



# Offshore and Onshore Pipeline Solutions



# Tenaris

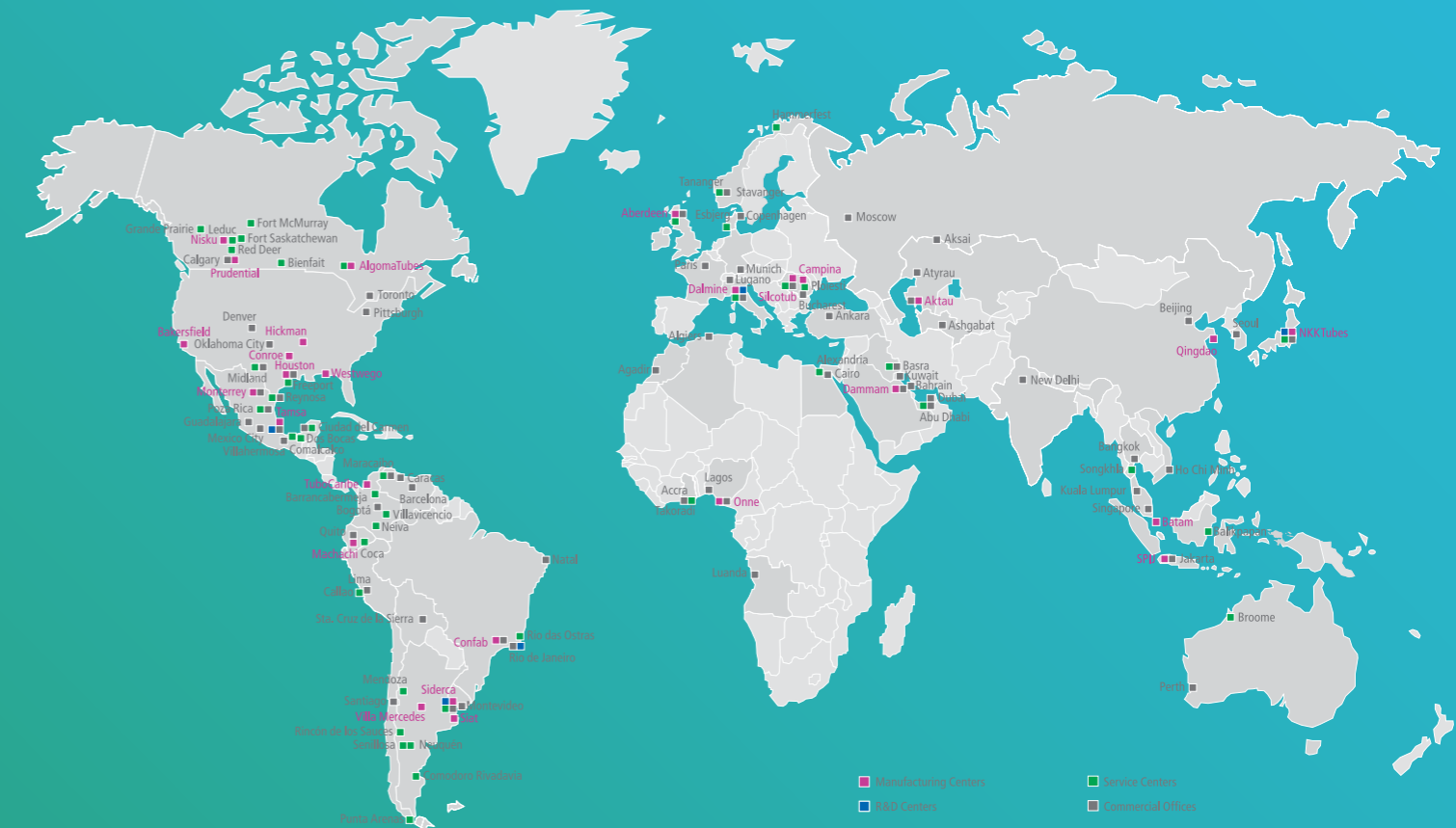
Tenaris is a leading supplier of tubes and related services for the world's energy industry and other industrial applications. Our mission is to deliver value to our customers through product development, manufacturing excellence, and supply chain management. We seek to minimize risk for our customers and help them reduce costs, increase flexibility and improve time-to-market.

Tenaris consists of a network of manufacturing facilities, Research & Development (R&D) centers, service centers and commercial offices that spans the globe. We provide casing and tubing, line pipe products and

other mechanical and structural steel pipes for different applications. Our state-of-the-art manufacturing facilities have a production capacity of over six million tons per year.

We manufacture our steel pipe products in a wide range of specifications, under strict quality standards and complying with ISO 9001, ISO 14001 and OHSAS 18001 requirements.

Tenaris employees around the world are committed to continuous improvement by sharing knowledge across a single global organization.



# The highest QHSE standards

Tenaris places the utmost importance to the health and safety of each and every one of its employees and users of its products. To achieve that goal, Tenaris is aligned with OHSAS 18001 and with the Health and Safety principles established by the World Steel Association.

The company implements safety practices to encourage its personnel to reduce and prevent risks. The management's steadfast commitment to risk evaluation in order to increase employee knowledge and awareness, as well as discipline and induction training for new and relocated employees, are key factors for continuous improvement to achieve zero accidents in the workplace.

TENARIS DEVELOPS AN ENVIRONMENTAL PRODUCT DECLARATION (EPD) FOR THE LINE PIPE PRODUCTS IT MANUFACTURES.

Tenaris seeks to provide a quality working environment and to promote the awareness of healthy practices among employees. We have also introduced programs to prevent illnesses unrelated to the workplace.

As part of our commitment to developing a long-term sustainable business we integrate care for the environment into all our business management procedures, from the beginning of the production process to the final delivery of the products and services to our customers. To achieve that goal, Tenaris is aligned with ISO 14001. We understand that the environment is a differentiating factor and a top priority for our customers.



# Integral solutions for the line pipe industry

With more than 40 years in the line pipe industry, Tenaris has vast experience working in the most demanding environments of the world. We work side-by-side with our customers to better understand their needs and supply them with the products and services required for each particular operation.

All our mills, commercial offices, research and development centers, service centers and warehouses are covered by one quality management system (ISO 9001) and one HSE system (ISO 14001 and OHSAS 18001). For Tenaris, quality and HSE are a key added value that implies satisfying our customers' needs in every stage of their operations. This commitment allows us to supply the line pipe industry with products that exhibit exceptional mechanical and dimensional properties, pursuing HSE performance.

For severe conditions, Tenaris offers sour service grades with improved resistance to Sulphide Stress Corrosion (SSC) and Hydrogen Induced Cracking (HIC). Our heavy wall pipes are able to withstand high pressure/high temperature (HP/HT) and sour environments. Tenaris produces pipes of up to 60 mm (2.362") with optimum tolerances, weldability, reliability and fatigue resistance.

Our integral offer for the line pipe industry includes a complete package of accessories, such as double joints and hot induction bends. In addition, we supply customers with coating services for the most demanding onshore and offshore environments, including anti-corrosion and thermal insulation solutions.

With our strong focus on research and development, we constantly design new and updated solutions able to perform in the increasingly complex operating conditions of today's oil and gas industry. Our commitment to improvement along with our knowledge of metallurgy have led us to develop line pipe products for environments with very low temperature.

WITH OUR STRONG FOCUS ON RESEARCH AND DEVELOPMENT, WE CONSTANTLY DESIGN NEW AND UPDATED SOLUTIONS.



# Innovative products for growing challenges

Tenaris's global network of R&D centers is a fundamental component in its approach to serving the customer. We are committed to develop new products and services, raising the quality and range of our products to help operators meet the challenges posed by even the most difficult environments of the world.

Tenaris carries out research & development on line pipe products from its locations in Veracruz (Mexico), Campana (Argentina), Kawasaki (Japan), Rio de Janeiro (Brazil) and Dalmine (Italy).

In Mexico we develop and qualify seamless line pipe products, conducting research in areas and disciplines like metallurgy, welding technology (for double jointing and in-field product qualification), premium connections and upset end solutions.

We also lead R&D activities on coating solutions and coiled tubes in our Argentine R&D center.

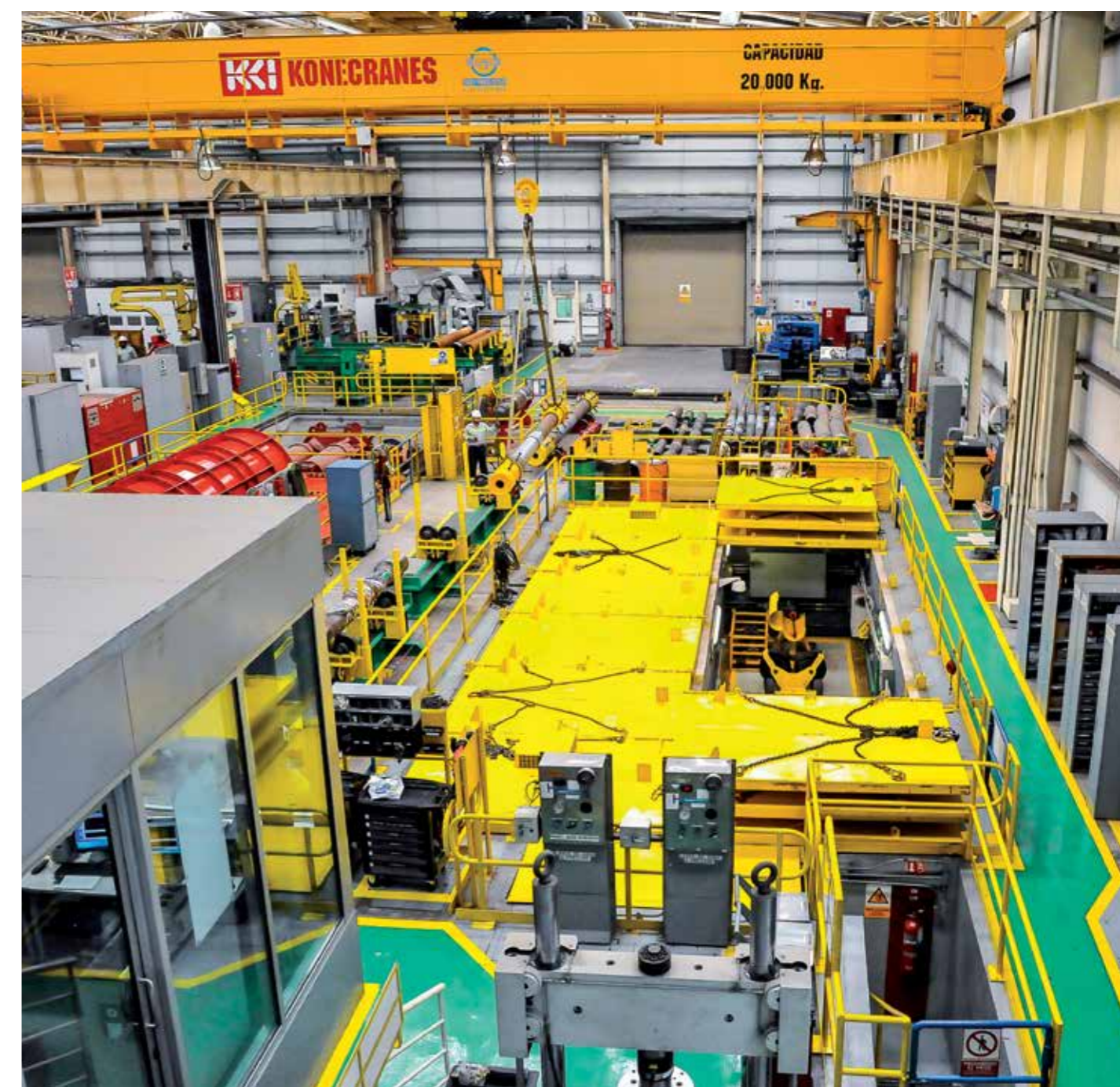
In Japan, Tenaris develops and qualifies corrosion resistant products that extend the life span of tubular products in corrosive environments.

In our Brazilian R&D center we develop and qualify LSAW line pipe products for onshore and offshore deepwater applications, using technologies like advanced welding.

In Italy the center specializes in hot rolling processes and product development for heavy wall pipe, hot induction bends and other applications.



TENARIS CARRIES OUT RESEARCH & DEVELOPMENT ON LINE PIPE PRODUCTS FROM ITS LOCATIONS IN MEXICO, ARGENTINA, JAPAN, BRAZIL AND ITALY.



VERACRUZ  
MEXICO

CAMPANA  
ARGENTINA

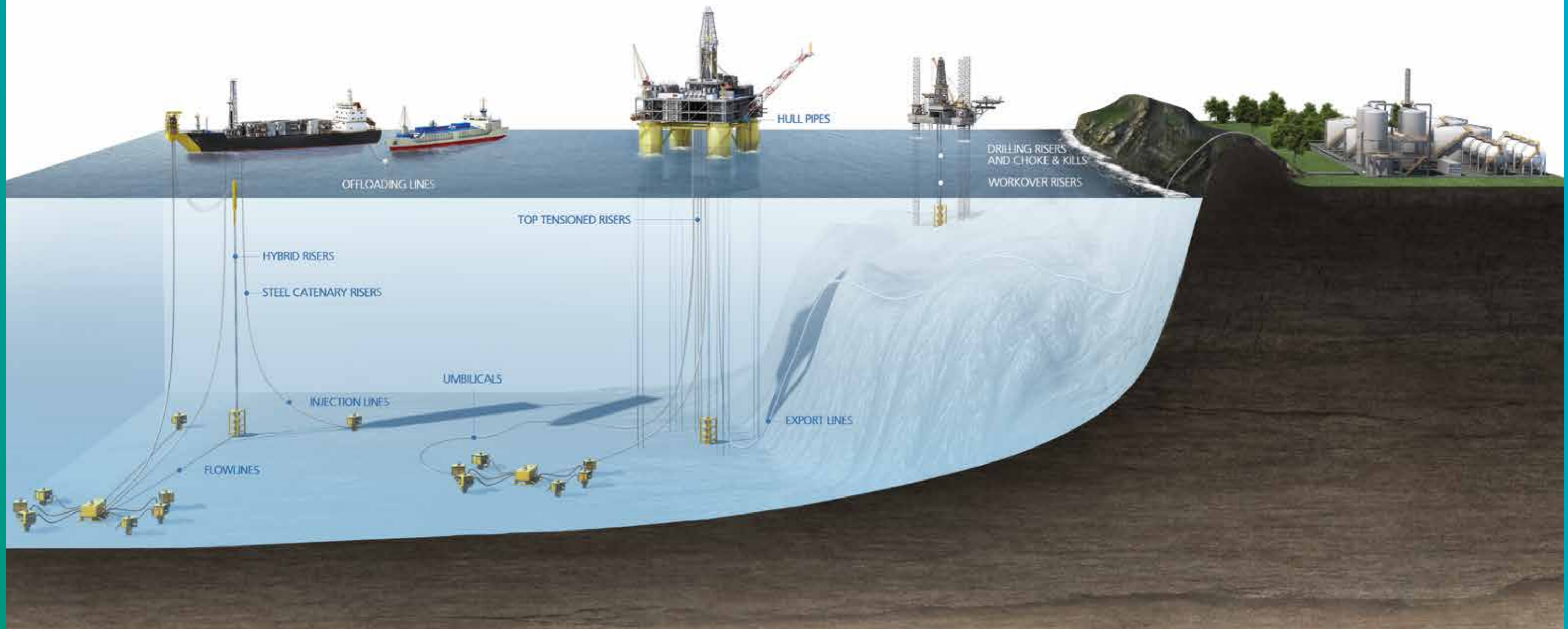
KAWASAKI  
JAPAN

RIO DE JANEIRO  
BRAZIL

DALMINE  
ITALY

# Deep experience, ultra deep expertise

Tenaris delivers a wide range of seamless and welded tubes for onshore and offshore line pipe applications, to be used in the most demanding conditions.





## A technical offer that meets all needs

Tenaris manufactures steel pipe products in a wide range of specifications, which vary in diameter, length, thickness, finishing and steel grades. Our manufacturing process includes state-of-the-art technology such as seamless, welded and coiled line pipe. All our products are manufactured and tested under the most stringent quality standards.

Tenaris's line pipe is available in sizes from 1.3" (33.0 mm) to 28" (711.2 mm) outside diameter (OD) and wall thickness (WT) of up to 2.362" (60 mm) for seamless products, and from 0.75" (19.05 mm) to 48" (1219.2 mm) OD and WT of up to 1.575" (40 mm) for welded products. They can be manufactured in different steel grades, from B up to X100, PSL1 & PSL2, and with offshore and sour service grades.

We supply corrosion resistant alloys (CRA) for customers working in highly corrosive environments. Tenaris also offers clad and lined pipes for onshore and offshore pipelines that require a balance between the mechanical properties of the C-Mn steel tube and the corrosion resistance properties.

Tenaris supplies oil and gas companies with double joint pipes (24 m / 78.740 ft long) in order to reduce costs and pipe laying times, which represent a large portion of the total capital expenditure of an offshore project.

Double jointing services are performed at our own mills or at mobile double joint plants, depending on our customers' needs.

We also supply a wide range of hot induction bends in different geometries, designs, customized radius and angle bends that differ from the conventional 45° and 90° angles.

Tenaris uses its own coating plants near its mills and also works in alliance with worldwide coating manufacturing companies to supply pipes with different coating solutions for both onshore and offshore oil and gas projects. These capabilities allow Tenaris to offer a wide variety of coating solutions, such as external anti-corrosion, internal, concrete weight and thermal insulation coatings.

We offer pipe ends dimensional services, using Laser End Measurement Systems that enable the efficient alignment of pipe ends and the minimization of Hi-Lo prior to field welding.

Our TenarisHydril Blue® Riser connection has been specially designed for use in deepwater top tensioned riser, work over riser and high pressure drilling riser applications in which outstanding fatigue resistance and sealability performance are required.

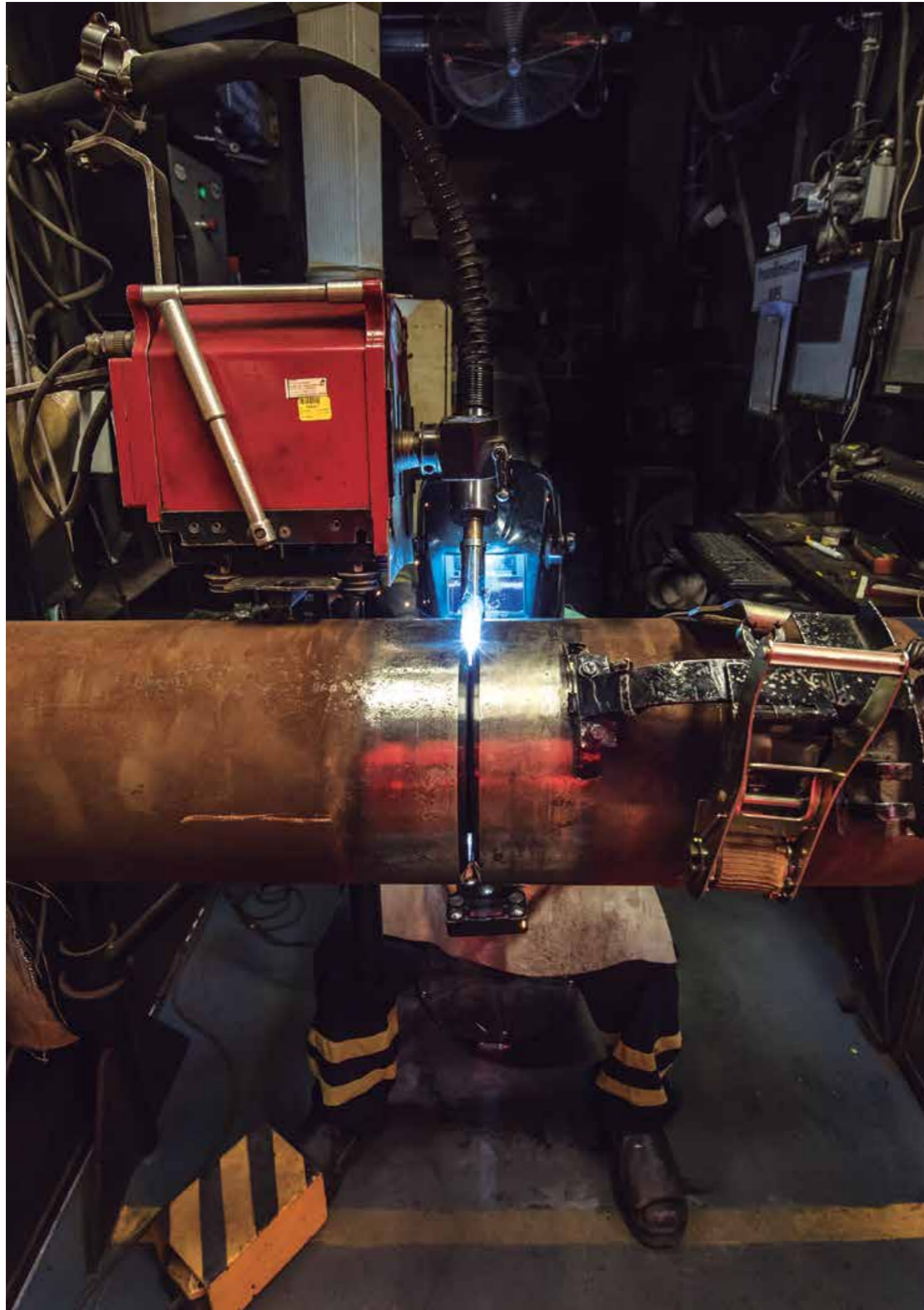
All our products are supplied with full traceability.



OUR MANUFACTURING FACILITIES ARE LOCATED IN MAJOR OIL AND GAS MARKETS, ALLOWING US TO SERVE OUR CUSTOMERS WITH A LOCAL OR REGIONAL PRESENCE.



Courtesy of TechnipFMC



## Services that promote better results



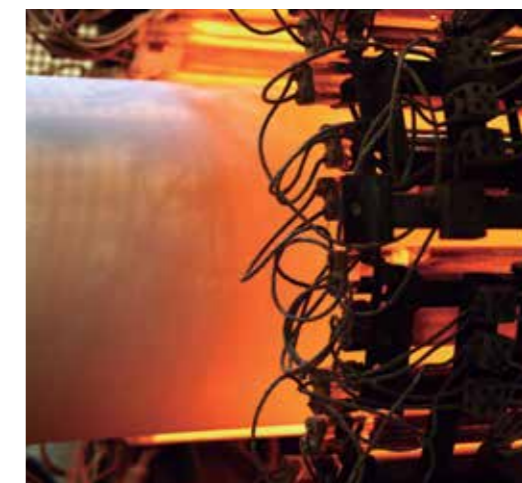
Tenaris supplies technical advice services for operations that require customized solutions. Our experts support customers during pipeline design to help them get the best out of our products in every environment.

Each oil and gas company working with Tenaris has its own Tenaris project manager, a qualified and proactive expert that keeps a direct communication channel open throughout the project.

Our pipe management services help customers reduce tubular supply chain costs and minimize inventory levels and working capitals. We offer integrated demand planning and inventory management services.

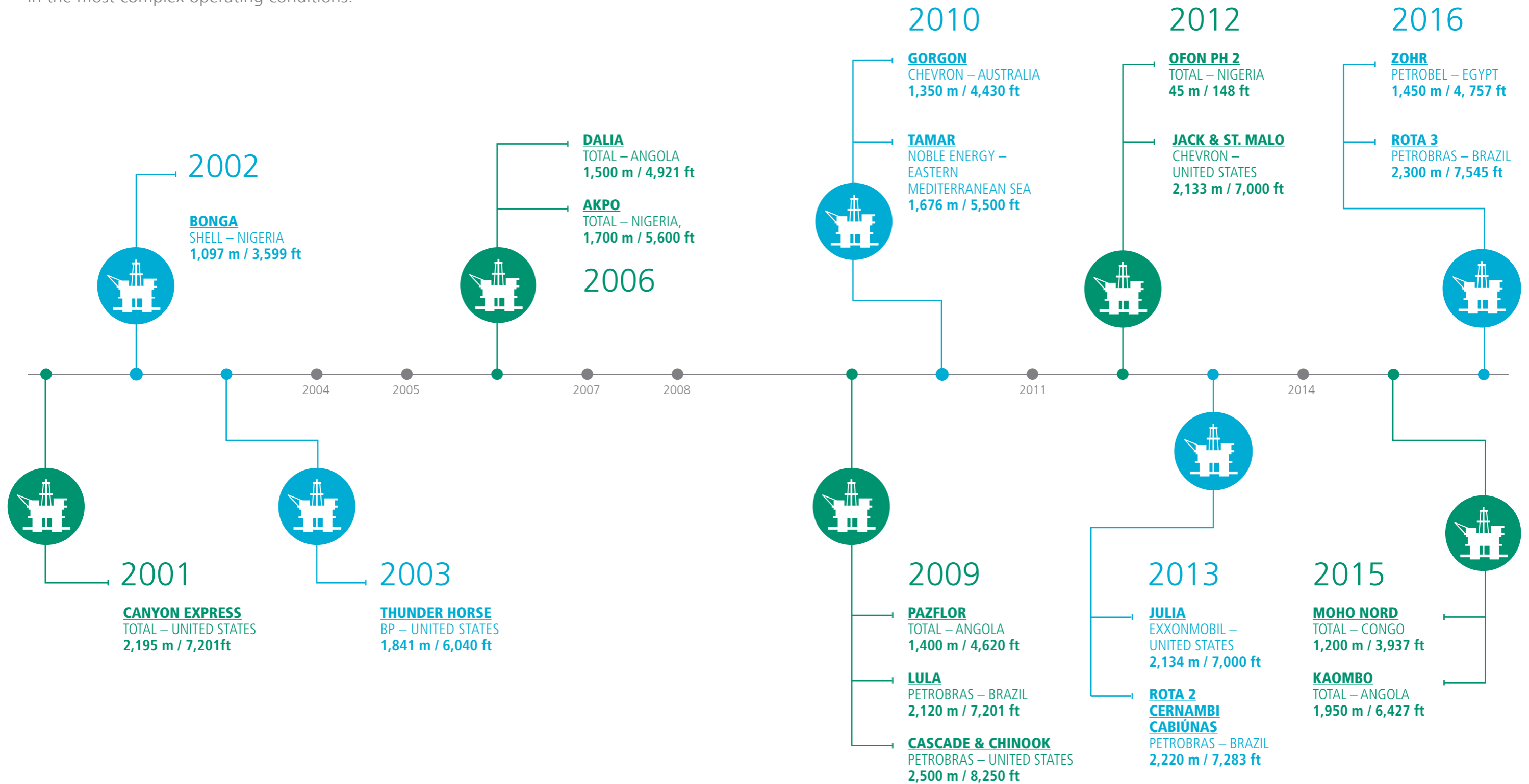
Our state-of-the-art manufacturing facilities are strategically located in major oil and gas markets, allowing us to serve our customers with a local or regional presence. We conduct as many processes as possible on site, close to our customers' operations, to promote local content and to help develop local talents in fields such as heat treatment, finishing, coating and double joints.

**ALL OUR PRODUCTS ARE MANUFACTURED AND TESTED UNDER THE MOST STRINGENT QUALITY STANDARDS.**



# An outstanding track record in a place not to compromise

More than 40 years supplying products and services in the most complex operating conditions.











For additional information, please visit:  
[www.tenaris.com](http://www.tenaris.com)

