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

GB 31144-2014

Safety of woodworking machines-Manual radial arm saws

木工机床安全 手动式摇臂锯

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Foreword

The standard Chapter 3, Appendix A is recommended, the rest are mandatory. This standard was drafted in accordance with GB/T 1.1-2009 given rules. The standard proposed by China Machinery Industry Federation. This standard by the National Woodworking Machine and Tool Standardization Technical Committee (SAC/TC84) centralized. This standard is mainly drafted by: Fuzhou Woodworking Machine Tool Research Institute, Asian workers (Weihai) Co., Ltd., Weihai complete Woodworking Machinery Co., Secretary of Jiangsu tide Technology Co., Ltd., Dongguan City, south-furniture Equipment Manufacturing Co., Ltd. Changting County Quality and Technical Supervision Bureau, Changting County Measuring the quality of detection, Jinhua Wang Qiang furniture Limited, Cheung Woodworking Machinery Minhou County, Fujian Province Deli Electrical Co., Ltd. Drafters of this standard. Zhang Zhen, Song Zhimin, Liu new to this, Yang Gaohuai, Dongyan Wen Zhong xin chang, poplar gold, Chen Yun root, Lin Wenxin CIVIL ENGINEERING AND. Safety of woodworking machines manual radial arm saws

1 Scope

GB 31144-2014 is the Chinese national standard on safety of woodworking machines-manual radial arm saws, in the field of wood technology. It carries no /T suffix, which in the Chinese system means compliance is mandatory: a product or a practice within its scope has to meet it to be lawfully made, sold or carried out in China. It was issued on 3 September 2014 by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China; Standardization Administration of China, and has been in force since 1 October 2015. Classification: ICS 79.120.10, CCS J65. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This standard specifies the requirements for the removal of hazards and limit the risk of manual radial arm saws (hereinafter referred to as the machine) and/or measures. This standard applies to sawing wood, particleboard, fiberboard, plywood and veneer or plastic material welt machine. This standard does not apply in the following machine.

- a) by a person moving, working at a fixed operating point, install a desktop machine on the table or similar devices;
- b) installation of hydraulic power operated member (for example, a hydraulic clamping device) of the machine;
- c) the machine is equipped with dynamic positioning means;
- d) equipped with means for longitudinal section, the milling machine (including cutting and slotting), sanding or drilling and other accessories;
- e) a plurality of sawing machine axes.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version suitable for use herein Member. For undated references, the latest edition (including any amendments) applies to this document. Determination of sound power levels of noise sources reflecting plane free field engineering method

GB/T 3767-1996 Acoustics sound pressure

GB/T 3768-1996 Determination of sound pressure of sound power levels of noise sources using an enveloping surface reflectance measuring surface Simple Method

GB 4208-2008 shell protection (IP code)

GB/T 5013.1-2008 rated voltage of 450/750V and below rubber insulated cables - Part 1.

General requirements

GB/T 5023.1-2008 rated voltage of 450/750V and below PVC insulated cables - Part 1. General requirements

GB 5226.1-2008 Safety of machinery - Electrical machinery and electrical equipment - Part 1. General requirements GB /Determination of sound power levels of noise sources in reverberant fields - small, movable sources Engineering T 6881.2-2002 sound pressure - Part 1. Comparison method hard walled test rooms GB /Determination of sound power levels of noise sources in reverberant fields - small, movable sources Engineering T 6881.3-2002 sound pressure - Part 2. special reverberation test rooms Determination of sound power levels of noise sources anechoic and semi-anechoic chamber Precision method

GB/T 6882-2008 Acoustics sound pressure

GB 7247.1-2012 Safety of laser products - Part 1. Equipment classification, requirements

GB/T 8196-2003 mechanical safety devices fixed and movable guards General requirements for the design and manufacture

GB 12557-2010 Safety of woodworking machines General

GB 14048.4-2010 Low-voltage switchgear and control equipment - Part 4-1. Contactors and motor starters electromechanical contact Contactors and motor starters (with motor protection)

GB 14048.5-2008 Low-voltage switchgear and control equipment Part 5-1. Control circuit devices and switching elements - Electromechanical Control circuit devices Declaration and verification of

GB/T 14574-2000 Acoustics machinery and equipment noise emission values

3 Terms and Definitions

GB/T 15706-2012 defined in Chapter 3 and the following terms and definitions apply to this document.

3.1 Transverse cross-cutting Longitudinal cutting through the workpiece.

3.2 Manual radial arm saws manualradialarmsaw The machine's cutting unit to manual feed, cutting, sawing unit linearly moved horizontally along the arm to saw the workpiece, and then back to stop Stop position (see Figures 1 and 2). Rocker horizontally rotatable about a vertical axis of rotation, and the saw unit can about a horizontal axis parallel to the rotation of the rocker arm (tilt oblique). Manual positioning of the workpiece and manual feed from the table. NOTE. The saw blade is not in the rest position. Figure 1 instance of a manual radial arm saws Figure 2 manual radial arm saws Example Two

3.3 Manual sawing unit feed handfeedofthesawunit In the feed direction, along the front of the rocker arm, manually move the blade with integral sawing unit.

3.4 Mechanical actuator mechanism machineactuator [GB 5226.1-2008, the definition 3.34].

3.5 Cutting zone cuttingareaofthesawblade machine [GB 12557-2010, the definition 3.8].

3.6 Machine no cutting area non-cuttingareaofthesawblade [GB 12557-2010, the definition 3.9].

3.7 Rocker saws cutting zone cuttingareaofaradialarmsaw The maximum stroke, the rocker arm and tilt the saw unit designed with maximum diameter of the blade to rotate about a vertical axis around the largest area is formed.

3.8 Coasting time unbrakedrun-downtime [GB 12557-2010, the definition 3.15].

3.9 Guarantee confirmation [GB 12557-2010, the definition 3.19].

3.10 Movable machine displaceablemachine The machine is placed on the ground, the use of stationary, it is equipped with a mobile device to make the machine between place, the device is usually wheel.

4 Dangerous List

Dangerous List (see Table 1) relates to all dangerous this machine.

--- For important risk, safety requirements and/or measures adopted by the law or by indicating the appropriate class B standard;

--- For hazardous unimportant, such as general, subordinate or secondary danger by indicating the appropriate Class A standards, especially GB/T 15706-2012. These risks are by GB/T 15706-2012 Appendix B raised. Table

1 Danger List No. dangerous comply with this standard Article number 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8

1.9 Mechanical hazards.

--- Consists of the following elements of the workpiece or machine parts caused by. shape; relative position; Quality and speed (controlled or uncontrolled movement of kinetic energy); Mechanical strength;

--- Accumulation of potential energy caused by the following reasons. An elastic member (spring); Under the pressure of liquid or gas; Risk of crushing Cut dangerous Cutting or severing hazard Dangerous wound The risk of introduction or involvement Shock hazard Stab or stabbed dangerous Friction or abrasion hazard High pressure fluid ejection hazard 5.3.3,5.3.5,5.3.7,5.4.5 5.2.2,5.3.3,5.3.5,5.3.6, 5.3.7,5.4.3,5.4.5 5.3.3,5.3.7 5.3.2,5.3.3 5.3.3.5 5.2.5,5.3.7,5.4.12 5.3.6 5.3.6 5.3.3.5,5.3.3.6,5.3.6 5.3.6 5.3.6 5.3.7 5.3.6.1 5.3.6.1