

ÉIRECOMPOSITES



EireComposites for Marine Energy

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- **Company Activities**
 - **Manufacturing, Testing, Tooling, Design, Research**
- **Markets**
 - Aerospace, Wind, **Ocean Energy**, Automotive, Leisure
 - Over €50m of contracts in place
- **Projects on Marine Energy**
 - Carbon Fibre in Marine Energy (FP7)
 - Composite Blades for Tidal Energy (Horizon2020)
- **EireComposites for Marine Energy**
 - EC aims to become a **leading supplier of composite** structures for Marine Energy

MarinComp: FP7

- Carbon-fibre blades for large offshore wind turbines and tidal turbines
- Project partners UCC, UU, Toray, Suzlon.
- Cost modelling
- Stress modelling
- Development of sensor systems



[Company Activities](#)

Manufacturing

Testing

Tooling

Design

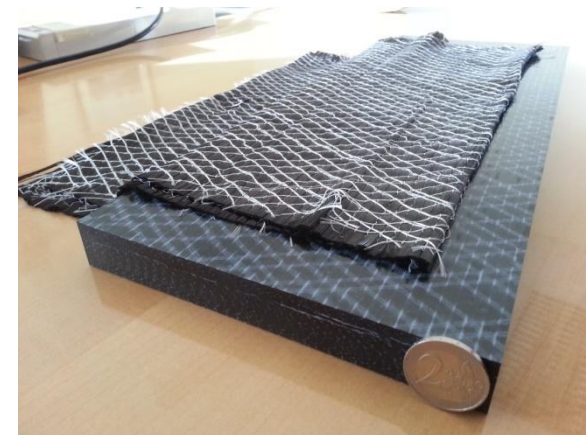
Research



Tidal Energy: Horizon 2020



- Project to build a tidal turbine
- Success in H2020 Low Carbon Energy
- 70% funded by Europe
- Several European partners
- EireComposites scope is to build blades
- Challenges:
 - Corrosion/erosion prevention
 - Fatigue life
 - Manufacturing thick composites
- Scale:
 - 10 times heavier than 14m wind blades
 - Similar loads to a 1.5MW wind (30m)



[Company Activities](#)

Manufacturing

Testing

Tooling

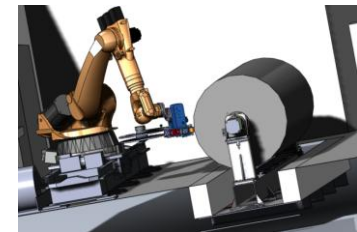
Design

Research

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Selected Other R & D Projects

- **Future Launchers Preparatory Programme 2.1**
 - Composite Cryogenic Upper Stage Tank (with ESA)
- **Future Launchers Preparatory Programme 2.2**
 - Composite InterStage Structure (with ESA)
- **Automated Tape-Placement of Thermoplastic Composites**
 - Collaboration with Astrium ST & EADS CASA, GSTP)
- **Development of Thermal Welding of TPC Aircraft Structures**
 - Collaboration with Bombardier Aerospace (Northern Ireland)
- **EU Framework 7 YBRIDIO Programme**
 - Joining of Dissimilar Materials
- **Design and development of TPC Helicopter Structures**
 - Collaboration with Eurocopter Deutschland (Germany)
 - Clean Sky Helicopter Door



[Company Activities](#)

Manufacturing

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Design

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Thanks for your time!

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