Wellstream flexible pipe solutions

Highly adaptable and reliable solutions for offshore and subsea projects
Flexible pipe

Risers, flowlines, fluid transfer lines and jumpers are critical to offshore oil and gas production systems. They are subject to extreme temperatures, pressures, physical stresses and corrosive materials — yet must still ensure reliable connections and optimal product flow. As offshore and subsea developments move into deeper waters and more challenging environments, flexible pipe is highly versatile, in some circumstances it is the only suitable technology available.

GE Oil & Gas solutions

Our portfolio of Wellstream flexible pipe solutions draws on more than 25 years of research and development, material science and installation experience in some of the harshest conditions the industry has to offer — particularly in environments where water depth and seabed conditions impose unusual restrictions. Our products are robust, highly flexible and adaptable to unique project requirements, and offer proven reliability in highly corrosive conditions.

The performance value of our Wellstream flexible pipe is further enhanced by GE Oil & Gas’ broad industry experience which ranges from high-pressure/high-temperature and extremely corrosive applications, to the deepest water drilling record, longest subsea tieback and complete systems design for some of the world’s most ambitious offshore and subsea projects.
Flexible pipe is highly versatile in meeting the demands of subsea and FPSO based production in some circumstances. It is the only suitable technology available.

Wellstream products can be found in every major offshore production basin worldwide and are engineered to withstand the harshest operating conditions. Our systems are currently operating in depths well beyond 2,000 m and are being qualified up to 3,000 m.

Our pipes are unbonded products made from multiple layers of thermoplastic material, stranded or extruded thermoloplastics. Each layer is designed to meet specific project requirements, including, for example:

- **High temperature**
- **High pressure**
- **High levels of CO₂ and H₂S**
- **Water depths to 3,000 m**
- **Pipe inner diameter from water depth capabilities**
- **Highly dynamic marine environments**
- **High pressure**
- **High temperature**
- **Water depths to 3,000 m**

Flexible pipe construction that governs lifecycle performance. Wellstream products can be found in every major offshore production basin worldwide and are engineered to withstand the harshest operating conditions. Our systems are currently operating in depths well beyond 2,000 m and are being qualified up to 3,000 m.

Wellstream products, service & support

Wellstream is dedicated to delivering products that are better for both business and the environment. Our primary engineering design and service facilities are strategically located in Newcastle, UK and Niterói, Brazil. These sites are supported by service teams in all major water depth capabilities, and the most corrosive sour service. In all cases, our approach is underpinned by a risk-based methodology developed specifically to address the attributes of the project and the project environment. This level of expertise enables solutions that are customized to meet the particular needs of an installation and its operator.

**Key benefits**

- **Proven track record in all water depths:** More than 400 miles installed globally.
- **Operational in ultra-deep depths:** More than 3,000 m.
- **Competitive economics on an established basin:** Pipe is fully tested on-shore prior to delivery.
- **Re-usable:** Resources can be re-used.
- **Promotes flexibility in field architecture:** Rapid installation and retrieval

**Varyed offshore solutions**

We design and manufacture a complete range of proven flexible pipe products for reliable offshore and subsea field development. Every product is customized to meet the specific requirements of each project and employs proven technologies to ensure the highest efficiency and cost-effective delivery. We are qualified to ISO 13628-2, API 17J, DNV GL Register Type Approval. Our EHS and Quality management systems comply with ISO 9001, 14001, and are certified to ISO 14001:2004, ISO 13628-2:2003, DNV GL Register Type Approval.

Drawing on extensive experience in the industry’s most challenging applications, we design products for extreme conditions: high temperatures and pressure environments, environments with severe water depth capabilities, and the most corrosive sour service. We continually overcome challenges with the next generation of flexible pipe products. Our suite of flexible pipe products includes Jumbo Jumpers™, Flexible Flowlines™, lightweight carbon fiber solutions and Integrity management Key benefits

- **Reduced operational, safety and environmental risk**
- **Improved asset availability**
- **Reduced costs through a predictable maintenance regimen**
- **Potential for life extension from the acquisition of service data**

In keeping with our design philosophy, our installation solutions can also be tailored to suit each customer’s unique needs. We can install several miles of flexible pipe on a single vessel or on a separate lay barge. In either case, we will ensure that the flexible pipe solution is installed in the safest and most efficient manner possible.
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