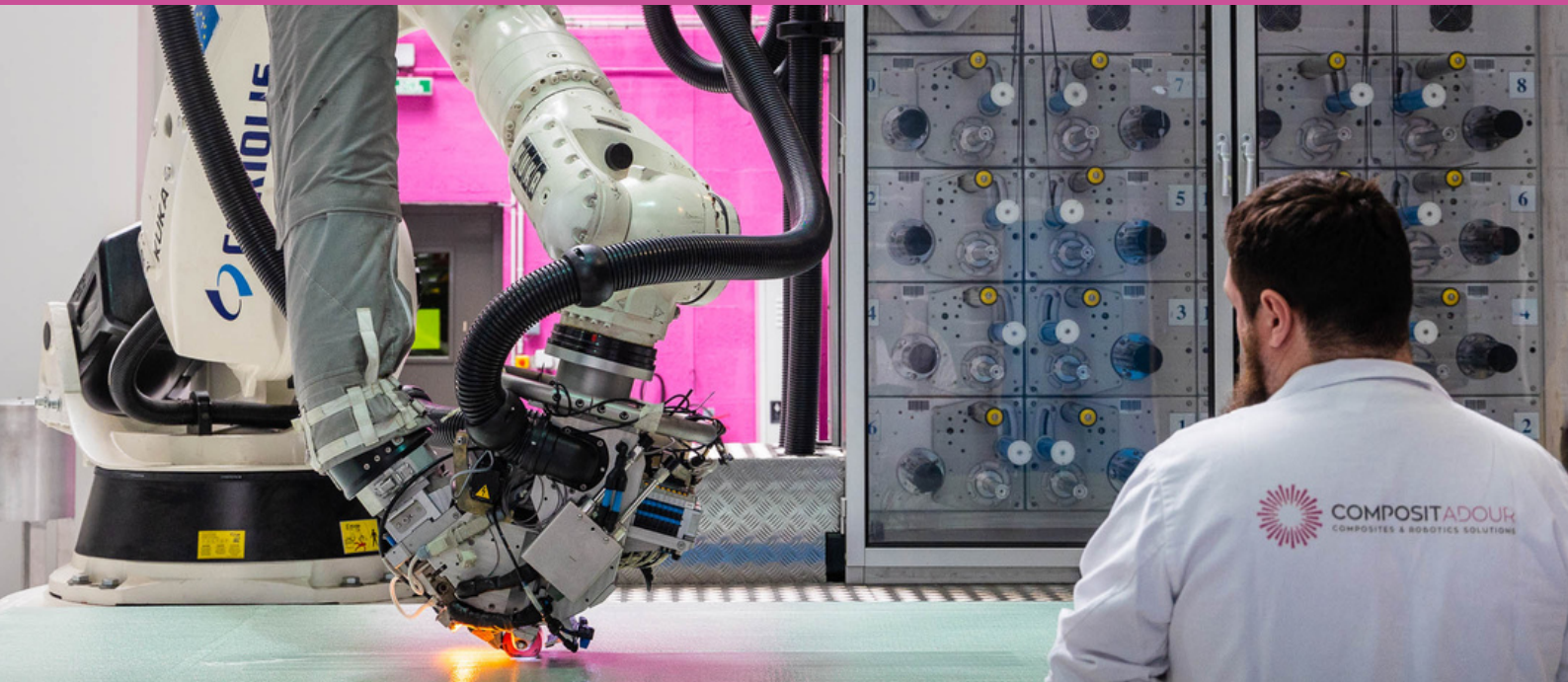




COMPOSITADOUR
COMPOSITES & ROBOTICS SOLUTIONS

RESEARCH & DEVELOPMENT | TRAINING | TECHNOLOGY TRANSFER



COMPOSITES

Compositadour is a technology platform specialising in advanced processes: Composites, Robotics and Additive Manufacturing. A genuine platform for experimenting with the digital and robotic technologies of the Factory of the Future, Compositadour offers cutting-edge equipment for developing innovative projects.

KEY WORDS

Thermosetting composites / Thermoplastics
Dry fibres / AFP (Automated Fiber Placement)
ATL (Automatic Tape Lay-up) /
RTM (Resin Transfer Molding) / LRI (Liquid Resin Infusion)
LRI (Liquid Resin Infusion) / Stamping / Thermocompression /
Composite recycling

RESEARCH TOPICS

- Lighter structures for the mobility sector
- Improving production performance
- Numerical simulation of processes
- Use of recycled/recyclable bio-based materials of composites
- Streamlining structures for the mobility sector

SERVICES

Feasibility studies

Structural design and dimensioning

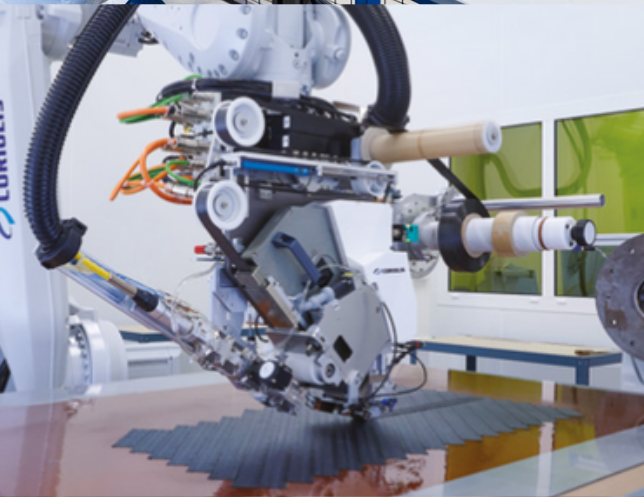
Process and materials screening

Development of processes and special machines and specific tooling

Prototype production, scale 1:1

Qualification part

Training and technology transfer



RESOURCES

Software

Coriolis Composites | CATFiber® / CADFiber®

Dassault Systems | CATIA® (CPE, CPM) / 3DEXPERIENCE®

ESI Group | PAM RTM®

Equipment

Automated lay-up workshop

temperature and humidity control, 2 5T cranes

- Large dimensions AFP
 - Coriolis C1 (16 fibres), IR and Laser
R 3600 mm, horizontal positioner 6T x 9m
 - Coriolis C1.2 - (8 fibres), IR and Laser,
R 3800 mm, horizontal positioner 12 x 10m, 1,6x1,6x2
- Small dimensions AFP
 - Coriolis C-solo, IR and Laser, 0 à 38,1m , 1T vertical positioner
 - Carbon Axis, positioner, 1mx1mx1m
 - Add.composites positioner 1T , 2mx2mx2m, R 2 m

Hand lay-up workshop

temperature and humidity control

- LASER projector

Curing area

- Oven : 250°C - 4700 x 2000 x 2000 mm³
- Autoclave : 400°C - 10 bars - Ø 1000 mm x 1800 mm
- Thermoplastic stamping cell: 300 T press,
400°C heating platen - 1650 mm x 950 mm
- RTM/LRI: 2 resin injection machines (120°C - 7 bars), 20 L
infusion tank with temperature and injection parameters
regulation, control and recording

Inspection laboratory

- Automated Ultrasound NDT cell, in double through-transmission
or simple reflection: 1900 x 1250 x 1500 mm³
- Dimensional metrology : R1500 measuring arm and Leica AT960
LASER tracker (Tmac and Tscan) in partnership with ELKAR
- Micrographic cutting: cutting, coating, polishing and macro zoom
x0.7-x4.5, Leica microscope x5-x100
- Hitachi TM4000Plus SEM
- Machine SYNTAX 300 - 3R Labo - 300kN

CONTACT



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R&D Industrial Partnerships

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