

DEP SPECIFICATION

CENTRIFUGAL FANS FOR PETROLEUM, CHEMICAL, AND GAS INDUSTRY SERVICES (AMENDMENTS/SUPPLEMENTS TO API 673)

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DESIGN AND ENGINEERING PRACTICE



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All administrative queries should be directed to the DEP Administrator in Shell GSI.

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PART I INTRODUCTION

1.1 SCOPE

This new DEP specifies requirements and gives recommendations for design, materials, inspection, and testing of fans intended for continuous duty in petroleum, chemical, and gas industry services. Fans that conform to this DEP can be used in services such as process gas, furnace forced draft, and furnace induced draft.

This DEP is based on API 673, 2nd edition, January 2002, Reaffirmed November 2010. Part III of this DEP amends, supplements and deletes various clauses and paragraphs of API 673.

Clauses in API 673 which are not mentioned in this DEP shall remain valid as written.

1.2 DISTRIBUTION, INTENDED USE AND REGULATORY CONSIDERATIONS

Unless otherwise authorised by Shell GSI, the distribution of this DEP is confined to Shell companies and, where necessary, to Contractors and Manufacturers/Suppliers nominated by them. Any authorized access to DEPs does not for that reason constitute an authorization to any documents, data or information to which the DEPs may refer.

This DEP is intended for use in facilities related to oil and gas production, gas handling, oil refining, chemical processing, gasification, distribution and supply/marketing. Application in other facilities may also apply.

When DEPs are applied, a Management of Change (MOC) process shall be implemented; this is of particular importance when existing facilities are to be modified.

If national and/or local regulations exist in which some of the requirements could be more stringent than in this DEP, the Contractor shall determine by careful scrutiny which of the requirements are the more stringent and which combination of requirements will be acceptable with regards to the safety, environmental, economic and legal aspects. In all cases, the Contractor shall inform the Principal of any deviation from the requirements of this DEP which is considered to be necessary in order to comply with national and/or local regulations. The Principal may then negotiate with the Authorities concerned, the objective being to obtain agreement to follow this DEP as closely as possible.

1.3 DEFINITIONS

1.3.1 General definitions

The **Contractor** is the party that carries out all or part of the design, engineering, procurement, construction, commissioning or management of a project or operation of a facility. The Principal may undertake all or part of the duties of the Contractor.

The **Manufacturer/Supplier** is the party that manufactures or supplies equipment and services to perform the duties specified by the Contractor.

NOTE: The term **Vendor** is used in API STD 673. In the context of this DEP, Vendor shall be understood to mean **Manufacturer/Supplier**.

The **Principal** is the party that initiates the project and ultimately pays for it. The Principal may also include an agent or consultant authorized to act for, and on behalf of, the Principal.

NOTE: The term **Purchaser** is used in API STD 673. In the context of this DEP, Purchaser shall be understood to mean **Principal**.

The word **shall** indicates a requirement.

The word **should** indicates a recommendation.

1.3.2 Specific definitions

Term	Definition
Vital service	Service in which failure of equipment causes an unsafe condition, resulting in jeopardy to life and/or major damage (fire, explosion, etc.).
Essential, non-spared service	Service in which failure of equipment renders a plant inoperable or reduces performance to a level unacceptable to the Principal.
Essential, spared service	Service in which failure of equipment renders a plant inoperable or reduces performance to a level unacceptable to the Principal, but where that equipment has an installed spare.
Non-essential service	All other services

1.4 CROSS-REFERENCES

Where cross-references to other parts of this DEP are made, the referenced section number is shown in brackets. Other documents referenced by this DEP are listed in (Part IV).

1.5 COMMENTS ON THIS DEP

Comments on this DEP may be sent to the Administrator at standards@shell.com, using the DEP Feedback Form. The DEP Feedback Form can be found on the main page of "DEPs on the Web", available through the Global Technical Standards web portal <http://www.shell.com/standards> and on the main page of the DEPs DVD-ROM.

1.6 DUAL UNITS

This DEP contains both the International System (SI) units, as well as the corresponding US Customary (USC) units, which are given following the SI units in brackets. When agreed by the Principal, the indicated USC values/units may be used.