

OIL LOADING AND DISCHARGE HOSES FOR OFFSHORE MOORING INSTALLATIONS (AMENDMENTS/SUPPLEMENTS TO OCIMF GUIDE)

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DESIGN AND ENGINEERING PRACTICE



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PART I INTRODUCTION

1.1 SCOPE

This DEP specifies requirements and gives recommendations for floating and submarine hoses used at mooring installations. Additionally, some requirements and recommendations for other applications are also provided.

Part II of this DEP amends and supplements the OCIMF document "Guide to Purchasing, Manufacturing and Testing of Loading and Discharge Hoses for Offshore Moorings" (Fourth Edition, 1991). Accordingly, the Section numbering of Part II of this DEP follows the numbering of the OCIMF Guide. Sections within Parts 1 and 2 of the OCIMF Guide which are left unamended by this DEP shall remain applicable as written.

The contents of Part 3 of the OCIMF Guide, although useful as an inspection guide, do not form part of this DEP.

This DEP is a revision of the DEP of the same number dated December 1992; a summary of the main changes since the last edition is given in (1.6).

1.2 DISTRIBUTION, INTENDED USE AND REGULATORY CONSIDERATIONS

Unless otherwise authorised by Shell GSI and SIEP, the distribution of this DEP is confined to companies forming part of the Royal Dutch/Shell Group or managed by a Group company and, if necessary, to Contractors and Manufacturers/Suppliers nominated by them.

This DEP is intended for use in oil refineries, chemical plants, gas plants, exploration and production facilities and, where applicable, supply/marketing installations.

When DEPs are applied, a Management of Change (MOC) process should 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 may 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 as regards 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. Based on the potential impact on design, construction and maintenance costs, the Principal may decide to consult with the Authorities concerned with the object of obtaining agreement to follow this DEP as closely as possible.

1.3 DEFINITIONS

The **Contractor** is the party which 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** is the party which manufactures or supplies equipment and services to perform the duties specified by the Contractor.

The **Principal** is the party which initiates the project and ultimately pays for its design and construction. The Principal will generally specify the technical requirements. The Principal may also include an agent or consultant authorised to act for, and on behalf of, the Principal.

NOTE: The word "Purchaser" as used in the OCIMF Guide shall be taken to mean "Principal".

The word **shall** indicates a requirement.

NOTE: The word "will" is often used in the OCIMF Guide. Where the context implies a requirement, this shall be taken to mean "shall".

The word **should** indicates a recommendation.

1.4 ITEMS TO BE SPECIFIED BY THE PRINCIPAL

1.4.1 Items that shall always be specified

Item	OCIMF Guide Section
Type of hose and number of each hose type	1.1
Nominal diameter	1.1
For submarine hose: with or without location collars	1.1/1.6
Whether the Principal will witness manufacture and/or inspection of the hoses	1.12

1.4.2 Items to be specified if requirements deviate from standard OCIMF settings

Item	OCIMF Guide Section
Pressure rating in excess of 15 bar (ga)	1.2.1
Flow velocity in excess of 21 m/s (diameters up to and including 400 mm) or 15 m/s (diameters 500 mm and larger)	1.2.3
Aromatic hydrocarbon content is consistently greater than 25 % or occasionally greater than 40 %. If the product will contain MTBE, then the percentage of MTBE shall be specified. The basic composition of the products should be provided to the Manufacturer for comments.	1.2.4
Product temperature is outside the range of minus 20 °C to plus 82 °C	1.2.4
Ambient temperature during use and/or storage is outside the range of minus 29 °C to plus 52 °C	1.2.4
Hose length different from standard length of 9.1 m for submarine and tanker rail hose, or standard length of 10.7 m for other types of hose	1.3.1
Special requirements with regard to flange type and/or flange face	1.5.3
Welded serial numbers not wanted on rim of flanges	1.5.3
Submarine hose should be able to operate at a water depth greater than 76 m	1.6.1
Floating hose should have a reserve buoyancy in a specified range	1.8.4
Special requirements with regard to the marking of tanker rail hose	1.9.5
Additional test certificates	1.13
Special requirements with regard to marking	1.15
Special requirements with regard to packing	1.17

1.4.3 Items to be specified if requirements deviate from options selected in this DEP

Certain options in the OCIMF Guide have been given pre-selected by this DEP.

The Principal should check the relevant Sections and indicate whether he wishes to deviate from the DEP option.

The applicable items are:

Item	OCIMF Guide Section
Electrical continuity	1.5.4
Stiffness test	1.11.5
Kerosene test	1.11.7
Inspection by Principal	1.12

1.4.4 Items to be specified if requirements deviate from Manufacturer's standard

Certain items in this DEP are left to the discretion of the Manufacturer (in some cases this discretion is restricted to the Manufacturer choosing permitted options). If the Principal has specific requirements or preferred options with regard to these items, this shall be explicitly stated in the Purchase Order.

Relevant items are:

Item	OCIMF Guide Section
Cover materials and extra thickness	1.5.1
Colour of cover	1.8.3
Flange coating	1.5.3
Collar dimensions	1.6.2

1.4.5 Items to be specified when ordering floats

If new floats are ordered for existing hoses:

Item	OCIMF Guide Section
Collar dimensions	1.6.2
Maximum operating depth	1.6.2
Colour preference, if any	1.6.2

If new floats are ordered together with new hoses:

Item	OCIMF Guide Section
Maximum operating depth	1.6.2
Colour preferences, if any	1.6.2
Required collar dimensions	1.6.2

1.5 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 III).