

Date: 10/09/2020	Title: ÉireComposites General Overview & Capabilities List
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Core

Skills:

Below are the core services offered by ÉireComposites and it's subsidiary Composites Testing Laboratory



Aerospace Manufacturing

ÉireComposites manufacture all kinds of composite components including **flight control surfaces**, **engine nacelle components** and **interior parts**.

Composites
Expertise.
Manufacturing
Know-How.

Space

ÉireComposites have manufactured **thermoset autoclave parts** for space, **parts using ATP** are experts in **thermoplastics**. Companies often rely on input from ÉireComposites to **inform on the manufacturability** of their designs.

Composite Testing

ÉireComposites subsidery **Composite Testing Laboratory** offers a compete portfolio of **mechanical composites testing** and is approved Airbus, Bombardier, Saffran and many others. It allows ÉireComposites to offer a **one-stop-shop for design-test-build projects**.

Competitive Advantages:



Quality Systems

- Highest Quality systems in place for all work.
- NADCAP approved for manufacturing, testing and NDT
- SC21 Bronze award
- AS/EN 9100
- ISO 17025

Our Equipment

- Over **€7m of specialist equipment**.
- Fully equipped test laboratory
- Equipment for Autoclave Manufacturing; Infusion; Pressing; Induction Welding; 5
 Axis CNC Machining; Painting; Storage; Ply-cutting
- Software for design and simulation

Our People

- Over **400 years** of combined composites experience
- **Engineering lead** company with a **focus on innovation**

Manufacturing Equipment List:

- 60,000 sq.ft. facility in Galway
- Autoclave 1: 250°C, 10 bar 2.5m Ø x 6m
- Autoclave 2: 450°C, 10 bar 1.5m Ø x 3m
- 6 meter 5 Axis CNC Machine
- 100 tonne double daylight press 1.5m x 0.5m
- 80 tonne single daylight press 1m x 1m
- 200 m2 Cleanroom
- NDT Ultrasonic C-Scan
- NDT Ultrasonic A-Scan
- State of the art 660 kW gas-fired oven
- Calibrated ovens (2m x 2m x 2m)
- Thermoplastic compatible press plates
- Thermoplastic induction welder
- Liquid processing equipment (RTM)
- Paint booth







Testing Types Offered:

- Tensile/lap shear
- Compression
- In-plane shear and v-notch shear
- Inter-laminar shear and flexure
- Bearing testing
- Sandwich flexure
- Flatwise tension and climbing drum peel
- Mode I & II fracture/bolt pull through
- Drop weight Impacting
- Fatigue
- TG and fibre volume
- Microsection analysis
- Environmental testing
- Specimen preparation
- Non Destructive Testing
- Final machining capabilities
- End-Tabbing
- Drilling and assembly





Testing Equipment Available:

- 3 Static test machines: 400kN, 250kN & 10kN
- 5 Fatigue machines with a load capacity of up to 250kN
- Operating Range from -70°C to + 200°C
- Dynamic Extensometers
- Biaxial Extensometers
- Strain gauge data acquisition systems
- Hot/Wet environmental chambers
- Temperature controlled immersion baths
- Fibre Volume Fraction area
- Ultrasonic C-Scan and A-Scan
- Microscope and stereoscope
- Specimen preparation workshop





Contact:



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