PROFILE
2018
The Techint Group
Highlights

TECHINT GROUP HIGHLIGHTS USD Million

<table>
<thead>
<tr>
<th></th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenues¹</td>
<td>23,826</td>
<td>19,108</td>
<td>15,238</td>
<td>18,495</td>
<td>23,490</td>
</tr>
<tr>
<td>Permanent Employees</td>
<td>58,257</td>
<td>51,191</td>
<td>48,530</td>
<td>55,383</td>
<td>57,074</td>
</tr>
</tbody>
</table>

1. Includes Republic Conduit, sold in January 2017.

REVENUES

PERMANENT EMPLOYEES

TERNIUM

SHIPMENTS OF STEEL PRODUCTS*

SALES BY REGION IN 2018 USD million

SALES BY REGION IN 2018 USD million

TENARIS

SHIPMENTS OF TUBES

TOTAL 7,859

ASIA PACIFIC 300
EUROPE 725
MIDDLE EAST & AFRICA 1,560
NORTH AMERICA 3,612
SOUTH AMERICA 1,462
OTHER MARKETS 3,177
MEXICO 3,343
SOUTHERN REGION 1,594

*Shipments of pig iron not included.
**TECHINT ENGINEERING & CONSTRUCTION**

**HIGHLIGHTS**

**BACKLOG OF ORDERS BY REGION AS OF 12/31/18 USD million**

- **TOTAL**: 1,218 million

- **EUROPE, MIDDLE EAST, AFRICA**
  - Argentina: 315 million
  - Middle, Far East & Oceania: 245 million
  - Africa: 94 million

- **OTHER AMERICA**
  - South America: 326 million

- **MEXICO**: 252 million

- **BRAZIL**: 282 million

**REVENUES ORDER INTAKE**

- **COMPANIES' PERFORMANCE**
  - 2014: 1,500 million
  - 2015: 1,200 million
  - 2016: 1,000 million
  - 2017: 800 million
  - 2018: 600 million

**TENOVA**

**BACKLOG OF ORDERS BY REGION AS OF 12/31/18 USD million**

- **TOTAL**: 1,178 million

- **MIDDLE, FAR EAST & OCEANIA**: 245 million

- **AFRICA**: 94 million

- **CHINA**: 172 million

- **EUROPE & CIS**: 309 million

- **NORTH & SOUTH AMERICA**: 357 million

**TECPETROL**

**PRODUCTION***

- **2014**: 0 million
- **2015**: 20 million
- **2016**: 30 million
- **2017**: 40 million

**PROVED RESERVES***

- **2014**: 0 million
- **2015**: 150 million
- **2016**: 300 million
- **2017**: 450 million

**E&P OPERATIONS SERVICE CONTRACTS**

- **6/30/17**: 6/30/18

**HUMANITAS GROUP: IMPACT FACTOR***

- **2014**: 0
- **2015**: 200,000
- **2016**: 300,000
- **2017**: 400,000
- **2018**: 500,000

**HUMANITAS GROUP: UNIQUE CLIENTS**

- **2014**: 100,000
- **2015**: 200,000
- **2016**: 300,000
- **2017**: 600,000
- **2018**: 1,000,000

**HUMANITAS**

* Own working interest.

* Widely established measure of the quality and resonance of scientific publications.
“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 Engineering & Construction has built a number of regasification plants in Latin America and Europe.

Currently, Techint E&C is simultaneously engaged in several large-scale projects in different countries (see detailed references in the Techint Group Companies section).
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.

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, and has an annual production capacity of 600,000 tons. TuboCaribe in Colombia also underwent major expansion, and in 2015, its plant began operations 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.

The company’s most recent expansion projects aim to bolster its global positioning in two relevant oil and gas markets - Saudi Arabia and Russia. In late 2018, Tenaris entered into an agreement to acquire 47.79 percent of the shares of Saudi Steel Pipe Company (SSP), a welded pipe producer, expanding Tenaris’s product portfolio and services scope. The acquisition closed at the beginning of 2019.
In early 2019, Tenaris announced a USD 240 million joint venture with Severstal to build a welded pipe plant in West Siberia to better serve a growing market for OCTG pipe products.

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 galvannealed 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 a 100% ownership 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, made Ternium the largest steel producer in Latin America and created a platform for a new stage of growth for the company.

In September 2017, Ternium announced the construction of a new hot-rolling mill in Pesquería, which will enable the company to expand its product range in the country. In addition, recently announced new hot-dip galvanizing and pre-painting facilities also in Pesquería, strengthen its value chain and substituting imports.

These two new lines will begin operations in 2019 and the new hot-rolling mill, which will be a state-of-the-art facility, will be ready by 2020.

With an annual production capacity of approximately 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 led important oil & gas exploration and production operations in Argentina through Tecpetrol. In view of the results, Tecpetrol expanded its operations in Argentina and other countries of the region, such as Peru, Ecuador, Mexico, Colombia, Bolivia and Venezuela.

Tecpetrol also holds operating interests in other gas transportation and distribution companies that operate in Argentina, namely Transportadora de Gas del Norte (TGN), Transportadora de Gas del Mercosur (TGM) and Litoral Gas.
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 leads the operation, in partnership with Ternium and Tenaris, of a gas combined cycle power plant in Pesquería, near Monterrey, Mexico, which was inaugurated in December 2016. With an investment of USD 1 billion, the 900-MegaWatts plant 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. By the end of 2018, Tecpetrol had already allocated USD 1.6 billion and achieved a level of production of 600 million cubic feet/day. This amount represents 13% of Argentina’s gas production.

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. The Humanitas network today includes nine hospitals and 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 74,500 total employees, 57,100 of which are permanent.

The global annual turnover of companies of the Techint Group, public and non-public, was USD 23.5 billion in 2018. The magnitude of operations of the main companies of the Techint Group may be gleaned from the following table:

<table>
<thead>
<tr>
<th>Techint Group Companies - significant data</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Tenaris: total (seamless and welded) tube shipments in 2018 (million tons)</td>
<td>3.6</td>
</tr>
<tr>
<td>Ternium: shipments of steel products* in 2018 (million tons)</td>
<td>12.9</td>
</tr>
<tr>
<td>Techint Engineering &amp; Construction: overall annual sales as of December 31, 2018 (billion of USD)</td>
<td>1.6</td>
</tr>
<tr>
<td>Tenova: backlog of work as of December 31, 2018 (billion of USD)</td>
<td>1.2</td>
</tr>
<tr>
<td>Tecpetrol: oil &amp; gas working interest including service contracts in 2018: (thousands bbl of oil equivalent/ day)</td>
<td>124</td>
</tr>
<tr>
<td>Humanitas: unique clients in 2018 (thousands)</td>
<td>927</td>
</tr>
</tbody>
</table>

* 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.
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 a 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 a leading energy company dedicated to the exploration, production, transportation and distribution of hydrocarbons as well as power generation. The company operates in several Latin American countries, including Argentina, Bolivia, Colombia, Ecuador, Mexico, Peru and Venezuela;
- **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 USD 9 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 4.3 million tons of seamless pipes and 2.6 million tons of welded pipes.

The company employs approximately 23,500 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 a 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 20,700 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 more than 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 more than 20,500 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 are available.
**Tecpetrol**

Tecpetrol has a long-standing record of leading large and complex energy projects in Latin America. These projects are related to upstream and midstream activities of the oil and gas industry and to the power generation industry. The fast-track development of unconventional resources in Vaca Muerta, a major Argentine field, has consolidated Tecpetrol as a regional leader in this area. The company has vast experience operating mature fields, applying enhanced recovery methods in order to extract the largest amount of oil available in the reservoirs.

**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. Today the Humanitas Group also includes 12 diagnostics centers: an innovative way of doing healthcare by meeting citizens and their health and prevention needs directly on the territory.

In 2014, Humanitas established an international medical university integrated with its hospital near Milan. Innovative educational methods, 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 and the autumn of 2018 the opening of Mario Luzzatto Student House.

**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 near 9 billion dollars in purchases of a wide range of categories, including the aforementioned in trading, plus supplies, transport and services. The company employs more than 500 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 13,580 active suppliers and performing more than 840,000 transactions every year.
Techint Group Companies

TENARIS

TERNIUM

TECHINT ENGINEERING & CONSTRUCTION
TENOVA

TECPETROL

HUMANITAS