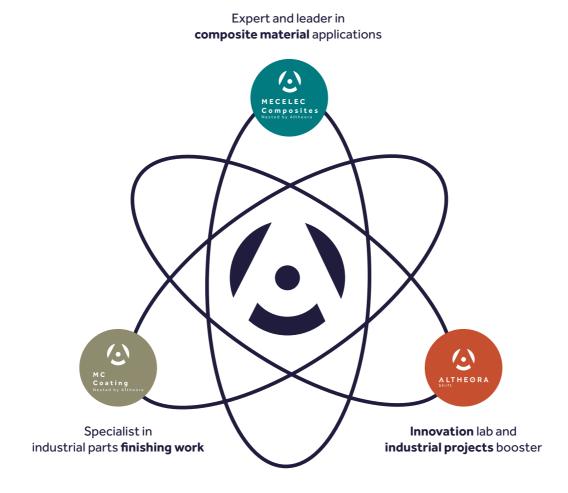




### ALTHEORA is the French leader in composite material applications.

**Since 1934**, the company has been known for its specific tools development in construction and public works (boxes for electrical, gas, telecommunications, and other applications). The Group has developed **expertise** and **state-of-the-art technologies** in wide-ranging and exacting sectors such as railways, aeronautics, ground mobility, healthcare, leisure, urban outdoor furnishings, and more. ALTHEORA offers **solutions that are 100% integrated**, starting from R&D to production. Alongside its clients, it develops new products responding to **the needs of tomorrow** (new types of mobility, smart cities, etc.).

### The Group is built around three centers of excellence:



## **MECELEC Composites**

# the ALTHEORA's ecosystem flagship

Within the ALTHEORA Composites division, MECELEC Composites is the company providing expertise, and a leader in composite material applications. For almost 90 years, we have shared our know-how to satisfy our clients.

With more than 6,000 product references and 500 clients in 28 countries, MECELEC Composites is the expert partner in consulting and engineering, supporting projects from their design through their final application whatever the technical constraints are.

With its 3 manufacturing sites Mauves and St-Agrève (Ardèche, France), St-Etienne-de-Saint-Geoirs (Isère, France), MECELEC Composites proposes **one-off or mass-produced parts that meet complex technical specifications and strict standards, whether it be in terms of resistance, flexibility, or impermeability, electrical insulation, for example.** 

Mecelec Composites manages composite material applications used in many sectors:



### MOBILITY (aeronautics, ground mobility)

Our technical sophistication helps us to produce parts that respect advanced engineering characteristics, parts with a painted appearance, as well function integration. Using our compression presses that can apply a force of up to 2,000 metric tons, we produce aerodynamic parts, car body parts, interior structural/semi-structural parts.



### **RAILWAY INDUSTRY**

We work with the market leaders to supply railway equipment and embedded equipment that meets strict qualifications in terms of fire, smoke, mechanical and dielectric properties, wear, impermeability, insulation, signaling, etc.



### **ENERGY**

We design complete ranges of cabinets for all players in the gas, electricity, water or telecom sectors. Our fully automated manufacturing lines allow for all custom finishes. From spare parts to complete equipment, we provide solutions to all our clients' demands.



### SPORTS, LEISURE, MARINE & MEDICAL

We develop products that meet more specific requirements, such as urban equipment (Morris columns), sporting equipment, medical equipment (sterilization stations, sanitary facilities, etc.), leisure and marine equipment (pool walls, marine furniture, etc.).

### our technologies, our equipments

# the mastering of each fabrication process

**MECELEC Composites** master all its manufacturing processes. **It produces technically sophisticated parts** (of non-standard sizes, resistant to extreme temperatures, fireproof, with strong electrical insulation properties, etc.). We also offer finishing work for parts up to the end product (painting, marking, insertion, cabling, surface treatments, etc.)

### THERMOSETTING COMPRESSION (SMC):

This molding technique enables us to produce materials that are resistant to extreme temperatures, are fireproof and have high electrical insulation without changing their mechanical strength.

32 presses from 100 to 2,000 tons, mostly robot-controlled and automated.

### THERMOPLASTIC INJECTION:

This technology allows us to achieve technically sophisticated parts with almost no finishing operations needed.

15 presses from 50 to 550 tons for technical or class A parts.

#### CONTACT, INFUSION , R.T.M.:

These processes enable us to produce structural parts and large-scale parts, from one-offs to medium-sized series.

2 low pressure injection machines RTM

#### **AND FINISHING WORK:**

We provide a finished product, ready to be integrated, thanks to our machining centers present on each of our sites: painting, marking, insertion, cabling, surface treatments, application of industrial paint (liquid and powder), etc.

## exceptional properties of composite materials

Composite material is an association of at least two immiscible materials with a high adhesion capacity. It forms a new material with extra properties that each element alone does not have. It has many advantages compared to other materials that can be used for the same purpose (steel or aluminum for example):

- More lightweight
- Stronger and more rigid
- More resistant

- More design and customizable
- More technical (waterproofing, insulation, etc.)
- More eco-friendly

# our approach

### the tailored solution

MECELEC Composites focuses its development on support and R&D, to meet the challenges of its clients' needs. For each project, the technical specifications, safety requirements and standards are unique. This is why a 12-person team, operating in project mode in line with OEM standards, is responsible for examining prerequisites and developing custom projects for clients. Our daily mission: accompanying our clients' most ambitious and technical projects by contributing our experience and our capacity for innovation.



tests & qualifications

# our achievements



### EUROPISCINE

We manufacture pool structure panels that make up the entire "shell" of an in-ground pool. A true innovation, it is a durable and more robust alternative to traditional masonry or metal structures.

Production: high quantities

Site: Mauves

Manufacturing process: SMC and injection



#### **JC DECAUX**

MECELEC Composites manufactures the most iconic urban outdoor furnishings in Paris, the roof of the Morris columns since 2019. Our challenge was to respect its mythical design while opting to employ a responsible manufacturing process using linen fibers, and guaranteeing that the column is completely waterproof.

Production: medium quantities

Sites: Mauves, Saint-Geoirs, Saint-Agrève

Manufacturing processes: injection, SMC, RTM and painting



#### PANDROL

We produce insulating support arms for Pandrol. These highly technical parts support the distribution rail of the new metro lines in Warsaw.

Production: high quantities

Site: Saint-Geoirs, Mauves

Manufacturing process: SMC



#### TRIGANO

MECELEC Composites manufactures the front roof of the CHALLENGER and CHAUSSON brands' emblematic motorhome. Using composites improves the quality of the product and makes it easier to install.

Production: high quantities

Site: Mauves

Manufacturing process: SMC and painting

# our achievements

### LPG

For 20 years, MECELEC Composites has been manufacturing parts for LPG beauty devices. These devices are a reference in aesthetic medicine, helping to revive circulation by activating the fat release and reducing imperfections of the skin.

Production: high quantities

Site: Saint-Agrève

Manufacturing process: injection

### **IVECO**

MECELEC Composites manufactures the battery and air-conditioning packs for hybrid buses in urban areas. The manufacturing process protects the components and channels airflow for proper use.

Production: high quantities

Site: Mauves

Manufacturing process: SMC





#### LIGIER

MECELEC Composites manufactures the floors and firewalls of Ligier group's license-free cars. Using grained mass tinted composites creates an aesthetic, light, structural and semi-structural part.

**Production: high quantities** 

Site: Mauves

Manufacturing process: SMC



### **RENAULT TECH**

Renault Tech has entrusted MECELEC Composites with the manufacturing of the rear floors for its new Kangoo model for reduced mobility passengers. This composite part is more lightweight than sheet metal parts, but has still high structural properties.

Production: medium quantities

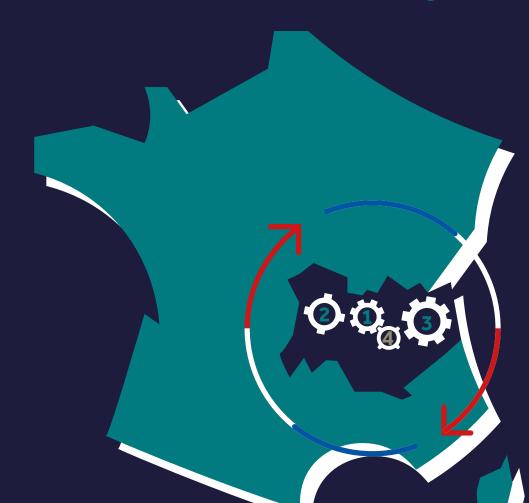
Site: Mauves

Manufacturing process: SMC



# our production plants

the industry quality and competitiveness located in Auvergne-Rhône-Alpes Region 🔬



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