



### **ADDITIVE MANUFACTURING**

"Manufacturing the future"



València Parc Tecnològic Calle Gustave Eiffel, 4 46980 Paterna · Valencia · SPAIN Tel. +34 96 136 60 40 · Fax +34 96 136 60 41 info@aimplas.es | www.aimplas.net

Follow us: twitter.com/aimplas www.facebook.com/aimplas





# 

# IN PLASTIC

ADDITIVE MANUFACTURING

## Innovate with additive manufacturing

#### **Product Development**

We cover the 3 areas:

- > **Product design.** Assessment and assistance in the designing process bearing in mind the application requirements and AM technologies characteristics.
- Material Research. Suitable material selection according to the product final use..
- Manufacturing process. Selection of the best suited/most appropriate technologies considering design and material to obtain the parts aimed functionality.

#### Material Development and Rod manufacturing

We provide assistance in:

- > Material Research. Searching for the most suitable commercial materials taking into account their extrusion processability and the product's final application and use.
- > Tailor-made materials. Physical and chemical modification of commercial materials to meet the defined requirements.
- Commercial and tailor-made material evaluation in the rod manufacturing process. Pilot plant processing. Further assessment and assistance in the industrial scale up will be provided.





- → Technical Data sheets of: products, raw materials, rods and final parts.
- $\rightarrow$  Validation/verification of requirements and specifications.
- → National and international standards compliance (UNE, USO, ASTM, DIN, BS, etc.).

Testing laboratory accredited by ENAC according to the UNE-EN ISO/IEC 17025 standard. AIMPLAS is the Spanish centre with the widest range of accredited tests in the plastic industry.

- → Mechanical properties.
- → Performance against external agents.
- → Rheological properties.
- Physical and thermal properties.
- → Optical properties.

#### Standards (Regulatory compliance assessment)

- → Legislative requirements.
- → Standards.
- → Assesment about regulatory requirements of a specific product. Identification of the standards and legislation perceptive for the product. Product's standards and legislation identification.
- $\rightarrow$  Material and process standard's information.

#### Training

- → Seminars on: additive manufacturing technologies, materials, trends and applications.
- Tailor-made courses.

#### Materialization of the first physical series/parts

- $\rightarrow$  Use of the best available AM technologies.
- $\rightarrow$  First series development from Polyurethane vacuum casting process.
- i Injection mold inserts development for initial injection trials in order to improve the final materials validation.
- > Mould cavities development of and inserts by AM technologies to allow initial injection tests using the final materials in order to validate the parts with minimum costs.



