

fagorederlandgroup

2010 edition



fagorederlandgroup

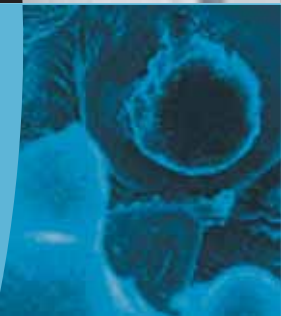
We are a leading automotive business group focused on Chassis and Powertrain business sectors that offers integral solutions to the market with global service vocation.

group



Innovation is the key driver of our current and future business allowing our technological challenges and generating new activities.

innovation



Our Business Units, Chassis and Powertrain, are focused on the knowledge of product functionality covering a wide range of added value proposals in each and every product line.

business



As a cooperative company within Mondragon Corporation, our essential objective is employment generation. We apply a management model based on sustainable development and social commitment.

management

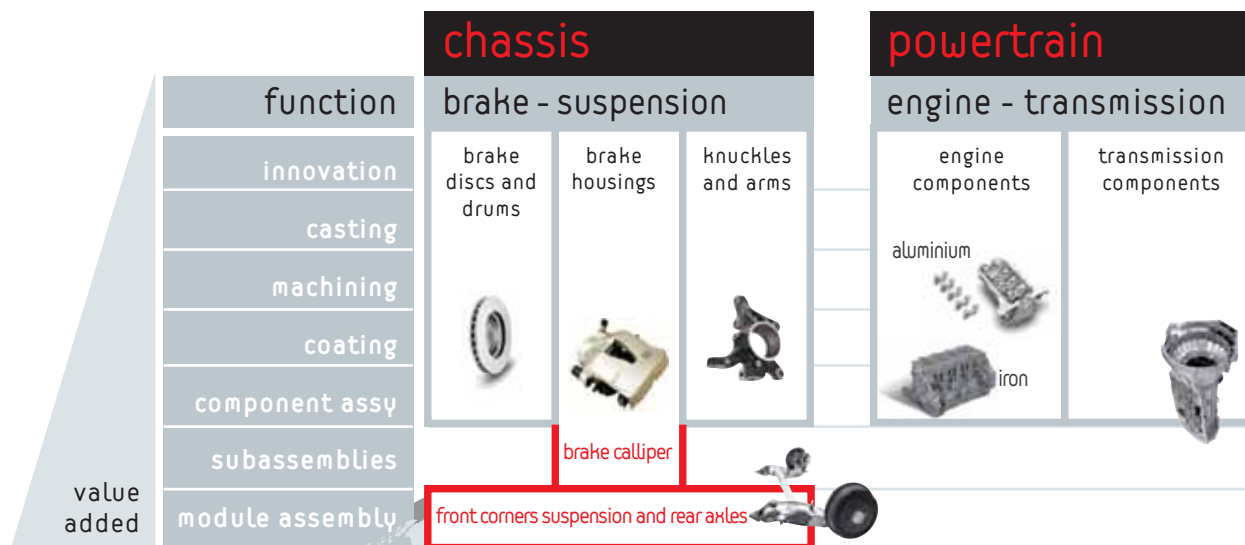




group

We are a leading automotive business group focused on Chassis and Powertrain, which offers integral solutions to the market.

fagorederlandgroup

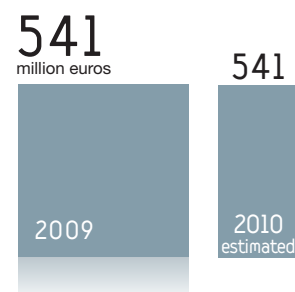


international presence

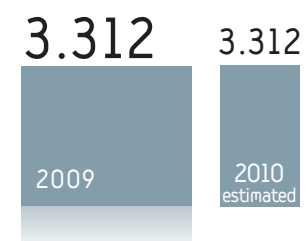
fagorederlandgroup

Highlights

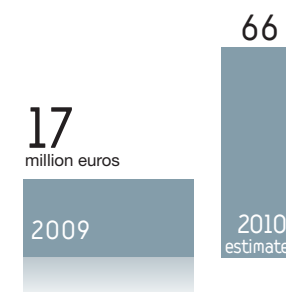
sales



workforce

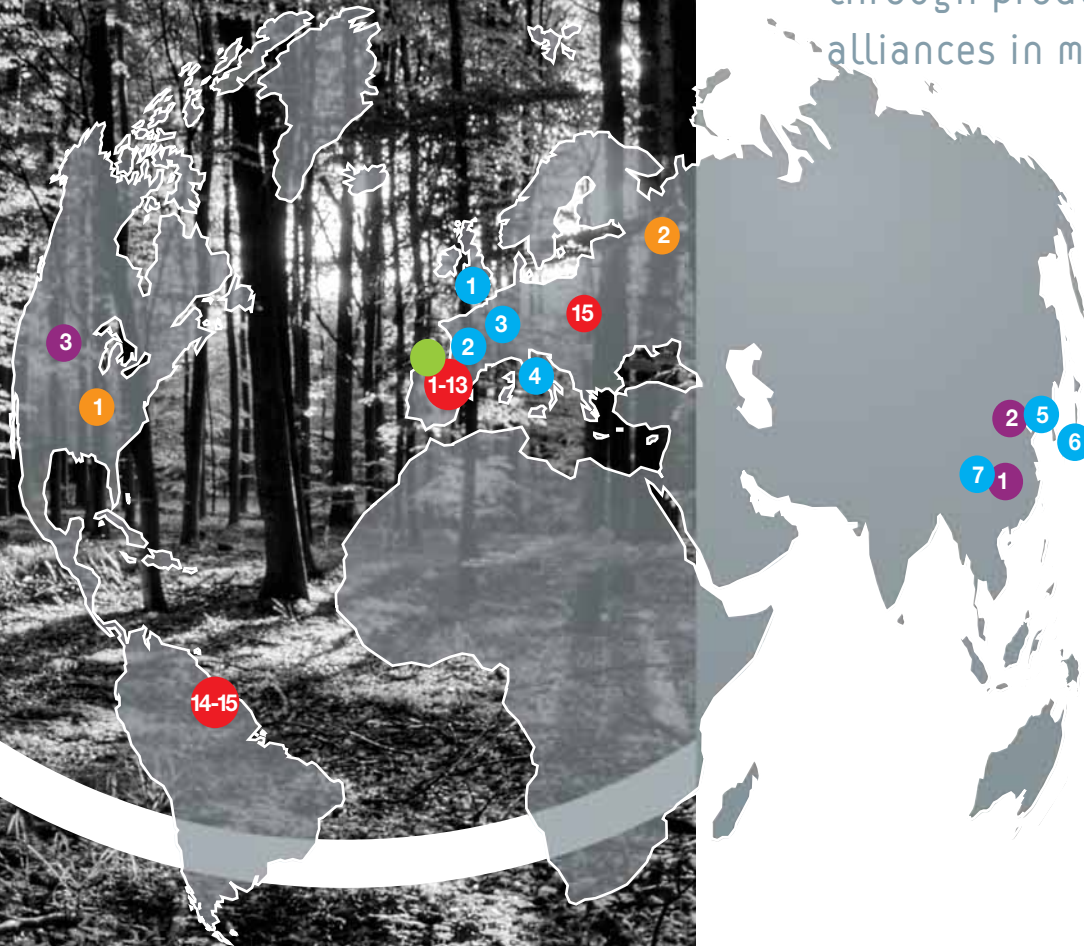


investment



Our clear service vocation

has led our international market presence, allowing us to become a global service supplier for the main market regions through production plants in West-East Europe and Brazil, alliances in market regions such as Asia and Nafta.



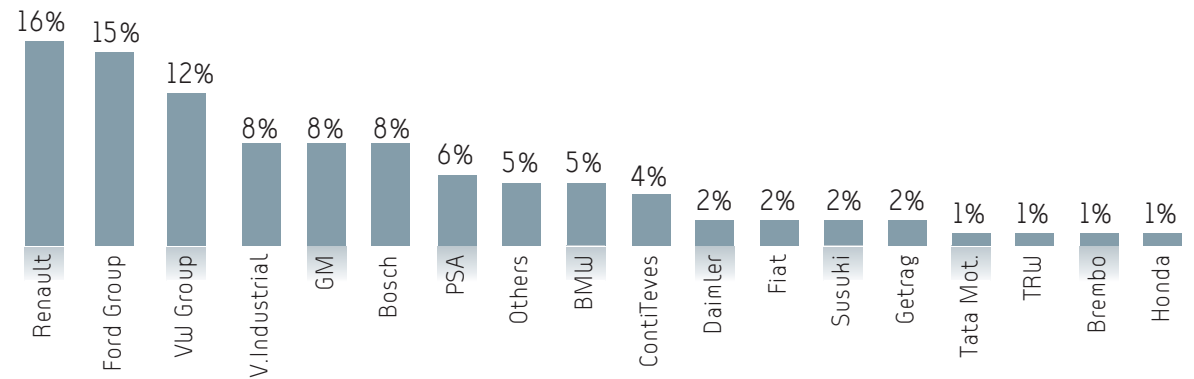
- **chassis**
 - 1 Eskoriatza foundry
 - 2 Usurbil foundry
 - 3 Uribarri foundry
 - 4 Markulete foundry
 - 5 Uribarri machining
 - 6 FIT Automocion
 - 7 Automodulos Aragon
 - 8 Fagor Ederlan Borja
 - 9 Uribarri Low Pressure
 - 14 Fagor Ederlan Brasileira machining
 - 15 Fagor Ederlan Brasileira foundry
- **technology centre**
EDERTEK
- **globalisation projects**
 - 1 USA
 - 2 Russia
- **sales offices**
 - 1 UK
 - 2 France
 - 3 Germany
 - 4 Italy
 - 5 Korea
 - 6 Japan
 - 7 China
- **powertrain**
 - 10 Aluminium Eskoriatza
 - 11 Aluminium Aretxabaleta
 - 12 Fagor Ederlan Tafalla
 - 13 Fagor Ederlan Slovensko
- **production alliances**
 - 1 China
 - 2 Korea
 - 3 Nafta

Customers

40 years of experience with the main automotive manufacturers and related Tier 1's endorsed us a full service supplier.



sales 2009 by customer



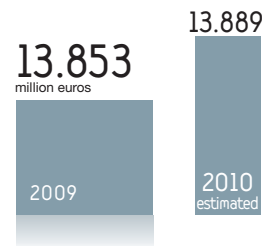
Mondragon Corporation

We are part of the biggest cooperative group in the world, Mondragon Corporation.

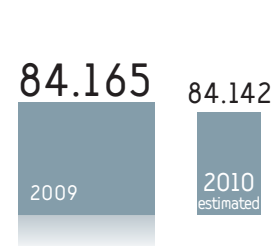


Mondragon Corporation

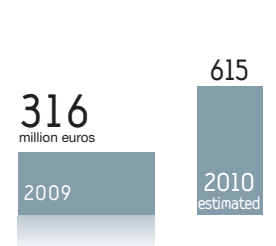
sales



workforce

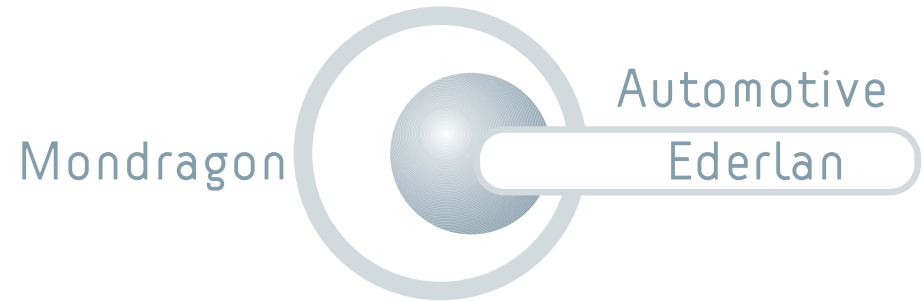


investment



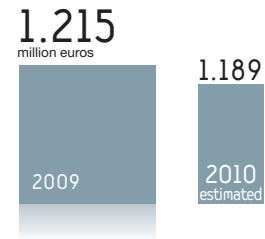
Mondragon Automotive Division

is an amalgamation of common strategies and synergies of all the automotive companies of the group.

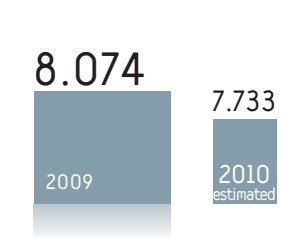


Automotive Division

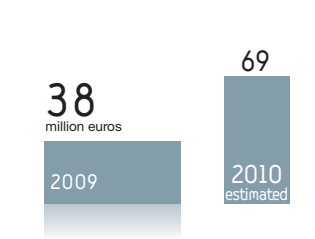
sales

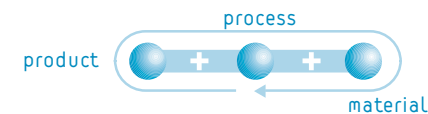


workforce



investment

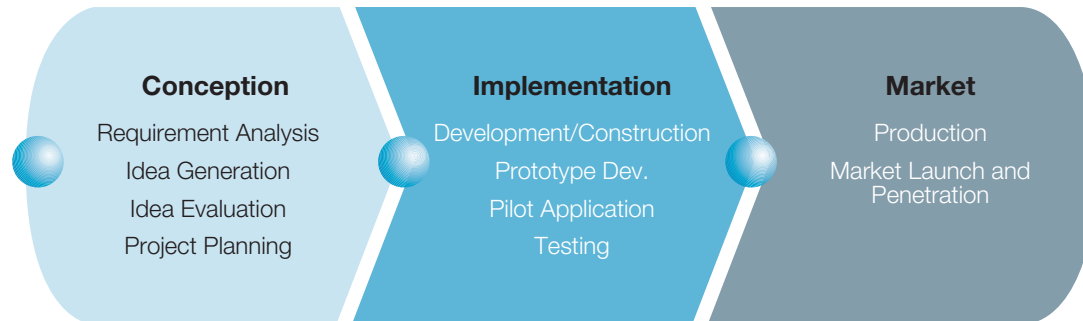




Innovation, our way of doing

The base of our innovation capacity is our knowledge, as an expert supplier. With more than 45 years experience in the Automotive Industry, we are a technology leader in aluminium casting, iron casting, machining and assembly processes.

EDERTEK
technology centre



Edertek: Our technological centre

Innovation is the key driver for Fagor Ederlan Group activity and generation of new business.

Edertek, our technological centre, has as a primary target the investigation and development of new products, processes and materials that meet the highest market place challenges. Registered as a science and technological agent it is located in the Garaia Innovation park, a space for excellence that joins companies

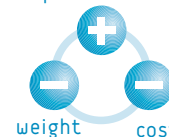
and technological centres from Mondragon corporation such as Mondragon University, Ikerlan and Tecnalia, with which Edertek has signed collaboration agreements. Our technological alliance policy leads us to set collaboration agreements with market technological leader.





innovation

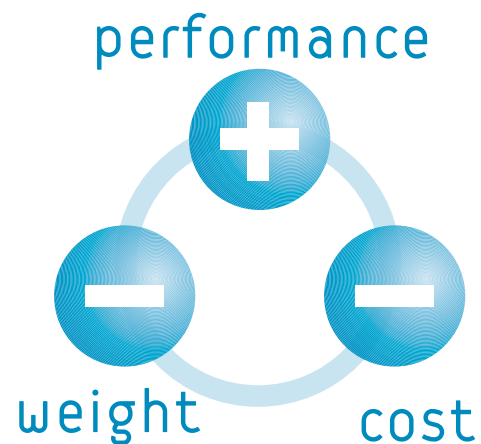
performance



We offer solutions in the most important key drivers of the market

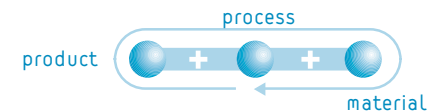
We work through material research and product design to obtain optimum product solution: short cycle product life (lead time from launch to

market) light product solution (design of light casting product and use of light materials) and high performance.



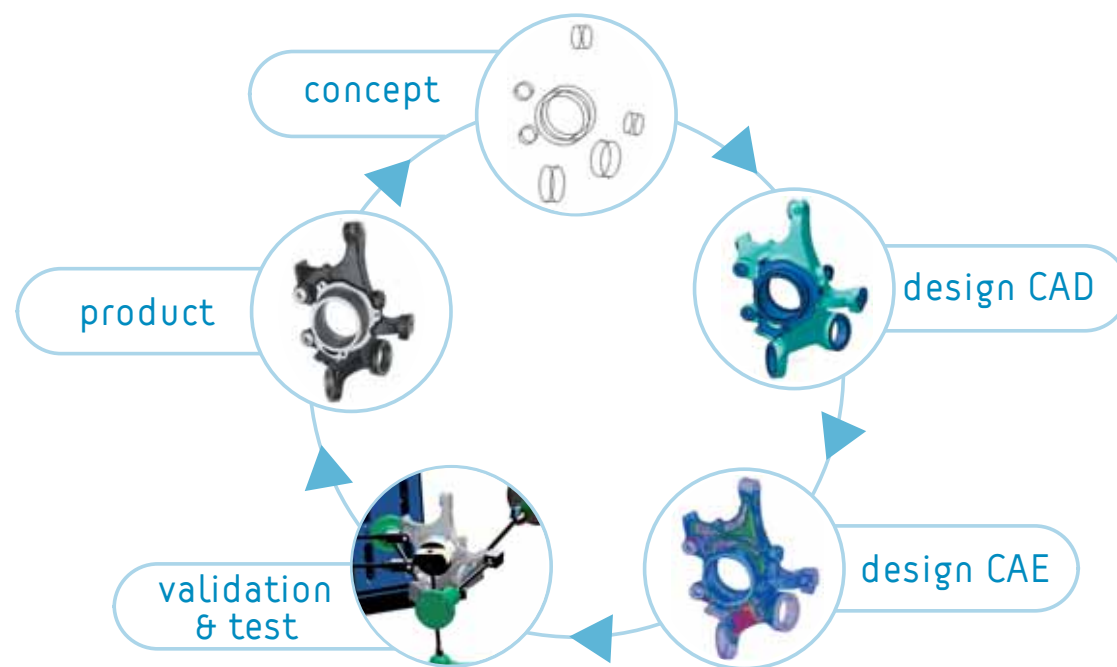


innovation

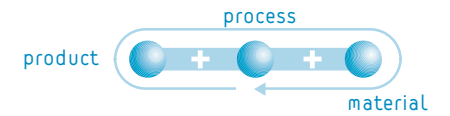


From the concept to the solution

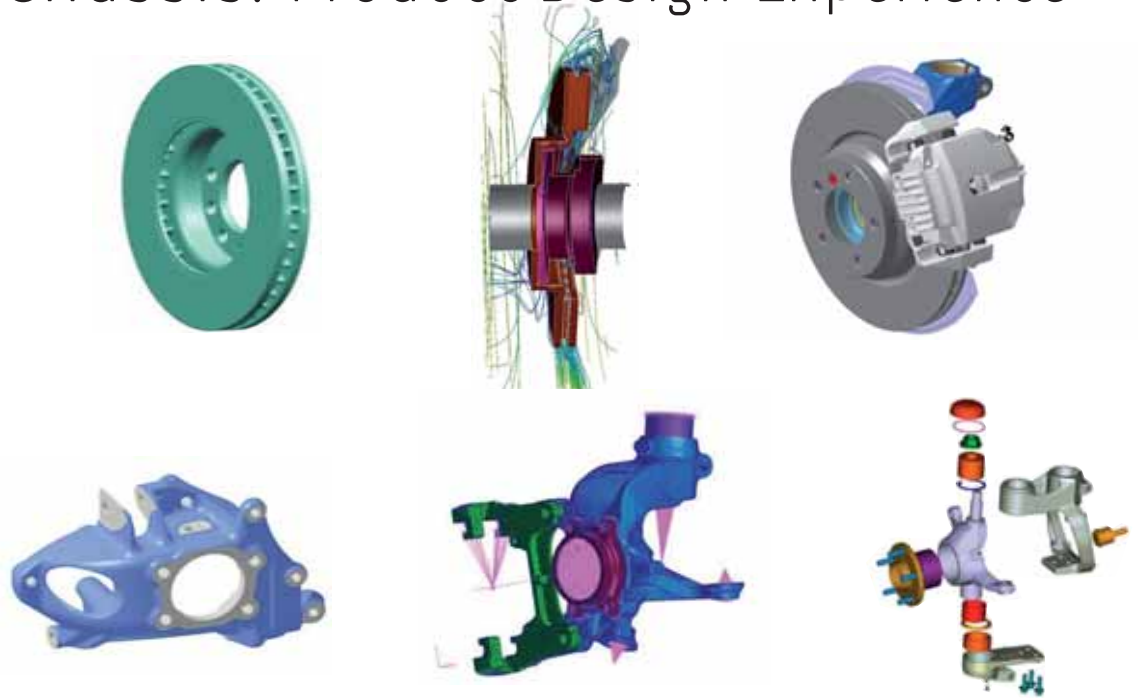
Our development expertise apply to all products within Fagor Ederlan Group and to the complete process chain value phases.

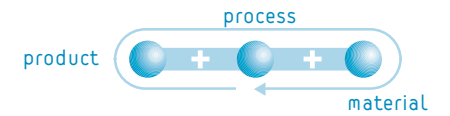


fagorederlandgroup

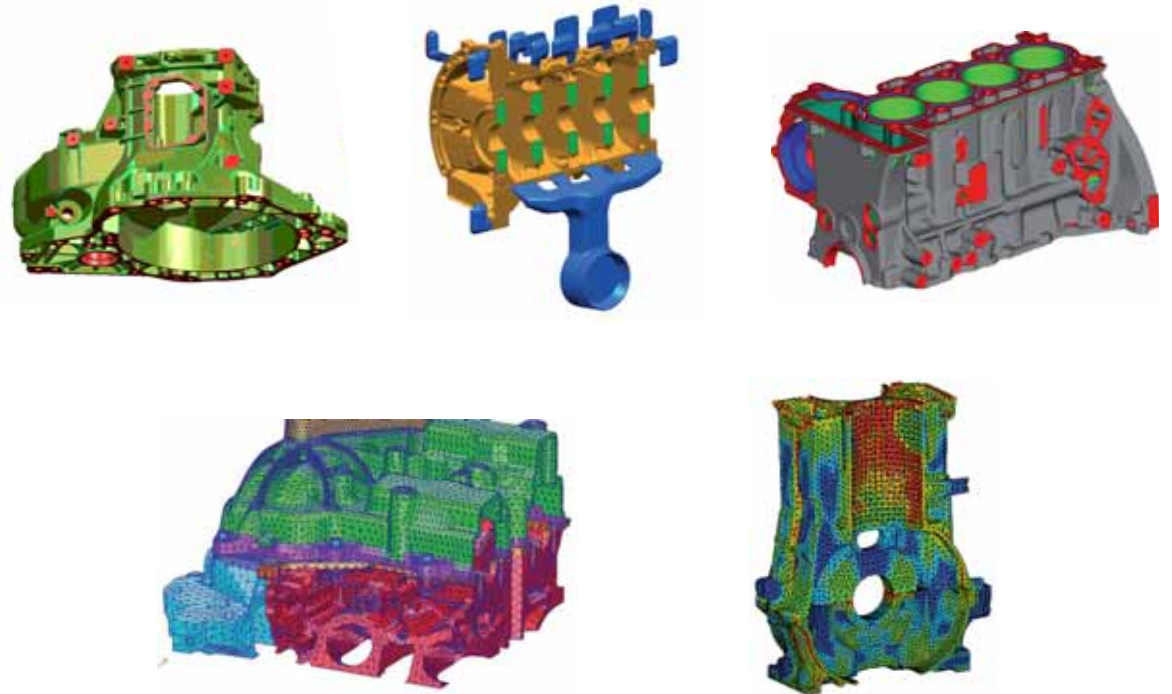


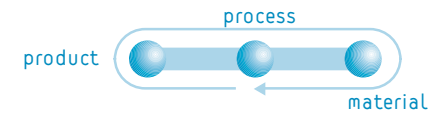
Chassis: Product Design Experience





Powertrain: Product Design Experience





With focus on process

We investigate in order to increase and reinforce the competitiveness of our process.

We focus on areas such as process flexibility, continuous improvement process capability and synergies optimization within different process

steps in order to eliminate no value operations so consequently reduce process leadtime.

melting



metalurgical quality elaboration

casting



development of high capable processes

post-casting



maximun flexibility and synergies with casting and machining

machinning



Flexibility lines according to product requirements

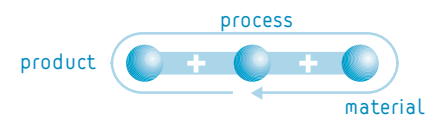
assembly



Adding value continuously



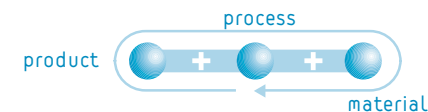
innovation



With focus on tools

We understand the tools design as part of our integral process development activity and it gives us a technological differential because we reduce the launch project leadtime and the impact of tools on cost and product quality





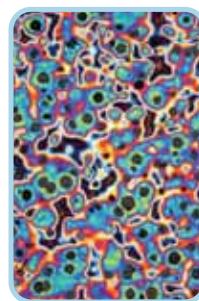
With focus on material

Our research in this area is aligned with product requirement, looking for the best properties and material solutions.

Optimisation of metallurgical quality is our focus for high quality performance

product, cover all the process stages in casting and treatment.

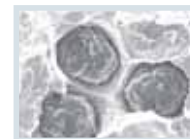
iron



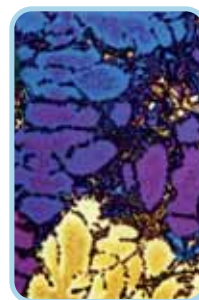
grey LGI ——— Thermal properties

compact CGI ——— Thin wall thickness

ductile SGI ——— High mechanical properties



light alloys

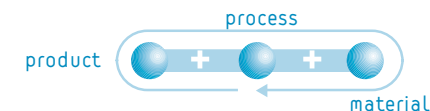


Al ——— A356 ——— Use of secondary alloys (recycled)
A380

Mg ——— Weight reduction

MMC ——— Micro- and Nano-reinforcing particles





Innovation in house facilities: pre industrialisation

We have internal innovation production facilities that allow us to validate, try and improve our design capacity. We have a prototype area equipped with the latest technologies.



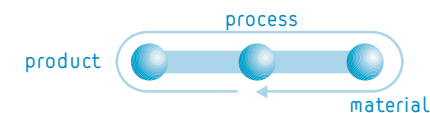
High pressure cell

- 2700 Tn. locking force
- 1Tn/h melting capacity
- 2 Tn. holding capacity
- 2800 kg. dosing capacity
- Vacural & conventional vacuum technology
- Robot for lubrication
- Robot for extracting the part
- Water & oil thermal regulators
- 20 Thermocouples monitoring
- Flow & temp. automatic control in 5 circuits
- 640x480 pixel thermocamera

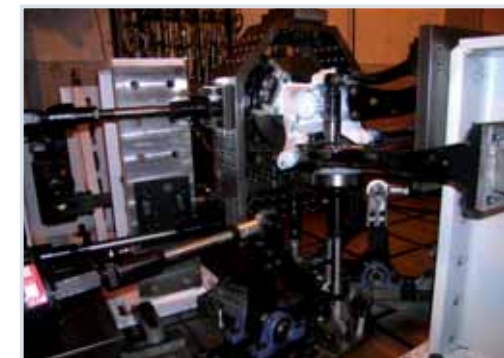


Low pressure cell

- 1000 kilo aluminium casting furnace
- Moulds for parts up to 1200x1775mm & 60 kg.
- Xray equipment,
- Machining control
- Quick cooling system



Innovation in house facilities: test
we have internal innovation facilities for creating prototypes,
carrying out testing, validating product and process
innovations.



Testing equipment

- 24 hydraulic actuators
- Inertia dynamometer
- Drop Impact tester
- Noise&vibration analyser

Innovation in house facilities: engineering applications

We support our customers with collaborative designs as an expert supplier, with knowledge of the product function and the process.

Data and project management:

Windhchill

Product and tooling design:

Catia v5, Unigraphics NX, Pro- Engineer Wildfire, I-deas

Product verification:

Abaqus, Nastran, Fluent, Adams, Fatigue, Patran, HyperWorks, ...

Process verification:

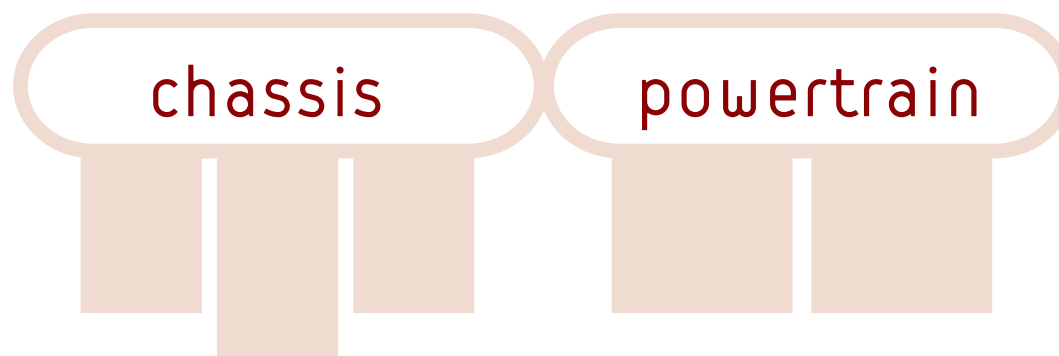
Procast, Magma, Tecnomatix Plant Simulation

Data interchange:

KVS , OEM-Advantage, Leapfile, Autoweb, Odette, Galia, FTP,...

Our Business Units

Chassis and Powertrain, are focused on their knowledge of production functionality covering a wide range of added value proposals in each and every product line.



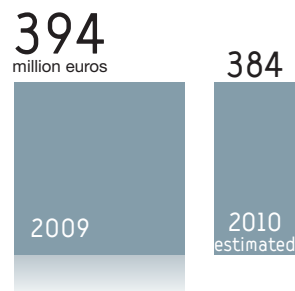
chassis

powertrain

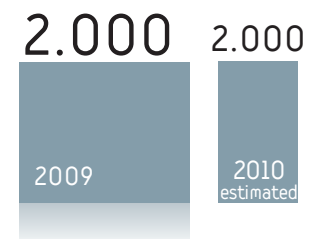
Chassis

The Chassis business unit is a master for the key components of Brake and Suspension functionality. From our experiences and innovation resources, we are able to offer the best option of products and modules in terms of weight, material, process and cost to the global service demand required.

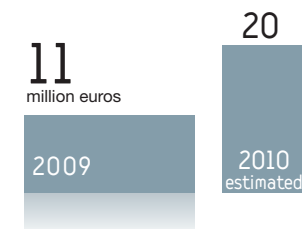
sales

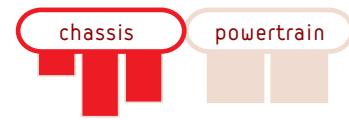


workforce



investment





value added	
technologies	capacity
 iron casting	200.000 tonnes
 low pressure aluminium	3.000.000 components
 machined parts	15.700.000 units
 components produced	40.000.000 units
 assembly	4.450.000 units

11
plants in
Europe and Brazil

chassis

powertrain

discs and drums



cast iron:
grey

70.000
tonnes



machined
parts

8.000.000
components



2 foundries

In Europe:

● **Uribarri and Markulete**

1 machining plant

In Europe:

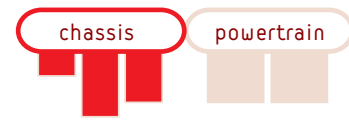
● **Uribarri**

(14 flexible machining lines)

technologies

capacity

value added



brake calliper



cast iron:
nodular **67.000**
tonnes

machined **3.000.000**
units



2 foundries

1 in Europe:
● **Usurbil**

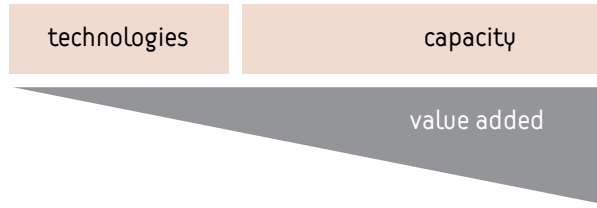
1 in Brazil:
● **Fagor Ederlan Brasileira**

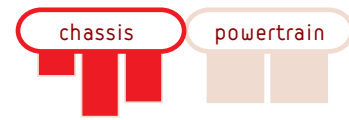


brake
calliper
assembly **3.000.000**
units/year

1 machining plant

In Europe:
● **FIT Automoción**





knuckles and arms



cast iron:
nodular **67.000**
tonnes

2 foundries
1 in Europe: ● **Eskoriatza**
1 in Brazil: ● **Fagor Ederlan Brasileira**



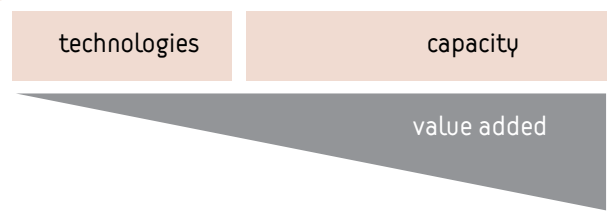
low pressure
aluminium **3.000.000**
units

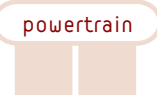
1 low pressure
in Europe: ● **Uribarri**

machined **9.000.000**
units

2 machining plants
1 in Europe: ● **Uribarri**
1 in Brazil: ● **Fagor Ederlan Brasileira**

● **Production alliances in Korea, China and USA**





front corners and rear axles



2 assembly plants
in Europe
● Fagor Ederlan Borja



module assembly	500.000 pairs of front corners
	700.000 rear axles

technologies capacity

value added



chassis

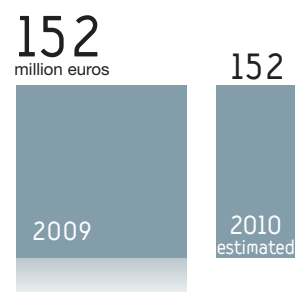
powertrain

Powertrain

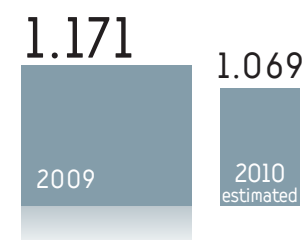
Offers to the market complete solutions, improving its position on the basis of its knowledge of the Engine-Transmission function.

Technological leaders in high-pressure aluminium die-casting, iron casting and machining for engine and transmission components, we offer high added value solutions.

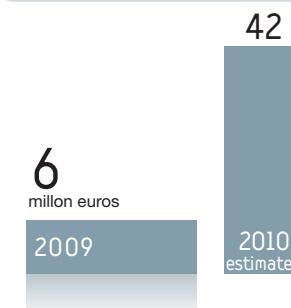
sales

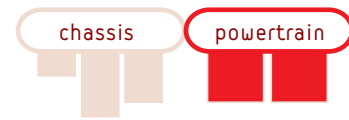


workforce



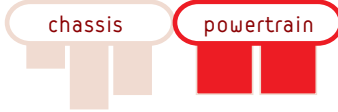
investment





value added	
technologies	capacity
high pressure aluminium diecasting components	38.000 tonnes / year
grey cast iron, engine blocks and cylinder heads	140.000 tonnes
machining	1.440.000 units / year

4 plants in Europe



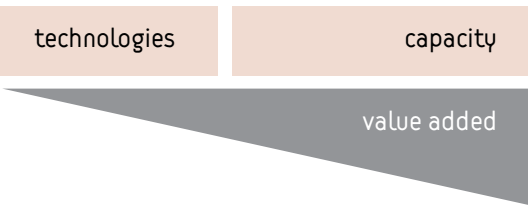
transmission components

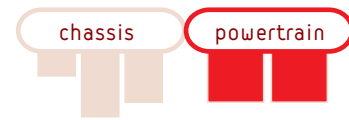


high pressure aluminium diecasting	23.000 tonnes
------------------------------------	---------------



3 aluminium die casting plants
● 2 in Spain
● 1 in Slovakia



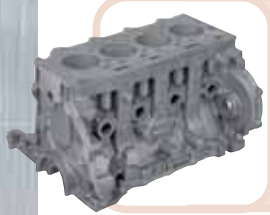


engine components



high pressure aluminium diecasting **15.000** tonnes

aluminium machining + assembly **1.440.000** units / year



grey cast iron, engine blocks and cylinder heads **140.000** tonnes

3 aluminium die casting

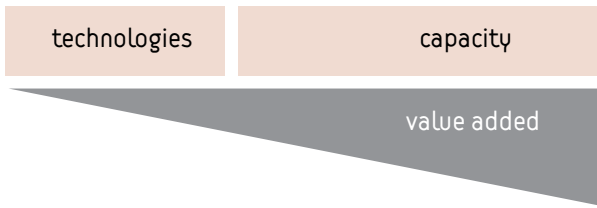
- in Europe:
- 2 in Spain
 - 1 in Slovakia

3 machining plants

- in Europe:
- 2 in Spain
 - 1 in Slovakia

1 iron foundry

- in Europe:
- Fagor Ederlan Tafalla



Social commitment

Continuous job creation, preferably on a co-operative basis with full value added, progressively turning our subsidiaries into co-operatives, and promoting social models of work. Participation and internal democracy as an ethical and human form of relationship and governing the co-operative organisation.

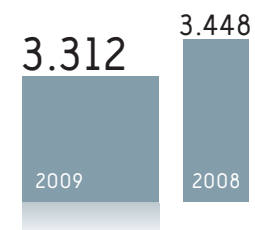
In-service training and personal development as a basis for the future, with high levels of internal promotion and a boost to professional and personal qualifications at all structural levels.

Solidarity and involvement in the community through the Co-operative Promotion and Education Fund (FEPC) and the Inter-co-operative Promotion and

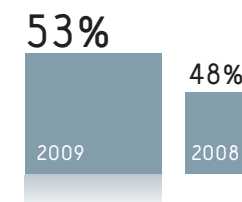
Education Fund (FEPI). Direct collaboration with civil administration to establish and develop cultural and sustainability policies.

Exceptional internationalisation model aimed at maintaining activity and employment levels at the parent organisation level.

workforce



members





Environmental commitment

That goes beyond the legal requirements and is deployed within the framework of government collaboration.

Environmental Guidelines with the Basque Government (2004), and signing of Voluntary Agreements as a contribution to the Basque Environmental Strategy for Sustainable Development 2002-2020.

Strategic initiatives aimed the full life cycle of the vehicle.

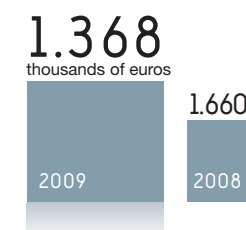
Awareness that excellence in environmental management requires behaviour from people in tune with their values.

Environmental management increasingly more integrated in the notion of the sustainable company where sustainability is understood from a social, economic and environmental perspective born from our own co-operative principles.

investments

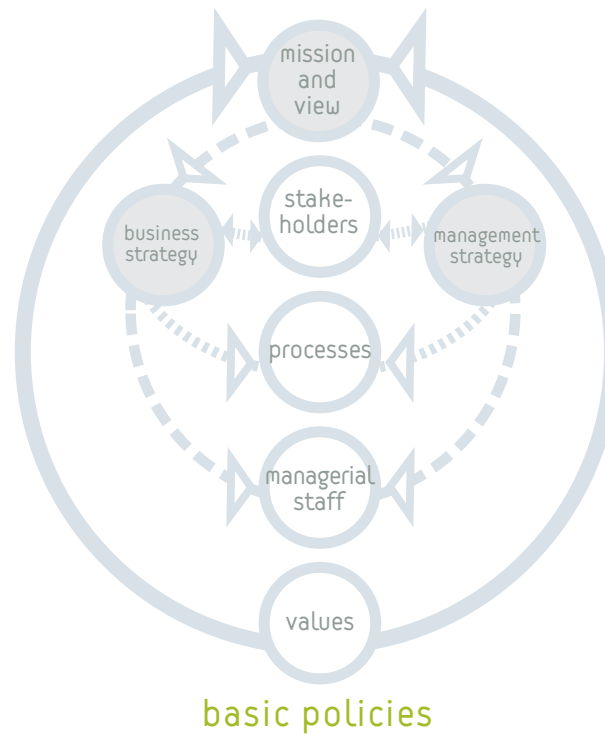


costs



Management

Our Management Model is part of a people-based project, focused on the principles and values that are the identifying features of an outstanding socio-business project.



Management systems certified to the highest market standards:

ISO-TS 16949:2002

ISO 9001:2000

ISO 14001

OHSAS 18001

An environmental commitment within a framework of sustainability beyond the legal requirements:

establishment of Voluntary Agreements with the Basque Government as part of collaboration in the Basque Environmental Strategy for Sustainable Development.





www.fagorederlan.es

sales offices

Germany

Fagor Industriecommerz GmbH
Postfach 604 D73008 Göppingen
Nördliche Ringstrasse 100
D-73033 Göppingen
Tel:+497161200423
Fax:+497161200451

France

Fagor Ularco France
8 rue de l'Estere
Bat. Rome SILIC 556
94643 Rungis Cedex
Tel:+3341730111
Fax:+3345605530
Branch office Director: Jesús Ayala

UK

Fagor Industrial Components
DBH Dudley Castlemill
Burnt Tree
Dudley DY4 7UF
Tel: +44121 226 3542
Fax: +44121 226 3540
Contact name: Nigel Coysten

Italy

Customer Assistant: Marco Ranno
m.ranno@fagorederlan.es
Cell: +39 340 1838945
fax: +39 02 95301298

Korea

Branch office Manager: Yoo Soon Bong
ysbfagor@hotmail.com
Tel: +82-(0)322028842
H.P.+82-(0)1077612412

Japan

Corporate representative: Yukio Tsujai
tsujiai@aa.mbn.or.jp
Tel.+81-9029062844

China

Fagor Ederlan Shanghai Auto Parts Trading Co.Ltd
Room 3211,Haitong Securities Building, No.689
Guangdong Road, 200001,Shanghai, P.R.C
Tel: (86 21) 6341 0726
Fax: (86 21) 6341 1073
Corporate representative: Xu Kun
xu.fagorederlan@mondragoncorporation.cn
MP: (86) 139 1682 8575

head office

Paseo Torrebaso, 7 • 20540 Eskoriatza, Gipuzkoa • SPAIN

Tel. 34 943 719 000 • Fax. 34 943 719 001



fagorederlangroup