

R&D&i prototype production service. Technical work

Work by technical staff specialising in prototype design, production and testing



Contact information

Address: GRUPO DE INVESTIGACIÓN INGENIERÍA DE FABRICACIÓN. E.T.S. DE INGENIEROS INDUSTRIALES (DEPARTAMENTO DE INGENIERÍA MECÁNICA). Calle de José Gutiérrez Abascal, 2, 28006 Madrid.

Phone number: 910677212

Website: fabricacion.industriales.upm.es

Email: jc.hernandez@upm.es

Technological Offers type

Technological scientific services

Research and innovation areas

- Industry, Materials and Circular Economy

ODS



Available from: 2010

Where?

[manufacturing engineering](#)

Keywords: | [Automation](#) | [Manufacturing](#) | [prototype manufacturing](#)

Specialist engineering and technical services

Description

Specialist services carried out by machining and automation engineers and senior technicians. The human team available encompasses a comprehensive offer of skills in *turnkey production of prototypes, moulds, and individual or sets of tooling made in metal or plastic that are fully operationally functional*. The following are amongst the services that can be signed up to:

- 3D computer design of pieces and sets from specifications
- Analysis using CAD tools
- Detailed production process planning
- Tool design
- Materials planning. Suppliers and supplies management
- Development of CNC machining programs
- Machining simulation
- Mechanical production using CNC or conventional machinery, including tooling
- Assembly and adjustment: mechanical and electric
- Pneumatic or hydraulic automation
- Control systems integration
- Verification of dimensional quality
- Usability testing
- Final adjustments and delivery

Needs requested

R&D units, laboratories and start-ups associated with the UPM, along with private companies, are offered the chance to **validate** their **research results** with the production of physical prototype pieces or systems, including pre-series, according to the client's specifications and plans.

References from University Research Groups and R&D Centres:

- CIEMAT
- Solar Energy Institute (IES)
- Automatics. HTSIE-UPM
- Electronics. HTSIE-UPM
- Thermal Engines. HTSIE-UPM
- Automotive Research Institute (INSIA)
- Central Electrotechnics Laboratory. HTSIE-UPM
- Nuclear Engineering. HTSIE-UPM
- Graphic Engineering. HTSIE-UPM
- Fluid mechanics. HTSIE-UPM
- Material Resistance. HTSIE-UPM
- Metallurgy. HTSIE-UPM
- Machines and Mechanisms Laboratory. HTSIE-UPM
- Physics Department. HTS for Roads, Canals and Ports. UPM

Company References

- SIEMENS

- RENAULT
- New Technologies Global System (NTGS)
- Inspiralia R&D
- Betia Ingeniería
- Mecanizados Pedrera
- INDUSHER
- Solfocus Spain

Location

The service is offered by the Manufacturing Engineering (ME) Laboratory which belongs to the Community of Madrid Laboratories Network. The facilities are at the Higher Technical School for Industrial Engineers. C/ Jose Gutiérrez Abascal 2. 28006 Madrid.

Request for service

A **request** for service can be made by contacting the officer

Dr. Juan Carlos Hernández

via the e-mail jc.hernandez@upm.es. The applicant will be asked for technical and scientific information to enable assessment of the system to be made and the work needed identified, along with the technical and human resources needed to carry it out. The rates for other technical services are published on this web site and on the Universidad Politécnica de Madrid's web site under the heading 'Prototype Production Services' <https://www.upm.es/Investigacion/estructuras/ServiciosCientificos> .