

PROFILE  
2017  
The Techint Group

# Highlights

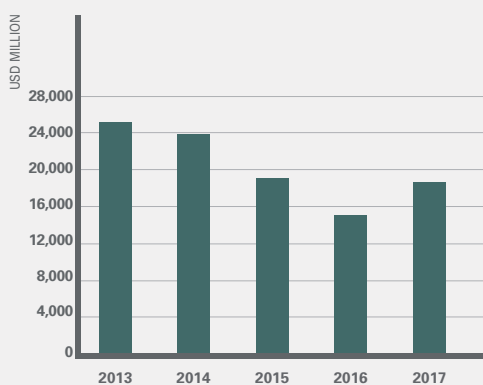
## TECHINT GROUP CONSOLIDATED COMPANIES' HIGHLIGHTS USD Million

	2013	2014	2015	2016	2017
<b>Revenues<sup>1</sup></b>	25,378	23,826	19,108	15,238	18,495
<b>Capital Expenditures<sup>2</sup></b>	2,085	2,455	2,405	1,708	1,771
<b>Total Assets</b>	33,226	34,026	29,928	29,166	34,971
<b>Permanent Employees</b>	59,429	58,257	51,191	48,530	55,383

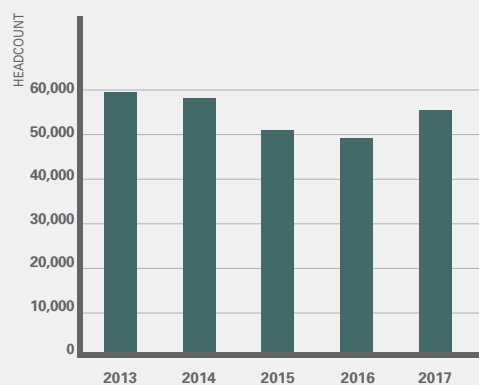
1. Includes Republic Conduit, sold in January 2017.

2. Increase before depreciation of tangible and intangible assets gross of divestitures.

### REVENUES

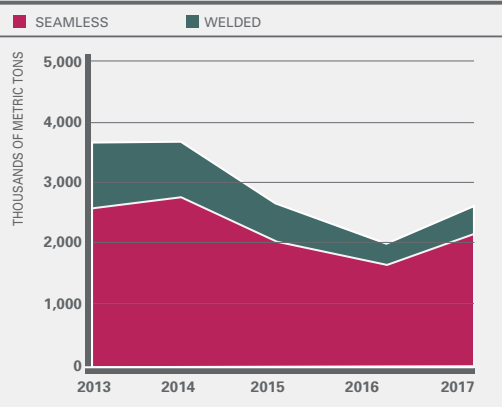


### PERMANENT EMPLOYEES

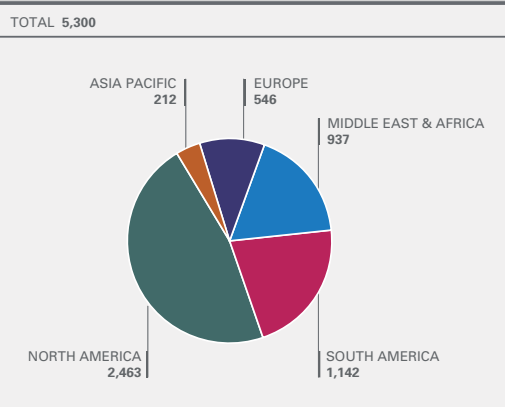


## TENARIS

### SHIPMENTS OF TUBES

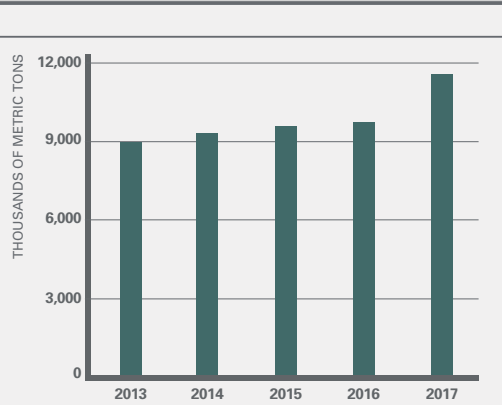


### SALES BY REGION IN 2017 USD million



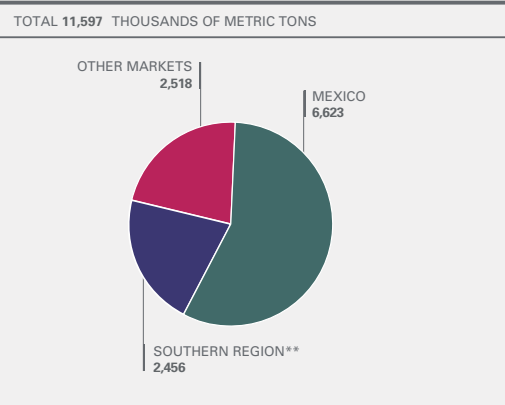
## TERNIUM

### SHIPMENTS OF STEEL PRODUCTS\*



\*Shipments of pig iron not included.

### SHIPMENTS BY REGION IN 2017\*

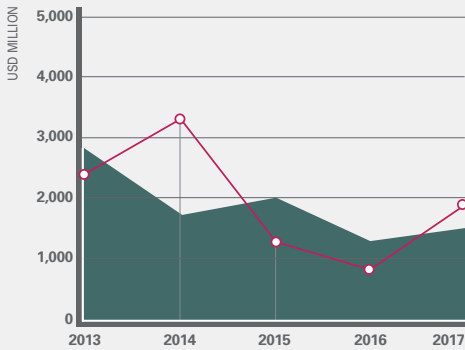


\*Shipments of pig iron not included.

\*\*The Southern Region encompasses Argentina, Bolivia, Chile, Paraguay and Uruguay.

### COMPANIES' PERFORMANCE

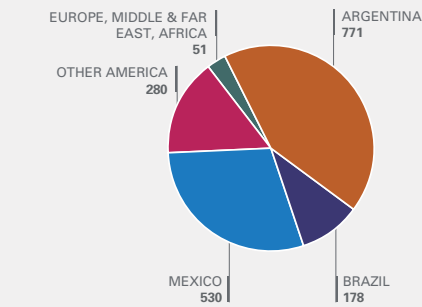
■ WORK PERFORMED ○ BACKLOG OF ORDERS\*



\*At end of period.

### BACKLOG OF ORDERS BY REGION AS OF 12/31/17 USD million

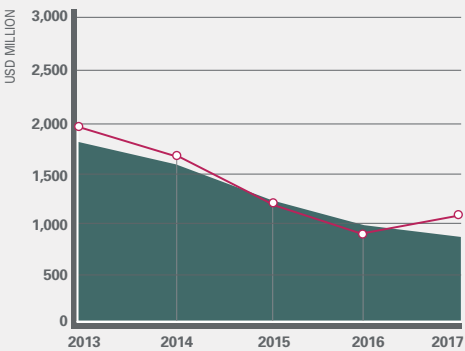
TOTAL 1,810



## TECHINT ENGINEERING & CONSTRUCTION

### TENOVA PERFORMANCE

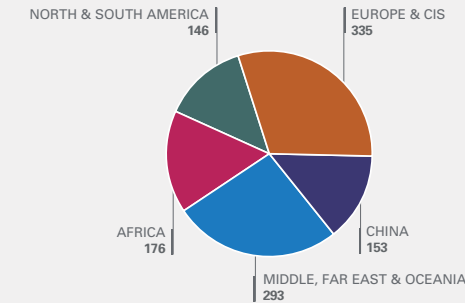
■ WORK PERFORMED ○ BACKLOG OF ORDERS\*



\*At end of period.

### BACKLOG OF ORDERS BY REGION AS OF 12/31/17 USD million

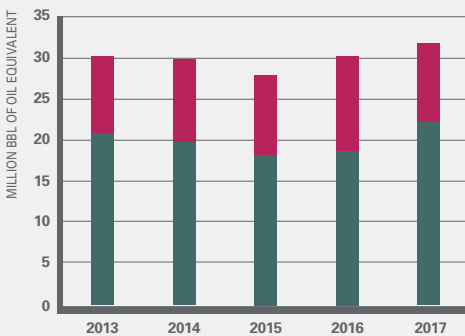
TOTAL 1,104



## TENOVA

### PRODUCTION\*

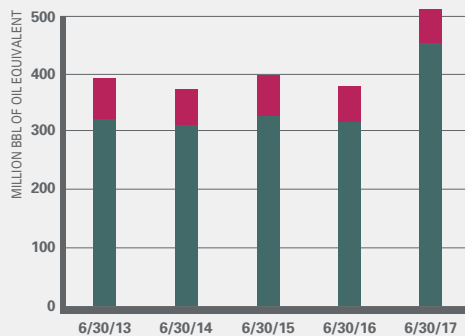
■ E&P OPERATIONS ■ SERVICE CONTRACTS



\* Own working interest.

### PROVED RESERVES\*

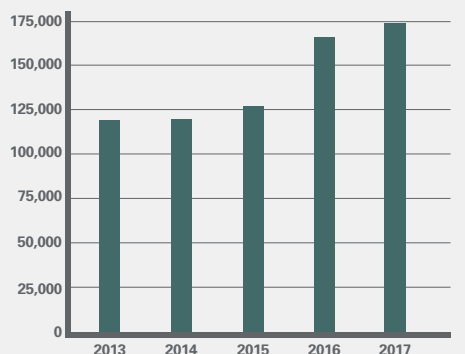
■ E&P OPERATIONS ■ SERVICE CONTRACTS



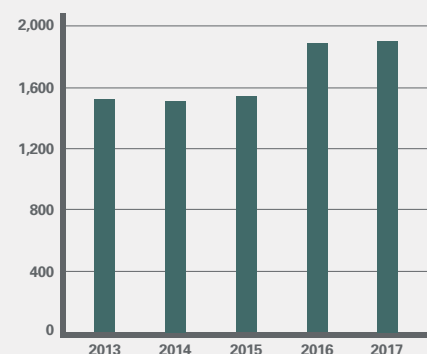
\* Own working interest.

## TECPETROL

### HUMANITAS GROUP: TOTAL ADMISSIONS



### HUMANITAS GROUP: OPERATIVE BEDS\*



\*Beds for inpatient and outpatient activity, at end of period.

## HUMANITAS

# Origins and Expansion



Agostino Rocca  
(1895-1978),  
founder of the  
Techint Group.

*“Compagnia Tecnica Internazionale” - soon named TECHINT after the original telex code - was founded as an international corporation in 1945. The founder, Agostino Rocca, was an innovative engineer, manager and entrepreneur, and a key force behind the development of the Italian steel industry in the 1930s. The company initially provided engineering services to a growing number of customers in Latin America - to where Agostino Rocca had traveled after World War II - and Europe. Construction activities soon followed: the first major Techint engineering and construction (E&C) project was a network of large diameter pipelines in Argentina and Brazil. After building the southern gas pipeline in Argentina (inaugurated in 1949) and completing*

*other pipeline projects, the E&C activities of the company extended during the 1950s to the field of power infrastructure. In those early years, the company started the production of steel structures and heavy mechanical parts and equipment near Buenos Aires in order to support the manufacturing ventures which soon followed.*

*Fueled by Rocca’s vision, the company expanded and diversified its original activities by building and then operating two seamless steel pipe manufacturing facilities, one in Veracruz, Mexico, and the other in Campana, Argentina. Both plants began production in 1954. In the late 1960s, a flat steel cold-rolling facility was built in Ensenada, Argentina, as the first step in a strategy for a fully integrated operation. Steel manufacturing was now the main industrial activity of the Techint Group.*

*In the 1960s and 1970s, E&C activities continued to grow as Techint became one of the world’s major pipeline and infrastructure builders, in addition to supplying turnkey plants for a range of manufacturing industries from steel to petrochemicals. In the 1980s, the company completed a series of major projects in Argentina, Brazil, Ecuador and Mexico, and diversified into new markets, building its first nuclear facilities and offshore oil and gas rigs. In 1980, Techint Engineering & Construction was among the first industrial companies to adopt computer aided design (CAD) systems.*

*The following decade saw the Techint E&C companies making key contributions to energy integration in the Southern Cone, laying the pipeline network to link Argentina and Chile, Bolivia and Brazil, and Brazil and Argentina. In the early 2000s, the company simultaneously undertook two of the most challenging pipeline projects ever seen in the region, overcoming a range of natural obstacles in complex environments: the OCP crude oil pipeline in Ecuador and the Camisea gas and LNG pipelines project in Peru.*

*The E&C companies also pursued projects in Egypt and Nigeria, working on the electromechanical assembly of power generation facilities and natural gas liquefaction plants. More recently, Techint E&C has built a number of regasification plants in Latin America and Europe.*

*Currently, Techint Engineering & Construction is simultaneously engaged in several large-scale projects in Argentina, Brazil, Chile, Ecuador, Egypt, France, Mexico,*

Peru, Poland, as well as other countries (see detailed references in the Techint Group Companies section of this publication). In over 70 years of activity, Techint Engineering & Construction has successfully completed more than 3,500 projects in more than 45 countries, and continues to work on major industrial and infrastructure projects around the world.



From left to right:  
Gianfelice,  
Agostino (1945-2001),  
Roberto (1922-2003)  
and Paolo Rocca.

At the same time, Techint Group's steel pipes business also continued to grow. In the mid-1980s it undertook a major, export-oriented expansion of the Campana mill and acquired Argentine welded pipe-manufacturer Siat. In the 1990s it also acquired control of the Veracruz mill in Mexico and the Dalmine seamless pipe mill in Italy. Over time, steel pipe manufacturing facilities were also acquired in Brazil, Venezuela, Japan, Canada and Romania.

Tenaris, the company under which all the manufacturing and service activities in the steel pipe business are grouped today, went public at the end of 2002. Its shares are listed on four stock exchanges: Buenos Aires, Mexico City, Milan, and on the New York Stock Exchange.

Tenaris became a leading North American producer of welded OCTG, line pipe and coiled tubing with the acquisition of Maverick Tube Corp. in 2006, and in 2007, it integrated premium connections into its USA portfolio by acquiring Hydril. Tenaris also expanded its presence in other regions by acquiring a presence in Colombia through TuboCaribe; gaining control of Seamless Pipe Indonesia Java (SPIJ), an OCTG processing business, and completing its premium threading facilities in Saudi Arabia and in China.

Over the last decade, Tenaris undertook two major investments in North America: a rolling mill in Veracruz, which began operations in 2010, and a greenfield seamless pipe mill in Bay City, Texas, which started operations late 2017. The new facility has an annual production capacity of 600,000 tons. TuboCaribe in Colombia also underwent major expansion and a new plant began operations in 2015 with an output of 250,000 tons of welded and seamless pipes.

Tenaris also increased the production of sucker rods, with an expansion of the mill in Veracruz, Mexico and the construction of a new mill in Conroe, USA.

Today, Tenaris is a leading supplier of tubes and related services for the world's energy industry and certain other industrial applications. It has an integrated worldwide network of steel pipe manufacturing, finishing, service and research facilities with industrial operations in North and South America, Europe, Asia, the Middle East and Africa, and a direct presence in most major oil and gas markets.

*Tenaris continues to strengthen its competitive position, investing heavily in research and the continuous improvement of its talented workforce.*

*Cold rolling and downstream processing of flat steel in Argentina continued to grow through the 1980s. In 1992, the Group acquired from the state a majority share of Somisa, the largest integrated flat steel plant in Argentina, and brought it up rapidly to international production standards through a major investment program.*

*Steel coating and processing capacities were also expanded in the 1990s through investments and acquisitions. All Argentine flat steel facilities were then integrated in Siderar. In 1997, the Group participated in a consortium that acquired a controlling share of Sidor, the largest steel company in Venezuela.*

*In 2005, Ternium was created with the integration of Siderar, Sidor and Hylsa. Acquired in August of that year, Hylsa was the largest steel manufacturer in Mexico, and the one with the highest level of vertical integration, from the extraction and processing of iron ore to the manufacturing of high value-added steel products.*

*In February 2006, Ternium was listed on the New York Stock Exchange.*

*In 2007, Ternium took control over Grupo Imsa, a company with a strong presence in Mexico and processing facilities in Guatemala and the United States.*

*In 2008, the Venezuelan government nationalized Sidor.*

*In 2010, Ternium completed the acquisition of Colombia-based Ferrasa, a leading long and flat steel products processor and distributor. That same year, Ternium and Nippon Steel signed an agreement to form a company in Mexico for the manufacturing and sale of hot-dip galvanized and galvanized steel sheets to serve the Mexican automobile market.*

*In January 2012, Ternium became part of the control group of Usiminas, the largest flat steel producer in Brazil with 9.5 million tons of crude steel capacity. The company has strategically located facilities near the main consumers of steel in Brazil and iron ore mines in the Serra Azul region.*

*In September of 2013, Ternium inaugurated a modern industrial center in Pesquería, Mexico, a project developed by Ternium and Tenigal, the joint venture between Ternium and Nippon Steel & Sumitomo Metal Corporation. The industrial center produces high-end steel mainly for the automotive industry, with annual processing capacity of 1.5 million tons of cold-rolled steel and 400,000 tons of galvanized steel.*

*In February 2017, Ternium announced a definitive agreement with the German conglomerate thyssenkrupp AG to acquire, for a total 1.26 billion euros plus debt, a 100% interest in thyssenkrupp Slab International B.V. and its wholly-owned subsidiary CSA Siderúrgica do Atlântico Ltda. in Brazil. The acquisition, completed in September*

2017, makes Ternium the largest steel producer in Latin America and creates a platform for a new stage of growth for the company.

With an annual production capacity of approximately 12.4 million tons of finished steel products and 4.5 million tons of iron ore, Ternium is one of the largest and most dynamic players in the Americas. The company continues to invest in its steel mills and in mining in order to increase production, improve quality and draw synergies from process integration and product specialization.

The Techint Group experience and skills in plant making have, since the beginning, been accompanied by the in-house manufacture of heavy equipment and industrial machinery. Starting in the 1980s, a series of acquisitions and expansions in Italy had multiplied the portfolio of products and leading technological solutions, particularly for the metals and raw materials industries. Important international acquisitions of leading companies took place in the mid-2000s under the Tenova brand, aimed at the dual objective of completing the offer in terms of technologies and products, and broadening and consolidating the geographical penetration. Today Tenova, founded in 2007, operates in 22 countries across five continents and its product lines include innovative technologies for the metals and mining industries.

In metals, Tenova works both upstream and downstream, continuously innovating for clients by focusing on quality, energy savings and environmental protection in areas including metal making, hot and cold rolling, processing and aluminum, and dedicated services and components.

In mining, Tenova provides integrated solutions to the global mining, bulk material handling, minerals processing and beneficiation industries, offering innovative technological solutions as well as process and commodity knowledge along the industry value chains.

During the 1990s, the Techint Group invested in oil & gas blocks in Argentina through exploration and production company Tecpetrol. In time, Tecpetrol expanded its operations in the country and developed others in Venezuela, Bolivia, Ecuador, Mexico, Peru and Colombia.

Tecpetrol also holds operating interests in gas transportation and distribution businesses in Argentina, such as Transportadora de Gas del Norte (TGN), Transportadora de Gas del Mercosur (TGM) and Litoral Gas. In 2014 Tecpetrol sold its interests in the Camisea pipelines in Peru, which it had held since their construction.

Tecpetrol continues to pursue the development of energy infrastructure projects, a synergic field of activity involving all the major strengths of the Group. Accordingly, Tecpetrol led the construction, in partnership with Tenaris and Ternium, of a power plant in Pesquería, near Monterrey, Mexico, which was inaugurated in December 2016. With an investment of USD 1 billion, the 900-MegaWatts power plant is run by Techgen and provides energy to Ternium and Tenaris facilities in Mexico.

*In 2017, Tecpetrol announced the investment of USD 2.3 billion until 2019 at the Fortín de Piedra field in Vaca Muerta for the development of shale gas in Argentina.*

*In Italy, the Techint Group entered the health services sector in the mid-1990s by building and managing Istituto Clinico Humanitas (ICH), a state-of-the-art hospital and medical research institute near Milan. Humanitas has subsequently acquired controlling interests in other important private hospitals in Milan, Bergamo, Turin, Catania and Castellanza, where the successful technology-based and patient-oriented management model originally adopted in Istituto Clinico has been replicated.*

*Humanitas continues to invest in new health and science facilities, consolidating its position as a foremost private health company in Italy.*

*For more than 10 years, Istituto Clinico Humanitas has been a teaching center for medicine, biotechnologies and nursing degrees thanks to an affiliation with the University of Milan. Its Research Center has become a world-famous hub of excellence for immune system related diseases, from cancer to rheumatoid arthritis. Since 2014, ICH also hosts Humanitas University, a private non-profit institution strictly integrated with the hospital. An international setting, innovative educational methods, cutting edge scientific research and the close integration with first rate hospital facilities are the pillars of Humanitas University. Since the end of 2017, Clinica Castelli, a prestigious clinic in the center of Bergamo, is also part of the network, which now includes eight diagnostic centers.*

*Today, the Techint Group comprises six main companies operating worldwide through numerous subsidiaries, supported by a workforce of experienced professionals and skilled workers numbering 70,900 total employees, 55,400 of which are permanent. The global annual turnover of companies of the Techint Group, public and non-public, was USD 18.5 billion in 2017. The magnitude of operations of the main companies of the Techint Group may be gleaned from the following table:*

#### **Techint Group Companies - significant data**

Tenaris: total (seamless and welded) tube shipments in 2017 (million tons)	2.6
Ternium: shipments of steel products* in 2017 (million tons)	11.6
Techint Engineering & Construction: overall annual sales as of December 31, 2017 (billions of USD)	1.4
Tenova: backlog of work as of December 31, 2017 (millions of USD)	1.1
Tecpetrol: operated & service contracts working interest in oil & gas production in 2017 (million bbl of oil equivalent)	32
Tecpetrol: operated oil and gas pipelines at end-2017 (thousand kilometers)	9
Humanitas hospitals admissions in 2017 (thousands)	174

\* Excluding pig iron.



# Values

*Techint Group companies share an original philosophy of long-term presence, commitment to local development, and a passion for quality and technology. The success and growth of its companies also reflect a management approach based on continued investment in human resources and the development of people's capacities and responsibilities in a safe working environment where teamwork is as essential as individual drive and initiative.*

*Techint Group companies are "multilocal" industrial enterprises deeply rooted in the countries where they operate, and are established with such objective in mind. Thus, they possess a thorough understanding of local cultures, and are able to recognize, and draw fully from local strengths and skills. Companies are committed to economic progress and contribute to local development and growth through their output, investment in human resources and investments aimed at improving the welfare of the communities in which they operate. They respect, care for, and contribute to the quality of the surrounding environment.*

*The management of Techint Group companies is renowned for its professionalism and for the strict financial and operational control it exercises over all ventures. Thus, Techint Group companies are ideal partners for business initiatives, and have often set up joint ventures with both local and foreign partners wherever they have an established presence.*

*Techint Group companies aim for competitiveness in international markets, relying on quality, technology and an understanding of their clients' needs.*

*Techint Group companies have always prided themselves on their ability to manage complex projects and integrate up-to-date technology in all fields of operation, beginning with the companies' own industrial and service facilities and the information and communication technology links that allow them to operate worldwide.*

*A full understanding and evaluation of clients' needs is a main principle of the Group's philosophy as companies strive to develop long-term relationships with them.*

*Respecting the philosophy of its founder, Agostino Rocca, it is not the policy of the Techint Group to engage in purely financial activities.*

Safe Hour Program:  
safety is the  
company's top  
priority.



# Activities



The AfterSchool Program promotes social inclusion through informal education and the development of socio-emotional and academic skills in pre-school children.

*During more than 70 years of activity, the companies of the Techint Group have evolved, building upon the vast amount of experience gained in such areas as steelmaking; building of complex infrastructures; design and construction of industrial plants and machinery; technologies for the metals and mining industries; oil & gas exploration and production and research-oriented health facilities.*

*All along, companies have maintained a deep commitment to efficiency, quality, integrity and respect for the value of individuals, promoting health and safety among employees, being careful of the footprint of operations on the environment, establishing transparent and constructive relations with local communities and establishing long-term relationships with customers and suppliers.*

*Today, the companies of the Techint Group are active in a small number of clearly circumscribed industries, where they have global or regional prominence:*

- **Tenaris** is a leading supplier of steel tubes and related services for the world's energy industry and certain other industrial applications;
- **Ternium** is the leading supplier of flat and long steel products in Latin America, with steel manufacturing and processing facilities, and service and distribution centers in the Americas;

- **Techint Engineering & Construction** offers integrated services ranging from design to execution for high complexity projects in the Oil & Gas, Power, Industrial Plants, Downstream & Chemicals and Mining sectors, as well as Infrastructure & Architecture Civil Works;
- **Tenova** is a worldwide partner for innovative, reliable and sustainable solutions in metals and mining, which designs technologies and develops services that help companies reduce costs, save energy, limit environmental impact and improve working conditions;
- **Tecpetrol** is dedicated to the exploration, production, transport and distribution of hydrocarbons as well as power generation in several countries in Latin America;
- **Humanitas** promotes, implements and manages health care initiatives, research and teaching.

In addition, Techint Group company **Exiros** provides a wide range of industrial procurement services to many of the above companies, negotiating more than USD 8 billion per year in purchases of raw materials, industrial goods and services for its customers.

## Tenaris

Tenaris offers advanced product technology and integrated supply chain management services on a global scale to customers that include the world's major oil & gas companies, as well as engineering and industrial companies.

Tenaris has manufacturing facilities in Argentina, Brazil, Canada, Colombia, China, Ecuador, Indonesia, Italy, Japan, Mexico, Romania, Saudi Arabia and the United States, a proprietary global service along with a worldwide distribution network.

Tenaris's annual production capacity is 3.7 million tons of seamless pipes and 2.6 million tons of welded pipes. The company employs approximately 21,600 people.

Tenaris is the world leader in premium connections and is at the forefront in the development of the tubular technologies required not only to operate in the most demanding oil & gas fields, but also in high performance mechanical and structural applications. Tenaris is a public company, incorporated in Luxembourg, with its shares listed in Milan, Buenos Aires and Mexico, and its American Depositary Securities listed on the New York Stock Exchange; it adheres to international standards of corporate governance, financial transparency and information disclosure.

## Ternium

Ternium is the leading steel producer in Latin America. It has an annual production capacity of 12.4 million tons of crude steel. The company manufactures, processes and distributes a broad range of value-added steel products - including galvanized and electro-galvanized sheets, pre-painted sheets, tinplate, welded pipes, and hot-rolled and cold-rolled steel, as well as slit and cut-to-length offerings through its service centers. It services customers active in the construction, automotive, home appliances, capital goods, packaging, and energy industries. Ternium has 21,300 employees and

*production facilities located in Argentina, Brazil, Colombia, Guatemala, Mexico and the United States. In addition, Ternium participates in the control group of Usiminas, Brazil's largest steel company. Ternium is since 2006 a public company listed on the New York Stock Exchange (NYSE:TX).*

## **Techint Engineering & Construction**

*Techint Engineering & Construction provides a range of services including project management, engineering, procurement and construction for large-scale high-complexity projects in locations around the world.*

*Backed by 70 years of experience in the market, Techint Engineering & Construction develops high complexity projects, from design to execution, taking care of the environment and the welfare of surrounding communities.*

*With around 20,000 employees worldwide, the company has successfully completed more than 3,500 projects in compliance with ISO/BS/OHSAS international standards in America, Europe, the Middle East and Africa. Currently, the company delivers services in the following market segments: Oil & Gas, Power, Industrial Plants, Downstream & Chemical, Mining, as well as Infrastructure & Architecture Civil Works.*

*The company's multilocal approach means each operation has a thorough knowledge of the technical standards, laws, regulations and tax structures applicable in each country. Similarly, Techint E&C develops relationships with the financial entities, labor unions and subcontractors in the regions where they operate, on the basis of a comprehensive understanding of local cultural norms.*

## **Tenova**

*Tenova is a worldwide partner for innovative, reliable and sustainable solutions in the metals and mining industries. Leveraging a staff of more than 3,000 forward-thinking employees across five continents, Tenova shares the long-standing principles of its industrial group and better understands its partners' needs.*

*The company works alongside client-partners to design and develop innovative technologies and services that improve their business both today and in the future, creating solutions that help mining and metals companies reduce costs, save energy, limit environmental impact and improve working conditions for their employees. Together, the people of Tenova share a strong sense of passion for their work. By channeling this passion through professional expertise, they are able to anticipate trends and transformations within the industry, helping clients identify and take advantage of new opportunities the moment they're available.*

## **Tecpetrol**

*The Techint Group has a long-standing record of involvement in the American continent's potential for energy development and integration. With privately held Tecpetrol, it is active in the exploration and production of oil & gas fields in Argentina, Bolivia, Colombia, Ecuador, Mexico, Peru and Venezuela.*

*Tecpetrol also participates in the operation of gas transportation companies, among*

*them Transportadora de Gas del Norte (TGN), Transportadora de Gas del Mercosur (TGM), Litoral Gas in Argentina, as well as other energy-related developments. The company also offers maintenance services to Pemex in Mexico, in the Sistema 3 project. Tecpetrol achieves synergies with Techint Engineering & Construction, a top-ranking builder of oil & gas pipelines and facilities worldwide. With Tenaris and Ternium as partners in a company called Techgen, Tecpetrol has built and runs Central Eléctrica Pesquería, a combined cycle power plant in northeast Mexico.*

## **Humanitas**

*In Italy, the Techint Group is active in health care through the Istituto Clinico Humanitas and the Humanitas Group. Humanitas promotes, implements and manages health care initiatives, research and teaching.*

*The Humanitas Group includes the well-established, research- and teaching-focused Istituto Clinico Humanitas hospital near Milan, built by Techint, and prestigious private accredited hospitals in Milan, Bergamo, Turin, Catania and Castellanza (Varese). The delivery of health care in these structures is based on Humanitas' economically successful, patient-oriented management model, supported by state-of-the-art technologies.*

*In 2014, Humanitas established an international medical university integrated with its hospital near Milan. Innovative educational methods, the close integration with first-rate facilities and cutting-edge scientific research are the pillars of Humanitas University. The autumn of 2017 marked the opening of the new Humanitas University Campus.*

## **Exiros**

*Exiros is a global company that offers integral procurement solutions, from suppliers scouting activities to inventory management and trading of raw materials, production materials and equipment. Exiros centralizes the purchasing operations of Tenaris and Ternium, the steel business companies of the Techint Group, and a portion of Techint Engineering & Construction's, consolidating over 8 billion dollars in purchases of a wide range of categories, including the aforementioned in trading, plus supplies, transport and services. The company employs 436 people in Argentina, Brazil, Canada, China, Colombia, Guatemala, Italy, Indonesia, Mexico, Nigeria, Romania, The Netherlands, Uruguay, and the United States.*

*Fully owned by Tenaris and Ternium, Exiros aims to increase the efficiency of its shareholders' supply chains, leveraging on the support of more than 13,970 active suppliers and performing more than 730,000 transactions every year.*

# Techint Group Companies

## TENARIS



## TERNIUM



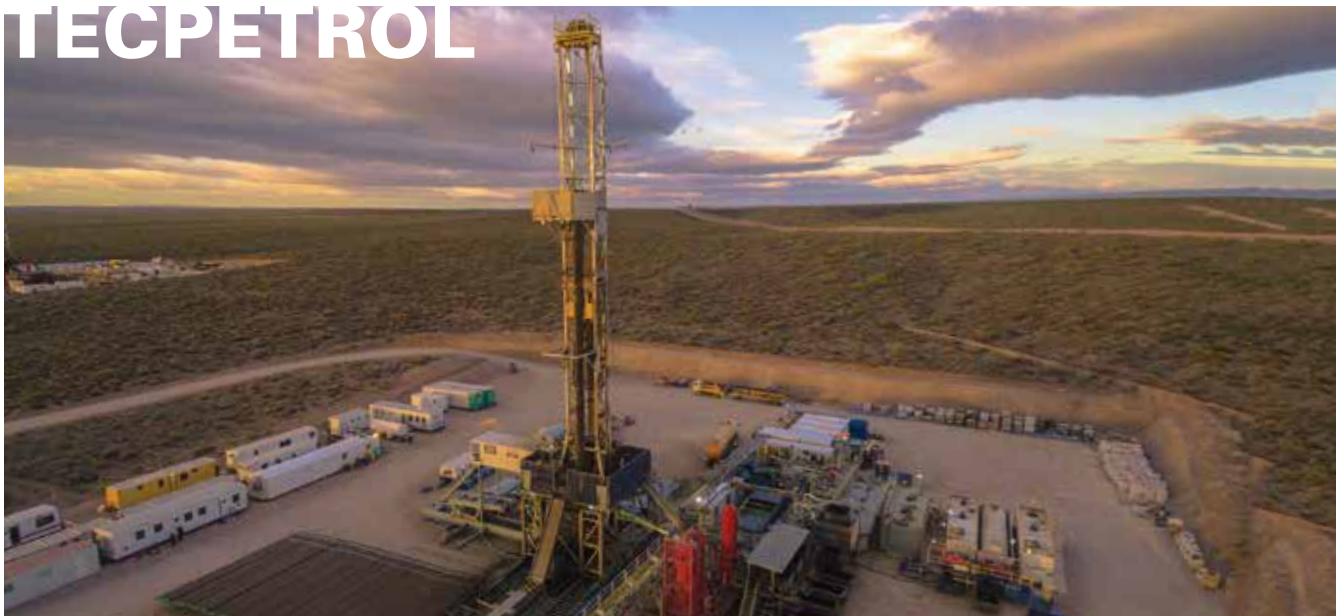
## TECHINT ENGINEERING & CONSTRUCTION



# TENOVA



# TECPETROL



# HUMANITAS



TECHINT GROUP COMPANIES

# Techint Group Companies in the World

