

ANSI B11.13-1992

# American National Standard

*for Machine Tools –  
Single- and Multiple-Spindle  
Automatic Bar and Chucking Machines –  
Safety Requirements for  
Construction, Care, and Use*



**American National Standards Institute**

11 West 42nd Street  
New York, New York  
10036

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**ANSI**®  
**B11.13-1992**  
Revision of  
ANSI B11.13-1983

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for Machine Tools –

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Automatic Bar and Chucking Machines –  
Safety Requirements for  
Construction, Care, and Use**

Secretariat

**AMT – The Association for Manufacturing Technology**

Approved June 2, 1992

**American National Standards Institute, Inc.**

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**Foreword** (This foreword is not part of American National Standard B11.13-1992.)

Recognizing the need for a safety standard for single- and multiple-spindle automatic screw/bar and chucking machines, American National Standards Committee B11 on Safety Standards for Machine Tools established Subcommittee B11.13 in 1972 to develop the safety requirements for these machines. ANSI B11.13-1975 was approved and released in 1975, and revised in 1983. It is now superseded by ANSI B11.13-1992, entitled *American National Standard for Machine tools – Single- and multiple-spindle automatic bar and chucking machines*, which has been changed to more appropriately reflect current industry practice.

To continue this objective, the Subcommittee revised this standard to cover all the different types of single- and multiple-spindle automatic bar and chucking machines, carefully considering the possible hazards to setup and operating personnel. It approached the problem by requiring a hazard control strategy that provides a degree of safety by:

- a) Eliminating by design any recognized hazards due to construction;
- b) Reducing exposure to hazards through appropriate safeguarding;
- c) Heightening safety awareness through procedures, training, warning devices, and signs.

To implement these requirements, responsibilities have been assigned to the manufacturer, the rebuilder, the modifier, and the user.

To assist all persons concerned in complying with the requirements of this standard, explanatory information has been placed in the right-hand column, adjacent to the requirements to which it applies.

Recognizing the difficulty of updating machines immediately after the approval date of this standard, the Subcommittee has provided a 24-month period for compliance; this is specified in the applicable portions of this standard.

It is recognized that the words "safe" and "safety" are not absolutes. Safety is an attitude. This standard is not intended to replace good judgment. Operator skill, training, experience, job monotony, and fatigue are all safety factors that must be considered.

Suggestions for improvement of this standard will be welcome. They should be sent to AMT (Association for Manufacturing Technology), 7901 Westpark Drive, McLean, VA 22102 – Attention: B11 Secretariat.

This standard was processed and approved for submittal to ANSI by the Accredited Standards Committee on Safety Standards for Machine Tools, B11. Committee approval of this standard does not necessarily imply that all committee members voted for its approval. At the time it approved this standard, the B11 Committee had the following members:

Theodore M. Wire, Chairman  
Charles A. Carlsson, Secretary

<i>Organization Represented</i>	<i>Name of Representative</i>
Aerospace Industries Association of America, Inc. ....	Daniel J. Nauer
Alliance of American Insurers .....	John W. Russell

<i>Organization Represented</i>	<i>Name of Representative</i>
American Boiler Manufacturers Association .....	Russell N. Mosher Thomas A. Saari (Alt.)
American Institute of Steel Construction .....	Charles Peshek, Jr.
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Computer and Business Equipment Manufacturers Association .....	William F. Hanrahan Wayne Loomis (Alt.)
Defense Industrial Plant Equipment Center .....	Edward E. Ramsey Jack W. Lynch (Alt.) Garland T. Smith (Alt.)
Forging Industry Association .....	Karen Taylor Dale Bos (Alt.)
Grinding Wheel Institute .....	James J. Wherry Charles S. Conant (Alt.)
International Association of Machinists and Aerospace Workers .....	Herb Johnson Jim DeWitt (Alt.)
International Union, United Automobile, Aerospace and Agricultural Implement Workers of America (UAW) .....	Barrie E. Brooks
Machinery Dealers National Association .....	Chuck Wood Clyde Batavia (Alt.) Sid Lieberstein (Alt.) Darryl D. McEwen (Alt.)
Metal Building Manufacturers Association .....	Charles M. Stockinger John G. Thimmig (Alt.)
Metal Powder Industries Federation .....	Donald White Dennis Cloutier (Alt.)
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<i>Organization Represented</i>	<i>Name of Representative</i>
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Tooling and Manufacturing Association .....	Bruce C. Braker Jeff Stollard (Alt.)
U.S. Department of the Navy – NAVSEA.....	Howard I. Wildman
U. S. Department of Labor – Occupational Safety and Health Administration (OSHA) .....	Joseph J. Bode Pat J. Cattafesta (Alt.) Pat Clark (Alt.) Alvah O. Conley, Jr. (Alt.) Frank A. Smith (Alt.)

Subcommittee B11.13 on Safety Requirements for the Construction, Care, and Use of Single- and Multiple-Spindle Automatic Bar and Chucking Machines, which revised this standard, had the following members:

Fred W. Lewis, Chairman	Kirt M. Babuder
Richard D. Zahniser, Secretary	John Dogger
	Bill Dunsmore
	Russell L. Herlache
	Henry Hubli
	Val Parker
	Peter K. Rosenkrands
	Emmett Sindelar
	Harold D. Walker, Jr.

In addition to the work performed by the subcommittee, extensive work in the development of this standard was preformed by the membership of the National Screw Machine Products Association.

## **Explanation of Standard Format**

This standard uses a two-column format to provide supporting information for requirements. The material in the left column is confined to standards requirements only, and is so captioned.

The right column, captioned "Explanatory Information," contains information that the committee felt would clarify the standard. This column should not be construed as being a part of this American National Standard.

Illustrations 1 through 11 included with this standard are provided to aid in its understanding. As such, they are to be considered as examples and not as part of the requirements.

Operating rules (safe practices) are not included in either column of this standard 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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for Machine Tools –

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STANDARD REQUIREMENTS

EXPLANATORY INFORMATION

(Not part of *American National Standard for Machine tools – Single- and multiple-spindle automatic bar and chucking machines – Safety requirements for construction, care, and use*, ANSI B11.13-1992)

**1 Scope, purpose, and application**

**1.1 Scope**

**This standard applies to single- and multiple-spindle automatic bar and chucking machines in which all tool movement is controlled by the machine.**

**Specific machines shall include, but not be limited to:**

- a) Single-spindle automatic bar machines of the tool turret-indexing type;**

*E1.1 Scope*

A machine of this type is automatic in the sense that it repeatedly performs all of the necessary operations, which may include ejecting the machined piece and presenting a new piece or length of stock to the tools. These machines run continuously until stopped by an operator or any sensing device. The control of these machines can be provided by, but is not limited to, any mechanical, pneumatic, hydraulic or electrical means, or combination thereof.

Historically some machines to which this standard applies were referred to as screw machines.

Specific automatic machines will be referred to as single- or multiple-spindle automatic bar and chucking machines.

- a) Turret-indexing types. (See illustrations 1,2)  
Turret-indexing types are those in which tools are mounted in an indexing turret and are advanced automatically to the work