

FIVES, AN INDUSTRIAL
ENGINEERING GROUP,
designs and supplies
machines, process
equipment and production
lines for the world's largest
industrial players.

MORE INFO

www.fivesgroup.com

www.plantsofthefuture.com



OTHER DOCUMENTS

- *Annual and CSR Report*
- *Financial Report*



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75009 Paris - FRANCE



Fives at a glance

| 2018



FIVES OVERVIEW



Fives, an industrial engineering group, designs and supplies machines, process equipment and production lines for the world's largest industrial players.

Fives' multisector expertise provides a global vision of industries and markets that yield a continuous source of innovation.

The Group's industry knowledge and depth of experience enable the management of complex projects while respecting deadlines and fulfilling performance commitments.

Fives R&D programs design forward-thinking industrial solutions that anticipate clients' needs in terms of profitability, safety, while maintaining compliance with environmental standards.

This strategy is backed by a human resources policy that is focused on the individual, encourages initiative-taking and technical excellence.

Expertise
**DESIGN
SUPPLY
INSTALLATION
PROJECT
MANAGEMENT
SERVICE**

€2,117 million of order intake

€1,896 million of sales

€34.9 million spent on R&D
2,169 patents in force

Close to
8,700 employees

A network of over
100 operational units
in nearly 30 countries

KEY INDUSTRIES
aerospace • aluminium •
automotive • cement and
minerals • energy • glass •
logistics • steel...

More than 200 years of history

FIVES

GLOBAL PRESENCE AND REFERENCES

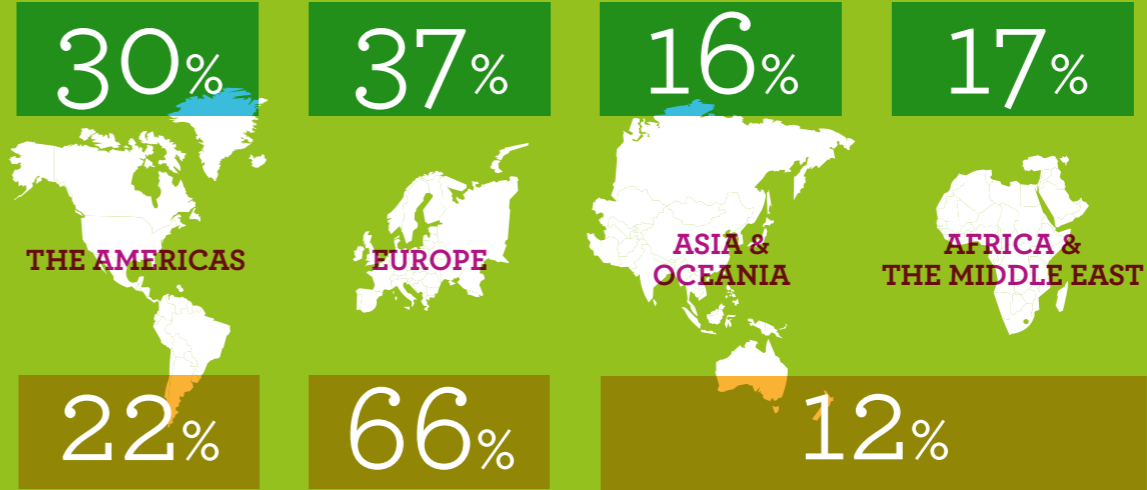
FIVES AT A GLANCE

Fives has an extensive global presence with a network of over 100 operational units in nearly 30 countries. From the single component and machines to the complete production lines, the customers and solutions are worldwide.

Fives' international multisector expertise gives the Group a panoramic overview of the industrial world on global scale.

The Group relies on expert teams dedicated to design, project management, commissioning, service and maintenance which brings it closer to its customers. This network also gives Fives the ability to draw on the experience of all its companies in any region of the world providing flexibility and responsiveness.

ORDER INTAKE BY GEOGRAPHICAL AREA



Thousands of
EQUIPMENT
OR SOLUTIONS
INSTALLED
WORLDWIDE

EMPLOYEES BY GEOGRAPHICAL AREA

A network of over **100** operational units in nearly **30** countries

- Australia • Barhain • Brazil • Canada • China • France • Germany • India • Italy • Japan • Mexico • Russia • South Africa • Spain • Switzerland • United Arab Emirates • United Kingdom • USA...

FIVES' OFFER

Fives provides high added-value solutions and equipment for the world's largest industrial players. As a designer and a manufacturer, Fives has proprietary technologies that produce state-of-the-art machines, process equipment, complete production lines and process units.

The multisector offer of Fives is presented through 18 business lines, specialized by market or technology. Each business line includes design, supply, installation, service and maintenance.

Fives supports its customers throughout the entire lifecycle of their equipment, from commissioning to revamping. Fives offers a service portfolio according to its customers' needs in:

- **OPERATION:** to ensure the highest level of equipment performance;
- **OPTIMIZATION:** to maximize the efficiency of production processes;
- **EVOLUTION:** to guarantee equipment sustainability.

FIVES, MULTISECTOR EXPERTISE MANAGED BY EXPERT TEAMS

Fives' multisector offer is presented through **18 dedicated business lines** that are driven by the type of **industry** or **technology**.

Moreover, some industries, such as automotive, aerospace, and industrial equipment, are served by numerous business lines.



MULTIPLE END-MARKETS |

AEROSPACE • ALUMINIUM • AUTOMOTIVE & TRUCK • BIOENERGY • CEMENT & MINERALS • CHEMICALS & PETROCHEMICALS • CRYOGENICS • ENERGY • GENERAL MACHINING • GLASS • HEAVY EQUIPMENT • LOGISTICS • MANUFACTURING INDUSTRY • OIL & GAS • RAIL • STEEL • SUGAR • THERMAL & NUCLEAR POWER • TRANSPORTATION • WIND ENERGY...

AMONG FIVES' CLIENTS |

AIRBUS • AIR LIQUIDE • ALBA • ALCOA • ALSTOM • ARCELORMITTAL • AREVA • BAOSTEEL • BOEING • CRH • DAIMLER • DHL • EDF • ELEMENTIA • EMIRATES GLOBAL ALUMINIUM (EGA) • FEDEX • FORD • GM • GROUPE LA POSTE • GROUPE PSA • GRT GAZ • HINDALCO • HONDA • LAFARGEHOLCIM • LUIGI BORMIOLI • MAHLE • MICHELIN • OUTOKUMPU • POSCO • QATAR NATIONAL CEMENT COMPANY • RENAULT NISSAN • RIO TINTO • RUSAL • SAGAWA • SAINT-GOBAIN • SCHMIDT • SEVERSTAL • SNCF • TATA • TEREOS • THYSSENKRUPP • TOTAL • TOYOTA • VOLKSWAGEN • YAMATO...

FIVES' OFFER

- Fives' offer consists of **18 business lines** according to markets and technologies.
- Each business line includes **design, supply, installation, service and maintenance.**



ALUMINIUM

Process equipment and complete installations: Carbon, reduction and casthouse sectors.

Range of products: ECL, Solios, North American



AUTOMATION

Complete automated and integrated systems: Assembly solutions, washers, conveyors, gantries, fasteners, interlinking and robotic handling solutions, software and traceability solutions.

Range of products: CentriSpray™, CFC, Cinetic, DyAG, ETFA



CEMENT | MINERALS

Core process equipment, complete plants and customer services: Crushing, grinding, pyroprocessing, combustion, gas treatment and control & optimization.

Range of products: FCB, Pillard, Solios



COMBUSTION

Burners, controls and customized combustion systems. Design, supply, construction and maintenance services for furnaces, heaters and steam generation units.

Range of products: ITAS, North American, Pillard



CRYOGENICS | ENERGY

Brazed heat exchangers, cold boxes, cores-in-drums and cryogenic pumps for air separation, distribution, natural gas processing, LNG, olefins and petrochemicals, helium and filling systems. **Range of products:** Cryomec (cryogenic pumps)



CUTTING TOOLS | ABRASIVES

Custom engineered diamond and cBN cutting tools; diamond dressing tools; conventional and superabrasive grinding wheels.

Range of products: CITCO Tools, Gardner Abrasives, TruGARD™



FILLING | SEALING

Fluid filling, fluid tests and sealing equipment.

Range of products: DeckerSealing®, RapidCharge®



GLASS

Process equipment and complete lines for automotive glass, architectural glass, thin-glass and specialty glass (fiber, container...) production.

Range of products: Prium®



GRINDING | ULTRA PRECISION

Grinding solutions and machine tools for precision component manufacturers.

Range of products: Cranfield Precision, Giustina, GrinderCareSM, Landis, Landis-Bryant



INDUCTION

Full range of induction heating and industrial cooling solutions.

Some products: CELES CELINE (long products), CELES EcoTransFlux™ (flat products)

FIVES' OFFER



More information on
Fives' 18 business lines:
www.fivesgroup.com



INTRALOGISTICS

Design and supply of automated solutions for internal logistics flows for a wide variety of markets: Food industry, distribution, e-commerce, postal and courier, and manufacturing industry. **Some products:** GENI-Belt™, GENI-Flex™, OPR®, Trace®, UltiView®



PIPING SOLUTIONS

Complete tailor-made solutions for piping projects: Engineering, prefabrication, assembly and maintenance.



MAINTENANCE

Industrial maintenance services through contracts with performance objectives and maintenance engineering support services.



STEEL

Design and supply of technologies and equipment for cold rolling workshops (lines and mills), reheating, heat treatment, straightening; consulting for auto steel suppliers and carmakers. **Range of products:** Bronx, CELES, DMS, North American, Stein



MANUFACTURING

Mechanical subcontracting for all projects from welding, machining, assembly including equipment repairs.



SUGAR | BIOENERGY

Process equipment and process lines for sugar recovery and co-generation of electricity. **Range of products:** Cail, Fletcher



METAL CUTTING | COMPOSITES

Metalworking machine tools, automated composites processing systems and complete manufacturing solutions. **Range of products:** Cincinnati, Forest-Liné, Giddings & Lewis, Global Services, Liné Machines



TUBE AND PIPE

Welded tube mill lines, finishing equipment for both seamless and welded tubes, services. **Range of products:** Abbey, Bronx, OTO, Taylor-Wilson



A complete Service offer

Fives provides full support to its customers throughout the entire lifecycle of the equipment installed.



Additive manufacturing

AddUp, a joint venture between Fives and Michelin launched in 2016, offers its customers complete industrial metal 3D printing solutions, from machine design and supply to services and advice on part production.

www.addupsolutions.com



FIVES' ADVANCED PROPRIETARY TECHNOLOGIES

FIVES AT A GLANCE

Pioneering since the beginning, Fives bases strategy on the development of the best available technologies and services in the market.

Fives focuses on developing high-value proprietary technologies which are partly related to the energy and environmental performance.

Fives was one of the first designer of capital goods to formalize its eco-design program, the Engineered Sustainability®, which is known to meet strict and transparent specifications.

Fives benefits from a major technological advance notably in grinding, composite tape-laying, fluid filling of equipment, combustion systems, sorting systems, furnaces, heat exchangers and solutions for the aerospace, aluminium, automotive, cement and minerals, energy, glass, logistics and steel industries.

 €34.9 million spent on R&D
With 52 new patented inventions, Fives has enhanced its patent portfolio to

2,169 patents in force and 632 families

 29 research and test centers

 13% of first patent in application related to energy and environmental performance

Fives' eco-design approach, the Engineered Sustainability® innovation program and brand, aims to optimize the energy performance and reduce environmental impacts of its products



9 products

have been awarded the Engineered Sustainability® brand in the following business lines:

- ALUMINIUM
- CEMENT | MINERALS
- COMBUSTION
- INTRALOGISTICS
- STEEL

FIVES' PEOPLE



Men and women are what make the Group successful.

Thanks to the network of experts located in over 100 operational units in 30 countries, Fives can rely on dedicated teams that combine initiative, know-how, technical excellence and customer proximity.

In an effort to provide a challenging and motivating work environment for all of its people, Fives has implemented a HR policy based on dialogue, skill development and respect for diversity:

- **Dialogue:** Fives has developed opportunities for employees to exchange and discuss their careers during individual meetings/discussions.
- **Talent development:** Fives uses specific HR tools to offer its employees a career path where they will best be able to develop their potential and talent within the Group.
- **Promoting pluralism and diversity:** Diverse profiles, experiences and skills are one of the Group's wealth.



Close to
8,700 employees
63 different nationalities



71%

are engineers, managers, technicians, designers or supervisors



40%

of women are engineers and managers



77% of employees

attended a training course during the year

Dialog • Development • Diversity

Numerous *career opportunities* in many fields including

R&D
PROJECT MANAGEMENT
SALES
DESIGN
MAINTENANCE
ON-SITE IMPLEMENTATION
SERVICE SUPPORT

FIVES' COMMITMENTS



Fives' development is supported by sustainable actions, notably in terms of ethics, safety, environment and governance.

Corporate Social Responsibility: Fives developed a comprehensive program structured around 4 key concerns.

- **ENVIRONMENT**
Minimize Fives' environmental footprint and that of its clients: Eco-design & machine safety and environmental management.
- **ECONOMICS**
Promote fair practices in the marketplace: Ethical conduct & anti-corruption and sustainable partnerships.
- **SOCIAL**
Provide a safe and motivating workplace: Health & Safety management, diversity and social benefits, skills & career management and monitoring employees' satisfaction.
- **GOVERNANCE**
Embed the CSR priorities into the organization of each Fives Entity: CSR coaching program.

Fives, a responsible industrial engineering group, has studied the factory of the future since 2012 and opened the debate on industrial sustainability.

ETHICS



Fives officially joined the UN Global Compact in 2011. This initiative for businesses is based on the promotion and implementation of 10 universal principles which provide a framework for compliance with Human Rights, labor standards, environmental and corruption prevention measures.



Fives' Code of conduct sets the principles and rules that govern the behavior of each Group employee. Each employee has received a copy of this Code in their native language, with 13 different language versions available in the Group.

SAFETY & ENVIRONMENT



SAFETY

3.74 accident frequency rate for Fives employees and temporary workers.



ENVIRONMENTAL FOOTPRINT

80% of Fives' industrial sites are ISO 14001 certified.

Top 1% of the EcoVadis panel

Fives deliberately requested to be assessed by EcoVadis, a rating agency specialized in CSR. Fives has been awarded a rating of 75/100 by EcoVadis for its CSR performance, placing it in the top 1% of businesses assessed by this independent party. It provides an assessment by taking into account company's performance in four areas of corporate social responsibility: environment, social aspects, business ethics and responsible procurement.

ATTENTIVE LISTENING,
CUSTOMER COMMITMENT
AND PIONEERING SPIRIT
make Fives a strong partner
dedicated to anticipating
clients' needs and proposing
the most efficient, relevant
and forward-thinking
solutions.

FACTORY OF THE FUTURE



*In 2012, Fives created the **Fives Plants of the Future Observatory**, a think-tank whose mission is to open the debate on the future industry.*

Events are regularly organized with leading figures (economists, sociologists, journalists...) and industrial players who shed a new light and enrich the debate on the factory of the future.

*In 2013, Fives jointly led the **Factory of the future** plan within the French governmental program: "**Nouvelle France Industrielle**" (the New face of Industry in France).*

*Fives remains involved in the "**Alliance Industrie du Futur**" (the Industry of the Future Alliance), a group of businesses, professional organizations, scientific and academic institutions, and regional authorities responsible for rolling out the French government's **Industry of the Future** plan.*

