

Single Carcass Submarine Hose

'21' SERIES

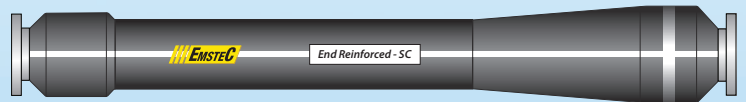
EMSTEC provide a range of high quality, high performance, oil suction and discharge hoses, extensively used at offshore moorings throughout the world. The EMSTEC **Single Carcass Submarine** hoses are utilized in high integrity sub-sea installations such as MBM, CALM, SALM configurations (i.e. Steep 'S', Lazy 'S', Chinese Lantern).

The EMSTEC hose fully complies with the requirements of the "Guide to Manufacturing and Purchasing Hoses for Offshore Moorings, **OCIMF/GMPHOM 2009 - 5th Edition**".

All hoses are designed and manufactured under a quality system in accordance with ISO 9001.

For performance characteristics and specification, please refer to EMSTEC data sheet 'Single Carcass Hose Specification'.

21210 SSC - End Reinforced without float collars (i.e. under Buoy)



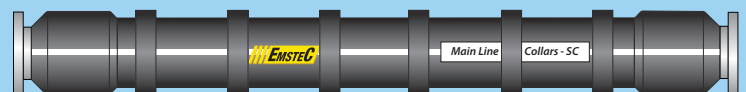
21310 SSCF - End Reinforced with float collars (i.e. under Buoy) *



21220 SSC - Main Line without float collars



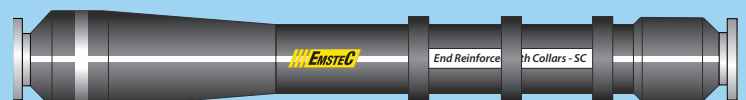
21320 SSCF - Main Line with float collars



21230 SSC - End Reinforced without float collars (i.e. off PLEM)



21330 SSCF - End Reinforced with float collars (i.e. off PLEM) *



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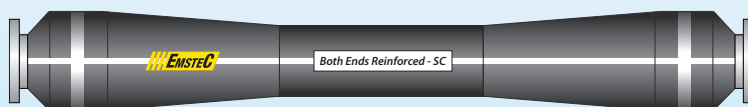
*Note: Number and distribution of float collars can be adjusted to suit client specific requirements.



Single Carcass Submarine Hose (continuation)

'21' SERIES

21240 SSC - Both Ends Reinforced without float collars



21250 SSC - Reducing Hose without float collars



21260 SSC - Tail Hose without float collars



21270 SSC - Tanker Rail



Single Carcass Hose Specification

‘21’ SERIES

EMSTEC Single Carcass Submarine, Floating & Catenary hoses fully comply with the requirements of the “Guide to Manufacturing and Purchasing Hoses for Offshore Moorings, **OCIMF/GMPHOM 2009 - 5th Edition**”.

PERFORMANCE CHARACTERISTICS & CONSTRUCTION

Nominal Bore (mm):	150 (6”), 200 (8”), 250 (10”), 300 (12”), 400 (16”), 500 (20”), 600 (24”) (non-standard diameters available on request)
Standard Length:	9.1M (30’), 10.7M (35’) & 12.2M (40’) (non-standard less than 12.2M also available)
Hose Construction:	Liner Tube – NBR based Rubber, resistant to hydrocarbons with aromatic content up to 60%. Main Carcass – Elastomer reinforced with multi-layers of high tensile textile cords and embedded steel wire helix. Floatation Material (Floating Hoses only) – Closed Cell Foam Outer Cover – Fibre reinforced smooth elastomer cover, resistant to ageing, abrasion, weathering, sunlight, tearing and oil and seawater penetration. (Polyurethane coating available on request).
Flanges:	ANSI B16.5 Class 150 or 300 Flat Face (FF) or Raised Face (RF), Hot Dip Galvanisation in accordance with BS729 Part 1, EN ISO 1461
Pressure Rating:	15 BAR (225 PSI), 19 BAR (275 PSI), 21 BAR (305 PSI) (higher pressure ratings on request)
Minimum Burst Pressure:	75 BAR (1090 PSI), 95 BAR (1375 PSI), 105 BAR (1525 PSI)
Flow Velocity:	Maximum of 21m/s
Fluid Product:	Crude Oil and Liquid Petroleum Products (other than liquefied petroleum gases and liquefied natural gases).
Temperature Range:	Fluid Temperature from -20°C to 82°C. Ambient Temperature from -29°C to 52°C.
Minimum Bend Radius:	Submarine Hose - 4 x hose Nominal Bore Diameter. Floating Hose – 6 x hose Nominal Bore Diameter
Electrical Continuity:	Electrically Continuous or Discontinuous as required.

For information regarding hose types and applications, please refer to relevant EMSTEC hose data sheets.

DESIGN APPROVAL & QUALITY ASSURANCE

All of the hoses are designed and manufactured under a quality system in accordance with ISO 9001. Prototype Hose manufacture and testing witnessed and verified by Bureau Veritas & Det Norske Veritas (Certifying Authorities) and GDC International (Industry Consultants).



ISO 9001
Design



ISO 9001
Manufacture



Prototype Approval
(BV)



Prototype Approval
(DNV)



Prototype Approval
(GDC)

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