Centrifugal Fans for Petroleum, Chemical, and Gas Industry Services

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Introduction

Users of this standard should be aware that further or different 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 appropriate where there is innovative or developing technology. Where an alternative is offered, the vendor should identify any variations from this standard and provide details.

This standard requires the purchaser to specify certain details and features. A bullet (•) at the beginning of a paragraph indicates that either a decision by, or further information from, the purchaser is required. Further information should be shown on the datasheets (see Annex A) or stated in the quotation request and purchase order.

Centrifugal Fans for Petroleum, Chemical, and Gas Industry Services

1 Scope

1.1 This standard covers the minimum requirements for centrifugal fans for use in petroleum, chemical, and gas industry services. Fan static pressure rise is limited to differential usually not exceeding 130 in. (330 cm) of water equivalent air pressure from a single impeller or each impeller in a two stage fan. This standard does not apply to axial flow, aerial cooler, cooling tower, and ventilation fans and positive displacement blowers.

- **1.2** This standard covers equipment for both general purpose and special purpose applications. The purchaser shall determine which classification applies.

NOTE Refer to Section 3 for definition of the terms general purpose and special purpose.

1.3 Additional or overriding requirements applicable to special purpose applications are included at the end of each section (e.g. 6.7.5, etc.).

2 Normative References

2.1 The editions of the following standards, codes, and specifications that are in effect at the time of publication of this standard shall, to the extent specified herein, form a part of this standard. The applicability of changes in standards, codes, and specifications that occur after the inquiry shall be mutually agreed upon by the purchaser and vendor.

API Specification 5L, *Specification for Line Pipe*, Forty-Fifth Edition

API Recommended Practice 500, *Recommended Practice for Classification of Locations for Electrical Installations at Petroleum Facilities Classified as Class I, Division 1 and Division 2*, Second Edition

API Standard 541, *Form-wound Squirrel-cage Induction Motors—500 Horsepower and Larger*, Fourth Edition

API Standard 546, *Brushless Synchronous Machines—500 kVA and Larger*, Third Edition

API Standard 547, *General-purpose Form-wound Squirrel Cage Induction Motors 250 Horsepower and Larger*, First Edition

API Recommended Practice 578, *Material Verification Program for New and Existing Alloy Piping Systems*, Second Edition

API Standard 611, *General-purpose Steam Turbines for Petroleum, Chemical, and Gas Industry Services*, Fifth Edition

API Standard 612, *Petroleum, Petrochemical and Natural Gas Industries—Steam Turbines—Special-Purpose Applications*, Sixth Edition

API Standard 613, *Special Purpose Gear Units for Petroleum, Chemical, and Gas Industry Services*, Fifth Edition

API Standard 614, *Lubrication, Shaft-sealing, and Control-oil Systems and Auxiliaries for Petroleum, Chemical and Gas Industry Services*, Fifth Edition

API Standard 670, *Machinery Protection Systems*, Fourth Edition

API Standard 671, *Special-purpose Couplings for Petroleum, Chemical, and Gas Industry Services*, Fourth Edition

API Standard 677, *General-purpose Gear Units for Petroleum, Chemical and Gas Industry Services*, Third Edition