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

GB 27608-2011

Ironworker - Safety requirements

联合冲剪机 安全要求

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Foreword

The standard Chapter 3, Appendix A are recommended, the rest are mandatory. Accordance with the standards GB/T 1.1-2009. Drafting Rules "Standardization Guide Part 1 standard structure and preparation of" given. The standard proposed by China Machinery Industry Federation. This standard by the National Forging Machinery Standardization Technical Committee (SAC/TC220) centralized. This standard is mainly drafted by: Anhui Sanli Machine Tool Manufacturing Co., Ltd., Jinan Foundry and Metalforming Machinery Research Institute Co., Ltd., Shenzhen Shenzhen City, measuring Detection Technology Co., Ltd. The main drafters of this standard. Dao Bao, Ma Liqiang, Zhu Ping, Zhang Zhengbing, Bo. Ironworkers - Safety requirements

1 Scope

GB 27608-2011 is the Chinese national standard on ironworker - safety requirements, in the field of manufacturing engineering. 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 5 December 2011 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 2012. Classification: ICS 25.120.10, CCS J62. 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 Ironworkers general safety requirements, safety equipment requirements, safety requirements for the work of the danger zone. This standard applies to Ironworkers. Also apply to single-head punching machine, double punching machine, profile cutting machine, cut machine, die cutting machine, such as single or Multi-function punching machine.

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. GB 2893 Safety colors

GB 2894 Safety Signs and use guidelines

GB/T 3766 Hydraulic System General technical conditions

GB 4584 presses photoelectric protection device technology

GB 5092 press induction type safety device technology

GB 5226.1 mechanical and electrical safety of machinery - Electrical equipment - Part 1. General requirements

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

GB/T 9969 General Instructions industrial products

GB/T 12265.3 Safety of machinery to avoid crushing of parts of the human body minimum spacing

GB/T 15706.1 Safety of machinery - Basic concepts, general principles for design - Part 1. Basic terminology, methodology (ISO 12100-1)

GB 17120 Metalforming machinery - Safety requirements Device design and selection principles interlock

GB/T 18831 mechanical belt guards

GB 23821 Safety of machinery - Safety distances to prevent danger zones being reached on the lower limbs

GB 24389 shear mechanical noise limits

3 Terms and Definitions

GB/T 15706.1 and established the following terms and definitions apply to this document.

3.1 Adjustable limiting device adjustable restricter Restrictions hands and fingers into the adjustable means workspace.

3.2 Anti-repeat antirepeat Even limiting Ironworkers engagement mechanism remains engaged state, only a single stroke.

3.3 Felt guardrail awareness barrier A device to prevent operation of entering the danger zone.

3.4 Blade blade Having one or more shear, cut or molded Shear blade interchangeable tools.

3.4.1 Fixed blade fixedblade Having one or more cutting blade Fixed blade.

3.4.2 Movable blade movableblade Having one or more cutting edges, fixed ironworker on the movement of the working parts.

3.5 Clutch clutch Coupled flywheel and spindle, directly or through the transfer gear will move to the slider. Currently, the clutch design Ironworker's only mining With the whole rotary.

3.6 Continuous continuous Repeat stroke slider without interruption, in the end of each trip should be no pause.

3.7 Die cutting station coping-notchingstation When the workpiece is cut from the side or the surrounding material shearing station.

3.8 Balancing device counterbalance With separate drive mechanism for balance or support the weight of the slider member means.

3.9 Round trip cycle It refers to slide from the starting point and then return to the same starting position.

3.10 Foot control device footcontrol Foot-operated control start travel agency.

3.10.1 Pedals footpedal Fixed or movable platform to the foot anywhere around ironworker.

4.1 General Safety Requirements

4.1.1 ironworker design, manufacture and this should be consistent with GB 17120 standards. Strength

4.1.2 Ironworkers main parts, rigidity and stability should meet the requirements, when used as specified service life can not be produced Health fracture or broken. Parts

4.1.3 ironworker on the run should not be loose, fall off, and should be taken against rotation.

4.1.4 Ironworkers should be equipped with a lighting device.

4.1.5 Without prejudice Ironworkers function, the body and other exposed parts of the design should not have hurt sharp corners, sharp edges, or Projections.

4.1.6 moving parts and related personnel could easily lead to injury (not including the operating area injury) site should take protective measures. Injuries can not be avoided When the damage, the application of safety signs warning, and shall comply with the provisions of GB 2894.

4.1.7 safety precautions should be taken to make due to the crack break, drop or damage caused by the release of mechanical energy down to a minimum.

4.1.8 manipulated by the handle, the handle should prevent accidental leaving the role of Ironworkers generating device malfunction.

4.1.9 specification selection switch should work with key. When the selector switch is selected in continuous stroke specification, the steering control shall have a Pre-action before you can work to achieve continuous travel.

4.1.10 electrical system shall comply with the provisions of GB 5226.1; redundancy should be used, to prevent the safety control element failure and hair Accidents stroke movement.

4.2 Stroke control requirements

4.2.1 The device shall prevent the slider mechanism or accidental operation.

4.2.2 Ironworkers should have a single stroke and continuous stroke function. Single stroke prevention should repeat function.

4.2.3 If single stroke agencies rely on spring, spring compression spring should be, and should be set on the rod guide hole or tube.

4.2.4 operating device must be installed correctly and firmly, not by mechanical rigidity foot operated lever mechanism.

4.2.5 The foot switch should protect the safety shield in its upper part and both sides of the foot switch should be flexible and reliable, the return spring should be used Spring.