

Packaged, Integrally Geared Centrifugal Air Compressors for Petroleum, Chemical, and Gas Industry Services

API STANDARD 672
FOURTH EDITION, MARCH 2004

ERRATA, OCTOBER 2007
ERRATA 2, JULY 2010



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Downstream Segment

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0 Introduction

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 appropriate 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.

Annex A contains data sheets which purchasers are encouraged to use.

Annex B provides information on normative references.

Annex C specifies requirements for lateral analysis.

Annex D contains forms which may be used to indicate vendor drawing and data requirements.

Annex E contains schematic drawings of lubrication systems.

Annex F specifies requirements for determining residual unbalance.

Annex G contains an inspector's checklist.

Annex H contains an illustration of nomenclature for integrally geared centrifugal air compressors.

This International Standard requires the purchaser to specify certain details and features.

A bullet (●) at the beginning of a paragraph indicates that either a decision or further information is required. Further information should be shown on the data sheets (see example in Annex A) or stated in the quotation request and purchase order.

In this International Standard, where practical, US Customary units are included in brackets for information.

1 Scope

1.1 This standard covers the minimum requirements for constant-speed, packaged, general purpose integrally geared centrifugal air compressors, including their accessories. This standard is not applicable to machines that develop a pressure rise of less than 0.35 bar (5.0 psi) above atmospheric pressure, which are classed as fans or blowers.

Note: Special Purpose and Process applications including Process Air Services, are covered by API Std 617.

- **1.2** Equipment covered by this standard is considered non-critical, usually spared and may be either of two classifications, Basic or Special Duty. The purchaser shall specify which of the two classifications applies.

Basic packages are vendors' standard packages of proven design and include minimal additional requirements.

Special duty packages are typically specified for installations that require higher availability and include additional features and requirements.

1.3 Additional or overriding requirements applicable only to packages that have been specified as "Special Duty" are noted at the end of each section (see 6.12; 7.10; 8.5; and 9.4).

1.4 Conflicting Requirements

In case of conflict between this standard and the inquiry, the inquiry shall govern. At the time of the order, the order shall govern.

2 Normative References

2.1 Reference publications are listed in Annex B.

2.2 All referenced standards, to the extent specified in the text, are normative.