## 2015 ANNUAL REPORT

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LINK SOLUTIONS FOR INDUSTRY



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## A WORLDWIDE COMPANY SPECIALIZING IN THE DESIGN AND MANUFACTURE

# OF ASSEMBLY Solutions

The LISI Group is an international leader, whose activity is focused on the design and manufacture of high value-added assembly solutions. The Group's international dimension, its capacity for innovation and above all the performance of its production base, allow for solutions tailored to the requirements of its major clients. The Group develops its solutions everywhere where the problems are complex and bring added value and innovation. Hence over the years, LISI has won leadership positions in its three areas of activity: aerospace, automotive, and medical.



account for 80% of sales 43 industrial sites scattered in **14** countries





#### **3 MARKETS**

The LISI Group operates in three major markets: The automotive industry, for which LISI manufactures fasteners, and assembly and safety components; the aerospace industry, for which the Group manufactures fasteners and assembly and structural components, and lastly the medical sector, for which LISI manufactures medical implants and ancillaries.



#### AN INTERNATIONAL FOOTPRINT

The LISI Group has a presence in 14 countries in the world, and generates 65% of its sales revenue from exports. The Europe zone concentrates nearly 70% of the Group's activities, of which nearly half in France.

# A year of growth and consolidation

In exceeding their sales records, the three divisions of the LSI Group confirmed in 2015 their capacity to gain market shares in a complex environment.



# Results were up and continued value creation

The year 2015 saw a slowdown in the growth of the group's main markets, particularly that of commercial aerospace, concluding the end of the post "subprime crisis" bull market before the expected rebound for 2017 of a new round led by the program for the Airbus A350, the re-engined single-aisle or even the increase in power of the LEAP engines.

Despite the weaker activity of its markets, the LISI Group saw its **sales** increase by 11.6% compared to 2014, including organic growth of + 1.6% to reach the amount of  $\in$  1.458 million.

It should be emphasized that the group's three divisions all exceeded their previous sales record in 2015, thus confirming their ability to gain market share.

In parallel with this increase in business activity, management efforts and the streamlining of production facilities and productivity have resulted in **Current Operating Income (COI)** of  $\in$  146 million, higher by  $\in$  15 million from one year to the next and corresponding to an Operating Margin (MOP) of 10%.

After a volume of industrial investment, there again a record, of  $\in$  111 million, the Free Cash Flow amounted to  $\in$  40 million, i.e. 2.7% of sales revenue; therefore, the consolidated Net Financial Debt decreased by

€ 25 million to € 157 million, corresponding to a gearing of 20% and an EBITDA ratio of 0.8 well below the group's banking covenants.

Ultimately, the group has continued in 2015 to advance its goal of value creation that is symbolized by the increase of nearly  $\in$  500 million of its equity capital over the past 10 years compared with an increase in the Net Financial Debt of  $\in$  20 million over the same period.

#### Increase in development projects

However, the most striking item of fiscal year 2015 comes back to the very large number of structural development projects for the future that the group has generated in each of its divisions. Among them:

- On the commercial front, the aerospace division's signing of contracts with Airbus valued at \$ 1 billion over 5 years, SNECMA and even in the automotive world with TRW; they consolidate the sales growth in 2015 with the group's largest customers and provide high visibility over the medium term.
- On the industrial side, the extensions of the Aerospace Fasteners sites in Europe Villefranchede-Rouergue, Rugby (UK) and Saint-Ouen l'Aumone – allow us to anticipate the increase in Airbus' needs like, in North America, the new plants in the City of Industry, California and Dorval in Canada respond to

#### LETTER FROM THE MANAGEMENT

Boeing's growth plans and those of its partners. For its part, the LISI AEROSPACE Structural Components Business Group has made significant investments backing the development of new products at Marmande or the intensive modernization of the Manoir Aerospace sites bought in 2014.

In the automotive division, the commissioning of the completely renovated plant in Dasle and on time startup of new Mellrichstadt logistics center in Germany will have strengthened the division's positions and the industrial facilities; as well as the overall increase in the Security Mechanical Components business activity at the Shanghai site in China and the opening of the new Monterrey plant in Mexico for the Clipped Solutions Business Group.

- On the Products side, all the divisions posted outstanding performance in terms of renewal of their portfolios as evidenced by the development of the "OPTIBLIND<sup>™</sup>" automated assembly system presented at the Bourget air show – which has generated enormous interest among all manufacturing or OEM customers – and the launch of a "robotics" project at all the Aerospace Fasteners plants but also the renewal rate for new products of nearly 10% of sales in the automotive division or even the launch of a generic line of orthopedic implants in the Medical division.
- Finally, how can we not mention the creation of **LISI AEROSPACE Additive Manufacturing** with the Poly–Shape Company, the European leader in additive manufacturing with which the Group signed an agreement on December 17, 2015 to create a joint venture. 60% owned by LISI AEROSPACE and 40% owned by Poly–Shape, the new organization aims to provide aerospace customers with a response that incorporates the additive technologies in the design and production of machine parts using 3D printing: a promising field of application that is fully complementary to those that already exist in the group.

# Dividend increase and new organization in 2016

These major projects express the will of the group to continue its strategic development.

It is to mark its faith in the future as well as to thank its shareholders for their confidence that the dividend was increased to  $\in$  0.39 per share, thus increasing for the 6<sup>th</sup> consecutive year.

Finally, it is with this growth prospect that the Board decided, at its February 17, 2016 meeting, to opt to separate the positions of Chairman and CEO; thus with the help of all the LISI employees, the new executive team will have the main task of bringing these multiple development projects to a conclusion, which should fully meet our customers' expectations and ensure the group's growth performance.

# **Board of Directors**

Gilles KOHLER (1) Chairman

Emmanuel VIELLARD\* (2) Deputy Chairman

Capucine ALLERTON-KOHLER (3) Director

Eric ANDRE (4) Director

Isabelle CARRERE (5) Director

Patrick DAHER (6) Director

Jean-Philippe KOHLER (7) Permanent Representative of CIKO to the LISI Board of Directors Director Pascal LEBARD (8) Director

Lise NOBRE\*\* (9) Director

Christian PEUGEOT (10) Director

Thierry PEUGEOT (11) Permanent Representative of CID to the LISI Board of Directors Director

Marie-Hélène RONCORONI (12) Director

Cyrille VIELLARD (13) Permanent Representative of VMC to the LISI Board of Directors

- \* As from March 1<sup>st</sup>, 2016, Mr. Gilles Kahler remains the non-executive Chairman of the Board of Directors. Mr. Emmanuel Viellard, assisted by Mr. Jean-Philippe Kohler, becames the Group's CEO.
- \*\* As from the exercise 2016, Mrs. Lise Nobre is appointed Vice-Chair of the Board of Directors.





# **Executive Committee**

#### LISI

**Gilles KOHLER\*** Chairman and Chief Executive Officer of LISI Chairman of LISI AUTOMOTIVE Emmanuel VIELLARD\* Deputy Chief Executive Officer of LISI Chairman of LISI AEROSPACE Chairman of LISI MEDICAL Jean-Philippe KOHLER\* Vice President in charge of LISI internal auditing and of the HR coordination Christophe LESNIAK Industrial and Purchasing Manager of LISI



#### LISI AUTOMOTIVE

**François LIOTARD** Chief Executive Officer Martin BELEY Chief Executive Officer Business Group Safety Mechanical Components Laurent SANCHEZ Chief Executive Officer Business Group Clipped Solutions Marc STEUER Chief Executive Officer Business Group Threaded Fasteners **Patrick WEISSE** Vice President Finance and Administration



\* As from March 1<sup>st</sup>, 2016, Mr. Gilles Kohler remains the non-executive Chairman of the Board of Directors. Mr. Emmanuel Viellard, assisted by Mr. Jean-Philippe Kohler, becomes the Group's CEO.



**Jean-Louis COLDERS** Chief Executive Officer Alain-Jory BARTHE Chief Executive Officer Business Group Forging & Casting Christian DARVILLE Executive Vice President Administration and Strategic Development for North America **François-Xavier DU CLEUZIOU** Chief Operating Officer – Customers



Alexis GABILLON Chief Executive Officer Extrusion, Forming and Sheet Metal **Jean-François MICHELETTI** Chief Financial Officer **Emmanuel NEILDEZ** Chief Executive Officer – Business Group Fasteners



#### LISI MEDICAL

**Olivier LE BARS** Chief Executive Officer



# Performance Indicators



EBITDA | 204.1€M



		128.9	EBIT   131.7	146.5€м
	100.4	11.2% OF SALES	10.1% of sales	10.0% of sales
76.6	9.3% of sales			1 14
8.3% of sales				
2011	2012	2013	2014	2015





# Workforce registered | 10,923 staff





/ LISI 2015



# Site-level specialization by Business Group

To improve its efficiency and optimize its investments, the LISI Group has set up an operational organization that relies on a network of specialized sites, grouped into Business Groups.

#### LISI AEROSPACE

#### $21 \; \text{sites} \; 10 \; \text{ in France}$

Argenton-sur-Creuse

Saint-Ouen-l'Aumône

sur-Barangeon

Bar-sur-Aube

Bologne

Colomiers

Marmande

Parthenav

Vianoux-

Saint-Brieuc

Villefranche-

de-Rouergue

FRANCE



#### (FRANCE) BAR-SUR-AUBE

PRODUCTION	SURFACE	HEAD COUNT
BG Forging & Casting	18,000 m <sup>2</sup>	242

The Bar-sur-Aube site, within Forging & Casting is positioned on the forging of parts for aerospace and defense structure and equipment of aluminum, steel and titanium.

Engaged in a vertical integration approach to deliver parts that can be directly assembled (i.e. machined and painted) to its Airbus and OEM aerospace customers, the Bar-sur-Aube site has started up a robotics finishing line for circular parts with a capacity of 50,000 pieces/year to strengthen its position on gears and bearing rings for applications in aerospace engines and helicopters.

Since its integration into the LISI Group, the LEAP\* approach has been deployed over the entire site; the site's organization was completely changed in 2015 with the introduction of 2 Autonomous Production Units respectively covering the aluminum and titanium-steel activities and the implementation of PSM management tools according to the Group's standard.



\* LISI Excellence Achievement Program



# (USA)

PRODUCTION BG Fasteners Airframe North America SURFACE 22,000 m<sup>2</sup>

HEAD COUNT **939** 

The Torrance site in California is the division's largest plant with 939 people. Historically, this is a major player in the US market; this position has been strengthened over several years both on the HI-LITE<sup>™</sup> screws and the Lockbolt<sup>™</sup> as well as the collars and the nuts.

The site also hosts the R&D North America center for the Fasteners Business Group and ensures the development of new products and provides product expertise and materials for the Americas.

These last three years, the deployment of the LEAP\* has reorganized the plant and thus optimized its performance for its customers and internally, while absorbing strong growth in its business activity.

#### (FRANCE) VILLEFRANCHE-DE-ROUERGUE

PRODUCTION BG Fasteners Engines & Critical Parts SURFACE HEAD COUNT 16,000 m<sup>2</sup> 693

The Villefranche – de – Rouergue site, the most varied (products, customers, materials, processes) within BG Fasteners, has benefited for many years from a very significant modernization plan:

- Online organization of products supported by the deployment of the LEAP\* program
- $\cdot$  Automation
- Development of new products, in particular OPTIBLIND™

This plan is also materialized by the plant's proposed relocation in two stages to a new site: a first tranche in 2016 (delivery of the new building and partial relocation) and a second tranche in 2019.



#### LISI AUTOMOTIVE

#### 19 SITES 9 IN FRANCE

#### FRANCE

- Dasle
- Delle
- Dreux
- Grandvillars
- La Ferté-Fresnel
- Lure
- Melisey
- Puiseux
- Saint-Florent-sur-Cher

#### OUT OF FRANCE

- Cejc (Czech Republic)
- Fuenlabrada (Spain)
- Gummersbach (Germany)
  Heidelberg (Germany)
- Kierspe (Germany)
- Mellrichstadt (Germany)
- Monterrey (Mexico)
- Beijing (China)
- Shanghai (China)
- Vöhrenbach (Germany)

#### (CHINA) SHANGHAI

PRODUCTION BG Mechanical Safety Components SURFACE HEAD COUNT 7,300 m<sup>2</sup> 88

Based in China since April 2008, LISI AUTOMOTIVE Shanghai specializes in Mechanical Security Components and Threaded Fasteners. The plant, initially focused on the production of threaded fasteners, it is increasingly moving into the manufacturing of mechanical components such as parking brakes (EPB BIR), seat axles, torsion bars or brake screw fittings.

Mechanical Safety Components now being the core business activity, the Chinese team has developed its industrial and technical skills to be able to meet the industry's stringent requirements with support from the European teams.

Production equipment, beyond the standard process of cold heading, tapping and rolling machines, has been enriched with new means adapted to the components such as multi-spindle machine tools, grinding machines, milling machines, automatic sorting machines and a heat treatment line.

In 2015, Shanghai manufactured 90 million parts for automotive customers such as TI, Faurecia, SAIC MOTOR, Guangda, Benteler, THK, Sanoh, Yanfeng Key, BRILLANCE AUTO, BAIC...

#### (FRANCE) MELISEY PRODUCTION BG Mechanical Safety Components

SURFACE HEAD COUNT 11,000 m<sup>2</sup> at Melisey 1 and 4,700 m<sup>2</sup> at Melisey 2

The LISI AUTOMOTIVE Melisey site specializes in cold heading and machining of mechanical safety components for the automotive market.

With its five large ranges of mechanical safety components:

- Brake components
- Hydraulic fittings (screws and nuts)
- $\cdot$  Torsion bars
- · Airbag components
- Seat mechanisms

The Melisey site makes more than 90% of its sales overseas

- Europe - Asia - North and South America.

Thanks to a command of processes such as cold forging, machining, inspection and assembly, and personnel that are highly qualified in our businesses via qualifying internal processes training courses (Professional Certification in Metallurgy), the LISI AUTOMOTIVE site at Melisey has real expertise and a reputation with its customers. Customers that are mainly world-renowned automotive suppliers such as, for example, ZF-TRW, CBI, Autoliv, Faurecia, TI Automotive, etc.



#### (MEXICO) MONTERREY

#### PRODUCTION **BG Clipped Solutions**

LISI AUTOMOTIVE, a world leader in the design and manufacture of assembly solutions for the automotive industry, has just started operations at a new plant in Monterrey, Mexico.

After Asia with sites in Beijing and Shanghai, LISI AUTOMOTIVE now addresses a third continent to better serve its automotive customers and other industrial markets.

With this new plant, LISI AUTOMOTIVE supports its clients already established in this part of the world and takes position in the American market with its wide range of products.

It will highlight its recognized expertise in the development of innovative fastener solutions to reduce costs, simplify assembly and lighten vehicles.

This first plant is intended for the production of clip solutions, but it will also represent and distribute the full range of LISI AUTOMOTIVE fasteners and safety mechanical components.

#### LISI MEDICAL



# I YON

PRODUCTION Fasteners

HEAD COUNT 4.500 m<sup>2</sup> 137

Established in 1996, the LISI MEDICAL Fasteners plant at Nevron located in the nearby suburbs of Lyon, manufactures implants for many French and European customers.

SURFACE

The manufacturing is intended for the orthopedics markets in traumatology, spine and even for the extremities.

#### PRECISION, QUALITY AND SERVICE

The high-quality precision products are screws, plates, and even cervical cages, mainly of titanium but also plastic (polyethylene, PEEK...). The LISI MEDICAL Fasteners engineering teams, along with their customers, are developing and industrializing, many new implants and surgical instruments with a constant concern for quality, both in terms of the product, as well as customer service.

#### MACHINING AND FINISHING CAPACITY

The LISI MEDICAL Fasteners factory has a fleet of recent machines, consisting of multi-axis cutting machines or milling and milling/ turning machines, for producing complex products at the best cost and with extreme precision.

Moreover, the factory has the ability to finish products: (oxidation, anodic...) allowing it to offer customers a completely finished product.



# Draw on our industrial roots

LISI concentrates over two hundred years of industrial expansion. Always moving forward, the company has been able to constantly adapt to the changing markets in which it operates. Now become global, it has a size that allows it to serve its major customers in their development projects anywhere in the world.

240

YEARS OF INDUSTRIAL HISTORY

# 7 major Acquisitions

43 sites AROUND THE WORLD

#### 1796

MIGEON & DOMINE was founded in Morvillars, later to become VIELLARD MIGEON et Compagnie (VMC).

#### 1777

Frédéric JAPY set up a watch movement factory in Beaucourt, near Montbéliard.

#### 1806

JAPY Frères launched the first industrial manufacturing plant in France for forged wood screws, with VIELLARD & MIGEON as partner.



The Société Industrielle de Delle was founded by the DUBAIL-KOHLER family in the town of Delle, Belfort. The company quickly began to specialize in the manufacture of machineturned screws.

#### 1968

KOHLER, JAPY and VIELLARD merged. The three founding families were then part of CID (Compagnie Industrielle de Delle), owning a controlling stake in the LISI group.

1977

GFD acquired BLANC AERO, which specialized in aerospace parts and in packaging components for the Perfumery sector. This new group is named GFI.

#### 1989

GFI was floated on the Paris Stock Exchange's over-the-counter market and became GFI Industries.

#### 1990/2000

GFI Industries continued to strengthen its positions in its three sectors by acquiring over 15 companies throughout Europe and the US.

## 2002

GFI became LISI (LInk Solutions for Industry), a group focused on three divisions: LISI AEROSPACE, LISI AUTOMOTIVE, and LISI COSMETICS.

#### KNOW - HOW

#### 2004 Acquisition of FORM a.s

in the Czech Republic (LISI AUTOMOTIVE).

## 2005

Acquisition of KNIPPING in Germany (LISI AUTOMOTIVE). Opening of a factory in Canada (LISI AEROSPACE). Sale of Gradel (LISI AUTOMOTIVE).

#### 2008 LISI AUTOMOTIVE

2007

Creation of the LISI MEDICAL subdivision, specializing in the manufacture of surgical

(spinal & orthopedic) and

dental implants.

increased its presence in China with the purchase of a second manufacturing plant in Shanghai (threaded fasteners and safety mechanical components).

# 2010

The Group acquired two sites from US Group: Acument Global Technologies (LISI AUTOMOTIVE) and the production site of Stryker - hip prostheses (LISI MEDICAL).

## 2011

LISI refocused on its strategic markets: deconsolidation of LISI COSMETICS and purchase of the Creuset Group (AEROSPACE).

# 2012

2014

Acquisition of MANOIR

Aerospace, a group specializing

mainly in complex structural

components.

LISI sold 100% of its holdings in its subsidiary KNIPPING Umformtechnik GmbH to Gris Invest SAS. Merger of Indraero Morocco and Creuzet Morocco.

# 2015

**Creation of LISI AEROSPACE Additive Manufacturing,** a joint-venture with Poly-Shape specializing in 3D printing.

LISI 2015

#### **EXPERTISE**

# Adapting to technological requirements

LISI conducted an ambitious and coherent investment policy in order to design and develop ever more innovative solutions and to adapt its industrial facilities to new technologies. The Group can thus continually meet the organization's optimization requirements and adapt it to its growth rate internationally.



IN INDUSTRIAL CAPEX IN 2015







PSM SITE

#### AMBITION



# Achieving operational excellence

The commitment of the men and women within the Group is the key to its ability to adapt. The purpose of the LEAP\* program is to guide everyone's actions in order to achieve operational excellence in all areas and in all of the company's businesses. It should allow the Group to continue moving forward, with agility, in order to maintain and strengthen its competitiveness.



OR 9,175 EMPLOYEES INVOLVED IN 2015

\* LISI Excellence Achievement Program.



#### MISSION

# Contributing to our customers' performances

The implementation of the fastening systems is one of the most important cost items for our customers' industrial assembly activities. LISI innovates relentlessly to limit the complexity of these operations, and to propose solutions to the new lightening challenges. The Group thus contributes to creating significant sources of savings.



axes OF RESEARCH FOR THE VEHICLE OF THE FUTURE: AUTONOMY, SAFETY, LIGHTENING, PRODUCTIVITY



# **Opening** new avenues

Optimization of the assembly operations in aerospace, weight reduction in cars, improving production methods, performance research in the materials processing... The research and development projects and the acquisition of new skills are motivating challenges for the LISI Group. Its expertise combined with, today size, allows to provide lasting solutions to the market.

23, 8, 8, 10 € M

+ **11%** // 2014

# THE ľ S

#### AEROSPACE

# LISI#OneSide: the automated structural assembly solution

The LISI#OneSide solution, presented in June 2015 at the 51<sup>st</sup> Paris Air Show, is a major technological breakthrough in the field of aerospace assembly. Developed by teams from LISI AEROSPACE, it combines innovative solutions for blind installations and an optimized robotic unit capable of performing all the assembly operations from just one side of the structure. The OPTIBLIND<sup>™</sup> blind fastener delivers unprecedented mechanical performance which is at the same level as that of traditional dual access fasteners. This entirely automated solution brings industrial gains which are significantly better than those of current automated

assembly solutions which are often very specific to the task, intensive in capital, and require the presence of an operator to complete or control the assembly. In a context where the order books of aircraft manufacturers are full, this innovation responds to one of the main challenges facing aircraft manufacturers all around the world: ramping up production and reducing production costs while preserving the quality and security on the assembly line.

(continued on page 30).





**347 patents** now constitute the assets of the LISI AEROSPACE division

#### AEROSPACE LISI#ONESIDE A MAJOR TECHNOLOGICAL BREAKTHROUGH

Eight years of research were required to develop the technological building blocks needed to develop an integrated solution for automated structural assembly called LISI#OneSide.

### Only one robot to perform complete assembly sequence

Able to accurately position itself on the structure, the robot first pre-drills the panels and installs temporary CLY<sup>™</sup>62 fasteners to bring together the two panels and squeeze the sealant present between them. The final holes are then drilled and the OPTIBLIND<sup>™</sup> blind structural fasteners are installed while the temporary fasteners are removed. The selection and transfer of the fasteners, sealant application onto the fasteners as well as correct assembly control are done alongside operations on the structure. The productivity gain for the aircraft manufacturers is considerable, since just one robot can work continuously and autonomously to perform in parallel a wide number of assembly and control operations.

#### **Revolutionary blind fastener systems**

Anticipated for over 15 years, this major technological breakthrough was made possible by overcoming two technological barriers in the fastening systems: the development of a new CLY™62 temporary fasteners which is compact and compatible with robotization and more challenging the development of OPTIBLIND™ blind structural fastener solution capable of meeting all relevant areas of performance of traditional dual access fasteners.





#### AEROSPACE A GLOBAL APPROACH

LISI AEROSPACE has been addressing this challenge since 2007, by using a functional approach to the entire assembly cycle. Following preliminary exploratory phases (specifications, concepts selection...), the project has been integrated the NexGED collaborative research program, led by LATECOERE and supported by the DGAC. The LISI AEROSPACE teams have also relied on KUKA Systems (automation, effector) competencies for the automation side. This cooperation helped us to develop the necessary technologies to make a real size technology demonstration, during the Le Bourget Air Show in June 2015.

#### AEROSPACE STRUCTURAL ASSEMBLY **4 TECHNOLOGICAL AREAS CHALLENGED**



Adapted to robotic transfers and automatic installation and removal, the **temporary CLY™ 62** fastener enables pre-assembly automation

#### Structural blind fasteners

Designed for robotics applications, the **OPTIBLIND**™ fastener provides performance equivalent to conventional dual access fasteners.

#### Multifunction assembly effector

The new technologies of this multifunction assembly effector, integrated on a KUKA System basis, allow performing all the assembly and controls operations of the assembly sequence.





In addition to the robot unit, for conventional installation, a portable electronic tool installs the **OPTIBLIND™ fasteners**, with an identical parameter monitoring and record.



Design for the additive manufacturing / Poly-Shape

#### AEROSPACE AMBITIONS IN 3D PRINTING

On December 17, 2015, LISI AEROSPACE entered into discussion with Poly-Shape for the creation of a joint venture specializing in the 3D printing technologies development. 60% owned by LISI AEROSPACE and 40% by Poly-Shape, LISI AEROSPACE Additive Manufacturing will combine the exclusive expertise of these two partners in order to build strong positions in the field of the design and production of mechanical aerospace parts in 3D printing. The objective of this joint venture is to bring this new manufacturing process, to the technical and economic requirements levels of LISI AEROSPACE international

#### Slashing the buy-to-fly ratio

Founded in 2007, Poly-Shape has specialized in the design and rapid manufacturing of functional prototypes and small series production. Its innovative technologies, developed on strategic lightweight materials basis, are unattainable today with conventional methods, and enabled it to develop expertise in the aviation industry. This expertise will allow to shorten development cycles and facilitate the manufacturing for parts ordered on demand and finally reduce the buy-to-fly ratio, the ratio between the weight of the material necessary to make a part and the final flying weight.

#### **RESEARCH & DEVELOPMENT**

## WEIGHT REDUCTION CHALLENGES AT THE CORE OF THE R&D PROGRAMS

Major challenge for all the stakeholders in the automotive industry, weight reduction initiatives focuses an important part of research and development efforts of LISI AUTOMOTIVE. Reduction of vehicle weight is indeed a key factor to improve performance, reduce fuel consumption and reduce emissions. The savings made on mechanical components weight, such as fasteners, compensate the weight penalty of additional equipment integrated for better driving experience and enhanced safety.

The LISI AUTOMOTIVE division has been particularly active in 2015 in supporting the manufacturers in this virtuous approach, while ensuring limiting the risks. The research projects were conducted in several directions in order to achieve solid results.



MCE5-VCRi Technology – The mechanical and technological excellence push the limits of reducing fuel consumption.



#### 1. Powertrain

#### Assemblies components redesign

The LISI AUTOMOTIVE teams focused their activities on new concept development for hotter engines technology which allow drastically reduce the emissions, especially on entry level vehicles without using hybridization. Their industrialization requires re-engineering and resizing all the assemblies' components and fasteners for such engines.

#### 2. Chassis

#### Limiting the weight of screws

The weight of the chassis screws and their environment, which is significant in a vehicle, has been primary target of our research. Even if chassis screws and spacers strength increase offered by LISI AUTOMOTIVE must, in principle, reduce weight without difficulty, this option nevertheless imposes complex limits to be overcome: their hydrogen embrittlement sensivity does indeed require fine tuning and close monitoring of material treatment processes to avoid potential resistance losses. This specific issue greatly mobilized the LISI AUTOMOTIVE materials experts in 2015. Several studies steels embrittlement according to their heat treatment and their corrosion behavior were conducted in collaboration with private and public laboratories.

#### 3. Structural components

#### Use of composite (materials)

The introduction of composite materials in structural applications is an interesting perspective in weight-reduction matters. Depending on their nature, composite, however, imply design and assembly issues or even behavior of the materials. Associated in several research projects in these themes, the LISI AUTOMOTIVE teams organized an active technology watch in these areas and the division has positioned itself on the potential industrialization opportunities.



#### AUTOMOTIVE LIGHTER CLIPPED SOLUTIONS

The teams of the Clipped Solutions Business Group have managed to develop and market simplifications solutions for assemblies and lighter vehicles. These innovations have helped replace steel with high performance plastics materials for some parts. The first series applications (wheel chock, hand brake cable guide), have already been introduced on the market. They contribute to up to 500 grams weight reduction for each vehicle. In collaboration with the manufacturers, the approach is already pushed further with analysis carried out on new vehicles, in service and during their assembly. These discussions allow the LISI AUTOMOTIVE teams to further optimize these proposals through new simulation tools, which enable quick delivery of prototypes and of preproduction parts printed in 3D.

BETWEEN **5** AND **7** KG This is the weight of chassis screws' for 1.4 metric ton vehicle

#### MEDICAL **3D PROTOTYPES** TO EASE OSTEDINTEGRATION

LISI MEDICAL is a stakeholder for the discussions held within the group on additive manufacturing using 3D printing system. These new technologies allow to manufacture implants with integrated porous surfaces mandatory to facilitate the structural and functional connection with the bone (osteointegration). So with additive manufacturing, implants are manufactured directly in one operation without additional coating currently obtained by expensive techniques. The first prototypes of cups, offered with various external porosities, were produced in 2015. The development shall continue in 2016 in order to assess the opportunity to offer this type of industrial solution to all of our customers.



CORPORATE RESPONSABILITY

# To be engaged and involved

The involvement of all the LISI Group's employees is the basis for its HSE strategy. This search for commitment today structures the human relations management policy implemented within the company. The programs it implements focus its action on a two-fold objective: supporting its employees and optimizing the impact of its business on health and the environment.

10,923 employees around the world + 2,1% versus 2014

LISI 2015


### LEAP ADVANCED After the requirement



The LEAP\* Program - "LISI Excellence Achievement Program" - is an ambitious plan for continuous improvement, which aims to encourage operational excellence in each of the businesses of the company. After the implementation of the basic tools in all the group's units (factories and support services), LISI is undertaking the second phase of the plan with LEAP Advanced. This new step should allow for optimizing all the flow operations, from the production line to the maintenance, through inventory management.

### **Gaining** in efficiency

The first phase of the LEAP\* program has made it possible to successfully develop the use of the basic tools of operational improvement in all of the group's plants and support services. On 22 sites evaluated in 2015, 10 have now reached their level of maturity. The actual deployment of the second phase, initiated in 2015, was marked by the launch of the first projects related to the LEAP\* Advanced instruments. These first elements concerned, among other things, the Value Stream Mapping (VSM), which allows the analysis of all of the actions required to bring a product from its initial state to its final state, the management and optimization of pull flow, or even the process improvement method 6 Sigma.

### A better inventory control

These performance control instruments are already bearing fruit in many plants: improved production line flow, optimization of inventories, less scrap, reduced Lead-Time (the time needed between making the request and the moment when it is fulfilled). The first systems developed from the Kanban production management method (the lines are only fed with the items that they need to produce) have already provided better inventory control. Two plants are now equipped with small trains to accelerate the flow, to be more flexible and more efficient in the handling, and thus to reduce the Lead-Time. The implementation of the LEAP\* Advanced tools will continue throughout the year 2016.



\* LISI Excellence Achievement Program

PROBLEM SOLVING M ALT DYNA leap this work 14/00 ald 144 A model for the integration of new sites Perfectly honed and "ready for use" the deployment process for the LEAP\* program has promoted the integration of the new Manoir sites. It has in particular allowed for obtaining quick gains on well targeted

It has in particular allowed for obtaining quick gains on well targeted strategic problems: late deliveries, productivity gaps... The training, the discussions with more advanced sites and the backing of the experts have encouraged the teams to integrate and implement these methods. Increased awareness in only a few months, they have been able to deploy the LEAP\* standards throughout the new *Business Group* and obtain the first very concrete results.

## LEAP ADVANCED







### Driving the operational strategic plans

One of the strengths of the LEAP\* program is based on the A3 approach. This process, based on the Japanese Hoshin Kanri method – focuses all the efforts on the rapid achievement of a goal – facilitates steering of innovation projects. For 3 years, all of the group's sites, business groups and the divisions carry out their improvement plans, at their own level, according this overall improvement approach.

The headquarters of the LISI Group was chosen this year to drive the implementation of a dematerialized version of the A3 approach intended for remote sites and workers, through their collaborative LEAP portal. This variant is based on the Obeya, a practice of visual and collaborative management inspired by lean management. The connected teams can then develop and share their projects according to the A3 approach without travelling. The solution will be extended to the support services of the divisions and the business group in 2016. It will also apply to project monitoring in general. The plants will remain for their part on a normal physical medium, insofar as all members of the management committee are on site.



### LEAP Advanced is already providing results on key points, such as improving flows, reducing Lead-Time and inventory optimization...



### Improve the working conditions

The LISI AUTOMOTIVE factory at Grandvillars implemented in 2015 a model-overall improvement project. Dubbed Goldwire, this project was first supported by the accelerated deployment of the group's standards with the strong mobilization of the core teams. Only eight months were needed to transform the material preparation site. Alongside the introduction of the LEAP tools (WSM, 5S, SMED, 8D...), the teams have applied the standards of the LISI Excellence HSE program, quality, HR, technical. They have also worked on improving the working conditions posted and on the visual transformation of the factory by putting in evidence the areas of flow, risks... These actions have streamlined the operating performance of the site in various areas such as safety, customer deliveries, machines' operating rate, the quality level... This project will be continued in 2016.

### LEAP leaders : certifying training

In addition to the strong involvement of the management teams and the experts deployed in all of the group's units, LEAP\* program's success is based on the quality of the internal training provided to the employees. The general training (LEAP\* Intermediate, Advanced, Process...), enable understanding the fundamentals of *lean manufacturing*. The most advanced teaching (LEAP\*-Leader), offered by the university business LKI (LISI Knowledge Institute), has a certifying value, especially for the teaching of the 5S, SMED, 8D, VSM, Kanban and 6 Sigma methods. In 2015, 180 certificates were awarded to new LEAP\*-Leaders, able to lead projects in their areas.

The courses are held in 3 stages:





\* LISI Excellence Achievement Program.

### HEALTH & SAFETY Involving the entire workforce



The LISI Group has always conducted a very active policy in matters of risk prevention and health on the job. The focus of its work in 2015 and 2016, these central themes are considered to be vectors for ongoing improvement and areas for significant progress in the same way as operational excellence.

The issues of protecting health, safety and welfare at work are central to the policy that guides the Group's Human Resources management. Aware of the daily commitment of the 10,900 employees of LISI, the general management remains mobilized, more than ever, on these topics. At each level of its organization, the Group's aims are to achieve levels of excellence in the areas of health and safety by the mastering of the occupational risks generated by its activities. The goal is to turn these two priorities into areas of continuous improvement, including in areas that are not directly related thereto.

### Defining avenues, setting goals

In order to ensure the implementation of this desire, LISI has endowed itself with a Health, Safety and Environment (HSE) organization that is specific and capable of identifying the main areas of improvement, prioritizing the goals, and deriving the appropriate actions. The framework supporting this policy is based on the repository for international OHSAS 18001, the international standard for the occupational health and safety management system. In the area of safety, the adherence and involvement of each employee remains the key to the success of the strategy implemented. This approach to improving work safety seeks to first build the support and commitment of all our employees for these improvement plans.

The goal: making health and safety priorities into continuous improvement and progress vectors.

### A forum to raise the awareness of executives

On May 6, 2014, an HSE Forum brought together the directors of each site of the LISI Group around corporate responsibility in matters of health, safety and the environment. They set ambitious goals for themselves, in three directions:

#### Safety

By the end of 2016, all the LISI Group's sites will be required to display the workplace accidents frequency rate, with and without work stoppage (TF1) of less than 10, and do so by incorporating the temporary employees working on the company's behalf.

### Environment

Each of the 3 divisions of the LISI Group must reduce its environment impact by reducing its energy consumption by 10% in comparison with the 2014 figures.

### **HSE Corporate Culture**

LISI wants a true corporate culture to take hold related to HSE issues. To achieve this, the Group's management has implemented two programs: LISI Excellence HSE and SCP (Safety Culture Program) centered on the culture of the safety.

(read Pg.42-43)



# GOAL BY THE END OF 2016

-10% target reduction of energy consumption in 1 year

5 8€M amount invested IN THE IMPROVEMENT OF WORKSTATIONS IN 2015

### LISI EXCELLENCE HSE An ambitious action plan

Aware of the need to involve all the Group's employees on the issues of hygiene, safety and the environment, the LISI Group has initiated several strong actions. Launched in 2014, they were grouped together within the LISI HSE Excellence Program, which was extended to the entire group. This is now the common foundation of our HSE policy. The LISI Group launched an ambitious program in 2014, which aims to engage each employee around a common goal: seek and achieve excellence on all axes of the company's HSE – Health, Safety and Environment – strategy. Building on the proven methods of lean management, designed to accelerate the emergence of a common culture, the LISI HSE Excellence program must lay strong foundations to promote joint regulatory compliance, discussion of the best practices and finally to set ambitious goals shared throughout the Group.





### Tools for each of the Group's plants

The deployment of the LISI E-HSE program includes facilitator and support tools for each LISI factory in the world. These means of action have been designed by the Group's HSE experts in order to allow each of them to approach these subjects in a concrete and participatory manner. At each site, a kick-off day allows the Management Committee to define its own roadmap based on its needs and its resources. In February 2016, fifteen factories had already carried out this "kickoff" by deploying several key elements of the program:

- Safety Culture Program (SCP) to develop the culture of "safety": Accident Cause Analysis (5 subjects / 18 modules). Thematic Working Groups with videos produced and shot in house with the HSE teams.
- Training Venues : each new employee or temp is aware of risk control through interactive tools.
- **HSE Visual Management:** Observation grids for workstations make the dangers visible and strengthen prevention.



### Safety: 30% improvement in 5 years

The implementation of a culture of safety and of risk management is a long term strategy. LISI is improving its results on these points. In 2015, however, the work accident frequency rate with stoppage (TFo) that involved an LISI employee or a temp, has worsened compared to 2014 (+ 5%). This increase is due in part to the change in the group's scope and the integration of the Manoir Aerospace sites. The overall trend, over the last years, nevertheless remains very positive. The accident frequency rate with and without stoppage (TF1), which reached 14.4 in 2015, has improved by 30% compared to 2010 (and by 56% compared to 2007). Over the last 12 months, at some sites, like Monterrey, Cejc, Shanghai, or Tangiers, there have been no work-related accidents, with or without stoppage. These results demonstrate the interest in undertaking the effort over the long term, involving all the employees.



### HUMAN RESOURCES Integrate and train to develop skills

After the sharp increase recorded in 2014, related to the expansion of the Group's scope, the growth in numbers of employees has slowed in 2015. The efforts focus on the integration and development of skills, through training programs that consolidate the internal know-how and support the implementation of new projects.



At December 31, 2015, the LISI Group employed 10,923 employees, i.e. an increase of 2.1% compared to 2014. In total, 1,348 people have joined the group, compared to 1,126 departures, a net increase of 222 employees in 12 months. If the intensity of hiring is down compared to 2014, this reflects the progressive orientation of the group's skills towards increasingly technological know-how, particularly in the LISI AEROSPACE division, where 58.5% of new staff is concentrated. In 2015, the number of managers and engineers increased

significantly with +10.3% growth as opposed to 0.6% for blue collars. This last group still accounts for 2/3 of the company's head count.

### 2 employees out of 5 are based abroad

Reflection of its strong international development, the LISI Group employs two out of five employees abroad. Present in 14 countries, the company maintains, however, a strong local presence in mainland France. France, the Group's historical center of gravity, represents more than half (58%) of its workforce. The United States, where the Group is strongly developing its aerospace activities, is in second position with 12% of the workforce, followed by Germany (8%), where many LISI AUTOMOTIVE sites are located.

#### Breakdown of workforce by division

	2015	% Group	2014	Difference	⊇ N/N-1
LISI AEROSPACE	7,087	65%	6,957	1.9%	130
LISI AUTOMOTIVE	3,241	30%	3,186	1.7%	55
LISI MEDICAL	573	5%	538	6.5%	35
Holding company	22	N/A	20	10.0%	2
NET TOTAL GROUP	10,923	N/A	10,701	2.1%	222

#### Breakdown of staff by SPC

SPC	2015	2014	Difference N/N-1	
Blue collars	7,153	7,110	0.6%	43
Employees, technicians and supervisors	2,706	2,626	3.0%	80
Management	1,064	965	10.3%	99
Total	10,923	10,701	2.1%	222



### **250,654 hours of training** delivered to the Group employees

The LISI Group attaches particular importance to the training of its employees and considers that the strengthening of employees' skills is a major factor for the improvement of quality, efficiency and competitiveness. The significant increase in the workforce in 2014 has made this effort even more essential in order to facilitate integration and to develop common methods and skills. Every employee, regardless of his age or position, can access the training programs implemented at the company. The budget devoted by LISI for this mission reached  $\pounds$ 5.6 million in 2015, i.e. 1.5 % of its payroll. It helped deliver 250,654 hours of internal and external training on all sites.

1,348 EMPLOYEES JOINED THE GROUP THIS YEAR

58% of the workforce is based in France

**14.7**€M Allocated UNDER PROFIT-PARTICIPATION

 $5.6 {\rm ~M}_{\rm devoted ~to}$ 

### Degree-awarding courses to develop skills

More than 8,327 employees, i.e. 76% of the Group's employees, in 2015, received at least 3.5 hours of training. Among these curricula, LISI offers professional degree-awarding courses, based on the company's strategic businesses, and offers employees the opportunity to develop their professional qualifications. They allow for obtaining Joint Qualification Certificates in Metallurgy (CQPM) or Inter-Industries (CQPI). Over 5,300 hours were provided in the context of these courses since 2015, for a hundred CQPM and CQPI.

### Breakdown of training and integration actions in 2015

TOTAL	LISI
Total hours of training (internal & external)	250,654
of which training entitlement (France only)	798
Number of employees trained (at least 3.5 hours of training over the year)	8,327
Number of interns recruited in 2015	637
Number of apprentices recruited in 2015	241
Number of work experience contracts signed in 2015	83

### ENVIRONMENT Developing a responsible culture



The LISI Group applies the same principles of strictness and accountability, whether it involves environmental management, risk management, resources conservation or pollution prevention. They form the basis of our commitment to sustainable growth.

LISI has implemented a number of homogeneous indicators since 2008, in order to accurately measure the environmental impact of its activities. These tools now offer a clear picture of its footprint in order to implement effective corrective actions to mitigate its effects. All of the Group's sites are now ISO 14001 certified, except for the Manoir Aerospace sites acquired in 2014. Each of them has therefore acquired accurate data to implement the corrective actions needed to renew this certification.

### Treatment of VOC at Saint-Florent-sur-Cher

In addition to these directly operational measures, the Group, in the last two years, has accelerated the deployment of training programs directly related to HSE issues. These steps are intended to raise awareness and to promote the development of a common culture around environmental issues. In 2015, 0.23% of hours worked were devoted to these topics. The resources devoted to risk prevention related to the environment accounted for  $\in 6.8$  million, i.e. 5.8% of total LISI investments in 2015. Among the actions taken, there is the installation of the volatile organic compounds processing system (VOCs) at Saint-Florent-sur-Cher, or the installation of an energy saving device at Mellrichstadt, in Germany.

HSE training schemes have been implemented to raise awareness and promote the development of a shared culture with regard to environmental challenges.



### Water, energy, waste: consumption on the decrease

The initiatives taken by the production sites have reduced water consumption by 15.5% (compared to the added value), between 2014 and 2015. LISI AUTOMOTIVE is the largest contributor to this decline, thanks in particular to the work done at Dreux on the cooling water. Energy consumption is also down. The decline reached 1.1% of the Group's total consumption. Raising the awareness of the production teams has played a major role here.

### 94.7% of waste sorted

LISI generated, in 2015, 58.3 kg of waste for €1,000 of added value. In constant progress, the share of sorted scrap has now reached 94.7%, the balance consisting of household waste produced by production related activities. Nearly 55% of these are scrap metals that are resold for materials recycling. Dangerous waste, which represents 31% of the total quantity of waste, is removed via authorized channels that strictly abide with the applicable regulations.

UDD€ INVESTED IN ENVIRONMENTAL PROTECTION IN 2015 0.23% of hours worked devoted to the HSE training

### 0.377 MWh of Energy Consumed In 2014 For €1,000

OF ADDED VALUE

15.5% of water saved in 2015 related to the added value

LISI 2015 /





# LISI AEROSPACE

Despite the worldwide turbulence related to the declining price of oil, the aircraft construction sector has confirmed its momentum in 2015. The industrialization of new programs and the high backlog levels have allowed us to maintain a very sustained pace. This fiscal year again, LISI AEROSPACE is consolidating its performance based on significant and stable volumes.





## Dynamics the market is accelerating the pace



The major development programs launched by the international aircraft manufacturers have been finalized. The order books are full and the industrialization phases have been launched.

A particularly dynamic year, 2015 was the year of the culmination of the major programs and of the increase in the pace. The pace is expected to continue in the coming months. Between them alone, the two world leaders, Airbus and Boeing, have accumulated more than eight years of deliveries on their order books. Growth supported by innovation and constant improvements in the aircraft and their engines, allowing companies to accelerate the restructuring of their fleets, to prepare for the future and to further efforts to lower operating costs.

### A new generation of aircraft

Among the key projects, we note the flight of the A320 NEO from Airbus, equipped with the latest engine in the Pratt & Whitney line. The aircraft will make a second "first flight" in 2015 with

## **1,036** AIRBUS ORDERED IN 2015

768 BOEING ORDERED IN 2015

the LEAP engine, the fruit of collaboration between GEAE and Snecma, many of whose critical components are manufactured by LISI AEROSPACE. The A320 NEO alone accounts for 850 of the 1,036 orders taken by Airbus in 2015.

For its part, Boeing completed the roll-out of the new 737 Max 8, also equipped with the new LEAP engine. This aircraft represents more than half of the 768 orders for Boeing in 2015. The U.S. aircraft manufacturer is also focusing on the successor to the popular B777. With its experience in composites, Boeing is offering a hybrid aircraft, with metal fuselage, similar to that of the current 777, and composite wing, derived from technologies used on the B787. LISI AEROSPACE is accompanying Boeing on this major project.

### The impact of cheaper oil

The regional transportation situation is rather more mixed. The collapse in oil prices has blocked the influx of orders for the Franco-Italian ATR, without however causing significant transfers to the other two stakeholders, the Canadian Bombardier and the Brazilian Embraer. The market for helicopters has also had a difficult year. With the closure of many oil platforms, users of heavy transportation aircraft, and the manufacturers have seen the collapse of an entire section of their business activity, prompting some players, such as United Technologies, to sell assets. These difficulties have not, however, prevented Airbus Helicopters and Bell from presenting several novelties such as the H160, replacing the Dauphin, or even the Jet Ranger Bell 505 and the Bell 525.

### **QUESTIONS TO**

### Jean-Louis COLDERS

Chief Executive Officer, LISI AEROSPACE



Unless there is a macroeconomic accident or technical difficulties with our principals, LISI AEROSPACE should remain on high activity levels in 2016.

#### How do you look at 2015?

\_ 2015 was marked by the appreciation of the dollar, the decline in the price of oil, the rise in terrorism and the Chinese economic slowdown. Despite this volatile environment, passenger traffic, like freight traffic, has remained very strong and the civil aircraft manufacturers have consolidated their order books with the airlines whose profitability has improved.

### What were your key highlights?

\_ The actions of LISI AEROSPACE focused on several themes: the consolidation of our contracts, firstly, with, as a major event, the renewal of Airbus fasteners contract for 5 years. The integration of Manoir Aerospace, acquired in June 2014, has been partially completed. We have also continued our efforts in research and development, with the highlight being the presentation at the Paris Air Show of a blind structural fastener and the corresponding robotic installation solution. The focus internally has also been on robotics in order to optimize productivity and the stability of our manufacturing processes. Very major industrialization efforts have finally been made on the structural components to accompany the A320 NEO, 737 MAX, LEAP and A350 programs.

#### What is the outlook for 2016?

For several years, LISI AEROSPACE has been working on the industrialization of new products associated with various advanced programs, such as the new GE and LEAP engines, or even the structure of the A350 and A320 NEO aircraft. Their growing power will offset the cessation of the traditional programs, with an exchange rate much higher than one. For all these products, the industrial capacities are in the deployment phase: performance of boost-test to work on the robustness of the processes, creating new industrial surface areas, investment integration and staff training. These plans will be staggered until at least 2017 in order to accompany the increasing power of the new programs. Unless there is a macroeconomic accident or technical difficulties with our principals, we believe we will remain on high activity levels, with a more moderate growth.

### **LISI AEROSPACE**

### 2015 HIGHLIGHTS



Mixer DGEN motor on its building platform / Price Induction & Poly-Shape

### Parts without tooling thanks to 3D

The creation, with Poly–Shape, of a joint venture specializing in 3D printing is a real competitive advantage for LISI AEROSPACE (also read Pg.31). In its infancy, this technology allows for producing parts without tooling, by limiting the input of raw materials. The first areas of application are related to the production of prototypes, spare parts or complex single parts. With its partner, LISI AEROSPACE is now working to ensure the removal of the remaining obstacles to the development of this innovative technique: dissemination of the design methodologies for parts (Design for Additive Manufacturing); normalization of the parts and finally, the development of an industrial Supply Chain, able to deliver finished parts while complying with the quality–cost– service constraints.

# Fourth extension for Dorval

In 2005, LISI AEROSPACE launched the construction of a new "greenfield" factory at Dorval, (Quebec, Canada) with a team of 70 people. Ten years later, LISI AEROSPACE Canada employs more than 300 employees, has four plants and has sales figures for business turnover greater than 50 million dollars. For the aircraft manufacturers, engine manufacturers and OEMs, this site now constitutes a major industrial center on all the world markets, both in North America as well as in Europe.

### Large diameter screws

Specialized until 2014 in large diameter parts and the critical items made from alloy steel with high resistance, LISI AEROSPACE Canada has extended its area of its manufacturing footprint and product range. A fourth factory, created in 2015 and dedicated to the production of large diameter screws made out of titanium, marks a new stage in the expansion of this unique ensemble. This new activity, which represents a significant investment, should allow for strengthening LISI AEROSPACE's presence in the US market and accelerate the development of its Canadian subsidiary.

### IN BRIEF € 2 billion of contracts in 2015

LISI AEROSPACE has renewed, in 2015, nearly €2 billion of commercial contracts for a period of between five to eight years. Solidly positioned on the programs of the future, the LISI AEROSPACE division is benefiting from the investment policy conducted in recent years by the Group, to resize and to optimize its industrial tool as well as to strengthen its research capabilities.

### Airbus Best Performer Award

Distinguished twice as AIRBUS BEST IMPROVER, the Fasteners Business Group was awarded in 2015 the award for AIRBUS BEST PERFORMER for its performance in logistics and in quality. This award, which highlights the improved performance of the Business Group, supports the efforts provided by the LISI AEROSPACE teams in the structuring and execution of its industrial processes.



## **Successful relocation** City of Industry

The City of Industry site, based in California and specializing in the production of small mechanisms and fasteners for the interiors, has seen its business grow very significantly since 2010. To enable it to continue to grow, LISI AEROSPACE decided in 2013, to double the surface area. Carried out in 2015, this project allowed the moving of the entire factory to a new site, still within the area of the City of Industry.

### **Reorganizing flows**

This transfer of the business required meticulous preparation and execution: adaptation of the new building and setting up of the new production workflows, with formation of an "advance" to cover the transfer period and its hazards; requalification of the site and the references... Three months were needed to complete the physical relocation of the equipment and personnel. During this entire period and at the end of the operation, the site was able to maintain its very high performance level, both in quality as well as service rates.



### **MAIN PARTS**

# High value-added fastener systems

### **Flagship products**

#### Airframe

Structure fastener, principally of titanium; HI-LITE™, HI-LOK™, HI-TIGUE™ screws and nuts; PULL-IN™ fasteners; PULL-STEM™, TAPER-HI-LITE™, STL™; STARLITE™ nuts; Lockbolts crimped fasteners.

#### Engine

Engine fasteners (high temperature steels, cobalt- or nickel-based alloys, very high resistance superalloys), inserts and studs; shaft nuts.

#### **Special parts**

Specialty, non-structural fasteners (clip nuts, quarter turns, spacers, etc.), locks, push-pins, assembly equipment.

#### Racing

56

Fasteners and components for motor sports. Other high quality automotive fasteners.

### Customers

Airbus; Boeing; Bombardier; Dassault; CFAN; EADS; Embraer; Eurocopter; Finmeccanica; GEAE; Pratt & Whitney; Rolls Royce; Safran; Spirit; Formula 1 teams.

### Competitors

Alcoa Fastening Systems; Precision Castpart Corp; BTL; Lauak; Leistritz; Mettis: Otto Fuchs; PFW; On Board; Breeze Eastern; Macsterlite; Klune; TECT; Doncaster; MIFA; Forge Ital; Dembiermont; Karlton-PCC: First Rikson.



**FASTENERS** 





STL<sup>™</sup> FASTENERS



3 SHAFT NUTS







4 HI-LITE™ FASTENERS, LOCKBOLT







MAIN PARTS

# Precision and high tech





### **STRUCTURAL COMPONENTS**



THRUST REVERSERS



BREAKING SYSTEM



DOOR STOPS



10 CONER BOX



13 AIR IN TAKE LIPS

VARIABLE VANES





CARGO HOOK

Structural components

Flagship products

Primary forged, sheet metal or formed parts and composite structural parts, complex assembled subsets, integrated into the cell or the aircraft engine: blades, leading edges, arms and OGVs, beams, shells, air inlets, trunk area, drives, gears, door stop, helicopter floor, APU nozzles, etc. Indoor equipment for aircraft and helicopter unloaders.



11

ANTI-CRASH

STRUCTURE

ENGINES BLADES



DISC

20

12

NOSE CONE



ROTATING SWASH PLATES



CANOPY FRAME





# LISI AUTOMOTIVE

The LISI AUTOMOTIVE division benefited in 2015 from dynamic organic growth in a global market with mixed results. The automotive rebound in Europe and the United States, however, offers encouraging prospects for LISI AUTOMOTIVE, which has been collecting the fruits of its industrial reorganization for several months.





# Rebound Europe returns to growth

Penalized by the slowdown in China and the collapse of the Russian market, the global market recorded modest growth in 2015. Europe however is experiencing a net rebound. A favorable context for the business activities of LISI AUTOMOTIVE

The automotive sector experienced moderate worldwide growth in 2015. Up 2% for the year, it recorded a net acceleration (+ 5.1%) in the last quarter. The Chinese rebound that occurred late in the year (+ 14.8% in Q4) after a period of sharp decline (- 1.9% in Q3) partially explains this phenomenon. For the year, China recorded a relatively modest increase (+ 5.3%) and is no longer able to play the driving force role that it previously held. It was unable to offset the poor performance of the Russian (- 35.7%) and Japanese (- 10.0%) markets. Only the United States (+5.8%) and Europe showed clear signs of recovery.

### European manufacturers are growing

Europe, the main area of LISI AUTOMOTIVE operations, indeed reconnected with solid growth (+ 9.2%); Spain (+ 20.9%) and Italy (+ 15.8%) are led the race. France ended with an enviable score (+ 6.8%), after a difficult year in 2014 (+ 0.3%). Some manufacturers, such as Daimler (+ 17.7%) and Nissan (+ 16.3%), posted satisfactory growth and Renault recorded a score higher than the market (+ 9.4%). In light of this performance, the actual progress of European automotive production, however, remains moderate (+ 3.2%). The low inventory levels, driven by more than just the manufacturers, explains this shift.

### Business volume is up

The share of new products among the orders taken was a record: it represents 9.8% of the sales of LISI AUTOMOTIVE, i.e. approximately  $\in$  44 m, versus approximately  $\in$  37 m in 2014 (8.3% of sales). With capacity to meet these new demands, LISI AUTOMOTIVE has achieved a turnover of  $\in$  454.6 m in 2015 (+ 1.4% on the previous year). After a very strong start to the year, the division however experienced a decline in the second half, the slowdown in the Chinese market causing adjustments throughout the supply chain. The decline in production among the European customers of LISI AUTOMOTIVE impacted by the declining exports to Eastern Europe – mainly to Russia – also explains this slowdown.



### **QUESTIONS TO**

### François LIOTARD

Chief Executive Officer, LISI AUTOMOTIVE



The uncertainties in Asia, and particularly in China, however, make the growth forecasts uncertain beyond the first quarter of 2016.

#### How do you look at 2015?

\_ The major portion of the European industrial reorganization plan, initiated in 2012 by LISI AUTOMOTIVE, was carried out according to the projected schedule. Such optimization and redeployment work, whose first results were visible in 2015, has contributed to the recovery over time of our European plants, particularly in France. Only a few challenges remain on a chassis screw production site. This plan especially offset the operational difficulties encountered in the first half year: some sites have indeed faced under-capacity problems in heat treatment. The arrival finally of the worksite at the factory in Dasle (Doubs). effective since the fourth guarter 2015, should finally contribute to firming up the division's profitability.

### What is the outlook for 2016?

\_ The level of orders to be delivered at the beginning of the fiscal year reflects the rebound recorded by the market in the fourth quarter 2015. Logistic conditions, sanitized in 2015, allow for considering an operational startup without major difficulties. The uncertainties in Asia, particularly in China, however, make the growth forecasts uncertain beyond the first quarter of 2016.

#### What are your objectives?

\_ We will have to capitalize on the industrial organization efforts undertaken since 2012. The progress achieved will have to be further enhanced under the LEAP\* plan in order to sustainably improve our operating profitability in Europe: three of the four Business Groups in the division have been strengthened. They now have real competitive advantages, and consolidated trade ties with our German customers as well as with the major OEMs. We also need to accelerate our international development, by organizing the gradual rise of the Mexican site for clipped fasteners, or even by accompanying the launch of the mechanical safety components on our Shanghai site.

\* LISI Excellence Achievement Program.

**2015 HIGHLIGHTS** 

### A third continent for LISI AUTOMOTIVE

LISI AUTOMOTIVE launched in October 2015, the production of components and plastic clipped fasteners at its new plant in Monterrey, Mexico. After Asia (Beijing and Shanghai), LISI AUTOMOTIVE is counting on a third continent to support the international strategy for its automotive customers, but also for other industrial sectors. The presence of LISI AUTOMOTIVE in this growing region – more than 3 million vehicles are already assembled there – strengthens the divisions' positions by enabling it to offer its products on the US market. This first Mexican plant is intended for the production of clip solutions, but it will also distribute the full range of LISI AUTOMOTIVE fasteners and safety mechanical components. The division will rely on its recognized skills in the development of innovative solutions to reduce costs, simplify assembly and reduce the weight of its customers' vehicles.

### Robots deployed at Melisey

One dozen robots were put into service on the Melisey production site (Haute-Saône). Deployed in the context of the increase in the site's capacity, this new equipment will ensure the loading of the production machines, the put-away after machining and even the performance of finishing operations. Waterproof and flexible to use, they adapt to harsh environments and can be easily reprogrammed when making manufacturing changes. Finally, they constitute progress vectors for the mastery of our manufacturing processes.





### Emmanuel Macron visiting Puiseux

On September 30, 2015, the top executives in the automotive sector, including those of Renault, PSA, Faurecia, Valeo and Plastic Omnium, participated in the Strategic Committee of the Automotive Industry at the invitation of Mr. Emmanuel Macron, Minister of the Economy, Industry and Digital Affairs.

This event, in which more than 80 people participated, took place at the plant in Puiseux-Pontoise (Val d'Oise). After a presentation of the LISI group by its Chairman, Gilles Kohler, and then of its automotive division by François Liotard, CEO, the Minister and his guests visited the site. Presented at every stage, many innovative solutions, particularly in matters of cost reduction, simplification of assemblies and lightening of vehicles, sparked real interest.

### **IN BRIEF**

### Inauguration of the new plant at Dasle

After 22 months of work without stopping production, 6,000 m2 destroyed 8,000 m<sup>2</sup> rebuilt and 130 displaced equipment units, the new plant at Dasle was officially inaugurated on October 23, 2015. The ceremony, to which numerous partners, suppliers and subcontractors were invited, was followed by a day of open doors intended for the employees' families.

### The Shanghai plant expands its offer

The manufacturing of the control mechanisms for the new electric parking brakes was deployed in 2015 in the Chinese factory in Shanghai. This very technical screw-nut system, produced by LISI AUTOMOTIVE in Europe for many years, will enrich the supply offered on the Chinese market, where the growth potential is significant for this type of parts. The now qualified production line, will go into production in 2016.

### The Fraunhofer Institute rewards LISI AUTOMOTIVE

The Fraunhofer Institute, one of the most reputable design firms in Germany and Europe for measuring the performance of organizations, awarded the prize for "Best Practices in Purchasing Techniques" to the teams in LISI AUTOMOTIVE's Purchasing Department. This distinction, based on the findings of a 4 month audit, rewards the efficiency of an organization based in particular on the principles of our LEAP\* tools.

\* LISI Excellence Achievement Program.

LISI 2015





1 ENGINE CRADLE SPACERS



2 STRUCTURAL FASTENING NUTS



3 STEERING COLUMN SCREWS



4 CYLINDER HEAD BOLT



ECCENTRIC BOLT FOR FRONT AXLE ADJUSTMENT



6 HOT FORGING GEARBOX SHAFT NUT



7 DOOR REINFORCEMENT PLATE

### **CLIPPED SOLUTIONS**



8 QUICK FASTENERS FOR INTERIOR TRIM



CLIP FOR AIRBAG REMAINING SYSTEM



10 TWO-MATERIAL FASTENER FOR TUBES



11 METAL THREADED CHIMNEY NUTS TO SNAP ON



12 WIRES AND TUBES CHANNEL



13 RADAR HOLDER

### **MECHANICAL SAFETY COMPONENTS**



14 TORSION BAR FOR SEATBELT



17 SEAT MECHANICAL COMPONENT



15 SAFETY MECHANICAL COMPONENT FOR BRAKE SYSTEM



16 GUIDE RODS



18 BRAKE FITTINGS

### Flagship products

### **Threaded fasteners**

Fasteners for powertrain; wheel screws and nuts; fasteners for indoor and outdoor equipment; wheel screws and nuts; structural screws and nuts; screws for sheet metal; self-tapping screws; screws for soft materials; nuts, spacers and hollow bodies, PRESSFIX® screws and forcefitting nuts and assembly equipment.

### **Clipped solutions**

Snap-on nuts with tapped drums; clip assembly systems for tubes, cables, and beams; rivets and pins; axis fasteners; blanking plugs and cable grommets; fasteners for panels; snap-on nuts with tapped drums; multifunctional metalloplastic subsets.

### Mechanical safety components

Torsion bars; guide rods; brake hoses; parking brake system; seat mechanism pinions and linkage; engine and gear shift components, direction components; airbag system components.

### Customers

### Carmakers:

BMW; Daimler; Dongfend; FAW; Ford; Opel; PSA; Renault-Nissan; SAIC; VW-Audi.

#### Parts manufacturers:

Autoliv; Bosch; CBI; Faurecia; Jtekt; JCI; Magna; Plastic Omnium; TI Automotive; Visteon; ZF - TRW.

### Manufacturing:

AGCO; Alstom; Blanco; Bombardier; BSH; Claas; Electrolux; Evobus; Franke; Miele; Iris Bus Iveco; Schneider.

### Competitors

ABC; Agrati; A. Raymond; Brugola; Fontana; ITW; Kamax; Nedschroef; SFS; Stanley Fastenings.


# LISI MEDICAL

LISI MEDICAL benefited in 2015 from a favorable environment in all the markets for bone surgery. This sustainable dynamic allowed the division to maintain a level of organic growth that was in line with the forecasts. The reorganization of the supply and the improvements in the operational performance offer solid prospects.



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### Concentration Harnessing the new deal



## +10 growth on Average

GROWTH ON AVERAGE OF THE MARKETS FOR EXTREMITIES IMPLANTS IN 2015



The markets for bone surgery have remained dynamic in 2015. Driven in the US by a strong destocking movement, they also benefited from the concentration movement that the sector is experiencing and that is causing a reconfiguration of supplies and ranges.

The markets for bone surgery have experienced, like last year, very heterogeneous growth, with rising levels ranging, according to the relevant universe from 3% to over 10%. Being mature, the market for bone joint reconstruction (hips, knees) increased at the mercy of developments among an aging population. Obesity also plays an important role in the developed countries. The increase in living standards in the emerging countries (China, India) finally constitutes an important growth factor.

### Mass destocking in US markets

The markets concerned by the spine and traumatology have also benefited from the massive destocking carried out in 2014 by the major customers in the US. The latter have indeed anticipated the establishment of the Excise Tax on inventories of implants manufactured by the OEMs, intended to finance the health reform in the US (Obama Care). The markets for extremity implants (shoulders, hands), have also experienced high levels of growth in 2015, with rebounds greater than 10%. These increases are related to the progress in operating techniques and to the emergence of new implantation solutions.

### An active year in Mergers & Acquisitions

The year 2015 also saw a strong recovery in mergers and acquisitions transactions in the OEM sectors and in subcontracting in bone surgery. The number one worldwide, Zimmer has bought its competitor Biomet, among the top 5 worldwide; Wright Medical acquired the Tornier Company and Tecomet finally got its hands on the orthopedic branch of Symmetry Medical, becoming the leading subcontractor on the market. These reconciliations have led to some rationalizations of the ranges and increases in volumes that are favorable to the market. The players are continuing their restructuring in order to support, both upstream and downstream, a dynamic market in full reconfiguration. A favorable environment for LISI MEDICAL, which subcontracts implants for the entire human body.

### **QUESTIONS TO**

### Olivier LE BARS

Chief Executive Officer, LISI MEDICAL



We intend to develop our strategy of generic products in all the orthopedics sectors, in order to provide the "Gold Standard" in the market.

#### How did the division perform in 2015?

\_ LISI MEDICAL posted organic growth of 3%. This growth was particularly strong in the United States. In Europe, the momentum came from the Caen site, which is specialized in bone joint reconstruction, where we launched series of products developed in 2014 for new customers. The set targets were achieved by all the sites, both in terms of growth as well as at the operational level.

### What is the outlook for 2016?

\_ Naturally driven by the demographic changes, the orthopedics markets are growing. They should remain so. The strategy of streamlining product portfolios, implemented by our customers should allow us to significantly expand our market share, particularly thanks to our lines of generic products. We indeed plan to develop this approach in all the areas of orthopedics, in order to provide the "Gold Standard" in the market. Of course, we will continue our offering for the new products coming from our existing customers or our prospects.

#### How do you integrate these new products?

\_ Some sites require capacity investments in order to absorb this growth. We thus decided at the end of 2015, to launch the project for the extension of our factory in Caen. This extension of 3,500 m2 will allow us to absorb the production of new products, but also of other types of implants. An equipment Capex program has moreover been launched in 2015 in our factory in the United States. It will continue in 2016.

### What organization do you plan to set up?

\_ The LEAP\* program, currently being deployed in the Group, is the first response. The methods and tools that it offers help to improve the field performance and management. We also carried out in 2015, a reorganization of the projects and Industrialization departments, to respond more effectively to our customers' demands. The supply chain at the factory in Caen was finally reorganized to adapt to the multi-client environment.

\* LISI Excellence Achievement Program.

### LISI MEDICAL





### **FASTENERS**



DENTAL IMPLANTS



TRAUMATOLOGY IMPLANTS

LUMBAR FUSION

AND NON-FUSION



MAXILLOFACIAL IMPLANTS



CERVICAL FUSION AND NON-FUSION



ELBOW AND SHOULDER PROSTHESIS





INSTRUMENTS





8 SNAP OFF SCREWS

### Flagship products

#### Joint reconstruction:

orthopedic reconstruction implants and instruments (hip, shoulder, knee).

### Spine, extremities, trauma and dental:

orthopedic implants and instruments, trauma and extremities, spine, maxillofacial and dental.

### Customers

Ace Surgical; Alphatec Spine; Biosense Webster; C2F Implants; LDR Medical; Medacta; Medacta; Newdeal Integra; Signature Orthopaedics; Smith & Nephew; Spineart; Spineart; Stryker; Tornier; Zimmer-Biomet.

### Competitors

Accelent; Avalign; Coors Tek; Greatbach; Marle; Norwood; Orchid/Sandvik; Paragon, Tecomet.

### 2015 HIGHLIGHTS

### MARKETING /

### Ramp-up of generic ranges

Initiated in 2014, the development of a generic LISI MEDICAL supply has accelerated in 2015. The year was indeed marked by the finalization of the generic project for full un-cemented hip replacement, offered packaged and sterilized by gamma rays or ethylene oxide. LISI MEDICAL can now offer a full denture to the distributors or to the OEMs that wish to supplement their range. These ready-to-use products are delivered with the associated surgical instruments and benefit from the necessary clinical experience.

The first serial production of knee prostheses have also been delivered throughout the year, 2015, allowing the site dedicated to reconstruction to expand its offering, which until then was very concentrated on hips. Finally, a unit dedicated to plastic implants (Poly-ethylene, PEEK) has been made operational and strengthened in 2015, in order to provide an overall response for the spine and the extremities.



### **IN BRIEF**

### The Lyon plant certified in Brazil

The Neyron (Ain) site, near Lyon, which specializes in the production of implants (extremities, spine, maxillofacial, dental, etc.), has passed the various tests in the regulatory audit conducted in 2015 by the Brazilian health authorities (ANVISA). This certification should open new business opportunities in the emerging markets.

### The extension in Caen scheduled in 2016

To meet the growing increase in demand for reconstruction implants, the factory extension at the LISI MEDICAL Orthopaedics factory in Caen was approved in 2015. This extension, scheduled over 3,500 m2, will include new hip and knee product lines. Work will begin in 2016 in order to accommodate new equipment in the first months of 2017. This extension will also enable the reorganization of the product lines, some involving major series.

### Commercial development at Caen and Escondido

The historically single-client Caen factory has continued the rollout of its commercial portfolio with new clients, managing to double its sales revenue in 2015. The Escondido site, in the United States, as for itself has been able to increase its sales in new markets, such as spine and trauma, which are very promising in the United States. This site has also been able to supplement its coatings lines intended to facilitate osseointegration of dental or spinal implants, through the acquisition of a type II anodizing line.

## STOCK MARKET & FINANCIAL DATA 2015

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### STOCK MARKET DATA



# € 25.00 per shareLISI's progress over 2015+ 16%: a consistent year

After growing strongly between 2015 and 2014 and experiencing a stabilization period, LISI stock resumed its history of growth (+ 16%). This growth compares to the major indices like the CAC MID 60 (+ 16.2%) and EURONEXT 100 (+ 8.0%).

The stock price at the closing (€ 25.00) is in the middle of the range between its height reached in April (€ 28.00) and lowest reached in January 2015 (€ 20.60).

In terms of volume, 5,535,000 shares were traded, down slightly compared to 2014 (6,202,000), i.e. a daily average of 15,378 shares and a turnover of the float of 23%.

### Coverage of the stock

The stock is followed by 8 stockbrokers who regularly issue research notes accompanied by opinions and objectives corresponding to the assessment by the analyst in charge. This coverage provides complete and diversified information for professional and private investors.

The LISI Group participates in numerous conferences, road-shows and investor meetings in the cities of Boston, Frankfurt, London, Lyon, New York, Nice and Paris. In total, the management of LISI met with more than 215 investors during the 2015 financial year.

The communication policy is based on complete and transparent communication, a presentation of the results along with the semi-annual and annual publications and on the assessment of the forecasts by the panel of analysts based on their macroeconomic assumptions, without the LISI being bound by numerical commitments (guidance).



- Including direct and indirect holdings: VMC: 20.94%
  FFP Invest: 18.94%
  CIK0: 15.55%
- \*\* Reserved for performance share plans

### List of brokers



### Stock Identification Sheet

ISIN Code: FR 0000050353 Reuters code: GFII.PA Bloomberg code: FII.FP Compartment: A Eurolist Stock marketplace: Euronext Paris Number of shares: 54,023,875 Market capitalization as at December 31, 2015:  $\in$  1,348 m Indices: CAC<sup>®</sup> AERO&DEF. , CAC<sup>®</sup>-All Shares , CAC<sup>®</sup>-All tradable, CAC<sup>®</sup> Industrials, CAC<sup>®</sup> Mid & Small, and CAC<sup>®</sup> Small

### 2016 events

The AGM will be held on April 27, 2016 on company premises: Immeuble Central Seine – 46 – 50 Quai de la Rapée 75012 PARIS.

The dividend payment will be made on May 9, 2016.

The release of the sales for the 2<sup>nd</sup> quarter of 2016, as well as those for the half-yearly accounts will be available on line via the LISI website (www.lisi-group.com), on July 28, 2016.

The financial information for the 3<sup>rd</sup> quarter of 2016 will be available on line via the Group website on October 26, 2016 after the close of the market.

### Securities accessible to individual shareholders

The Group's objective is to develop the individual shareholdings in 2016, and, in this regard, the group is communicating much more, participating in trade fairs and participating in presentations to investment clubs and to individuals.

### Contacts

For any information or documentation:

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Shareholders, investors, financial analysts and financial and economic press please contact: Mr. Emmanuel Viellard – CEO

### **INCOME STATEMENT**

(in €'000)	12/31/2015	12/31/2014 restated*
Pre-tax sales	1,458,052	1,306,530
Changes in stock, finished products and production in progress	20,405	1,682
Total production	1,478,457	1,308,213
Other revenues <sup>(a)</sup>	13,083	17,440
Total operating revenues	1,491,540	1,325,653
Consumed goods	(398,213)	(344,613)
Other purchases and external expenses	(308,415)	(265,077)
Value added	784,912	715,963
Taxes and duties <sup>(b)</sup>	(11,590)	(9,357)
Personnel expenses (including temporary employees) <sup>(c)</sup>	(569,236)	(513,273)
EBITDA	204,086	193,333
Depreciation	(73,787)	(64,630)
Net provisions	16,194	3,097
EBIT	146,493	131,800
Non-recurring operating expenses	(11,148)	(10,852)
Non-recurring operating revenues	5,308	8,058
Operating profit	140,652	129,005
Financing expenses and revenue on cash	(6,163)	(6,410)
Revenue on cash	983	807
Financing expenses	(7,146)	(7,217)
Other interest revenue and expenses	(9,819)	1,563
Other financial items	35,466	28,285
Other interest expenses	(45,285)	(26,722)
Taxes including CVAE (Tax on Companies' Added Value) <sup>(b)</sup>	(42,741)	(42,631)
Share of net income of companies accounted for by the equity method	(71)	31
Profit (loss) for the period	81,859	81,557
Attributable as company shareholders' equity	81,764	81,464
Interest not granting control over the company	95	93
Earnings per share (in €)	1.55	1.55
Diluted earnings per share (in €)	1.55	1.55
* 2014 financial statements restated to account for IE	DIC 21	

 \* 2014 financial statements restated to account for IFRIC 21.
(a) In order to provide readers of the financial statements with better information that is in accordance with international standards, in the 2015 financial statements the Company has continued classifying revenues related to CIR (Research Tax Credit) as "Other Revenues". (b) As at December 31, 2015, in accordance with the CNC (French National Accounting

(b) As at Detember 31, 2015, in accordance with the CKC (Field) National Accounting Committee) notice of January 14, 2010, the amount of CVAE (Tax on Companies' Added Value) was classified as "Corporate Taxes" (on profits) in the sum of -67.2 million.
(c) As at December 31, 2015 the competitiveness and employment tax (CICE) was provisioned for an estimated €9.5 million.

### **STATEMENT OF OVERALL EARNINGS**

		12/31/2014		
(in €'000)	12/31/2015	restated*		
Profit (loss) for the period	81,859	81,557		
Other items of overall income applied to shareholders equity				
Actuarial gains and losses out of employee benefits (gross element)	6,192	(8,115)		
Actuarial gains and losses out of employee benefits (tax impact)	(2,118)	2,930		
Restatements of treasury shares (gross element)	156	(1)		
Restatements of treasury shares (tax impact)	(56)	0		
Payment in shares (gross element)	2,951	1,227		
Payment in shares (tax impact)	(1,065)	(443)		
Other items of overall income that will cause a reclassification of income				
Exchange rate spreads resulting from foreign business	19,351	23,341		
Hedging instruments (gross element)	(2,189)	1,535		
Hedging instruments (tax impact)	(18)	(554)		
Other portions of global earnings, after taxes	23,202	19,919		
Total overall income for the period	105,061	101,476		

### **STATEMENT OF FINANCIAL POSITION**

### ASSETS

(in €'000)	12/31/2015	12/31/2014 restated*	
NON-CURRENT ASSETS			
Goodwill	260,334	256,511	
Other intangible assets	14,923	16,349	
Tangible assets	481,354	431,847	
Non-current financial assets	10,585	9,357	
Deferred tax assets	19,838	22,288	
Other non-current assets	924	976	
Total non-current assets	787,958	737,330	
CURRENT ASSETS			
Inventories	336,127	316,989	
Taxes – Claim on the state	23,819	5,744	
Trade and other receivables	215,291	216,107	
Cash and cash equivalents	125,812	110,818	
Total current assets	701,050	649,657	
TOTAL ASSETS	1,489,008	1,386,987	

### TOTAL EQUITY AND LIABILITIES

(in £'000)	12/31/2015	12/31/2014 restated*	
SHAREHOLDERS' EQUITY			
Share capital	21,610	21,610	
Additional paid-in capital	72,584	72,584	
Treasury shares	(14,740)	(15,042)	
Consolidated reserves	603,092	543,542	
Conversion reserves	30,598	11,248	
Other income and expenses recorded directly as shareholders' equity	(2,653)	(6,505)	
Profit (loss) for the period	81,764	81,464	
Total shareholders' equity - Group share	792,256	708,902	
Minority interests	1,189	1,117	
Total shareholders' equity	793,446	710,023	
NON-CURRENT LIABILITIES			
Non-current provisions	73,274	83,474	
Non-current borrowings	230,145	245,690	
Other non-current liabilities	12,591	9,071	
Deferred tax liabilities	31,527	21,584	
Total non-current liabilities	347,537	359,819	
CURRENT LIABILITIES			
Current provisions	15,350	22,907	
Current borrowings <sup>(1)</sup>	52,285	46,363	
Trade and other accounts payable	278,181	242,312	
Taxes due	2,211	5,566	
Total current liabilities	348,026	317,147	
TOTAL SHAREHOLDERS' EQUITY AND LIABILITIES	1,489,008	1,386,987	
(1) ) Of which current bank facilities	9,243	10,066	

\* 2014 financial statements restated to account for IFRIC 21.

### **STATEMENT OF CASH FLOWS**

(in €'000)	12/31/2015	12/31/2014 restated*
Operating activities		
Net earnings	81,859	81,557
Elim. of the income of companies accounted for by the equity method	71	(31)
Elimination of net expenses not affecting cash flows:	1-	()-/
- Depreciation and non-recurrent financial provisions	71,284	66,886
- Changes in deferred taxes	10,554	(274)
- Income on disposals, provisions for liabilities and others	(7,140)	(4,490)
Gross cash flow margin	156,628	143,648
Net changes in provisions provided by or used for current operations	(2,476)	(2,757)
Operating cash flow	154,153	140,891
Income tax expense (revenue)	32,187	42,905
Elimination of net borrowing costs	5,133	4,837
Effect of changes in inventory on cash	(18,066)	(8,557)
Effect of changes in accounts receivable and accounts payable	36,455	(4,427)
Net cash provided by or used for operations before tax	209,861	175,649
Tax paid	(53,641)	(34,577)
Cash provided by or used for operations (A)	156,220	141,072
Investment activities	190,220	141,072
Acquisition of consolidated companies	(47)	(127,735)
Cash acquired	(47)	8,841
Acquisition of tangible and intangible fixed assets	(112,803)	(92,548)
Acquisition of financial assets	(112,005)	(92,940)
Change in granted loans and advances	227	(215)
Investment subsidies received		(21)
Dividends received		
Total cash used for investment activities	(112,623)	(211,657)
Divested cash	(;;)/	(===;•)//
Disposal of consolidated companies		
Disposal of tangible and intangible fixed assets	1,341	1,923
Disposal of financial assets	-124-	
Total cash from disposals	1,341	1,923
Cash provided by or used for investment activities (B)	(111,281)	(209,733)
Financing activities	(111,201)	(207,755)
Capital increase		1,838
Net disposal (acquisition) of treasury shares		1,050
Dividends paid to shareholders of the Group	(19,467)	(17,820)
Dividends paid to minority interests of consolidated companies	(19,407)	(17,020)
Total cash from equity operations	(19,467)	(15,982)
Issue of non-current loans	9,166	155,307
Issue of current loans	40,926	467
Repayment of non-current loans	(5,301)	(22,903)
Repayment of current loans	(54,354)	(33,105)
Net interest expense paid	(5,134)	(4,837)
Total cash from operations on loans and other financial liabilities	(14,698)	<u>94,928</u>
	(34,164)	
(ash provided by or used for tinancing activities (C)	(34,104)	78,947
Cash provided by or used for financing activities (C)		
Effect of change in foreign exchange rates (D)	4,741	<u>5,597</u> (908)
Effect of change in foreign exchange rates (D) Effect of adjustments in treasury shares (D)	4,741 302	(908)
Effect of change in foreign exchange rates (D) Effect of adjustments in treasury shares (D) Changes in net cash (A+B+C+D)	4,741 302 <b>15,818</b>	(908) <b>14,975</b>
Effect of change in foreign exchange rates (D) Effect of adjustments in treasury shares (D) Changes in net cash (A+B+C+D) Cash at January 1 <sup>st</sup> (E)	4,741 302 <b>15,818</b> 100,751	(908) <b>14,975</b> 85,776
Effect of change in foreign exchange rates (D) Effect of adjustments in treasury shares (D) <b>Changes in net cash (A+B+C+D)</b> Cash at January 1 <sup>st</sup> (E) Cash at year end (A+B+C+D+E)	4,741 302 <b>15,818</b> 100,751 116,569	(908) <b>14,975</b> 85,776 100,751
Effect of change in foreign exchange rates (D) Effect of adjustments in treasury shares (D) Changes in net cash (A+B+C+D) Cash at January 1 <sup>st</sup> (E)	4,741 302 <b>15,818</b> 100,751	(908) <b>14,975</b> 85,776

\* 2014 financial statements restated to account for IFRIC 21.

### STATEMENT OF SHAREHOLDERS' EQUITY

(in €'000)	Share capital	Capital- linked premiums	Treasury shares	Consolidated reserves		Other income and expenses recorded directly as shareholders' equity		Shareholders' equity, Group share	Minority interests	Total shareholders' equity
Shareholders' equity at January 1 <sup>st</sup> , 2014, reported	21,573	70,803	(14,135)	487,458	(12,078)	(3,084)	74,639	625,179	1,253	626,434
Restatements*				951			59	1,010		1,010
Shareholders' equity at January 1st, 2014, restated	21,573	70,803	(14,135)		(12,078)	(3,084)	74,698	626,186	1,253	627,439
Profit (loss) for the period N (a)							81,464	81,464	94	81,558
Translation differential (b)					23,326			23,326	14	23,340
Payments in shares (c)						784		784		784
Capital increase	37	1,781						1,818	0	1,818
Restatements of treasury shares (d)			(907)					(907)		(907)
Restatements as per IAS 19 (g)						(5,186)		(5,186)		(5,186)
Appropriation of N-1 earnings				74,698			(74,698)	0		0
Change in scope				(988)				(988)	(243)	(1,231)
Dividends distributed				(17,820)				(17,820)		(17,820)
Restatement of financial instruments (f)						981		981		981
Various (e)				(757)				(757)		(757)
Shareholders' equity at December 31, 2014, restated*	21,610	72,584	(15,042)	543,542	11,248	(6,505)	81,464	708,901	1,118	710,019
Including total revenues and expenses recognized for the period (a) + (b) + (c) + (d) + (e) + (f) + (g)					23,326	(3,421)	81,464	101,369	108	101,477
Shareholders' equity at January 1 <sup>st</sup> , 2015, restated*	21,610	72,584	(15,042)	543,542	11,248	(6,505)	81,464	708,901	1,118	710,019
Profit (loss) for the period N (a)							81,764	81,764	95	81,859
Translation differential (b)					19,350			19,350	1	19,351
Payments in shares (c)						1,886		1,886		1,886
Restatements of treasury shares (d)			302			100		402		402
Restatements as per IAS 19 (g)						4,074		4,074		4,074
Appropriation of N-1 earnings				81,464			(81,464)	0		0
Change in scope								0	0	0
Dividends distributed				(19,467)				(19,467)	0	(19,467)
Restatement of financial instruments (f)						(2,207)		(2,207)	(25)	(2,232)
Various (e)				(2,447)				(2,447)		(2,447)
Shareholders' equity at December 31, 2015	21,610	72,584	(14,740)	603,092	30,598	(2,653)	81,764	792,256	1,189	793,446
including total revenues and expenses recognized for the period (a) + (b) + (c) + (d) + (e) + (f) + (g)					19,350	3,852	81,764	104,966	96	105,062

\* 2014 financial statements restated to account for IFRIC 21.

(e) due essentially to the change in the method of measuring discounts on inventories.

### FUNCTIONAL ORGANIZATION CHART



\*secondary sites

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Design, creation and realization The Photo credit Peter Allan

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