

DEP SPECIFICATION

**POSITIVE DISPLACEMENT PUMPS – ROTARY
(AMENDMENTS/SUPPLEMENTS TO API 676)**

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DESIGN AND ENGINEERING PRACTICE



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The objective is to set the standard for good design and engineering practice to be applied by Shell companies in oil and gas production, oil refining, gas handling, gasification, chemical processing, or any other such facility, and thereby to help achieve maximum technical and economic benefit from standardization.

The information set forth in these publications is provided to Shell companies for their consideration and decision to implement. This is of particular importance where DEPs may not cover every requirement or diversity of condition at each locality. The system of DEPs is expected to be sufficiently flexible to allow individual Operating Units to adapt the information set forth in DEPs to their own environment and requirements.

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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 rotary positive displacement pumps and pump units for use in the petroleum, petrochemical and gas industry services. Control volume pumps, hydraulically driven pumps and positive displacement reciprocating pumps are not included.

This DEP is based on API 676, 3rd edition, November 2009.

Part III of this DEP amends, supplements and deletes various clauses of API 676, 3rd edition, November 2009. Part III follows the clause numbering of API 676, 3rd edition, November 2009 for easy reference.

All clauses of API 676 not modified by 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 authorised access to DEPs does not for that reason constitute an authorisation 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.

The term **Vendor** is used in API STD 676. 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 authorised to act for, and on behalf of, the Principal.

The term **Purchaser** is used in API STD 676. 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.

1.4 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.

PART II GENERAL

Part III of this DEP is written as amendments and supplements to API 676. Wherever reference is made to API 676, it shall be understood to mean API 676 as amended/supplemented by this DEP.

For ease of reference, the clause numbering of API 676 has been used throughout Part III of this DEP.

Clauses in API 676 which are not mentioned in this DEP shall remain valid as written.