

ICS 23.140

J 72



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

中华人民共和国国家标准

GB/T 25359-2010

**Petroleum and natural gas industries — Packaged
reciprocating gas compressors**

石油及天然气工业用集成撬装往复压缩机

(ISO 13631: 2002, MOD)

Issued on November 10, 2010

Implemented on March 01, 2011

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

Standardization Administration of the People's Republic of China

Contents

Foreword.....	1
Introduction.....	2
1 Scope.....	1
2 Normative References.....	2
3 Terms and definitions.....	5
4 Statutory requirements.....	9
5 General package requirements.....	9
6 Compressor.....	10
7 Capacity control.....	25
8 Prime mover.....	28
9 Cooling system.....	36
10 Pressure vessels.....	42
11 Piping and appurtenances.....	47
12 Electrical systems.....	55
13 Instruments and controls.....	57
14 Shutdowns, alarms and annunciators.....	63
15 Skids.....	66
16 Paint and painting.....	69
17 Inspection and testing.....	70
18 Marking.....	76
19 Preparation for shipment.....	78
20 Corrosive gases.....	81
21 Offshore and marine environments.....	83
Annex A (Informative) Data sheets and check list.....	88
Annex B (Normative) Volume bottle sizing.....	104
Annex C (Informative) Typical sequence logic diagrams.....	105
Annex D (Informative) Compliance of compressor components with GB/T 20972.1.....	110
Annex E (Informative) Repairs to grey or nodular iron castings.....	111

Annex F (Informative) Normative references and contents of bibliography in ISO 13631: 2002 . 112

**Annex G (Informative) Technical differences and reasons between this Standard and ISO 13631:
2002 117**

Foreword

This standard is modified in relation to ISO 13631:2002, *Petroleum and natural gas industries -- Packaged reciprocating gas compressors* (in English version).

This standard was redrafted based on ISO 13631:2002 which was drafted in accordance with API spec 11P, 1989.

For the purpose of this standard, the technical contents have been changed when the international standard was referred to. These technical deviations are marked with a vertical line in the margin near the related clauses/sub-clauses. See Annex G for technical deviations.

For convenience of use, the following editorial changes have been made in this standard.

- a) The term of “this international standard” is replaced by the term of “this standard”;
- b) The common “,” used as decimal point is replaced by decimal point “.”;
- c) The foreword in the international standard is deleted;
- d) The captions are added for the figures in the annexes.
- e) For the other international standards cited in ISO 13631:2002, they are replaced by the Chinese national standards which adopt them accordingly.
- f) The units of measurement have been changed to the legal units of measurement of China and the bracketed units of measurement in English system are deleted.

For this standard, Annexes A, C, D, E, F, and G are informative and Annex B is normative.

This standard was proposed by China Machinery Industry Federation.

This standard is under the jurisdiction of National Technical Committee on Compressor of Standardization Administration of China (SAC/TC 145).

The responsible drafting organization is Shenyang Blower Works Group Corporation.

The participating drafting organizations include Hefei General Machinery Research Institute, Wuxi Compressor Co. Ltd, and Shanghai Compressor Company Limited.

The chief drafting staff of this standard includes Song Yun, Wu Feng, Meng Wenhui, Zhang Xiujuan, Chen Fang, Jiang Shanghong, Pu Jiping, Cheng Guangqing, and Wu Hui.

Introduction

Users of this Standard should be aware that further or differing requirements may be needed for individual applications. This Standard is not intended to inhibit a vendor from offering, or the purchaser from accepting, alternative equipment or engineering solutions for the individual application. This may be particularly applicable where there is innovative or developing technology. Where an alternative is offered, the vendor should identify any variations from this Standard and provide details.

A bullet (•) at the beginning of a subclause or paragraph indicates that either a decision is required or further information is to be provided by the purchaser. This information should be indicated on the data sheets, see annex A.

Petroleum and natural gas industries— Packaged reciprocating gas compressors

1 Scope

This Standard specifies requirements and recommendations for the design, materials, fabrication, inspection, testing and preparation for shipment of packaged skid-mounted, reciprocating, separable or integral compressors (hereinafter referred to as compressor) with lubricated cylinders and their prime movers, for use in the petroleum and natural gas industries for the compression of hydrocarbon gas.

It is also applicable to all necessary auxiliary equipment, such as water and gas coolers, silencers, emission control equipment, filters, separators, control panel, piping, etc. Specified purchase specifications and with the intent of minimizing field construction and field-purchased equipment. Required to install an operable unit in compliance with the purchase specifications and with the intent of minimizing field construction and field-purchased equipment.

This Standard is not applicable to the following:

- reciprocating compressors for petroleum and natural gas industries covered by GB/T 20322-2006;
- column-mounted compressors;
- non-lubricated compressors;
- compressors having trunk-type (automotive-type) pistons that also serve as crossheads;
- utility or instrument air compressors with a discharge gauge pressure of 0,9 MPa or less;
- compressors driven by diesel engine, gas turbine and steam turbine prime movers.

完整版本请在线下单

或咨询：

TEL: 400-678-1309

QQ: 19315219

Email: info@lancarver.com

<http://www.lancarver.com>

线下付款方式：

1. 对公账户：

单位名称：北京文心雕语翻译有限公司

开户行：中国工商银行北京清河镇支行

账 号：0200 1486 0900 0006 131

2. 支付宝账户：info@lancarver.com

注：付款成功后，请预留电邮，完整版本将在一个工作日内通过电子 PDF 或 Word 形式发送至您的预留邮箱，如需索取发票，下单成功后的三个工作日内安排开具并寄出，预祝合作愉快！
