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

GB 5091-2011

Replacing GB 5091-1985

Specification of safeguard for presses

压力机用安全防护装置技术要求

(English Translation)

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Foreword

Chapter 3 of this standard 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.

This standard replaces GB 5091-1985 "press safety device technical requirements." This standard compared with GB 5091-1985, the main Technical changes are as follows.

- Increasing the normative references (see Chapter 2);
- Increased terms and definitions (see Chapter 3);
- Increased requirements for interlocking guard (see Chapter 7);
- Modify the requirements for fixed guards (see Chapter 5, see the 1985 version of Chapter 2);
- Modify the requirements movable guards (see Chapter 6, see Chapter 3 of the 1985 edition);
- Changed hands manipulation device requirements (see Chapter 8, see the 1985 version of Chapter 4);
- Modify the photoelectric protection device of claim (see Chapter 9, see Chapter 6 of the 1985 edition);
- Modify the requirements for induction type safety device (see Chapter 10, see Chapter 7, 1985 edition);
- Remove the plate over safety devices (see the 1985 edition of Chapter 8);
- Remove the pusher safety device (see the 1985 edition, Chapter 9);
- Remove the handle safety device (see the 1985 edition, Chapter 10);
- Deleted Appendix A (see 1985 edition of Appendix A).

The standard proposed by China Machinery Industry Federation.

This standard by the National Forging Machinery Standardization Technical Committee (SAC/TC220) centralized.

1 Scope

This standard specifies the functions of the various security guards working press danger zones, design, manufacture and installation of technical requirements.

This standard applies to the manufacture, the transformation of the press on the range of safety devices.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the edition are not applicable to the present file. For undated references, the latest edition (including any amendments) applies to this document.

GB 4584 presses photoelectric protection device technology GB 5092 press induction type safety device technology GB 5093 press held electromagnetic sucker technical conditions GB 5226.1-2008 Safety of machinery - Electrical machinery and electrical equipment - Part 1. General requirements GB/T 8196-2003 mechanical safety devices fixed and movable guards General requirements for the design and manufacture GB 12265.3-1997 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/T 15706.2 Safety of machinery - Basic concepts, general principles for design - Part 2. Technical principles (ISO 12100-2) GB/T 16855.1-2008 Safety of machinery - Safety-related control system components - Part 1. General principles for design (ISO 13849-1.

2006, IDT)

GB 17120 Metalforming machinery - Safety requirements Device design and selection principles interlock GB/T 18831-2010 mechanical belt guards GB/T 19671-2005 Safety of machinery - hands control devices - Functional aspects and design principles GB/T 19876-2005 Safety of machinery and parts of the body close to the speed of the positioning of protective equipment GB 23821 Safety of machinery - Safety distances to prevent danger zones being reached on the lower limbs

3 Terms and Definitions

GB 17120, the terms and definitions GB/T 15706.1 defined apply to this document.

4 General requirements

4.1

Safety devices should comply with GB 17120, GB/T 15706.2 and GB/T 18831 requirements, and shall meet at least the following safety One of the functional requirements.

- a) During the slide operation of any part of the human body can not enter the danger zone work;
- b) During the slide downward stroke, can not enter any part of the body of work of the danger zone;
- c) During the slide downward stroke, when any part of the body before entering the danger zone, the slider can be stopped or exceed the downward stroke Dead.

4.2

Safety devices should comply with the intended use of presses purposes, and to consider the relevant mechanical hazards and other dangers. Security guards and