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Petroleum and natural gas industries — Packaged reciprocating gas compressors

Industries du pétrole et du gaz naturel — Unités de compresseurs alternatifs à gaz

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 13631 was prepared by Technical Committee ISO/TC 118, *Compressors, pneumatic tools and pneumatic machines*.

Annex B forms a normative part of this International Standard. Annexes A, C, D and E are for information only.

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Introduction

This International Standard is based on API specification 11P second edition, November 1989.

Users of this International Standard should be aware that further or differing requirements may be needed for individual applications. This International 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 International 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).

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Petroleum and natural gas industries — Packaged reciprocating gas compressors

1 Scope

This International Standard gives requirements and recommendations for the design, materials, fabrication, inspection, testing and preparation for shipment of packaged skid-mounted, reciprocating, separable or integral compressors 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., 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 International Standard is not applicable to the following:

— reciprocating compressors for petroleum and natural gas industries covered by ISO 13707;

— 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 (9 bar) or less;

— compressors driven by diesel engine, gas turbine and steam turbine prime movers.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this International Standard. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO 7-1, *Pipe threads where pressure-tight joints are made on the threads — Part 1: Dimensions, tolerances and designation*

ISO 68-2:1998, *ISO general-purpose screw threads — Basic profile — Part 2: Inch screw threads*

ISO 185, *Grey cast iron — Classification*

ISO 261, *ISO general-purpose metric screw threads — General plan*

ISO 262, *ISO general-purpose metric screw threads — Selected sizes for screws, bolts and nuts*

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