



DIMOFAC

# Laser texturing module for multi-material adhesion promotion



## AIMEN IN A NUTSHELL

**Founded:** 1963

**Location:** O Porriño (Galicia) Spain

**Technology:** Laser Texturing

**Industry:** Aeronautics, Automotive, Energy, Transport

**Website:** <https://www.aimen.es/en>



## ABOUT AIMEN

AIMEN is a Non-Profit association, which supplies technological support to companies dedicated to industrial or commercial activity related to metallurgy, automotive sector, civil construction, mechanics, shipbuilding, chemicals, foundry, machinery, ceramics, food, cement, wood and its by-products, plastics, engineering, assembly and others. AIMEN promotes and undertakes research, as well as improves manufacturing technologies in these sectors. Located in the Northwest of Spain, AIMEN is a highly professionalized organisation specialised in Materials Science, Manufacturing Process Engineering, Control Engineering, and Laser Processing. Its mission is to improve competitiveness and technology know-how of Manufacturing Industry.

## AIMEN PILOT LINE

LTMAP (Laser texturing module for multi-material adhesion promotion) by AIM (ES) owning technology for the laser processing of metallic materials for adhesiveless bonding between dissimilar components.



**The Laser-based generation of mechanical anchorage points on the metal surface for adhesion promotion. By using a high-productivity nanosecond pulsed fibre laser, it is possible to texture the part under the manufacturing cycle time.**

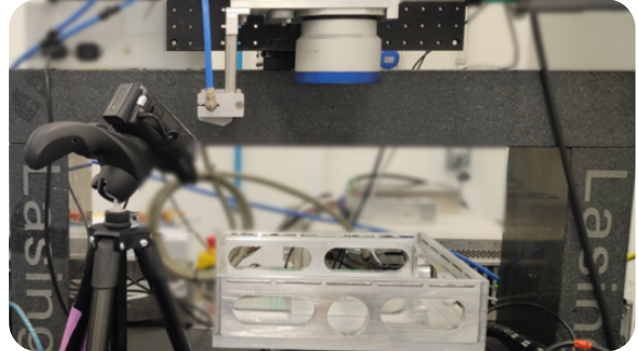
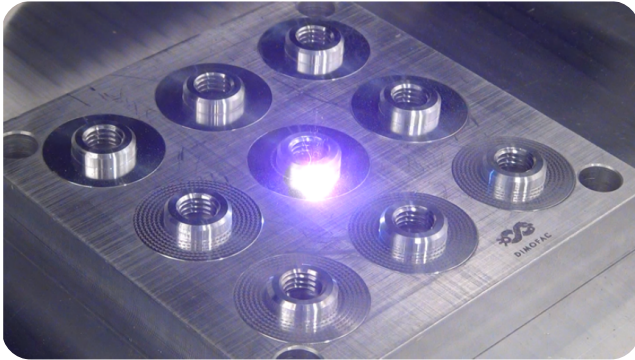


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Check Youtube video



## SERVICES OFFERED

1

### Viability study

Considering particular conditions of the materials and manufacturing chain

2

### Optimization of laser texturing

Strategies to improve adhesion strength between dissimilar materials

3

### Manufacturing of initial samples

For validation of the process, complying with quality yield requirements and cycle time.

## BENEFITS

It reduces the manufacturing time of hybrid parts by substituting conventional bonding process (applying adhesive and curing) and reduces the risk of sudden failure during the parts service life (failure of adhesive bonding is unpredictable and sudden).



### VALUE PER SERVICE

- Viability study (10k EUR),
- Optimization of laser texturing (80k EUR),
- Manufacturing samples (35k EUR)

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Polígono Industrial de Cataboi SUR-PPI-2 (Sector 2) Parcela 3  
36418 O Porriño (Pontevedra), Spain

<https://www.aimen.es/en> | [lucia.alonso@aimen.es](mailto:lucia.alonso@aimen.es) | +34 986 344 000