



Innovation & Technology



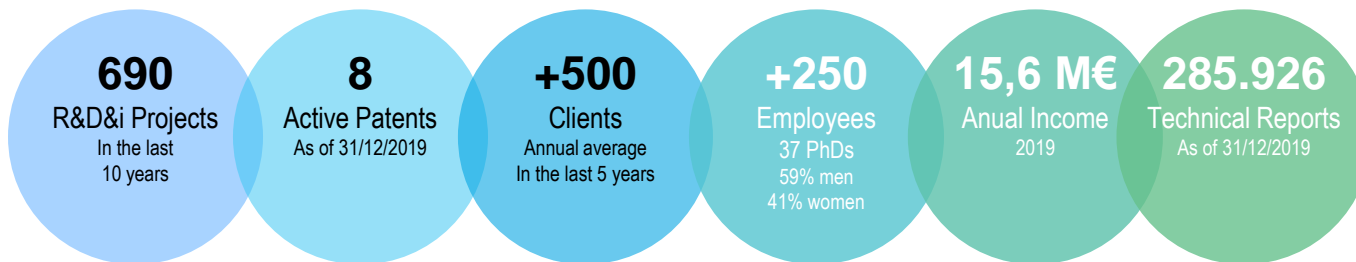
AIMEN TECHNOLOGY CENTRE

We are an **innovation and technology centre** specialized in **research** and in providing **technological services** in the field of **MATERIALS**, **ADVANCED MANUFACTURING PROCESS** and **INDUSTRY 4.0**



We are  
experts in

Joining Technologies  
Laser Technologies applied to Materials Processing  
Industrial Robotics

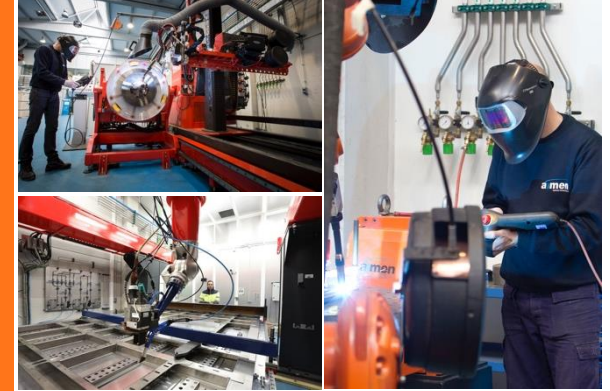


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|----------------------|--|--|--|---|--|
| <b>1967</b>          | <b>1995</b>  | <b>1998</b>  | <b>2002</b>  | <b>2004</b>   | <b>2014</b>                                    |
| Founding<br>of AIMEN | Opening of the<br>Armando Priegue<br>building in O Porriño | Official recognition as<br>a Innovation and<br>Technology Centre | Creation of a Pilot<br>Joining<br>Technology Plant | Comissioning of the<br>Laser Technologies<br>Research Plant | Opening of the<br>Laser Applications<br>Centre |

## R&D&I



## Industrial Services



## Testing & Analysis



## Training





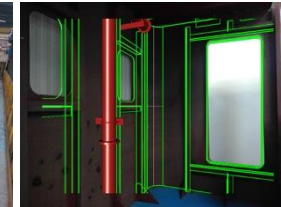
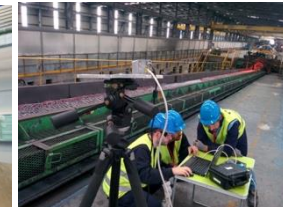
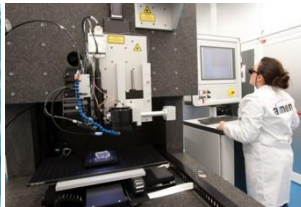
## R&D&I

- Applied research
- Extensive network of industrial and R&D partners
- Management of R&D&I Funding Programmes



## FIELDS OF SPECIALIZATION

- Advanced Materials
- Flexible Production Processes & Systems
- Robotics & Control
- Micro & High Precision Manufacturing
- Laser based Manufacturing
- Enviromental Technology



## Industrial Services

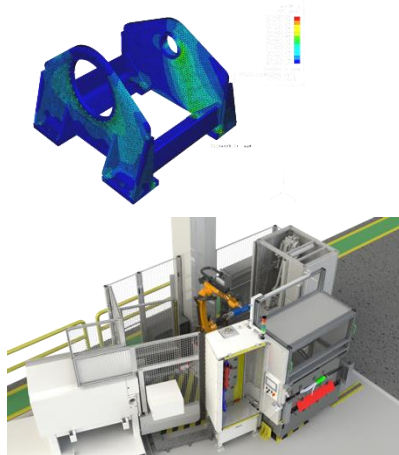
- Results-oriented
- Extensive knowledge of Spanish and international regulations and standards
- Customized services

**Welding & Corrosion  
Manufacturing**

**Manufacturing  
Engineering**

**Desing &  
Simulation**

**Mechatronics**



**Turnkey Projects**

**Prototype Development**

**On-site Technical Support**

**Training**

## Testing & Analysis

- Materials Characterisation
- Technical Support and Consultancy
- Specialised Technical Services

Study of in-service behaviour and the causes of failure

Characterisation of compound materials, non-metallic and metallic materials

Special and Customised Testing

Non-Destructive Testing and Inspection



## Training

- Highly Specialised Technical Programmes
- Extensive Catalogue of Specialised Training
- Accredited Training Centre

### Professionality Certificates

Coated Electrode and TIG welding

Oxy-gas and MIG/MAG welding

Organisation and Control of Non-Destructive Testing

### High Tech Specialisation

- IWE – International Welding Engineer
- FROSIO - Paints and Coating Inspector
- EAB – European Adhesive Bonder
- Non-Destructive Testing, levels I II III

### Ongoing Training

- In company training to meet each Company's needs
- Annual training programme of open courses

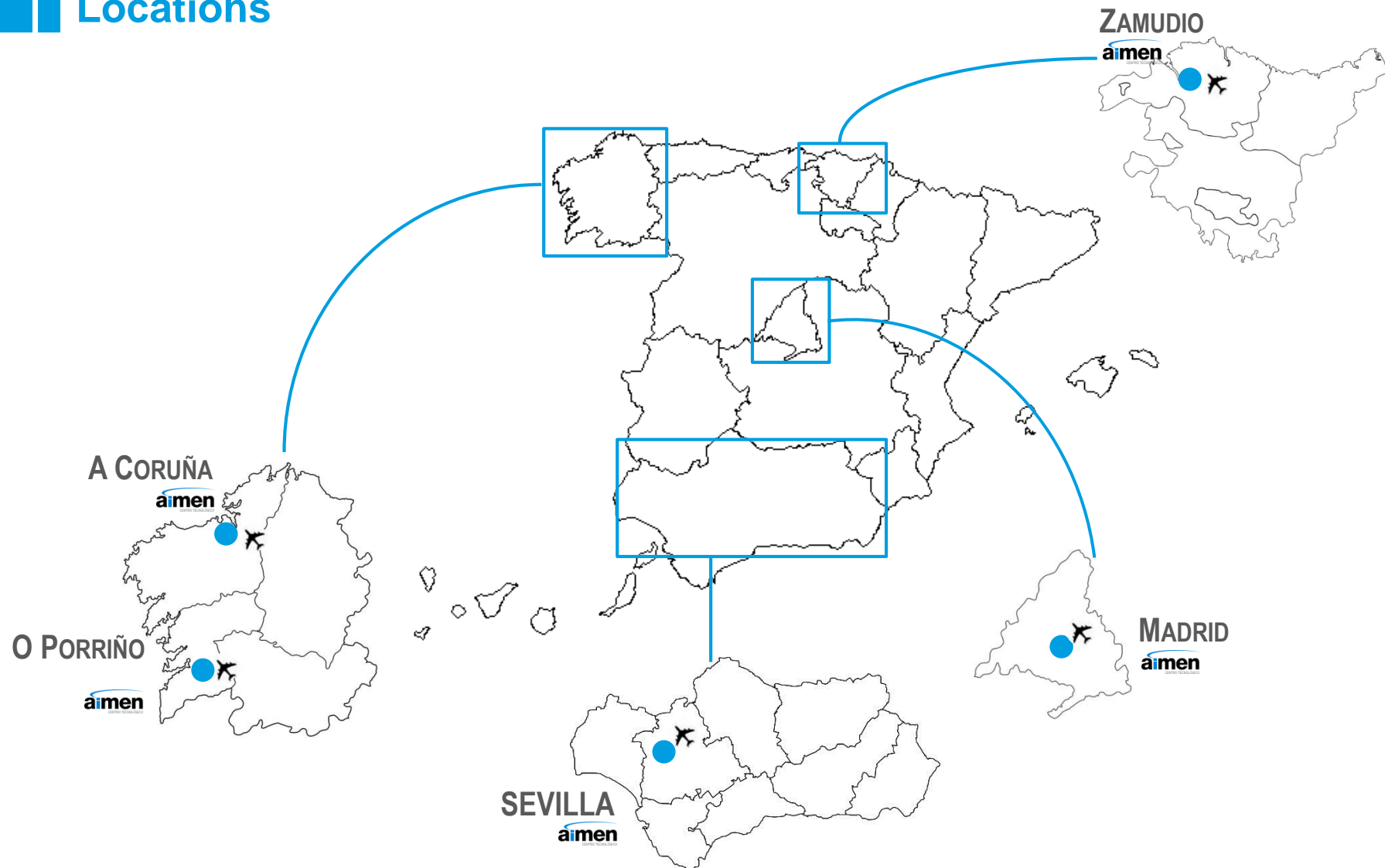
### Professionality Certificates

- Coated electrode and TIG welding
- Oxy-gas and MIG/MAG welding
- Organisation and Control of Non-Destructive Testing

**Specialisation Fields:** Materials, Analysis and Testing, Non-Destructive Testing and Inspection, Metallography, Failure Analysis, Corrosion, Joining Technologies and Laser Technologies.



## Locations





## Facilities

Our facilities are unique and innovative, with cutting-edge equipment to offer you fully guaranteed technology services.

- 2 centres: Armando Priegue Building and Laser Applications Centre
- 9,000 m<sup>2</sup> of technological and scientific infrastructure
- Cutting-edge equipment



Headquarters  
**Centro de Aplicaciones Láser**



Torneiros Centre  
**Edificio Armando Priegue**

## Joining Technologies

MIG/MAG/TIG/PAW/SAW Arc-welding Equipment  
Resistance Welding  
Friction Stir Welding & Processing  
Brazing & Soldering: furnaces, induction, flame  
Mechanical Joints  
Adhesive Joints  
Plastic cutting and welding equipment



## Laser Technologies

### Laser - Macro-processing

- ROFIN DC035 CO<sub>2</sub> source of
- 3.5 kW
- LASERLINE LDL 160 Direct Diode laser source:
- 3,3 kW
- TRUMPF TruDisk Disc Laser System 16 kW



### Laser – Microprocessing

- SPECTRA PHYSICS Pulsed Nd source: YAG PRO-290-30
- TRUMPF TRUFIBER fibre source 400W
- Pulsed sources: Nd YVO<sub>4</sub>
- 3D Laser Micro machining System
- TRUMPF TruMark 6350 Ultraviolet Laser with processing cabin
- EOLITE HEGOA IR40/G20/UV10 – 30ps Picosecond Laser



**Manipulation: CNC gantries, robots and Servo-controlled tables**

## Laboratories

### Mechanical Testing

- Universal testing Machines, up to 1000kN
- Resonance testing machine for fatigue testing
- Test bench for multi-axial mechanical tests made up by 3 hydraulic actuators (25kN, 25kN and 50kN).



### Microstructural Characterisation

- HITACHI S-4800 II field emission scanning electron microscope with EDS and EBSD microanalysis systems
- JEOL JSM 6400 scanning electron microscope with EDS microanalysis system



### Physical-chemical testing

- VARIAN VISTA-MPX simultaneous ICP plasma spectrometer
- BRUKER S4 Pioneer X-Ray Fluorescence Spectrometer
- PROTO iXRD portable residual stress measurement equipment using X-Ray diffraction
- Dektak 8CSM profilometer



### Non-destructive Testing Radiographic - Ultrasonic

- X-CUBE Compact Radioscopy Cabin from GE Inspection Technologies with 160 kV X-ray source
- Computerised Axial Tomography System (patent no. ES 2341833 B2)
- Gamma Radiography and X-Ray equipment
- PERKIN ELMER XRD 1622 A014 Digital X-Ray Flat Panel Detector
- DÜRR HD-CR 35 NDT Computer Radiography System
- ISONIC digital equipment for UT and TOFD with graphic register
- OLYMPUS OMNISCAN MX equipment for TOFD, PHASED ARRAY and UT



### Dimensional Metrology

- Mitutoyo EURO C 122010 Coordinate Measuring Machine 1200 x 2000 x 1000 mm

- Registered Technology and Innovation Centre N° 38
- Registered OTRI N° 166



- UNE-EN ISO 9001:2015
- UNE 166002:2014
- UNE EN ISO 14001:2015
- UNE-EN 9100:2016
- ISO 45001:2018



- Accreditation ENAC no. 71/LE158  
Testing in the industrial sector



- Lloyd's Register UNE-EN 15085-2:2008 (CL1)  
New manufacture and repair of welding structures for railway industry
- Lloyd's Register UNE-EN ISO 3834-2:2006  
Manufacture of welded components



- PIDi Network contact point since 2011



- Register of quality control lab in the construction of the CCAA no. L-033DR in the areas:
  - Testing of structural concrete structures
  - Testing of structural steel structures



- REPRO Register n° 312109





**METALWORKING**



**AUTOMOTIVE**



**ICT**



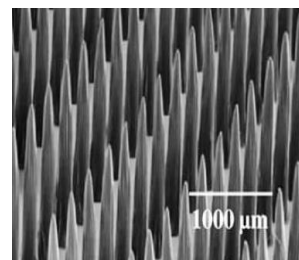
**SHIPBUILDING**



**AEROSPACE**



**ENERGY**



**BIOMEDICINE**



**TEXTILE**



### Headquarters

#### Laser Applications Centre

Polígono Industrial de Cataboi  
SUR-PPI-2 (Sector 2) Parcela 3  
E36418 O PORRIÑO  
Pontevedra - Spain  
Phone: +34 986 344 000

### Torneiros Facilities

#### Armando Priegue Building

Relva 27 A – Torneiros  
E36410 O PORRIÑO  
Pontevedra – Spain  
Phone: +34 986 344 000

### A Coruña Office

Polígono Industrial de Pocomaco  
Parcela D-22 Oficina 20  
E15190 A Coruña - Spain  
Phone.: +34 637 127 253

### Madrid Office

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E28015 Madrid - Spain  
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### Andalucía Office

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### North Office

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Thanks for your attention

