# BBATZ





# DIVERSIFIED GROUP



### **4 BUSINESS AREAS**



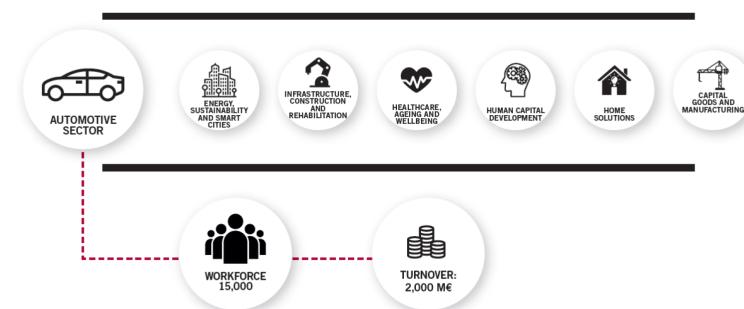
## 266 COMPANIES



## MONDRAGON INDUSTRIAL



### 7 STRATEGIC AREAS





## **B**BATZ

## MONDRAGON AUTOMOCION

#### MASS PRODUCTION

- Automotive Systems
- Chassis & Powertrain
- Exterior & interior Colour & trim
- Fluid conduction & Antivibration
- Electronics

#### TOOLING AND EQUIPMENT

- Stamping Dies
- Stamping Machinery
- Foundry machinery and Tooling

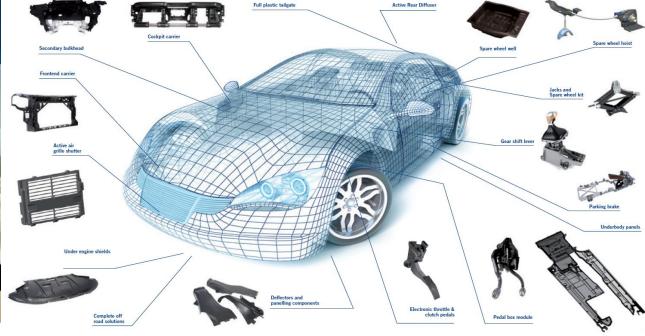






#### **Automotive**

#### **AUTOMOTIVE SYSTEMS**







#### **Automotive**

#### **TOOLING**

#### GLOBAL PROJECT MANAGEMENT



Advanced manufacturing technologies for integral solution.

More than 30 own try out presses, up to 2500 Tns and 5000 x 2500 mm press table, amongst others.

Up to 1.000.000 hours capability.

#### PRODUCT RANGE

40%

· Skin parts tooling: Aspect requirements fulfillment based on our commitment and expertise. Skin aluminium and steel parts.

• Structural parts tooling: Full material range, UHSS/AHSS and structural aluminium alloys.

20%

40%

· Press hardening: Cooling dies, two try out lines in-house. Advanced alloys for aerospace industry.



Complex project management.

### **CUSTOMER REFERENCES**

We work in close collaboration with important brands in the automotive, energy and aerospace industries.

#### **AUTOMOTIVE**

















































































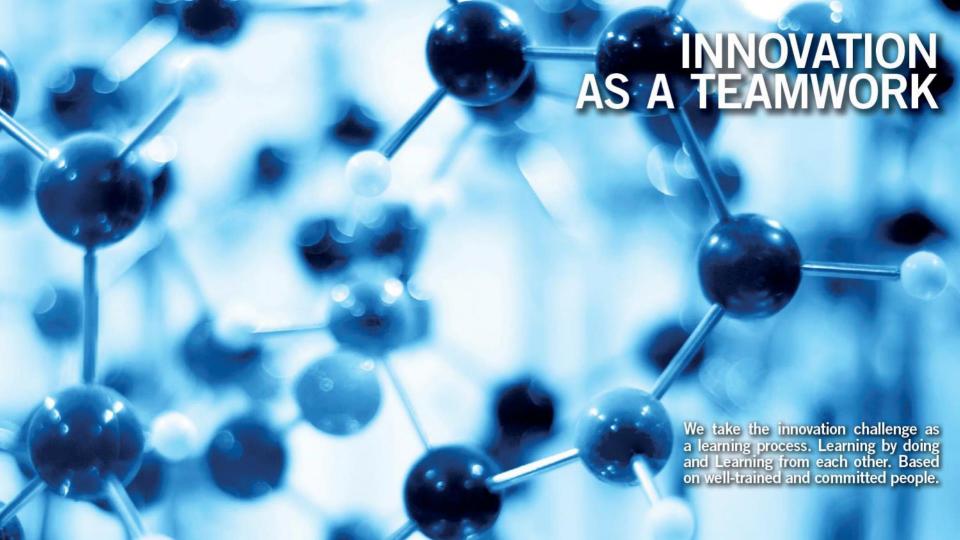












#### **INNOVATION DRIVERS**



Focused on electric mobility, lightweight materials & technologies to achieve a mass reduction and increase the range and NVH final user perception

Introduction of new lightweight materials & technologies to achieve a mass reduction with the final aim of reducing energy consumption and CO<sub>2</sub> emissions

Introduction of lightweight materials & forming process (hot stamping aluminum, multi-property body parts...) increasing safety



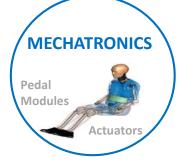
#### **INNOVATION AS A TEAMWORK**

Talented workforce skilled for the Automotive challenges focusing the future based on the ecosystem formed by several agreements with Universities and R&D centers

Digital brain







Mechatronic systems to provide several functionalities required by users' demands, such as safety or ergonomics



Innovative active aerodynamic solutions for minimizing energy consumption by optimizing the management of air flows and increase performance efficiency





1998







Aluminium







#### **OUR EXPERIENCE**

In 2006 we applied the ecodesing methodology to a pedal box module known as PQ24, the result was the new PQ25 for Volkswagen. This experience was shown on the client factory in Landaben as a good practise.

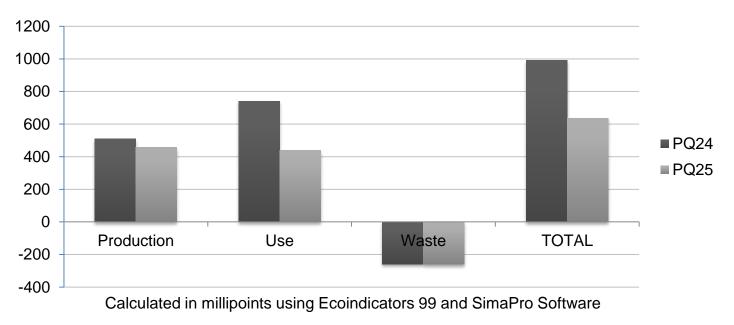
#### Giving some facts:

PQ 24	PQ25	IMPROVEMENTS
Steel	PP+GV	
22 parts	16 parts	-27% numbers of parts
2,933Kg	1,680Kg	- 43 % lightweighting
Using nut/bolt	clipping	easier dismantling (ELV)
Using weld and painted	Weld/ paint not needed	less production processes



#### LIFE CYCLE ASSESSMENT

We analysed the environmental impact of both pedal boxes through the entire life cycle as a product, wich includes production, use and disposal phases. We reached 637mPts, 36% less than the PQ24.





### WHAT WE HAVE LEARNED?

Our serial products will have the highest environmental impact during USE phase, basically refered to their weight, so that the strategy must be LIGHTWEIGHTING.



PQ25 was the cheaper alternative (-29%). Ecodesing doesn't increased the cost of the article. The implementation of PLASTIC INJECTION in BATZ can be seen as a success. Since then, we have new machines, equipment, products and technologies availables.

Water Injection Technology (WIT) Sheet Moulding Compound(SMC) In-Mold Coating (IMC) MuCell® Technology 2K Injection Moulding



#### LOGISTICAL SUPPORT

We improved not only during use phase. PQ25 packaging was redesigned, optimizing each shipment, using returnable steel containers with carton instead thermoformed polythene sheets.







## WE MADE, WE MAKE

The Logistics department has been working hard to have:

- Milk runs, handling with maximum capacity utilization and minimal costs.
- Standardized returnable KLT boxes. Some of them made whith our plastic waste, or second-hand bought

Our Engineering it is searching structural lightening based on the use of new materials





# «Foster the spirit of respect for the environment and a commitment to participating and colaborating in the actions taken on environmental issues»

Ana Camacho CEO BATZ Group

# BBATZ



