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

GB 22207-2008

Safety requirements of displacement air compressor

容积式空气压缩机 安全要求

(English Translation)

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Foreword

This standard 4.2.2,4.3.2 ~ ~ 4.5.3,4.6,4 4.3.4,4.4.1,4.4.2,4.5.1.7.1,4.7.2,4.8.1,4.9,4.10, 4.11,4.12.1,4.13,4.14.1.1,4.14.2.3,4.14.2.4,4.14.3,5.3.2 ~ 5.3.5 are mandatory, others are pushing Recommended provisions.

This standard is not equivalent U.S. ASME B19.1-1995 "volumetric compressor system safety standards", particularly using the standard Safety requirements for displacement air compressor portion. The standard gives the content specified value, this standard are to be employed; although the requirement for Without specific targets who, according to the

domestic content requirements of product standards, are given specific targets or quantitative requirements; while some of the recommendations of the standard Requirements or operational requirements in the country can not be executed, this standard were not used.

Japanese standards since the implementation date of the original JB8524-1997 "displacement air compressor safety requirements" abolished. Appendix A of this standard is an informative annex. The standard proposed by China Machinery Industry Federation.

2 Normative references

Terms of the following documents become provisions of this standard by reference in this standard. Where dated reference documents, all subsequent Amendments (not including errata content) or revisions do not apply to this standard, however, is to encourage the parties to the agreement according to the study of Whether the latest versions of these documents. For undated references, the latest version applies to this standard.

GB 150 steel pressure vessel

GB 151 shell and tube heat exchanger

GB 4208 shell protection (IP code) (GB 4208-2008, IEC 60529:2001, IDT)

GB/T 4975 General term displacement compressor (GB/T 4975-1995, eqv ISO 3857-1 ~ 3857-2. 1977)

Determination GB/T 4980 displacement compressor noise Vibration measurement and evaluation GB/T 7777 mechanical displacement compressor

GB/T 16301 ship engine room auxiliary measurement and evaluation of the vibration intensity

GB/T 12928 Marine low pressure piston air compressor

GB/T 12929 Marine high pressure piston air compressor

GB/T 13279 generally fixed reciprocating piston air compressor

GB/T 13928 miniature reciprocating piston air compressor

GB/T 15706.1 Safety of machinery basic concepts general principles for design - Part 1: Basic terminology and methods

JB/T 3771 mobile compressors Chassis conditions

JB/T 4223 truck-mounted displacement unit technical condition of the air compressor

JB/T 4253 for general use injector vane air compressor

JB/T 6430 is generally used oil-injected screw air compressor

JB/T 6441 compressor safety valve

JB/T 6539 miniature air compressor Steel pressure vessels

JB/T 6905 diaphragm compressor

JB/T 7662 The term rotary compressor displacement compressor

JB/T 8867 stationary reciprocating piston air compressor tank

JB/T 8933 Oil-free reciprocating piston air compressor

JB/T 8934 Direct portable reciprocating piston air compressor

JB/T 9107 reciprocating compressors term

JB/T 10525 is generally used single-screw air compressors injector

JB/T 10598 ships screw air compressor with dry conditions

JB/T 10683, the high-pressure reciprocating piston air compressor Pressure Vessel Safety Technical Supervision Regulation Simple Pressure Vessel Safety Technical Supervision Regulation

3 Terms and Definitions

Definition 3.1 compressor meets GB/T 4975, JB/T 7662 and JB/T 9107.

3.2

Safety of machinery in line with the definition of terms GB/T 15706.1.

3.3 following terms and definitions apply to this standard requirements

Pressure release means starts off instantaneously and a large number of compressed air is released, the pressure release means upstream pressure.

4 Safety requirements and testing

4.9.2

guard shields should be used to meet the following requirements.

- a) the shield should be easy to remove and install;
- b) the shield mesh size or the minimum distance to the object surface protection should ensure that any person does not touch the finger into the anti- Protection of the object;
- c) shield designs do not affect the convection air and ambient air around the compressor, the compressor should be able to ensure sufficient Cooling;
- d) the stiffness of the shield should ensure that any person against a protective cover does

not cause deformation or displacement of the shield lead shield is accessible Protection of the object.

4.9.3

When using guard fence, should meet the following requirements.

- a) Fence height should ensure that any person can not be easily entered;
- b) isolation and from the surface of the object to be protected, should ensure that when the object to be protected, without touching any hand;
- c) isolation should be fixed and not free to move, without isolation stiffness should ensure that the barrier against the person over any barrier Deformation, impact isolation.

4.1 General

4.1.1

air compressor design, production, installation, maintenance, operation and inspection shall comply with relevant product standards.

4.1.2

Micro reciprocating piston compressor shall comply with GB/T 13928's.

4.1.3

General fixed reciprocating piston compressor shall comply with GB/T 13279's.

4.1.4

General with injection screw compressor shall comply JB/T 6430's.

4.1.5

General single screw compressor with injection shall comply JB/T 10525's.

4.1.6

General vane compressor with injection shall comply JB/T 4253's.

4.1.7

General dry screw compressor shall comply JB/T 10598's.

4.1.8

diaphragm compressors shall comply with JB/T 6905's.

4.1.9

Oil-free reciprocating piston compressor shall comply with JB/T 8933's.