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

GB/T 30747-2025

Replacing GB 30747-2014

Safety requirements for tyre shaping and curing press

轮胎定型硫化机安全要求

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Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part 1: Structure and Drafting Rules of Standardization Documents". Drafting.

This document replaces GB 30747-2014 "Safety Requirements for Tire Curing Machines". Compared with GB 30747-2014, except for structural adjustments and...

Aside from editorial changes, the main technical changes are as follows.

- a) The scope of the document has been changed (see Chapter 1, Chapter 1 of the 2014 edition);
- b) Added schematic diagrams of the main components of the tire shaping and vulcanizing machine (see Figures 1 and 2);
- c) General requirements for safety requirements and/or protection/risk mitigation measures have been changed (see 4.1, 5.1 in the 2014 edition);
- d) The location diagram of the vulcanizing machine in the conventional tire loading mode has been modified (see Figure 3, Figure 10 in the 2014 version);
- e) The location diagram of the vulcanizing machine for automatic rear-loading tire mode has been changed (see Figure 4, Figure 11 in the 2014 version);
- f) Modified protection/risk mitigation measures associated with specific machine parts or areas under the production model (see 4.2.1.1, 2014 version). 5.2.3);
- g) Added requirements for normal stopping (see 4.2.1.2);
- h) The requirement for a reset device has been added (see 4.2.1.3);
- i) Increased requirements for the activation of protective devices during the vulcanization cycle (see 4.2.1.4);
- j) Increased requirements for energy supply failures (see 4.2.1.5);
- k) Specific requirements for operations outside of production mode have been changed (see 4.2.2, 5.2.4 in the 2014 version);
- l) The requirements for the emergency stop function have been changed (see 4.3, 5.3 in the 2014 version);
- m) Noise reduction requirements have been added (see 4.4);
- n) The verification method has been changed (see Tables 3 and 4, 2014 versions of Tables 3 and 4);
- o) Added descriptions of machine parameters (see 6.2.9);
- p) Added instructions for emergency stop and sulfidation medium discharge (see 6.2.10);
- q) Added description of noise emission (see 6.2.11);
- r) Added warning signs (see 6.4);
- s) The "List of Major Hazards" is changed to an informative appendix (see Appendix A,

Chapter 4 of the 2014 edition);

t) A normative appendix, "Noise Testing Procedure", has been added (see Appendix B).

Please note that some content in this document may involve patents. The issuing organization of this document assumes no responsibility for identifying patents.

This document was proposed by the China Petroleum and Chemical Industry Federation.

This document is under the jurisdiction of the National Technical Committee on Standardization of Rubber and Plastics Machinery (SAC/TC71).

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The release history of this document and the document it replaces is as follows.

- First published in 2014 as GB 30747-2014;
- This is the first revision.

Introduction

According to the classification of GB/T 15706, this document belongs to Class C standards.

This document is particularly relevant to the following stakeholders related to machinery safety.

- Machine manufacturer;
- Health and Safety Agency.

Other stakeholders affected by the level of mechanical safety include.

- Machine users;
- Machine owner;
- Service provider;
- Consumer (when the machine is scheduled to be used by the consumer).

All of the aforementioned stakeholders may participate in the drafting of this document.

The scope of the machinery involved, as well as the hazards, hazardous conditions, and hazardous events covered, is given in the scope of this document.

When the requirements of this document differ from those in Category A or Category B standards, for machines manufactured in accordance with this document...

For this instrument, the requirements in this document take precedence over the requirements in other standards.

1 Scope

This document specifies the safety requirements for the design and manufacture of tire vulcanizing machines (hereinafter referred to as "vulcanizing machines"), and provides guidelines for the safe use of the machines. Related explanations.

This document applies to both mechanical and hydraulic vulcanizing machines for vulcanizing tire outer casings.

This document applies to the treatment of vulcanizing machines throughout their entire lifecycle (see section 5.4 of GB/T 15706-2012) during the intended use process.

All significant hazards associated with the vulcanizing machine, including those arising from misuse that the manufacturer could reasonably foresee (see Appendix A). This document does not cover.

- Feeding and unloading systems;
- A vulcanizing machine for manual tire loading and unloading;
- Related auxiliary equipment (such as conveying equipment);
- Exhaust system;
- Danger caused by the falling of the mold sleeve or mold part.

2 Normative references

GB 2894-2008

GB/T 3766

GB/T 5226.1-2019

GB/T 6326

GB/T 7932

GB/T 8196