

# ÉIRECOMPOSITES



## EireComposites for Marine Energy

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February 2015

EireComposites Teo  
An Choill Rua  
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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**
  - **SEAMETEC**: Smart Blades for Tidal Energy
  - **MarinComp**: Carbon Fibre Tidal and Wind Turbine spars
  - **WAVE<sub>2</sub>0**: Partner with Resolute Marine with responsibility for fabricating large panels
- **EireComposites for Marine Energy**
  - EC aims to become a **leading supplier of composite** structures for Marine Energy



[Company Activities](#)

Manufacturing

Testing

Tooling

Design

Research

# SEAMETEC: Horizon 2020

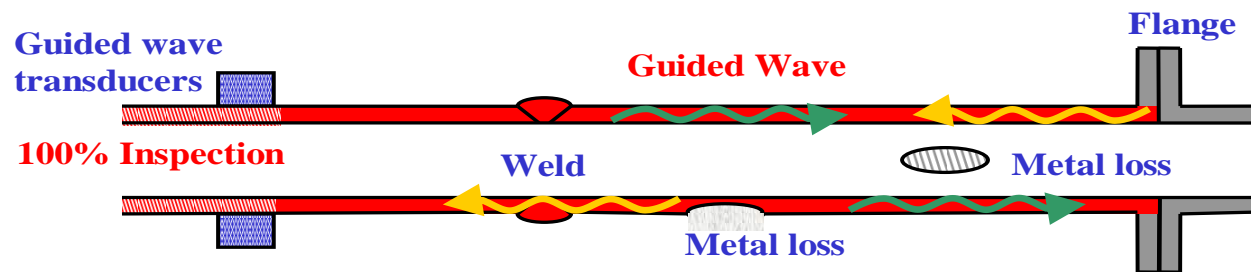
- Smart Efficient Affordable Marine Energy Technology Exploitation using Composites
- Success in H2020 SME instrument Phase 1



# SEAMETEC: Horizon 2020



- **SEAMETEC** is an excellent opportunity to develop **tidal turbine blades using European funding** support
- Project covers tidal blades and wind turbine spars
- EireComposites technology uses **carbon\glass fibre and epoxy powder**
  - Enhances quality and reduces cost
- Sensors on\in blades from EnerOcean (H2020 partner company)
- **Sensor system detects damage early** and reduce maintenance and repair costs



Company Activities

Manufacturing

Testing

Tooling

Design

Research

# SEAMETEC: Horizon 2020

- EireComposites is involved in the **WAVE<sub>2</sub>0 H2020 project** aimed at creating **potable water from wave energy**
- MarinComp Project looking at **carbon fibre blades** in offshore wind and tidal energy



[Company Activities](#)

Manufacturing

Testing

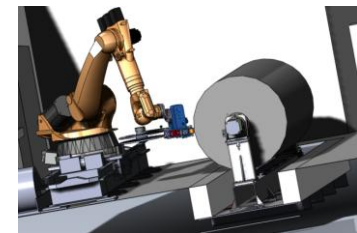
Tooling

Design

Research

# 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

Testing

Tooling

Design

Research

# ÉIRECOMPOSITES



**SEAMETEC**

*Smart Efficient Affordable Marine Energy  
Technology Exploitation using Composites*

## Thanks for your time!

**Dr. Tomás Flanagan**

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