweeping, dental hygiene, floor maintenance, sewer cleaning, street sweeping, and brushing tools manufactured in accordance with other applicable American National Standards are not covered.

Explanatory Information

(Not part of American National Standard ANSI B165.1-2013)

E1 Scope

It is the intent of this standard to cover power-driven brushes, of any size, any materials, any construction or any configuration except those specifically excluded under the scope. Brushes with wood or synthetic hubs and cores, which have overall appearances very similar to power brushes of this standard, have been excluded because the parameter of construction and use differ fundamentally from brushes covered in this standard. Other brushes excluded in this standard have been omitted because of significant differences in construction, dimension, service conditions or application.