

Oil & Gas - SURF

Exploration & Production

Steel Tube Umbilicals

STEEL TUBE UMBILICALS

Prysmian Subsea Umbilicals, Risers and Flowlines (SURF) is offering products for connecting subsea assets to a platform or floating production system at the surface. Prysmian Steel Tube Umbilicals (STUs) offer enhanced performance for more demanding applications and are typically used for chemical injection and hydraulic control applications.

APPLICATION

Available in duplex and super-duplex stainless steel, Steel Tube Umbilicals are most commonly used for chemical injection, hydraulic control and gas lift management. Prysmian STUs offer enhanced mechanical performance, improved corrosion resistance and can operate at higher working pressures than thermoplastic hose based designs.

STANDARDS & APPROVALS

Reference Standard: ISO 13628-5 / API 17E.

QUALITY & TESTING

Prysmian Group has one dedicated R&D Center for SURF Solutions based in Brazil, which is fully integrated with other 16 R&D centers spread worldwide, in order to benfit from Prysmian's high level of synergy and efficiency.

The R&D center for SURF in Brazil is structured to allow a full development of Umbilicals and Flexible Pipes. This center relies on dedicated facilities and qualified engineers and technicians whith a specific experience in SURF solutions.

Our laboratories offer a great variety of solutions for application development of polymeric materials and metals, failure analysis and plant support, mainly to provide the largest possible range of options.

All raw materials used in Prysmian SURF products are developed, tested and certified according to the most stringent Quality Standards.

DESIGN & CONSTRUCTION

STU technology allows to design compact and optimized cable cross-section by using preshaped fillers.

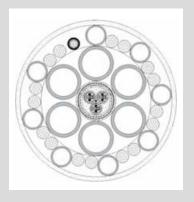
Within Steel Tube Umbilicals, steel tubes can also have a structural function, supporting the weight of the umbilical and removing the need for tensile armoring.

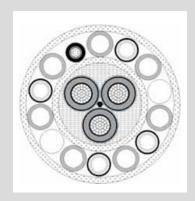
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In dynamic applications the individual steel tubes can be oversheathed to prevent excessive wear, increasing fatigue resistance and service life.











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PRODUCT RANGE

Prysmian is able to provide a global solution for SURF products, for instance, from the cross-section definition and raw material selection up to the full qualified product and services during the product installation.

| PARAMETER | VALUE |
|--|--|
| Maximum Diameter | Above 350 mm |
| Strength Member | Galvanized steel armour wire (Round or Flat), helically wound, duplex/super-duplex stainless steel tubes |
| Manufacturing length limitations | Qualified splicing processes are available. Length limited by umbilical design, packing and installation method |
| Maximum allowable installation tension, breaking tension, and crush load | Designed to meet specific project's requirements |
| Axial, bending, and torsional stiffness | Based on specific design |
| Design life | 25 years, as standard Longer design life can be provided |
| Packing, transportation, and load out | Based on customer's needs. Options available include: reel, carousel, pallets, baskets |
| Installation methods | Umbilicals designed to suit customer's installation method |

This product information sheet is provided for reference only. For more details, please contact your Prysmian representative.

