ICS 25.120.10
CCS J62

NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB 28244-2012

Automatic metalforming machinery - Safety requirements

自动锻压机 安全技术要求

Issued on: March 9, 2012 **Implemented on: January 1, 2013**

Issued by: General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China;
Standardization Administration of China

Table of Contents

1 Scope
2 Normative references
3 Terms and Definitions
4 Responsibility
4.1 Supplier Responsibility
4.2 User responsibility
5.1 Dangerous
5.2 Hazard control
6.1 General Requirements
6.3 Operating mode
6.4 Electrical Equipment
6.5 Pneumatic and hydraulic systems
6.11.1 General requirements
6.11.2 Emergency stop function
6.11.3 General Stop
8 Security 11 9 maintenance and use

Foreword

Chapter 3 of this standard are 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 Forging Machinery Standardization Technical Committee (SAC/TC220) centralized. This standard was drafted. Shengzhou Golden Lion Spring Machinery Co., Ltd., Ningbo Si Jin Machinery Co., Ltd., Zhejiang Metalforming Machinery Group Co., The company, Qingdao Machinery Plant Health Jian, Qiqihar Machine Tool Group Co., Ltd. The main drafters of this standard. Li Hongliang, AND CULTURE Zheng steel, building, Huangqiao. Automatic forging machines - Safety requirements

1 Scope

GB 28244-2012 is the Chinese national standard on automatic metalforming machinery - 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 9

March 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 January 2013. 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 technical requirements for safety Automatic forging machines. This standard applies to automatic forging machines (hereinafter referred to as the machine), including various types of cold heading machine and cold forming machines, such as. automatic cold heading machine, ball, roller Column cold heading machine, cold heading machine nut, bolt joint automatic machines, automatic trimming machine, automatic thread rolling machine, rolling machine, rolling mill, nail-making machine, coiling machine, spring Spring washer machine, automatic bending machines and multi-station cold forming machines.

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 150.1 pressure vessels - Part 1. General requirements

GB 150.2 pressure vessels - Part 2. Materials

GB 150.3 pressure vessels - Part 3. Design

GB 150.4 Pressure Vessels Part 4. fabrication, inspection and acceptance

GB 2894 Safety Signs and use guidelines

GB/T 3766-2001 Hydraulic System General technical conditions (ISO 4413.1998)

GB 4584 presses photoelectric protection device technology

GB 5092 press induction type safety device technology

GB 5226.1-2008 Safety of machinery - Electrical machinery and electrical equipment - Part 1. General requirements (IEC 60204-1.2005)

GB/T 7932-2003 Pneumatic system General technical conditions (ISO 4414.1998)

GB/T 8196 mechanical safety devices fixed and movable guards design and manufacture of general requirements (ISO 14120)

GB/T 9969 General Instructions industrial products

GB/T 15706.1-2007 Safety of machinery - Basic concepts, general principles for design - Part 1. Basic terminology, methodology (ISO 12100- 1.2003)

3 Terms and Definitions

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

3.1 Warning fence awarenessbarrier By touching an object approaching or entering a device warning danger zone personnel.

3.2 Warning signal (means) awarenesssignal (device) A device or signal, via an audible sound or visual light entering or approaching the danger zone warning.

3.3 Brakes brake A stop, slow down or prevent the operation of institutions.

3.4 Automatic forging machines automaticmetalformingmachinery It can automatically complete the work cycle, and can automatically feed stock and output products, forging machinery.

3.5 Cold upsetting coldheader The wire forming upsetting automatic forging machines.

3.6 Cold forming machine coldfomer Cold or warm forming process of Automatic forging machines.

3.7 Cold coldworking It refers to the plastic deformation of metallic materials without the preheating conditions.

3.8 Die die (s) With mold on the machine, or other materials for metal cutting, stamping, molding, extrusion, cutting, forging and so on.

3.9 Mold base dieblock Mounted on the body for supporting the mold.

3.10 Start control apparatus startupcontroldevice The operator starts the machine control unit in accordance with a preselected manner.

3.11 Extrusion extruding By metal or other material placed in the mold, wherein changing its shape to obtain a desired processing shape.

3.12 Guard guard Prevent access to the operating area or other protective barrier danger zone is an integral part of the machine. [GB/T 15706.1-2007, the definition 3.25]

3.13 Hand tools handfeedingtool In operation the danger zone for placing or removing material, workpiece hand tools.

4.1 Supplier Responsibility

4.1.1 The supplier shall, paragraph 6 and Chapter 8 of the design and manufacture of the machine in accordance with Chapter 5.

4.1.2 The Supplier shall identify hazards that exist (see 5.1).

4.1.3 The Supplier shall eliminate the danger or hazard prevention methods (see 5.2).

4.1.4 The supplier shall provide installation, commissioning, maintenance, use, safety and maintenance documentation.

4.1.5 modification or remanufactured machinery or supplies related equipment modification or remanufactured provide documentation, including the modification or remanufactured New or revised technical paper machine installation, inspection, testing, maintenance, use, security protection.

4.1.6 Each new machine should provide instructions.

4.1.7 All new machines should repair instructions or manuals; reconstruction should provide documentation for reconstruction. Maintenance instructions or manuals should include at least The following information.

--- All control functions and positions;

--- Power and ram stroke;

--- Electrical, hydraulic, pneumatic and lubrication systems;

--- Maintenance period;

--- Safe introduction.

4.1.8 Each machine should have one or more suitable safety guards.

4.2 User responsibility

4.2.1 Users should check the machine and its auxiliary equipment provided by suppliers to ensure that it complies with Chapter 5, Chapter 7, Chapter 8 and Chapter

4.2.2 Users should ensure compliance with the following requirements. Danger

--- machine work exists identified (see 5.1);

--- Security should be able to eliminate, control or avoid the risk has been identified, use and maintenance shall comply with the provisions of Chapter 8;

--- Shall establish procedures for inspection and maintenance of the machine to ensure that components (such as starter interlock switches, etc.) and security guards in a safe Operating status;

--- Establish a working diary system, and shall comply with the provisions of the instruction manual.

4.2.3 The user should ensure commissioning and maintenance personnel, operators trained to train at least the following.

--- All control functions and positions;