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Rubber autoclave

橡胶硫化罐

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Foreword

This standard 5.1.1,5.4.1,5.5.1 ~ 5.5.3,5.6.1,5.7.2 mandatory, the rest are recommended.

Appendix A of this standard is an informative annex.

The standard proposed by China Petroleum and Chemical Industry Association.

This standard by the National Rubber & Plastics Machinery Standardization Technical Committee (SAC/TC71) centralized.

Drafting of this standard. Guangdong Zhanjiang machinery manufacturing company.

Participated in the drafting of this standard. Yiyang Rubber & Plastics Machinery Group Co., Ltd., Guilin Rubber Machinery Factory, Fujian Hua Rubber automation technology shares Co., Ltd., Beijing Rubber Industry Research and Design Institute.

1 Scope

This standard specifies the rubber vulcanization tank (hereinafter referred to as autoclave) terms and definitions, models and basic parameters, requirements, testing, inspection and regulation Then, signs, packaging, transport and storage.

This standard applies to the autoclave with steam or hot air as the working medium vulcanized rubber products.

2 Normative references

The following documents contain provisions which, through reference in this standard and become the standard terms. For dated references, subsequent Amendments (not including errata content) or revisions do not apply to this standard, however, encourage the parties to the agreement are based on research Whether the latest versions of these documents. For undated reference documents, the latest versions apply to this standard.

GB 150-1998 Steel Pressure Vessels GB/T 191 Packaging - Pictorial signs (GB/T 191-2008, ISO 780:1997, MOD) GB 2894 Safety Signs and use guidelines GB 5226.1-2008 Safety of machinery - Electrical machinery and electrical equipment - Part 1. General requirements (IEC 60204-1:2005, IDT) GB/T 12783 Rubber & Plastics Machinery Model methodology GB/T 13306 signs GB/T 13384 mechanical and electrical products packaging General technical conditions HG/T 2113 Horizontal Autoclave detection method HG/T 3120 Rubber & Plastics Machinery appearance of the general technical conditions HG/T 3223 Rubber Machinery terminology HG/T 3228 Rubber & Plastics Machinery paint general technical conditions HG20582-1998 strength calculation of steel chemical containers provisions JB/T 4711 Pressure vessel coated with transport packaging JB4732 steel pressure vessel - Analysis and Design Standards Safety Technology Supervision TSGR0004-2009 Stationary Pressure Vessels

3 Terms and Definitions

HG/T 3223 and GB 150-1998 established the following terms and definitions apply to this standard.

Direct autoclave immediate autoclave Saturated steam as the working medium of the autoclave.

Indirect autoclave Steam, hot oil heating medium through the heat exchanger means for heating the air as the working medium of the autoclave.

Electric heating autoclave electricity heat autoclave by electrical heating means for heating the air as the working medium of the autoclave.

Open the door type autoclave quick-actuating doors autoclave Autoclave using the wrong gear connected between the tank and the tank door.

4.1 Model

Methodology autoclave models should be consistent with the provisions of GB/T 12783 of.

4.2 Basic parameters

The basic parameters of the autoclave in Appendix A.

5.1 Basic requirements

5.1.1

Autoclave design, manufacture should comply with the GB 150-1998 and TSGR0004-2009.

5.1.2

Autoclave shall comply with the requirements of this standard, and procedures approved by the drawings and technical documents manufactured in accordance with prescribed.

5.2 Functional requirements

5.2.1

Autoclave proper manual control and automatic control of the curing process tank operating pressure and temperature functions.

5.2.2

Autoclave should monitor tank pressure and temperature capabilities.

5.2.3

Autoclave condensate discharge should function.

Closing and locking devices 5.2.4 vulcanization jars door should be completed by mechanical means, and with manual or automatic control.

5.2.5

hydraulic tire curing tank with automatic pressure compensation system should function.

5.3 Performance Requirements

5.3.1

autoclave curing zone maximum radial temperature difference should not exceed 4 °C, the maximum axial temperature should be no more than 8 °C.

5.3.2

autoclave electrical equipment should be able to work under the following conditions.

- a) steady-state AC voltage is 0.9 to 1.1 times the nominal voltage;
- b) Ambient temperature 5 °C ~ 40 °C;
- c) When the temperature is 40 °C, relative humidity less than 50% (low temperature allows a high relative humidity, such as 20 °C, 90%);
- d) below 1000m altitude.

5.3.3

Indirect autoclave hot air circulation device, empty load test 1h, bearing temperature rise should not exceed 20 °C, and stable operation, no abnormal vibration Dynamic and sound.

5.3.4

Indirect autoclave hot air circulation device, load test, the motor power should not exceed the rated motor power.

5.3.5

Working pressure tire vulcanizer hydraulic system should be adjustable, when the tire vulcanizer hydraulic system operating pressure is reached, stop raising Pressure 1h, hydraulic system pressure drop should not exceed 10% of the working pressure.

5.3.6

Open the door vulcanizing Tanks door opening, closing, locking action should be flexible, accurate and reliable.

5.4 Pressure test requirements

5.4.1

Tanks sulfide body design requirements should be pressure test, there should be no abnormal noise and distortion during the test, holding time is not less than 30min, during