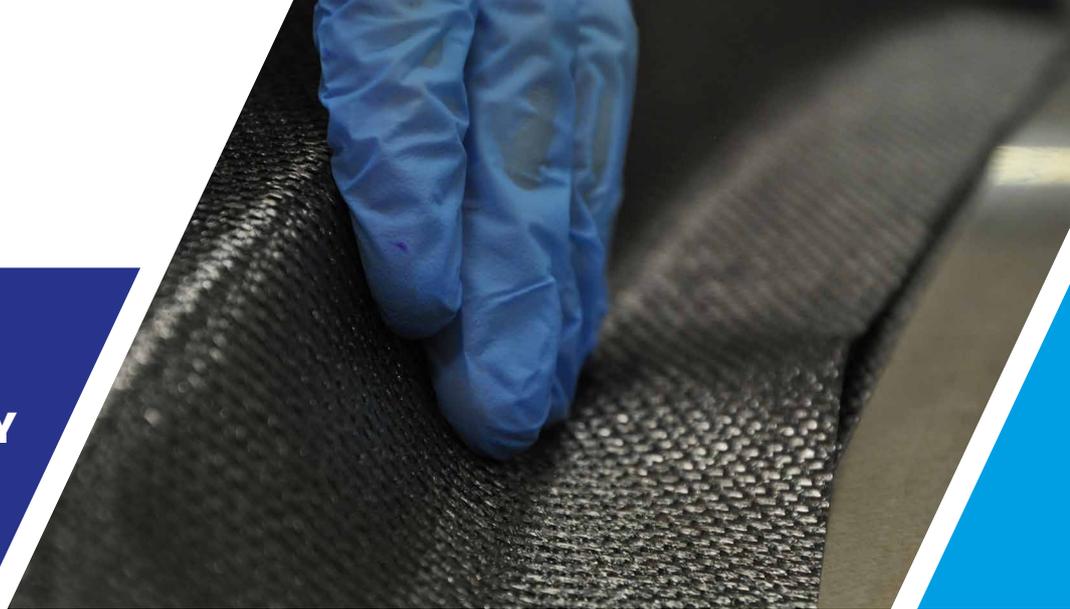


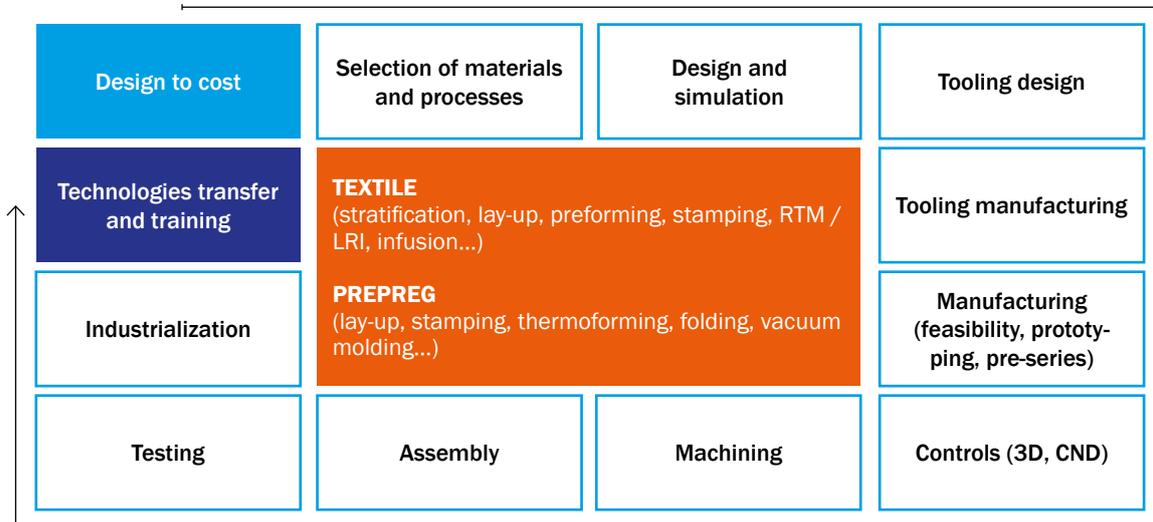


COMPOSITE ACTIVITY



ORATECH offers you its services and expertise for the development of composite parts, prototypes and small series, from design to cost studies to technology transfer in your facilities.

OUR COMPETENCES



OUR MEANS

Workshop	560m ²
Lay-up room	100m ² , 20 °C air -conditioned, hygrometric control, no overpressurization
Oven 1	2mx2.5mx4m, 250 °C, class 5
Oven	0.4m ³ , 300 °C, class 5
Material handling	overhead crane (0.5T), Fenwick (until 2900kg)
Marble lay-up	2000x3500mm
Press	540x550mm, 200 °C, 15T
Injection mean	RTM/LRI, 10L, 3bars, 100 °C
Vacuum central	controlled
Vacuum pump	< 1mbar
Storage	Cooling (-18 °C), chemical rack, tooling rack
Autoclave	Class 5 certified
Diam. (useful)	1.5m
Length	4m
Load (max)	1.5T
Temperature	200 °C (max. 250 °C)
Pressure (max)	10bars



This investment aims to answer the increasing demand of our clients in the development and the manufacturing of composite structural parts. This autoclave completes our current means to apply different manufacturing process (RTM injection machine, Oven, Press). This new equipment allows us to provide an efficient polymerization process integrating temperature, pressure and vacuum.



EXAMPLES OF REALISATIONS



Windturbine blade - scale 1/50th



Ω stiffener

OUR BUSINESS SECTORS

- AERONAUTICS** airliner, business aircraft
- ENERGY** wind and marine turbine
- DEFENCE** naval, land, aero
- TRANSIT** tram, train, bus
- BOATING** competition and pleasure sailboat
- AUTOMOTIVE** super-car, mass market
- SPACE** satellite, launcher
- MEDICAL** prothesis
- SPORT & LEISURE** cycling, skiing
- CONSTRUCTION & PUBLIC WORKS** scaffolding, carpentry, i-beam
- INTERNAL LAYOUT** furnitures



High dimensions composite tooling development

