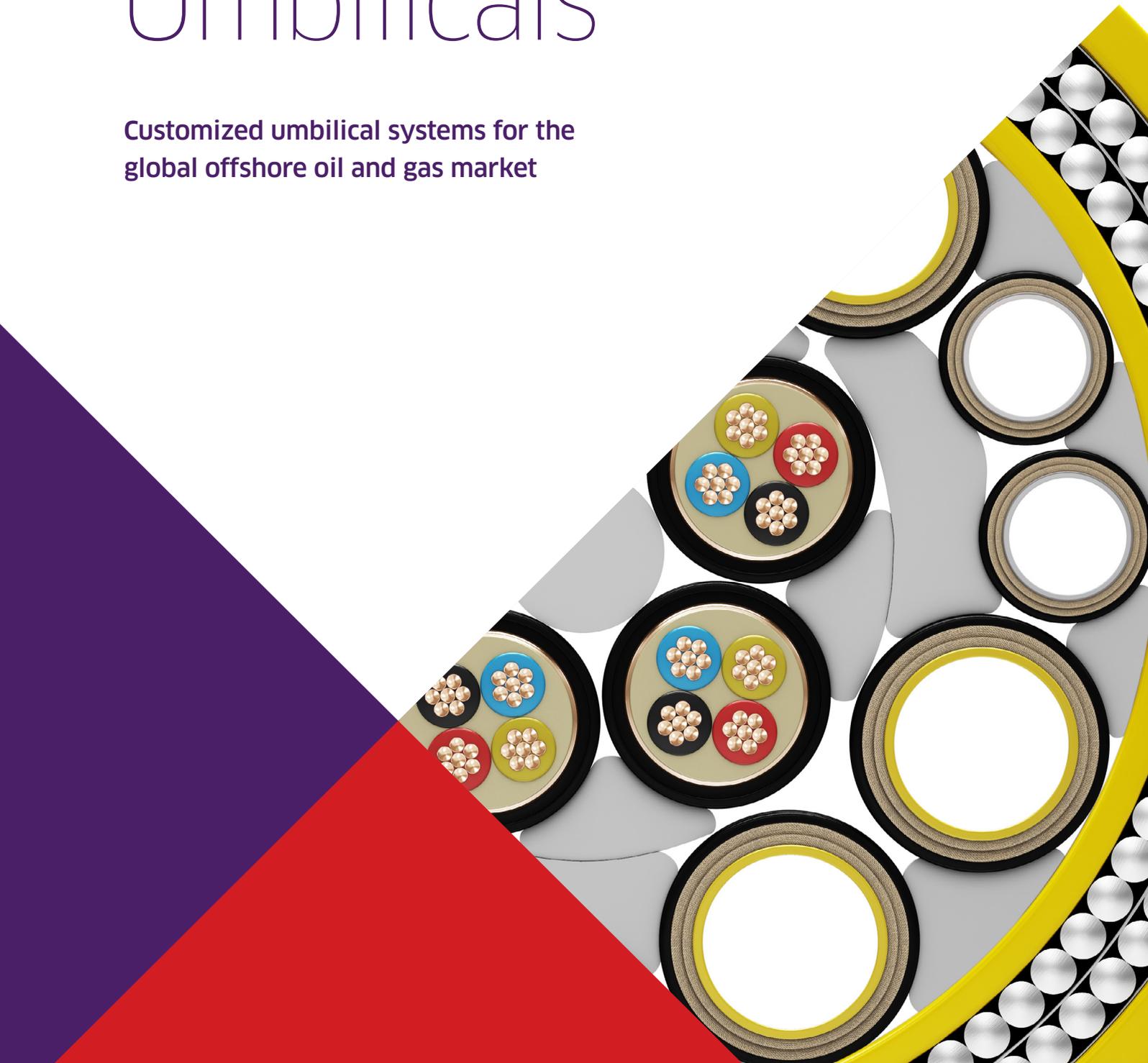


Umbilicals

Customized umbilical systems for the
global offshore oil and gas market



Umbilicals worldwide

TechnipFMC develops, engineers and manufactures customized subsea umbilical systems

- ▶ A worldwide leader, with over 40 years' experience in subsea capabilities
- ▶ Strategically located manufacturing plants in the UK, USA, Angola and Malaysia, providing global solutions for the umbilical market with responsive local services
- ▶ The geographic positioning provides the unique ability to design and supply customized umbilical products using flexible shared assets and technologies



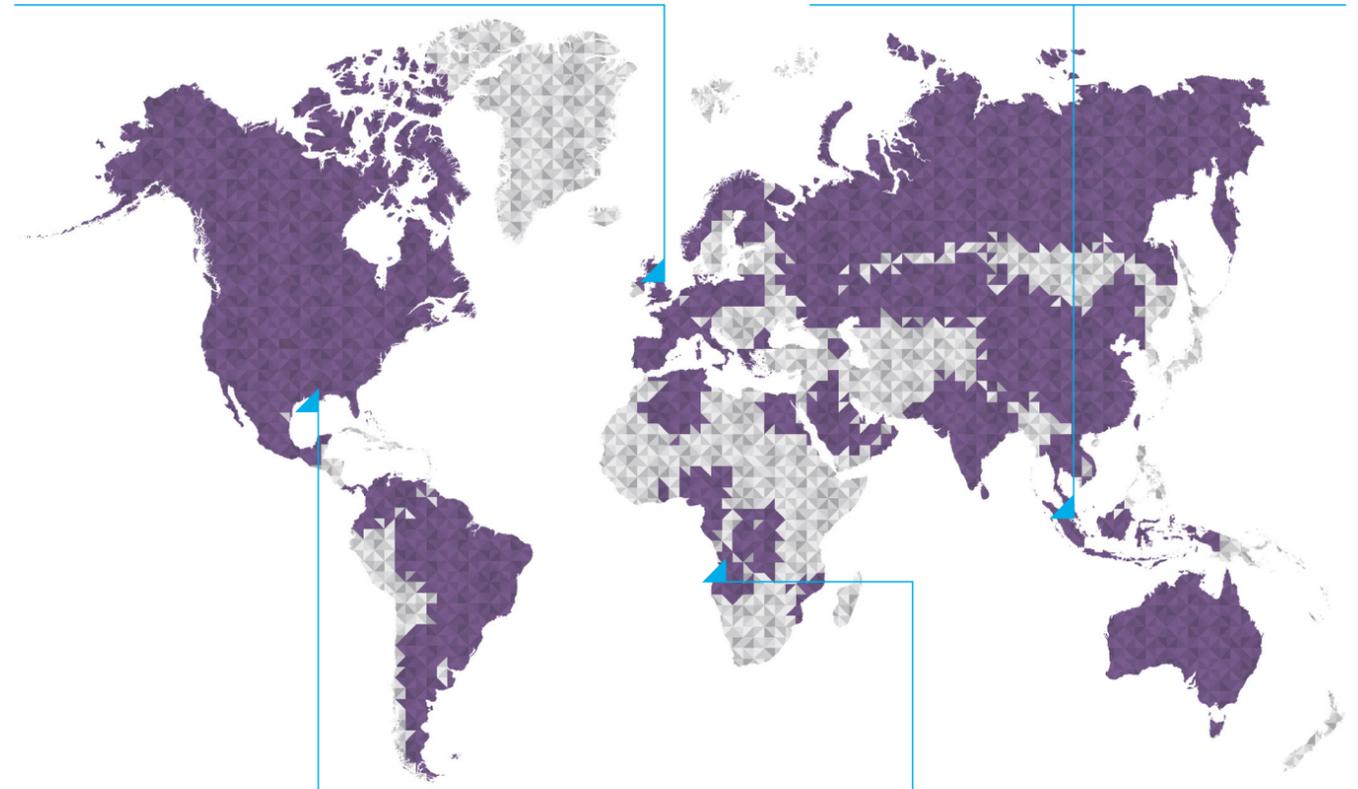
TechnipFMC Umbilicals Ltd.

- ▶ Newcastle, UK
- ▶ Opened 1977
- ▶ Steel, thermoplastic and electrical umbilicals
- ▶ Center of excellence for R&D and umbilical testing
- ▶ World's most capable steel tube umbilical assembly facility



Asiaflex Products

- ▶ Johor, Malaysia
- ▶ Opened 2010
- ▶ Thermoplastic and electrical umbilicals
- ▶ Combined Flexible and Umbilical manufacturing site



TechnipFMC Umbilicals Inc.

- ▶ Houston, USA
- ▶ Opened 1996
- ▶ Steel and electrical umbilicals
- ▶ Proven Gulf of Mexico capabilities



Angoflex Ltda.

- ▶ Lobita, Angola
- ▶ Opened 2003
- ▶ Steel and electrical umbilicals
- ▶ Only dedicated Umbilical manufacturing site in West Africa

Quality, Health, Safety & Environment

The umbilicals group operates following TechnipFMC's worldwide QHS&E standards

Effective QHS&E management is a key element to safe and efficient operations and to continuously improving performance and capabilities across the world.

Certifications*

- ▶ ISO 9001:2000
- ▶ ISO 14001:2004
- ▶ OHSAS 18001:1999

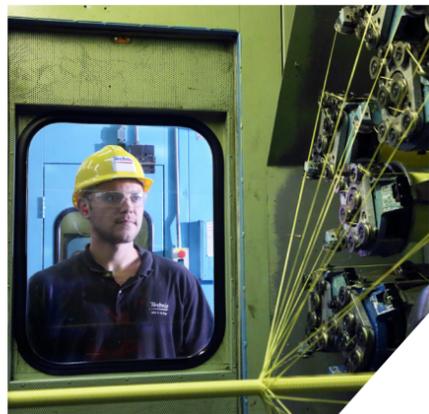
Accreditations*

- ▶ RoSPA Gold Award (2001, 2006)
- ▶ Chevron Agbami IIF Award (2006)
- ▶ Queen's Award for Enterprise: International Trade 2008
- ▶ Shell Perdido INJURY FREE AWARD (2009)
- ▶ NOF Company of the Year (2011)
- ▶ Subsea UK Company of the Year (2012)
- ▶ Investors in People Gold (2017)

QHS&E common goals are:

- ▶ To maintain a safe, healthy and injury free workplace
- ▶ To achieve quality in the performance of all functions
- ▶ To have respect for, and avoidance of damage to, the environment
- ▶ Safe working systems that anticipate hazards and reduce risks
- ▶ Compliance with applicable laws, industry standards and clients' requirements
- ▶ Working as a team and in partnership with clients and supplier

* Certifications and accreditations vary by legal entity



Umbilical systems

Umbilicals provide the critical link between remote subsea wells and fixed or floating production systems

Subsea solutions for every environment:

- ▶ Vertical integration
- ▶ In-house technologies
- ▶ Worldwide leadership
- ▶ First-class manufacturing assets
- ▶ Pioneering solutions
- ▶ Extensive track record
- ▶ Cost-effective solutions
- ▶ Available from America, Europe, Africa and Asia



Subsea services

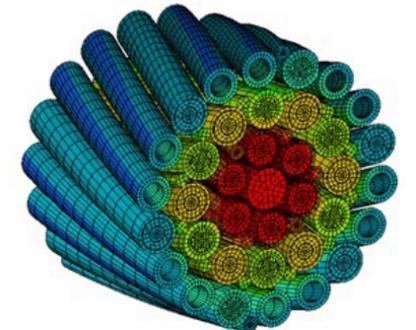


Engineering and design



Offshore testing and installation services

- ▶ Umbilical installation
- ▶ Regular monitoring and maintenance
- ▶ Large range of tests



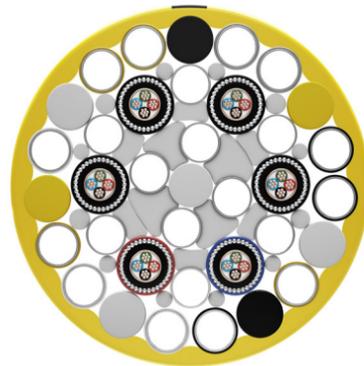
Predictive engineering capabilities

Subsea products



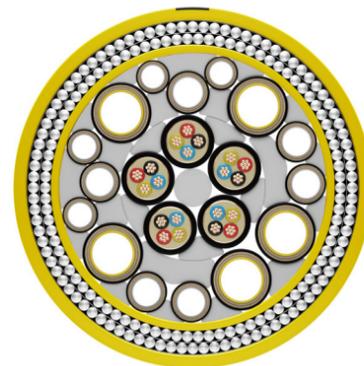
Umbilicals

- ▶ Steel tube umbilicals
- ▶ Thermoplastic hose umbilicals
- ▶ Power and communication systems
- ▶ Hybrid umbilicals



Steel tube umbilicals

- ▶ Long distance
- ▶ Deep water
- ▶ High pressures



Thermoplastic hose umbilicals

- ▶ Highly dynamic
- ▶ Short lead time
- ▶ Cost effective



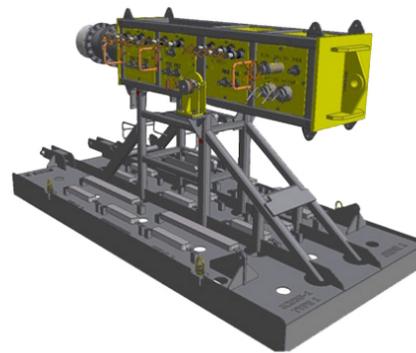
Electrical cables

- ▶ Subsea pumping and processing
- ▶ Aluminum cable for dynamic and deepwater application
- ▶ Multiple circuits for MPP umbilicals



Subsea products and services

- ▶ Jumpers
- ▶ Flying leads
- ▶ Stab plates



Umbilical hardware

- ▶ Topside termination
- ▶ Subsea termination and distribution
- ▶ Mud mats and support structures

Design

Research and development

- ▶ At TechnipFMC we are committed to expanding the limits of what is possible through research and innovation, based on the needs of our clients to successfully deliver their projects
- ▶ Through a combination of test services, research and development, and new product development, we are able to research materials, develop higher performing components and introduce new technologies, utilizing our risk-based qualification program to ensure that products are ready to deliver high performance and reliability
- ▶ Our dedicated team of experienced engineers and extensive prototype testing facilities are fundamental to developing future umbilical solutions, ensuring our clients are receiving the most modern umbilical systems possible

Engineering

- ▶ By using a combination of industry standard analysis techniques combined with in-house software tools, we are able to predict the behaviors and performance of our products, maximizing problem free solutions for clients
- ▶ Our engineering team's integrated approach is key to delivering an optimum solution the first time, as operating, installation and reliability challenges, along with increasing product complexity, continue to escalate. The team can readily produce engineered solutions to meet client design requirements, producing turnkey engineering solutions from concept development through to final installation, commissioning and in-service studies
- ▶ Our cutting-edge technologies, proven engineering processes and multidisciplinary team provides a fully integrated engineering solution to meet the unique challenges of individual client requirements



Commitment to delivery

Project execution

- ▶ A core offering at TechnipFMC is project execution. We integrate product with processes by establishing an experienced team to oversee each project throughout its life cycle
- ▶ Our processes consider all elements needed to ensure that project execution is seamless. A common project management model is operated across our facilities, ensuring the highest standards of safety, quality and delivery on all projects. Our experience of focusing on quality, scheduling and interface management provides our clients with the confidence and flexibility to fulfill every project
- ▶ Our thorough processes and systems help us to exceed client expectations at every opportunity and guarantee products are delivered safely, to quality, on time and to budget

Manufacturing

- ▶ Quality is a main focus throughout manufacturing. Continuous monitoring and measurement of operational performance highlights areas for constant improvements. The business excellence encompasses two facets: the lean program targets cost and schedule through reducing waste, and our Six Sigma program focuses on reducing critical process variation. Together they ensure that our manufacturing process is first class, resulting in exceptional umbilical systems and exceeded client expectations
- ▶ As the industry develops into new frontiers, we continually invest in asset capability to create constant benefits for all our clients. Our outstanding global facilities ensure that all projects can be accommodated with the manufacturing of umbilicals, flying leads, termination hardware and other subsea products. With unrivaled manufacturing experience and a solid investment program, TechnipFMC is well-placed at the forefront of the industry

Growing capabilities

Continued investment leads to ever-increasing capabilities, the industry's best people and ideas, and the world's most modern umbilical manufacturing facilities



In 2014, TechnipFMC opened the world's most capable steel tube umbilical assembly plant in Newcastle, UK. This investment follows the 2012 completion of our dedicated Research and Development facility located on the River Tyne, with deepwater access to the global market



TechnipFMC significantly invests in people, employing a large number of recognized industry experts

We constantly encourage training and development to ensure that our workers can provide the best services for our clients, while always staying at the forefront of the industry



TechnipFMC Umbilicals Inc. benefits from many upgraded assets, including carousels, assembly machinery, reel storage and quayside, and is located adjacent to Houston's shipping canal



Our **Angoflex facility** has undergone recent investments, including two new large carousels, upgraded operational capacity, load-out route and upgraded helix machine, and is located on the west African coast, with deepwater access



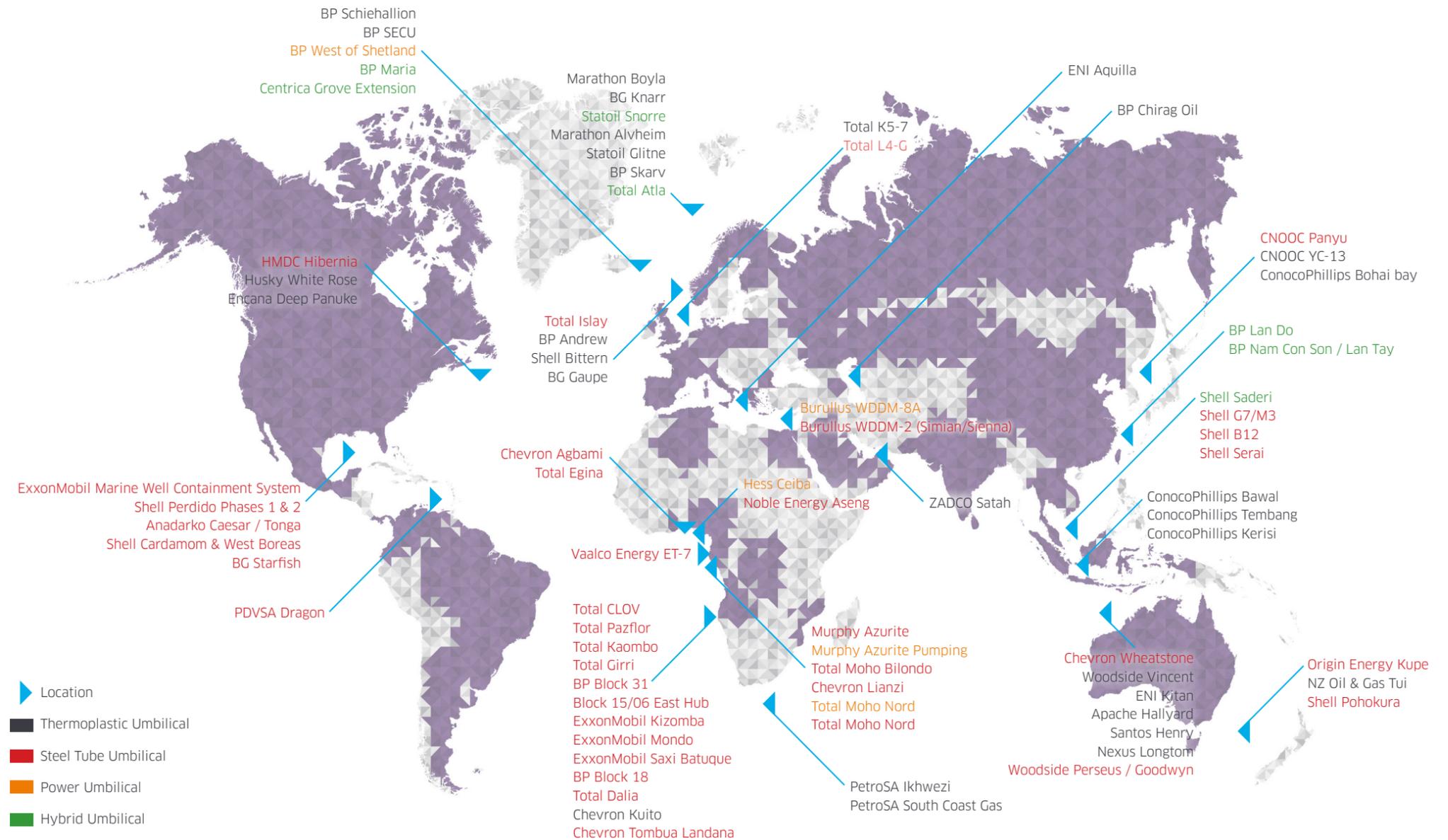
Our newest entity, **Asiaflex Products**, has a large site, assembly machine and a deepwater jetty—located on the Malaysian coast, with easy access to Asia Pacific and Australia

Record-breaking experience

To date, our business has manufactured and installed more than 5,500 km of umbilicals in over 600 projects

At TechnipFMC we like to set world records, including:

| Record | Client | Project |
|------------------------------------------------|----------|-----------------------|
| Deepest umbilical—3,000 m | Shell | Perdido |
| First high temperature umbilical | Total | Moho Bilando gas lift |
| Largest diameter and heaviest weight per meter | BP | Skarv |
| Longest continuous length subsea power cable | Burullus | Simian Sapphire |
| Harsh environment, dynamic power | BP | Schiehallion |
| Largest-ever value umbilical project | Total | Kaombo |



Europe, Middle East, Africa

TechnipFMC Umbilicals Ltd.
Nelson Road
Walker Riverside
Walker
Newcastle upon Tyne
NE6 3NL
UK
T: +44 191 295 0303
E: contact-TULtd@technip.com

Americas

TechnipFMC Umbilicals Inc.
16661 Jacintoport Boulevard
Houston
Texas 77015
USA
T: +1 281 249 2800
E: contact-TUInc@technip.com

Angola

Angoflex Limitada
Rua 1° Dezembro, 15 Lobito
C.P. 763 Provincia de Benguela
Republica de Angola
T: +244 72 23 597

Asia Pacific

Asiaflex Products Sdn Bhd
Tanjung Langsat Industrial Complex
81700 Pasir Gudang
Johor Darul Takzim
Malaysia
T: +60 3 2119 5555
E: jvanbedaf@technipfmc.com