68788#

SPEC FOR FIRST OF PLEM SUBMARINE HOSE FOR MULTI - BOUY

General

This inquiry is for 12"Ø hose located in submarine Hose strings of about 80m length for crude oil unloading.

The terminal is designed for tankers up to 130,000 ton dwt, at a maximum loading rate of 3800 m³/HR. A multi buoy anchorage is located at a depth of about 17 m, connected to storage tanks on shore through a 3100m X 32"Ø submarine pipeline.

There are two (2) strings connected to the P L E M.

The quoted hose string must comply in every particular with the above general conditions.

Manufactured in accordance with Oil Companies International Marine Forum (OCIMF) "Guide to purchasing Manufacturing and Testing of Loading and Discharge Hoses for offshore moorings" last revision., (Including Manufacturers Full Accreditation to ISO 9001 as required by OCIMF last revision) and by app. C of ISGOTT.

Hose carcass:

Primary: Synthetic nitrile based, oil resistant rubber lining suitable for handling

"sweet" crude with (aromatics) content up to 60%.

Reinforcement provided by multiple plies of high tensile textile cord and folly embedded helical wire arrangement. The angle of plies is set so as

to increase fatigue resistance.

A unique second lining, with similar properties to main lining, is applied over the first bank of plies to provide extra protection for the rest of the carcass in case of damage to the primary lining during hose service life

+ HOR ORANGE STRIP for divers locating assistance.

Cover: Synthetic blended rubber cover resistant to abrasion, weathering,

seawater and oil. An orange wear indicator is included within the cover.

FOR HYD TEST + VACUM.

Weight: Hose weight should not be higher then 100 kg/m

Length: 10 METER





End fittings:

Hose carcass mechanically and chemically bonded to flanged nipples at each end.

Flanged: ASTM A105 Normalized, maximum carbon content 0.25%, ANSI B16.5

Class 150 Race Face, hot dip galvanized.

Service:

Working pressure: 225 p.s.i. (15 bar)
Test pressure: 360 p.s.i. (24 bar)
Velocity: 70ft/sec (21m/sec)
Minimum Bend Rabius: four times nominal bore

Operating temperature: -20°C to $+82^{\circ}\text{C}$

Continuity: Electrically Continuous

Marking

Each hose should be marked by the manufacture

- ❖ The manufacturer's name or trademark
- ❖ Identification with the standard specification for manufacture
- ❖ Factory test pressure
- ❖ Month and year of manufacture
- Manufacturer's serial number

Documentation

Min. F.A.T and Doc Work shop testing including

- -Graphical Hydrostatic test
- Set up length, length at 0.7 bar, length at test pressure, final length
- Temporary elongation %
- Permanent elongation %
- Vacuum test (@25 Hg)
- Actual Hose weight and estimated under water weight.
- Electrically test
- Bend test at 1.2 min, radius.
- Prototype ref. no and test date.

All Doc. And F A T will be submitted to the customer for approval prior for shipment.

The documentation will be submitted as hard copy and printed PDF (not scan)

