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

GB 8176-2012

Replacing GB/T 8176-1997

Safety production codes for presswork

冲压车间安全生产通则

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Foreword

This standard Chapter 4, Section 5, Chapter 7, Chapter 8 is mandatory, the rest are recommended. This standard was drafted in accordance with rules GB/T 1.1-2009 given. This standard replaces GB/T 8716-1997 "General stamping plant safety in production," compared with the GB/T 8716-1997, in addition to editorial repair External change, the main technical changes are as follows:

- modify this standard English name (see cover, see the 1997 version of the cover);
- modify the "Normative references" (see Chapter 2, 1997 edition of Chapter 2);
- the operating environment and conditions, layout, device, mechanized equipment and safety devices, as well as to the safe operation of mandatory terms (See Chapter 4,5,7,8, 4,5,7, 8 Chapter 1997 edition);
- modify the layout requirements (see Chapter 5, Section 5 of the 1997 edition);
- increase the safety distance requirements cranes (see 5.3.2);
- modify the tonnage band related to large, medium and small presses (see 5.2, 1997 edition of 5.1.8). This standard is proposed and managed by the National Forging Standardization Technical Committee (SAC/TC74). This standard was drafted. Mechanical

Design and Research Institute Industrial IX. The main drafters of this standard. Li Yanchun, Lu Zhendong, Du Qinghui. This standard supersedes the previous editions are.

--- GB/T 8716-1987, GB/T 8716-1997. General safety production press shop

1 Scope

GB 8176-2012 is the Chinese national standard on safety production codes for presswork, 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 November 2012 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 June 2013. Classification: ICS 25.010, CCS J32. 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 general method of cold metal stamping plant production safety requirements and guidelines. In terms of personal protection, this standard both workers Health content industry, provides the production environment and conditions in line with labor hygiene, protection of human health of workers. This standard applies to all enterprises of the new cold stamping plant design, transformation of the original cold stamping plant, construction and installation, and acceptance in the real Shi security technology and management during production.

2 Normative references

The following documents for the application of this document is essential. For dated references, only applies to the version dated paper Pieces. For undated references, the latest edition (including any amendments) applies to this document. GB 2893 Safety colors

GB 2894 Guidelines for the use and safety signs

GB 4584 presses technical conditions photoelectric protector

GB 5083 production equipment with safety and health General Presses

GB 5091 Safety requirements for technical means

GB 5092 presses induction type safety device

GB 6077 Safety regulations for shearing machinery

GB/T 6441 enterprise workers casualty classification

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

GB 12801 General production process safety and health requirements

GB/T 13379 Principles of visual ergonomics indoor workplace lighting

GB/T 13441.1 Mechanical vibration and shock to a human body exposed to vibrations Evaluation Part 1. General Requirements

GB 13495 fire safety signs

GB/T 13547 body size work space

3 Terms and Definitions

The following terms and definitions apply to this document.

3.1 Factory works; factory Using a press punching or stamping assembly zero (portion) member of the production units, the term "plant" in the present standard, has a specific meaning, companies may refer to Who is responsible for the overall industry, but also an enterprise in a department responsible for personnel.

3.2 Shop shop; workshop A part of the plant, the term "plant" in the present standard, refers use of mechanical pressure, the implementation of this standard should production cells, it may be Is an independent energy plant (factory), it may be the workshop (Industry or section).

3.3 Process equipment layout layoutofmanufacturingequipment Drag the presses and other auxiliary equipment and production according to the production process and regional organizations are arranged.

3.4 Station positionofwork The operator work space occupied range.

3.5 Digital equipment instrumentsofposition Appliances and services for the station, A carrier blank workpiece or rack waste, material platform, and bin trays.

3.6 Operator operator Finger presses and other production workers to operate or auxiliary equipment, refers to production workers.

3.7 Helper helper Refers to assistance or help the operator to carry out the work of the workers.

3.8 Punching station stampingworker Press operation (except shears) and complete the stamping process workers.

3.9 Shearing station shearingworker And complete the operation of shears workers blanking step.

3.10 Operating danger zone pointofoperation The operator may be harmed region of

operation, this means that installation of the die area (or the shearing blade) in the press, is placed on the The material is cut, press molding, or assembly, and other parts of the processing area.

3.11 Clamping point pinchpoint Press means or the auxiliary means between moving parts, or moving parts and the fixing member presses the auxiliary device or material and the press Regional forces between the moving parts of the machine or the auxiliary means. At any point within the region of the human body or any part of the body There may be pinched or crushed and hurt, but the nature of the injury is different from the operation of the danger zone.

3.12 workplane face Suppose the main plane or work operation is completed actually exist, the general height from the ground 800mm.

3.13 Mold storage area diearea Storage, keeping the die area, and fixtures aids.

4 Operating environment and conditions

4.1 General requirements The facility should create and provide physical and psychological well as the operator's working environment, i.e. workshop temperature, ventilation, illumination, vibration and noise Sound, etc. shall comply with the requirements of labor health.

4.2 Temperature

4.2.1 workshop in the workplace air temperature shall be in accordance with the relevant provisions of GB Z1.

4.2.2 the indoor air temperature in summer workplace should not generally exceed 32 °C, when more than 32 °C, cooling plant should take effective measures Shi. Lower when more than 35 °C, summer cooling plant should take effective measures to ensure the safe operation of the premise, in order for the press operator to continue Continued work.

4.3 Ventilation

4.3.1 indoor workplaces must have good air circulation, and should meet the requirements of GB 50019.

4.3.2 has often been the prevailing tunnel should have natural ventilation or mechanical ventilation, harmful gases should not be laid in the tunnel (including flammable gases) pipeline.

4.3.3 damage to health when gas is found within a press base, should be ventilated before the operator (e.g., overhaul) enters. When the smoke, dust and other dirty air

4.3.4 workshop to be provided at the effective local sources of the ventilation means, if