

GP 03-11-01	Marine Cargo Transfer Hose	April 2005
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Marine Cargo Transfer Hose

GP 03-11-01

Scope

- 1) [I], [R] This Global Practice (GP) covers hoses used at fixed marine berths (docks) or in ship-to-ship lightering operations within protected harbors and waters. It is not intended for offshore marine floating and submarine hoses or hoses used for truck or rail loading.

This Practice shall apply to rubber and composite types of hoses for use in one of the following services:

- a) Oil and petroleum products at temperatures ranging from -20°F (-29°C) to 180°F (80°C) for rubber hoses and 140°F (60°C) for composite hoses.
 - b) Hot asphalt and sulfur at temperatures ranging from -20°F (-29°C) to 350°F (175°C) for rubber hoses.
 - c) Non-refrigerated Liquid Petroleum Gas (LPG), liquid or vapor, at temperatures ranging from -20°F (-29°C) to 115°F (45°C). (Refrigerated LPG should only be transferred via marine hard pipe loading arms and thus is not within the scope of this GP.)
 - d) Vapor recovery (excluding LPG vapor) at temperatures ranging from -20°F (-29°C) to 140°F (60°C).
- 2) [I] An asterisk (*) indicates that a decision by Purchaser is required, or that additional information shall be furnished by Purchaser.

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1. Summary of Additional Requirements

* [I], [R] Hoses shall be constructed in accordance with this GP and the appropriate standards listed. Where both the RMA and BSI standard are referenced, Manufacturer may select either one. Vendor shall also comply with any local rules or regulations specified by Purchaser.

1.1. ExxonMobil Data Sheets

ExxonMobil Data Sheets	ExxonMobil Data Sheet Home Page
T031101C01	Marine Cargo Transfer Hose - Hose Description - Customary Units
T031101M01	Marine Cargo Transfer Hose - Hose Description - Metric Units

1.2. API–American Petroleum Institute

API SPEC 5L	Specification for Line Pipe
API STD 1104	Welding of Pipelines and Related Facilities

1.3. ASME–American Society of Mechanical Engineers

Unless specific references to the ASME Code are listed, an IHS link to the Introduction is provided to facilitate access to the relevant parts of the Code.

ASME B16.5	Pipe Flanges and Flanged Fittings NPS 1/2 Through NPS 24 Metric/Inch Standard
ASME SEC IX	BPVC Section IX - Qualification Standard for Welding and Brazing Procedures, Welders, Brazers, and Welding and Brazing Operators

1.4. ASTM–American Society for Testing and Materials

ASTM A 53/A 53M	Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless
ASTM A 105/A 105M	Standard Specification for Carbon Steel Forgings for Piping Applications
ASTM A 106	Standard Specification for Seamless Carbon Steel Pipe for High-Temperature Service

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1.5. BSI–British Standards Institution

BSI BS 4089	Specification for Metallic Hose Assemblies for Liquid Petroleum Gases and Liquefied Natural Gases
BSI BS 5842	1980 Thermoplastic Hose Assemblies for Dock, Road and Rail Tanker Use
BSI BS 6130 PART 1	1993 Hose and Hose Assemblies for Asphalt and Bitumen Part 1: Specification for Flexible Metallic Hose and Hose Assemblies (Supersedes BS 6130: 1981) (E)
BSI BS EN 1765	Rubber Hose Assemblies for Oil Suction and Discharge Services - Specification for the Assemblies
BSI BS EN 13482	Rubber Hoses and Hose Assemblies for Asphalt and Bitumen - Specification

1.6. RMA–Rubber Manufacturer's Association

RMA IP-8	Specifications for Rubber Hose for Oil Suction and Discharge (#101 - Nondestructive Testing Handbook, vol. 2)
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2. Definitions

Term	[I] Description
General:	
aromatic content	Based on the volume percent toluene.
bore	The measurement of the inside nominal diameter of a hose and is used to define the hose size.
burst pressure	The pressure at which any part of the hose assembly fails, resulting in a leak, rupture, separation, or distortion in any part of the hose assembly.
minimum bend radius (MBR)	A measure of the smallest radius around which a hose can be bent without mechanical damage or permanent deformation of the hose. The radius is measured to the innermost surface of the bent section of hose.
minimum bend radius ratio (MBR ratio)	The ratio of the hose bending radius (at maximum allowable bend) to the nominal hose diameter.
rated working pressure (RWP)	The maximum operating pressure at which a hose is designed to be in service.