

## About this organisation

FTTD provides engineering services for development, production and distribution for components in the fields of aerospace and power generation.

FTTD has experiences in design and analysis for product definition and inspection of light-weight components. Several technologies such as 3D printing with metal alloys and plastics as well as composites are used for light-weight applications.

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### Organisation type

Small or medium-sized enterprise

### Sector



### Employees

10 up to 49

### Turnover

€2m - €10m

### Funding

### Main areas covered

aerospace/tubomachinery components

### Infrastructure

SIR inspection test bed, flow test bed

### Certifications

ISO 9001, AS 9100

### Keywords

### Memberships

## Overview of lightweighting expertise

|                                                                          | Research | Development | Manufacturing & Supply |
|--------------------------------------------------------------------------|----------|-------------|------------------------|
| <b>Offer</b>                                                             |          |             |                        |
| <b>Products</b><br>Parts and components                                  | ✓        | ✓           |                        |
| <b>Services &amp; consulting</b><br>Engineering, Prototyping, Simulation | ✓        | ✓           |                        |

## Overview of lightweighting expertise

|                                                                                                                                                                   | Research | Development | Manufacturing<br>& Supply |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-------------|---------------------------|
| <b>Field of technology</b>                                                                                                                                        |          |             |                           |
| <b>Design &amp; layout</b><br>Lightweight design                                                                                                                  | ✓        | ✓           |                           |
| <i>Functional integration</i>                                                                                                                                     |          |             |                           |
| <b>Measuring and testing technology</b><br>Visual analysis (e.g. microscopy, metallography),<br>Non-destructive analysis                                          | ✓        | ✓           |                           |
| <b>Modelling and simulation</b><br>Loads & stress, Life-cycle analysis, Multiphysics<br>simulation, Optimisation, Structural mechanics,<br>Reliability validation | ✓        | ✓           |                           |
| <i>Plant construction &amp; automation</i>                                                                                                                        |          |             |                           |
| <i>Recycling technologies</i>                                                                                                                                     |          |             |                           |

## Overview of lightweighting expertise

|                                                                                                                                                          | Research | Development | Manufacturing<br>& Supply |
|----------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-------------|---------------------------|
| <b>Manufacturing process</b>                                                                                                                             |          |             |                           |
| <b>Additive manufacturing</b><br>3D printing, Fused deposition modeling,<br>Selective laser melting (SLM, LPBF, ...), Selective<br>laser sintering (SLS) | ✓        | ✓           |                           |
| <b>Coating (surface engineering)</b><br>Painting, Plasma process, Powder coating                                                                         |          | ✓           |                           |
| <b>Fibre composite technology</b><br>Manual lamination, Resin infusion process,<br>Resin transfer moulding, Pre-preg processing                          |          | ✓           |                           |
| <i>Forming</i>                                                                                                                                           |          |             |                           |
| <b>Joining</b><br>Adhesive bonding, Soldering, Riveting,<br>Screwing, Welding                                                                            |          | ✓           |                           |
| <i>Material property alteration</i>                                                                                                                      |          |             |                           |
| <i>Primary forming</i>                                                                                                                                   |          |             |                           |
| <i>Processing and separating</i>                                                                                                                         |          |             |                           |
| <b>Textile technology</b><br>Fibre manufacturing                                                                                                         |          | ✓           |                           |

## Overview of lightweighting expertise

|                                                                       | Research | Development | Manufacturing<br>& Supply |
|-----------------------------------------------------------------------|----------|-------------|---------------------------|
| <b>Material</b>                                                       |          |             |                           |
| <i>Biogenic materials</i>                                             |          |             |                           |
| <i>Cellular materials (foam materials)</i>                            |          |             |                           |
| <b>Composites</b><br>Aramid fibre composites, Laminates               |          | ✓           |                           |
| <b>Fibres</b><br>Aramid fibres, Carbon fibres                         |          | ✓           |                           |
| <i>Functional materials</i>                                           |          |             |                           |
| <b>Metals</b><br>Aluminium, Steel, Titanium, Others (Inconel alloys ) | ✓        | ✓           |                           |
| <b>Plastics</b><br>Elastomers, Thermoplastics, Others (Duroplastics)  |          | ✓           | ✓                         |
| <i>Structural ceramics</i>                                            |          |             |                           |
| <i>(Technical) textiles</i>                                           |          |             |                           |

## Contacts

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