

ICS 79.120.10
CCS J 65



**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 44902-2024

**Safety of woodworking machines - Common requirements
(English Translation)**

Issued on: October 26, 2024

Implemented on: May 1, 2025

**Issued by: State Administration for Market Regulation, China National
Standardization Administration**

Table of Contents

Preface
1 Scope
2 Normative references
3 Terms and Definitions
4 Safety requirements and/or measures
4.1 Safety and reliability of control systems
4.2 Control Devices
4.3 Start
4.4 Safe Stop
4.5 Braking of the Cutter Shaft
4.6 Mode Selection
4.7 Tool Speed Shift
4.8 Power source failure
4.9 Manual reset control
4.10 Stopping Detection and Monitoring
4.11 Speed Monitoring of Moving Parts
4.12 Time Delay
4.13 Remote Services
5 Safety requirements and protective measures for mechanical hazards
5.1 Stability
5.2 Risk of fracture during operation
5.3 Design of tool and tool holder
5.4 Braking
5.5 Protective devices
5.6 Preventing access to hazardous moving parts
5.7 Impact Hazard
5.8 Clamping device
5.9 Projectile prevention
5.10 Support and guidance of workpieces
6 Safety requirements and protective measures for other hazards
6.1 Fire
6.2 Noise

6.3 Emissions of wood chips and dust

6.4 Electrical Equipment

6.5 Ergonomics and handling

6.6 Lighting

6.7 Pneumatic device

6.8 Hydraulic device

6.9 Electromagnetic Compatibility

6.10 Laser

6.11 Static Electricity

6.12 Assembly Error

6.13 Isolation

6.14 Maintenance

6.15 Related but not significant hazards

7 Usage Information

7.1 Warning

7.2 Sign

7.3 User Manual

Appendix A (Informative) Hazard List

Appendix B (Informative) Performance Level Requirements

Appendix C (Normative) Stability Test

Appendix D (Normative) Braking function test

Appendix E (Normative) Impact test of protective devices

Appendix F (Normative) Noise Test Procedure

Reference

Figure 1 Schematic diagram of forward cutting and reverse cutting

Figure 2 Protection of roller gap of roller table

Figure 3 Forming support design

Figure C.1 Stability test and forces during operation

Figure E.1 Example of impact test equipment

Figure E.2 Projectile dimensions for type A protective devices

Table A.1 Hazard List

Table B.1 Safety functions and required performance levels (PL)

Table F.1 Specifications of standard circular saw blades for measurement

Table F.2 Examples of noise emission indication values

Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents" Drafting.

This document is equivalent to ISO 19085-1:2021 "Safety of woodworking machine tools - Part 1: Common requirements".

The following minimal editorial changes have been made to this document.

--- To coordinate with the existing standards, the name of the standard is changed to "Common Safety Requirements for Woodworking Machine Tools";

--- Corrected the reference errors in 7.3.1n), 6.8 was changed to 6.7, 6.9 was changed to 6.8;

--- Corrected the table numbering error in Appendix A, and modified Table 1 to Table A.1.

1 Scope

This document provides the safety requirements and measures for continuous woodworking machine tools (hereinafter referred to as machine tools) to reduce the risk of accidents during operation, adjustment, these safety requirements and measures are prepared by the manufacturer for most machine tools.

See the commonly used conditions under the intended use within the scope, while also taking into account reasonably foreseeable misuse.

This document applies to machine tools for machining solid wood and materials with similar physical properties to wood, using manual feed or mechanical feed.

This document is intended to be used in conjunction with the safety requirements for specific machine tools (the safety standards for specific machine tools cover all significant hazards of that type of machine tool).

The hazards covered by this document are listed in Appendix A.

This document does not apply to machine tools used in potentially explosive atmospheres and to machine tools manufactured before the date of publication of this document.

2 Normative references

The contents of the following documents constitute the essential clauses of this document through normative references in this document.

For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version

(including all amendments) applies to this document.

GB/T 3766-2015 General rules and safety requirements for hydraulic power systems and their components (ISO 4413:2010, MOD) Note. There is no technical difference between the referenced content of GB/T 3766-2015 and the referenced content of ISO 4413:2010.

GB/T 3767-2016 Acoustics - Determination of sound power level and sound energy level of noise source by sound pressure method - Approximate free field above reflecting surface Process method (ISO 3744:2010, IDT) GB/T 3768-2017 Acoustics - Determination of sound power level and sound energy level of noise source by sound pressure method using an envelope measurement surface above a reflecting surface Simple method (ISO 3746:2010, IDT) GB/T 4208-2017 Degrees of protection provided by enclosures (IP code) Note. There is no technical difference between the referenced content of GB/T 4208-2017 and the referenced content of IEC 60259:1989 A1.1999.

GB/T 5226.1-2019 Electrical safety of machinery - Electrical equipment of machinery - Part 1: General technical requirements (IEC 60204-1.

2016, IDT)

GB/T 7251.1-2013 Low-voltage switchgear and controlgear assemblies Part 1: General (IEC 61439-1:2011, IDT) GB/T 7932-2017 Pneumatics - General rules and safety requirements for systems and their components (ISO 4414:2010, IDT) GB/T 8196-2018 Mechanical safety guards - General requirements for the design and manufacture of fixed and movable guards (ISO 14120:2015, IDT) GB/T 14574-2000 Acoustics - Marking and verification of noise emission values of machines and equipment (eqvISO 4871.1996) GB/T 15706-2012 Safety of machinery - General principles for design - Risk assessment and risk reduction (ISO 12100:2010, IDT) GB/T 16754-2021 Design principles for emergency stop functions of machinery (ISO 13850:2015, IDT) GB/T 16855.1-2018 Safety of machinery - Safety-related components of control systems - Part 1: General principles for design (ISO 13849-1.

2015, IDT)

GB/T 17248.2-2018 Noise emitted by acoustic machines and equipment above a reflecting surface with negligible environmental correction Free-field measurement of emission sound pressure levels at work and other specified locations (ISO 11201:2010, IDT) GB/T 17248.3-2018 Acoustics - Noise emitted by machines and equipment - Determination of working position and other noise levels using approximate environmental correction Emission sound pressure level at a specified location (ISO 11202:2010, IDT)