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PEOPLE'S REPUBLIC OF CHINA**

GB 18568-2001

**Machining centres -- Safeguarding specification
(English Translation)**

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Foreword

This Standard's Chapter 3, Article 4.7.3, Article 4.8.1, Article 4.8.3 and Article

4.8.4 are recommended, the rest are mandatory.

Formulated on the basis of GB 15760-1995 "Metal-cutting machine tools - General safeguarding specification", and combined with the structural characteristics of the machining center, this Standard is a supplement and realization to the aforementioned standard.

This Standard was written on the basis of GB/T 16755-1997 "Safety of machinery - Rules for drafting and presentation of safety standards".

This Standard was proposed by China Machinery Industry Federation.

This Standard shall be under the jurisdiction of China National Technical Committee for Standardization of Metal Cutting Machine Tool.

The drafting organization of this Standard. Beijing Machine Tool Research Institute.

Main drafters of this Standard. Zhang Wei and Li Xiangwen.

Machining centers - Safeguarding specification

1 Scope

This Standard specifies the technical requirements and safety measures on major hazards that shall be taken by machining centers.

This Standard is applicable to general-use machining centers.

2 Normative references

The following standards contain provisions which, through reference in this Standard, constitute the provisions of this Standard. At the time of publication, the editions indicated were valid. All standards shall be revised. The parties who enter into agreement based on this Standard are encouraged to investigate whether the latest versions of these standards are applicable.

GB 191-2000 Packaging - Pictorial marking for handling of goods (eqv ISO 780.1997)

GB 1251.1-1989 Ergonomics - Danger signals for public and work areas - Auditory danger (eqv ISO 7731.1986)

GB 1251.2-1996 Ergonomics - Visual danger signals - General requirements design and testing

GB 1251.3-1996 Ergonomics - system of auditory and visual danger and information signals

GB 2893-1982 Safety colors

GB 2894-1996 Safety signs (neq ISO 3864.1984)

GB/T 3168-1993 Numerical control of machine - Symbols (neq ISO 2972.1979)

GB 4053.1-1993 Safety requirements for fixed steel vertical ladders

GB 4053.2-1993 Safety requirements for fixed steel oblique ladders

GB 4053.3-1993 Safety requirements for fixed industrial protective railings

GB 4053.4-1983 Fixed steel industrial platform

GB/T 5226.1-1996 Safety of machinery - Electrical equipment of machines - Part 1. General requirements (eqv IEC 204-1.1992)

GB/T 6527.2-1986 General code of safety color (eqv ISO 3864.1984)

GB/T 6576-1986 Machine tools - Lubrication systems (neq ISO 5170.1977)

GB 7247-1995 Radiation safety of laser products equipment classification

requirements and users guide (idt IEC 825.1984)

GB/T 7632-1987 Recommendations for the choice of lubricants for machine tools

GB/T 7932-1987 Pneumatic fluid power - General rules relating to systems (neq ISO 4414.1982)

GB 8196-1987 Safety requirement of guard on machinery

GB 8197-1987 Safety requirement of shield

GB 9969.1-1998 General principles for preparation of instructions for use of industrial products

GB 12265.1-1997 Safety of machinery - Safety distances to prevent danger zones being reached by the upper limbs

GB 12265.2-2000 Safety of machinery - Safety distances to prevent hazard zones being reached by the lower limbs

GB 12265.3-1997 Safety of machinery - Minimum gaps to avoid crushing of parts of the human body

GB/T 13379-1992 Principles of visual ergonomics - the lighting of indoor work places (neq ISO 8995.1989)

GB/T 14775-1993 Ergonomics requirements for controller

GB/T 14776-1993 Ergonomics - Principles for determining dimensions of work places in manufacturing areas and the dimensions

GB/T 15241.2-1999 Ergonomic principles related to mental workload - Part 2. Design principles (idt ISO 10075-2.1996)

GB/T 15706.1-1995 Safety of machinery - Basic concept, general principles for design - Part 1. Basic terminology, methodology

GB/T 15706.2-1995 Safety of machinery - Basic concepts, general principles for design Part 2. Technical principles and specifications

GB 15760-1995 Metal-cutting machine tools - General safeguarding specification

GB/T 16251-1996 Ergonomic principles in the design of work systems (eqv ISO 6385.1981)

GB 16754-1997 Safety of machinery - Emergency stop - Principles for design (eqv ISO/IEC 13850.1995)

GB/T 16769-1997 Metal-cutting machine tools - Measurement method of sound pressure level

GB/T 16855.1-1997 Safety of machinery - Safety related parts of control systems - Part 1. General principles for design

GB/T 16856-1997 Safety of machinery - Principles for risk assessment

GB/T 17161-1997 Machine tools - Direction of operation of controls (eqv ISO 447.1984)

GB/T 17454.1-1998 Safety of machinery Pressure sensitive protective device Part 1. General principles for the design and testing of pressure sensing mats and pressure sensing floors

GB 17888.1-1999 Safety of machinery - Permanent means of access to machinery - Part 1. Choice of a fixed means of access between two levels

GB 17888.2-1999 Safety of machinery - Permanent means of access to machinery - Part 2. Working platforms and walkways

GB 17888.3-1999 Safety of machinery - Permanent means of access to machinery - Part 3. Stairs stepladders and guard-rails

GB 17888.4-1999 Safety of machinery - Permanent means of access to machinery - Part 4. Fixed ladders

GB/T 18153-2000 Safety of machinery - Temperatures of touchable surfaces - Ergonomics data to establish temperature limit values for hot surfaces

GB 18209.1-2000 Safety of machinery - Indication, marking and actuation - Part