

Who are we?

**Sectors** 

Why choose us?



# Who are we?







### "Vision"

To be a globally preferred *Actioning Solutions Partner* in terms of quality, flexibility, and quick capacity of response.

## "Mision"

To achieve *precision electro-mechanisms and components* capable of adapting to small sizes which comply with the most demanding specs. and quality standards

# "Strenghts"















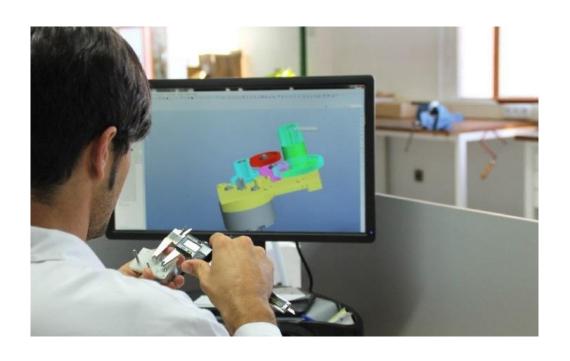
# Meeting the highest quality standards

CLR tries extensively to obtain the best performance and **meet** the highest quality standards in our gear motors and components, as well as Quality Management.



### **Devoted to Innovation and R&D**

CLR vocation to continuous improvement leads us to a permanent process of Innovation and R&D in areas such us materials, acoustics, mechanics and related areas, resulting in Patents.



#### **Our Quality & Innovation awards**









#### Unión Europea

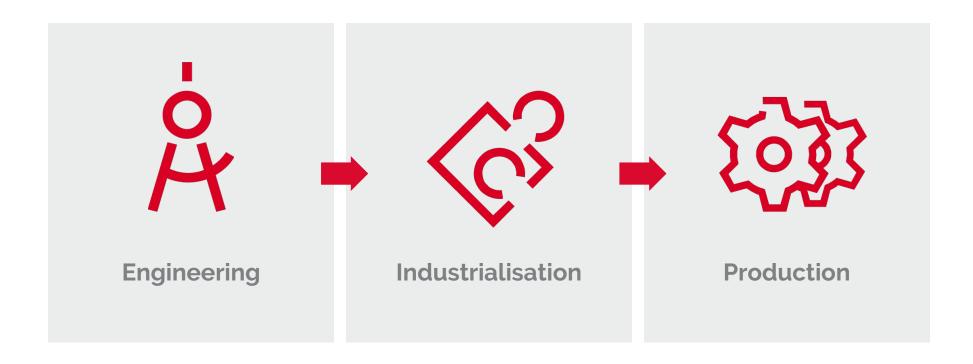
Fondo Europeo de Desarrollo Regional "Una manera de hacer Europa"





# The complete solution for your actioning ideas

Three large processes to deliver our value proposition :





## **Value Proposition: ENGINEERING**





# Our team is aware of the importance of each individual part

We are a flexible and innovative team that always finds an effective solution to bring your actioning ideas to life.

We are with you at every stage of your project, from analysis to development, and adapt to all your needs.

.



We have designed

+ 5.000 gearmotors



**Customised gearboxes** from CLR's



Tailor-made **Projects** 





## Value Proposition: INDUSTRIALISATION



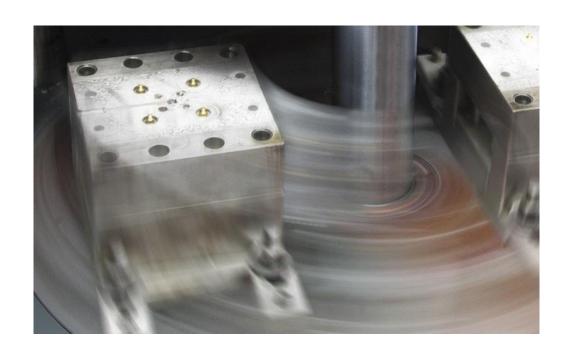


# Product industrialisation for product manufacture and assembly

CLR designs and develops the **product tooling** necessary to manufacture components, as well as the **line tooling and inspection machines** needed for a finished product assembly.

Our engineers develop each individual process for the industrialisation of the final product.

"We develop the processes and necessary tooling to manufacture, assembly and test your product"





## **Value Proposition: PRODUCTION**



# Technology and Know-how to ensure the quality of our products

#### **Gear motors & components**

CLR is specialised in turning the actioning solutions designed for each purpose into reality. Our lines of **flexible assembly**, **milling of toothed parts and injection processes** (conventional, microinjection and overinjection) come together to ensure that every aspect of our gear motors and components meet the highest demands in each sector.

"Product manufacturing with flexibility and speed".







# **Sectors**







## Which sectors do we work in?

CLR's experience spans many sectors. Thanks to our specialisation, we can assure the highest level of performance and durability.



· Automotive



· Vending



· Electromechanics



· HORECA



Security



· Air conditioning



# **Automotive**







## **Driving towards excellence**

+ 20 years with the biggest in car industry

Precision, quality and durability. **Automotive is a demanding industry in which every detail counts.** Thanks to the commitment of our team, our experience in the field and the quality of our solutions, big brands have been trusting our products for more than two decades.



CLR supplies actioning solutions to the most important brands in the car industry























# Variable suspension system actuator

A system which enables drivers of Audi RS6 models to manually regulate the stiffness of the vehicle's shock absorbers.



### Challenge

- Maximum performance in high vibration volumes
- Very small dimensions
- Maximum durability and quality in hard outdoor conditions



- Gear motor with more than 200.000 cycles, resistant under external conditions: rain and peaks of 85°
- · Audi has included our solution on the entire RS range





# Folding mirrors on passengers cars and commercial vehicles

**Electrical powerfold system for rearview mirrors** 





- To obtain a torque higher than 4 Nm in a very limited space by reaching a rotatory speed of 18 dregee/sec
- Design to comply with the strict regulatory demands of the sector, durability, liability & guarantees required by major brands



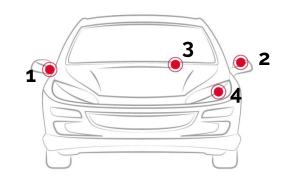


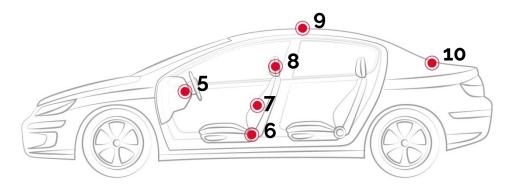
- EMC Electromagnetic compatibility
- Powerfolds capable to overcome 50.000 durability cycles, as well as strict regulations such as TL82398 from VW group.
- Our powerfold range for rearviews has progressed to covering the needs of different types of vehicles both passenger cars and commercial vehicles.





### Gear motors in vehicles





- 1. Rear-view mirrors: Powerfold actuators
- 2. Rear-view mirros: Glass actuators
- **3.** Engine block: Actuators for the actioning of valves regulating gases and fluids.
- 4. Lights: Actuator for headlight cleaning systems.
- **5. Steering wheel**: Actuators for the adjustment of the steering wheel position with respect to the driver.
- **6. Seat**: Actuators for the automatic regulation of the seat height and position.
- 7. Seat: Actuator for the lumbar adjustment of the seat.
- **8. Headrest**: Actuator for the automatic adjustment of the head support.
- **9.** Roof: Actuators for the opening and closing of the roof.
- **10.** Boot: Actuators for the automatic opening and closing of the boot lid.



# Vending







# **Strength in small sizes**

More than 25 years giving the perfect motion

Our solutions are adapted to dimensions and needs of adaptability and maintenance of the Vending sector. Thanks to our experience and the know-how of our team, we get great results and we comply with every customer specific requirement.



**CLR** manufactures for:













# **Extraction of products from vending machines**

**Great power extraction system in small dimensions** 



### **Challenge**

- Need for adaptability and easy maintenance
- Very small dimensions and great power
- ·Great resistance & durability



- Easy mounting and disassembly gearmotors with no need for tools
- Solution able to fulfil dimensions requirements and strength of the brand
- •Gearmotors which have a durability of up to 200.000 cycles



# **Hoppers activation gearbox**

Coin input control system for gaming machines



### **Challenge**

- •Bespoke gearmotor for casino machines
- Solution able to move bigger and heavier prize container
- •Reliability & precision in a large number of cycles



- •Design and material innovation to fulfil client demands
- •High power with maximum guarantee and precision
- Number of cycles greater than those required by the customer





# **Vending gear motors**

Coin return:

Solution for returning coins

Products extractor:

Product extraction system in all sorts of machines

Screws rotation:

Worm gear motion for product extraction

Wallet:

Solution for bill/note extraction

Roller drive:

Solution for roller actioning in slot machines.

Dispensers:

Solution for automated sweet dispensing



# **Electromechanics**







# **According to the strictest European** standards

Reliable gearmotors with the best guarantees

Our Engineering Team develops reliable and high quality gear motors in accordance with the **strict European Union safety standards**. Thanks to our experience, our solutions have managed to achieve great results even in the smallest sizes.



















# **Self Reclosing for Overcurrent Protection Systems**

Compac actuator enabling automatic reclosing



## Challenge

- ·High reliability and guarantee
- •Installation on a DIN rail
- •To comply with all the safety requirements as set by the EU



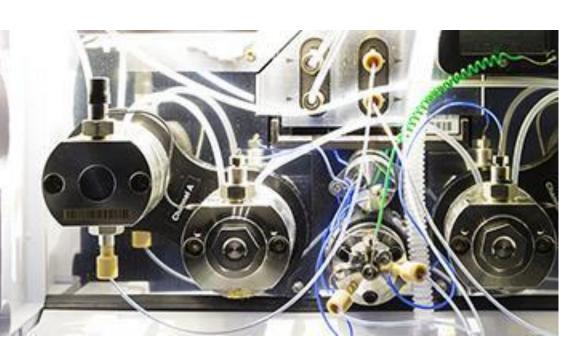
- •Gear motor using mechanical locks
- Solution capable of meeting client's needs of more than 20,000 cycles
- •The gear motor met the high safety requirements of the sector and the UL 94 flammability standards





# Peristaltic pump gear

Optimize the performance of the peristaltic pumps



## **Challenge**

- •To improve gear motors design, performance and quality
- Price and noise reduction
- To increase operating hours





- •Use of new materials and heat treatments
- •A 50% increase in the uninterrupted operation hours.
- •A 20% noise reduction
- •A 25% more economical solution.





### Gear motors in electromechanics sector

#### Automatic door opening

Mechanism performing the opening in automatic doors through remote control

#### Orientation solar panel

Solar tracking solution, reorienting panels so that they can absorb the maximum power.

#### Cradle oscillation:

Solution for oscillating movement in baby cradles

#### Pellet stoves:

Solution for the control of the automatic supply of pellet stoves.

#### Lorry tarpaulin automation:

A solution that gathers and extends tarpaulins on trailers that usually transport aggregates.

#### Incubators:

Solution that moves eggs in an incubator as a hen would to keep them warm.

# **HORECA**







## Overcoming the highest standards

Motion in hotel, restoration and catering

Besides a wide range of standard gear motors of the highest quality, at CLR we are specialists in developing custom movement solutions for your HORECA projects. We offer the perfect motion to machines of this sector like industrial mixers, industrial toasters, coffee grinders, etc.

















# Soluble dosing and brewing system

Bespoke solution for your machines



### **Challenge**

- •Improve market quality standard
- Avoid supply problems
- Iprove price, which was too high





- Custom design meeting requirements of each customer
- ·Quality, design and price improvement.





# Crushed ice density control system

Improve the standard solution on the market



## **Challenge**

- Need of customised solution
- Improvement in reliability and price



- To overcome customer expectations
- •More reliable and profitable gearmotor
- Less noisy solution with greater safeguards and durability





### **Gear motors in HORECA**

#### Coffee pressing:

Solution that performs the locking and pressing of the recipients where coffee is prepared.

#### Industrial juicers:

Solution for operating coffee shop juice extractors.

#### Industrial toasters:

Solution for the belt movement in industrial toasters.

#### Industrial mixers:

Solution for operating domestic and industrial food blenders.

#### Coffee grinders:

Solution for grinding coffee beans.

#### Convection ovens:

Solution for the actuation of valves in convenction ovens.



# Security







## **Perfect motion security**

#### There is no room for error

There is no room for error in the safety sector. At CLR we strive to develope **infallible** and **high quality gear motors** to obtain the highest guarantees to get the perfect motion when it is needed. Contact us to find the best solution in **automatic solutions**, **safety locks**, **safety barriers**, **intelligent locks** and many other projects.



#### CLR manufactures for:















# **Coin-controlled locks** for shopping trolleys

Patented system used in multinational supermarkets



### **Challenge**

•Improve the system they had for design, installation and price



- Great versatility mechanism being able to adapt to different market coins.
- Easy installation
- Inviolability





## Isolation barrier and smoke control

Facilitate the evacuation of people in case of fire in buildings



### **Challenge**

- Perfect isolation barrier fall mouvement in extreme situations
- Without power supply
- Approved in accordance with the strict European UNE EN 12101-1 standard and with a CE compliance certificate.



- Reduced consumption
- •Controlled and soft fall with the help of gravity
- It retains rolled-up control barriers until receiving the alarm signal





# **Gear motors in safety sector**

Gear motors for safety boxes:

Solution for automated lock

Intelligent locks:

Solution for the opening and closing doors on demand for hotels and domestic

Safety cameras:

Solution for rotating security cameras

# Air conditioning







# A new air for your project

## Solution for your movement needs

Each of our air conditioning projects is distinctive and unique. At CLR we develop everything, from gear motors capable of **moving heavy structures**, to products that require **small movements in very tight spaces**. Whatever your needs in air conditioning are, our solutions will give your project a new look.



















# Regulating system for farm ventilation

Automatically control ventilation on farms and in greenhouses



## **Challenge**

- Movement of heavy structures
- ·Big volume
- ·High reliability and guarantee





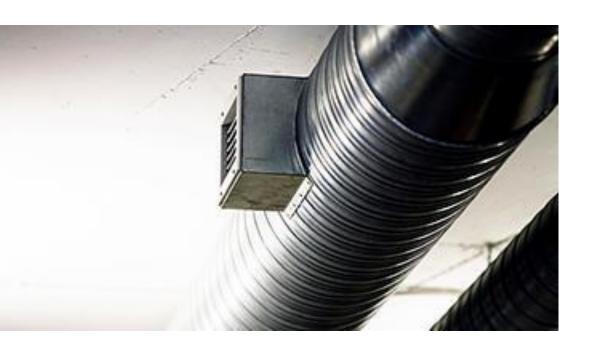
- ·Solution with a hypocycloidal gearmotor
- •Tubular location adjustment
- Driven through a system of sensors





# Air flow orientation system

Minimal noise with highest reliability



## **Challenge**

- •The need to improve noise
- To adapt to space restrictions
- Light element





- •Grille drive capable of directing and combining the air flow
- ·Sound level below 35 decibels at all times.
- Meet weight and size requirements





# Gear motors in air conditioning sector

Opening windows:

Solution for the opening and closing of tilt and turn windows.

Air conditioning:

Solution for grille opening and orientation on all types of air conditioning units.

Grilles:

Solution for opening and closing ventilation grilles on anir conditioning ducts.

# Why choose us?







# Your company actioning needs in a single supplier

Our main goal is **to satisfy your actioning needs.** CLR is the partner you're looking for, offering a solution to your needs **from your initial idea, right through to final product delivery: whenever and wherever you need it.** 







# **Companies that trust us**













































# Engineering your Actioning Ideas



www.mootio-components.com

