

Providing complete solutions to improve and simplify the production process through an integrated system of technologies and services: The Compact Supply Chain™.



Forgital Italy

With a tradition of more than one hundred years in the production of hot-rolling rings made of steel and other alloys, the factory has three hot-working lines, a complete range of over 20 furnaces for heat treatments and an extended machining capacity.

1873



Forgital Dembiermont

Equipped with one of most powerful rolling mills in Europe, the company can work with all types of material grades: from ordinary carbon steels to alloys to meet the most critical engineering requirements.

1881



Forgital FMDL

Amongst the most important European manufacturing unit specialized in small and medium-sized rolled rings up to a maximum of 20 tons of weight, can also offer a unique experience and know how in open-die forging.

1938 ----



Forgital USA

Forgital USA, headquartered in Houston, has manufacturing capabilities that complement The Forgital Group's ones, and is designed to closely support and serve key customers with warehouse and logistics facilities strategically located throughout the U.S.

1983



Forgital South America

The brand new plant is located in Buenos Aires area, and offers Customers the whole family of The Forgital Group products. Can also accept subcontracting heat treating and machining of your own products, up to 5m diameter and 20t weight.

2008 ————





The Forgital Group Today

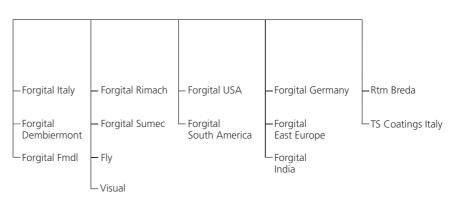
Turnover 250 M Employees 1100 Weight 100.000 ton

Worldwide Sales 16

TODAY -



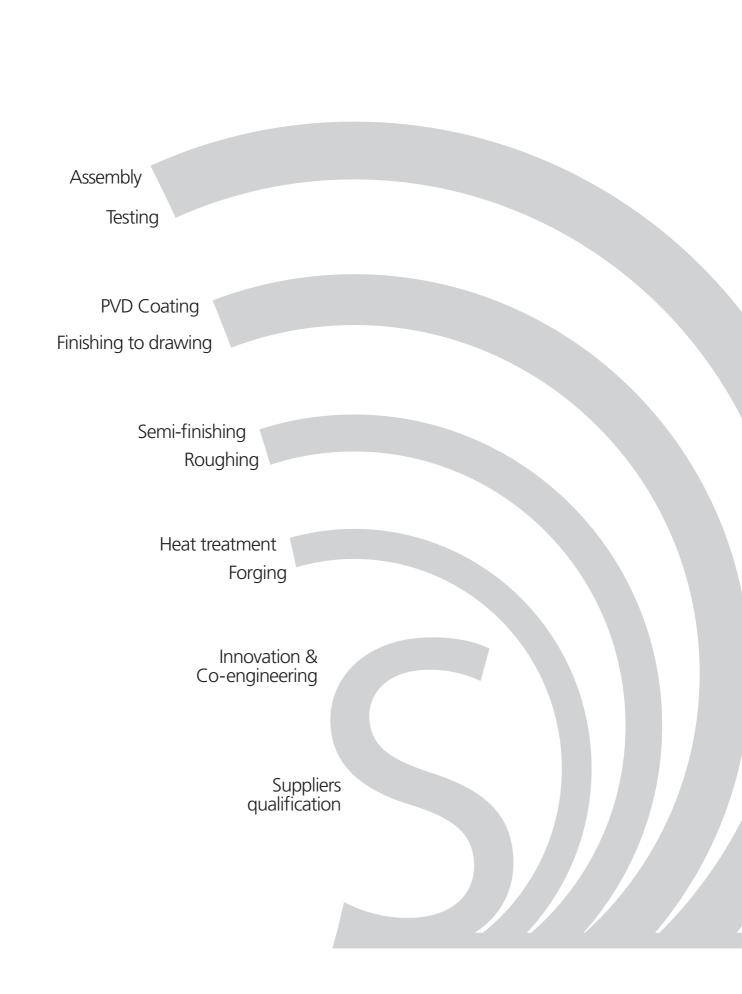
The Forgital Group



Production Machining Production Commercial R&D Subsidiary

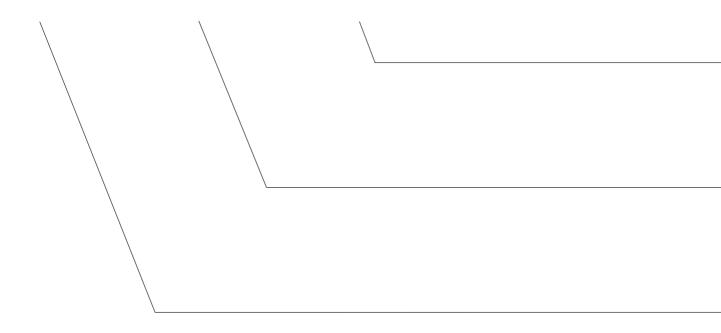
The Integrated Solutions Group

Compact Supply Chain Why does it work better?



A unique partner for a complete answer

Mechanical Testing Chemical Analysis Corrosion Test Metallography Non-destructive test Failure Analysis Engineering and Research Structural Engineering Temperature measurement Deposition, characterization and development of thin and anti-wear coatings, by cathodic arc or sputtering technique. DLC, TiN, CrN, AlTiN, TiCN, ZrN, CrN-NbN Superlattice The Forgital Group can offer a professional, technical assembly service according to customers' specific requests (Aerospace and Power Generation projects)









Post-processing phase

PVD Coating



Testing



Suppliers qualification



Innovation & Co-engineering

ocessing hase



Forging



Heat treatment

Processing phase



Roughing



Semi finishing



Finishing to drawing The Forgital Group's suppliers selection and qualification process is aimed to offer the maximum reliability and excellent quality standards in raw materials such as: carbon steel, low and high alloyed steel, stainless steel, duplex & superduplex steel, nickel base alloys, aluminium, titanium.

The concurrent engineering activities provide customers with support in the critical design stage of the piece and define the most suitable profile for forging, the most appropriate heat treatment, and different options in the use of the materials.

1100 Employees240 Qualified technicians

EDUCATION University degree 17% High school degree 48% Secondary school 35%

Extremely qualified personnel and high technology equipment guarantee the maximum quality standards, offering the solution for parts from 300 mm to 8000 mm.

85 Machines520 Skilled workers

The heat treatments range offered by The Forgital Group is supported by a unique technical expertise progressively refined in countless and diverse sectors of the engineering industry, and obtained from developing parts required to meet the most critical conditions.

- 41 Heat treatment furnaces
- 15 Are Nadcap certificated
- 17 Baths (water, oil, polymer)

Many years' experience across a broad spectrum of forging processes applied to the most varied industrial frameworks.

100.000 Tons of raw material capacity

- 7 Hydraulic presses, ranging from 1200 to 8000 tons.
- 6 Hot rolling mills
- 54 Heating furnaces

The Forgital Lean Management System

operational excellence team

guarantees the continuity of improvement processes

1. Clear definition of processes

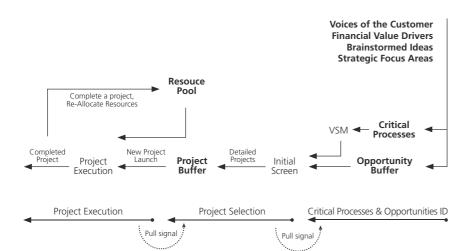




Focus on added value for the customer

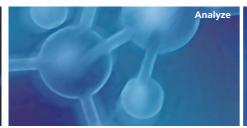
Value-adding activities transform materials and information into something precious for customer by:

- Specifying value from the perspective of the customer.
- Mapping the value stream from customer point of view.
- Creating continuous flow with capable and efficient processes.
- Customer needs pulling production and info flow.



> 2. Consistant organization of people

Creating a system focusing towards shared objectives







Systematic elimination of waste

- Efficient plant layout and fast/accurate flow of materials and information.
- Reducing equipment changeover times and cross-functional training.
- Flow rates, processing times, and quality.
- Eliminate non-value adding activities (transportation, inspection, rework).

The waste reduction process includes:

- Stop defective products at their source.
- Flow processes together.
- Eliminate excess material handling or costly handling steps.
- Eliminate or reduce pointless process steps.
- Reduce the time spent waiting for parts, orders, other people, information.

When waste is reduced or eliminated across the supply chain, overall cycle time is improved, labor and staff costs are reduced, product quality and delivery are improved, inventories are reduced, and customer lead-times are shortened. The net effect is that the entire supply chain is more efficient and responsive to customer needs.

High Reliability Organization

A so called "High Reliability Organization" ("HRO") is an organization that has succeeded in avoiding catastrophes and big mistakes in an environment where normal accidents can be expected due to risky technologies, demanding performance standards and organizational complexity. HROs require an organizational model where leaders and members interact freely and continuously for developing, refining and updating a shared understanding of the situation they face and their capabilities to act on that understanding, which jointly contribute to the system's overall culture of safety and performance.

Creation of synchronized, fast and efficient production and transactional flows

- Fast and accurate flow of materials and information through a strongly capital intensive plan.
- Synchronization of transactional and manufacturing processes.
- Alignment of people organization with each process.

An expertise extended through different markets

Aerospace Aero Engine Space Oil&Gas Deep Water Surface





The Forgital Group's activities in the aerospace sector began with the project for the Ariane IV launcher and developed along with Ariane V, Vega, PSLV and GSLV programmes. In recent years The Forgital Group has entered the aero engine market and the restricted circle of companies qualified in the supply of important airplane engine components - turbojet and turboprop - for the most important aircraft currently in production.

The Forgital Group owes the oilfield sector the beginning of its experience in hot rolling profile of simple and complex shapes. Particular attention has been dedicated to this field, with strong investments to optimize productivity and consequent cost reduction, with great competitive advantages and qualitative improvements. The exasperated uses increased the technical specialization that The Forgital Group can offer to its clientele.





Transmission Gear Wheel Bearing

Power Generation Steam and Gas Turbines Wind, Hydro and Nuclear power plants

General Mechanics

Chemical Equipment Shipbuilding Steel Mill Equipment Construction and Mining







The extreme applications, and the need for guaranteed quality, long service life, logistical flexibility and competitiveness in the sector provide continuous stimuli for progress. This approach confirms The Forgital Group as the ideal partner for the most sophisticated constructors and for manufacturers engaged in mass production.

The decisive leadership boasted by The Forgital Group in the Power Generation Sector originated in the early seventies with the involvement of the company in great nuclear energy development projects in Europe.

All the products are often in winning competition with more traditional technologies. The experience matured in the sector has allowed The Forgital Group to consolidate the organization of its internal processes in line with Quality Guarantee principles.

This Sector is characterized by the great commitment required from all parts of the company because of the variety of needs expressed by General Mechanics.

The Forgital Group not only makes its rolled

The Forgital Group not only makes its rolled rings but also its consultancy available to its clientele, composed above all of small users. This consultancy ranges from the choice of materials, to the definition of configurations and the realization of the quality control specifications.







Quality, Environment and Safety

Management Systems for Quality, Environment, Health and Safety, in other words **attention to customer's explicit and implicit requirements**, aiming at the maximum **respect for the Environment** and guaranteeing **healthy and safe** factories: these are the foundations on which The Forgital Group implements international standards in its organization that are appropriate for its various constituent structures, while certifying the management systems with independent inspection bodies. Ethics, and the verification of full compliance with them accompany our daily operations.

Quality system

Quality has always been an objective in which The Forgital Group is profoundly convinced and which is rooted in the company's tradition.

Forgital Italy was the first Italian company in the sector to qualify according to AS/EN 9100, a qualification which was obtained in January 2004.

Continuing its path towards production excellence, The Forgital Group has achieved numerous certifications both for its system and its products. These certifications, issued by the most important international bodies, regard particular procedures and special internal processes codified in dedicated procedures. These attestations principally testify to the company's ability to manufacture hi-tech, high-quality products for specific applications.

NADCAP Accreditation for HEAT TREATMENT

OHSAS 18001:2007

ISO 14001

MANUFACTURER ACCORDING TO AD-2000 MB and PED 97/23/EC [TUeV]

STEEL FORGINGS FOR SHIPS AND MOBILE OFFSHORE UNITS [DNV]

FORGINGS IN CARBON, CARBON-MANGANESE ALLOY AND AUSTENITIC STAINLESS STEEL [Lloyd's]

SEAMLESS, PROFILED ROLLED RING FORGINGS [Bureau Veritas]

APPROVAL OF MATERIAL MANUFACTURERS [GERMANISCHER Lloyd]

FORGING FACILITY AND PROCESS APPROVAL [AMERICAN BUREAU SHIPPING]

RULES FOR THE APPROVAL OF MANUFACTURES OF MATERIALS [RINA]

CONSTRUCTION PRODUCTS DIRECTIVE (CPD) & 93/68/EEC [TÜV]

NORSOK

FLY SpA NADCAP Accreditation for NDT, CHEMICAL PROCESSES, WELDING

ALSTOM - Pre qualified Supplier

AGUSTA - Forgings and forged and seamless rolled - Steel Heat Treatment

AVIO - Special processes - Heating for Hot Working, Forgings rolled rings & Heat Treatment

CATYPH - NPO SATURN -Special process - Heat Treatment

GE AVIATION System - Approval for material supplier

GE TRANSPORTATION AVIATION - Special process certifications

PRATT& WHITNEY- Forgings

ROLLS ROYCE plc - Qualification Spec. MSRR 9951, MSRR 9968, MSRR 9969, RPS 707, MSRR 9922 MSR 9920

SNECMA - Heat Treatment

SKODA JS - Forged semi-product for nuclear project

HITACHI - Material planning, Thermal Refinig, Forging

CATERPILLAR - Supplier Quality Excellence Process - Award for Platinum Level

























Contact us

Forgital Italy

Via G. Spezzapria, 1 36010 Velo d'Astico località Seghe (VI), Italy

Tel +39 0445 731 313 Fax +39 0445 731 490 forgitalitaly@forgital.com

Forgital Dembiermont

4, Rue Jules Campagne BP 10089 Hautmont 59618 Maubeuge Cedex, France

Tel +33 (0) 327 697 373 Fax +33 (0) 327 697 385 forgitaldembiermont@forgital.com

Forgital Fmdl

48, Boulevard d'Auvergne 42500 Le Chambon-Feugerolles France

Tel +33 (0) 477 405 370 Fax +33 (0) 477 563 057 forgitalfmdl@forgital.com

Fly

Zona Industriale, 19 38055 Grigno (TN), Italy

Tel +39 0461 775 711 Fax +39 0461 775 720 info@fly.tn.it

Forgital USA

8989 Monroe Road 77061 Houston, Texas

Tel +1 713 943 7059 Fax +1 713 943 8894 forgitalusa@forgital.com

Forgital South America

Ruta 6 s/n, km 176,5 2814 - Carlos Lemée Exaltación de la Cruz Buenos Aires, Argentina

Tel / Fax +54 2304 441 300 forgitalsouthamerica@forgital.com

Forgital India

Trishna – A, 15, 7[™] Main Road, R.A. Puram, Chennai – 600028, India

Tel +91 44 24359841 forgitalindia@forgital.com

Forgital Germany

Max-Planck-Straße 3 D-12489 Berlin, Germany

Tel +49 (0) 303 384 73 63 Fax +49 (0) 303 384 73 69 forgitalgermany@forgital.com

Forgital East Europe

Lidická 47 370 01 Ceské Budejovice Czech Republic

Tel / Fax +420 387 311 632 forgitaleasteurope@forgital.com

Rtm Breda

Via Po, 84 20032 Cormano (MI), Italy

Tel +39 02 615 439 11 Fax +39 02 615 439 00 info@rtmbreda.it

TS Coatings Italy

Via Fabio Filzi, 60 20032 Cormano (MI), Italy

Tel +39 02 615 439 11 Fax +39 02 615 439 43 info@tscoatings.it