



Training on injection moulding and moulds

The plastic injection process and its associated mould sector is one of the product manufacturing processes that most requires qualified personnel.

The high quality and multipurpose requirements mean that professionals must know the different phases involved in obtaining injected parts that meet the established quality criteria.

This requires that the industry professionals associated with the production of injection moulded parts have adequate technical knowledge of all the materials and processes involved, enabling them to respond to this need for companies.

Call open all year.

You will have two months to complete the course from the moment you decide to start it.

Registration period

Until 08 December 2022 or full capacity



Date and Schedule

From 17 Jan to 16 Dec
2022



Duration

80 class hours



Location

Online



Price

AIMPLAS members
600€

Non-members: 750€

Unemployed 600€ 10%
discount on the second
attendee from the same
company 10% discount if you
register three weeks before the
beginning of the course VAT
exempt rate

Objectives

- > The main objective of the training is that the student can understand the process of manufacturing a mould, what steps must be followed to manufacture a quality mould, how to interpret the documentation as well as understanding the injection process, a process in which the mould will be used and where its correct performance will be validated.
 - > To be able to distinguish the properties of mould making metals to manufacture the mould depending on the production needs.
 - > To be able to identify and classify plastic materials to be used in an injection moulding conventional process, depending on their typology and properties.
 - > To distinguish the parts used for integrating and manufacturing a mould.
 - > To analyse the behaviour of plastic in mould cavities.
 - > To evaluate defects in injected parts.
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Who is it aimed at?

- > Workers with recognized experience in the injection of plastic sector wanting to grow professionally, such as part designers, head managers, injection operators.
 - > Workers with no or limited experience in mould making.
 - > Young students coming from the Standardized Metal Mould Making Professional Education.
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Programme

1. MATERIALS

- > **1.1 Mould making materials**
- > **1.2 Polymers for injection moulding**

- > Introduction to polymers
- > Polymers. Main families
- > Biopolymers
- > Importance of additives

2. MOULD

- > **2.1 Mould design basis**
- > Phases of the design process.
- > Mould parts
- > Wall thickness, drafts, and ribs.
- > Holes, weld lines, guiding holes and radii.
- > Replacement of materials
- > **2.2 Technical drawing interpretation**
- > Isometric and Orthographic drawings.
- > Dimensioning
- > Sectioning
- > Tolerances

3. MOULD MAKING PROCESS.

- > **3.1 Mould making process and Equipment**
- > Cutting Tool
- > Lathe process
- > Milling
- > Drilling
- > EDM process
- > Finishing process
- > Additive Manufacturing
- > **3.2 Safety measures.**
- > **3.3 Documentation for mould making process.**

4. INJECTION MOULDING PROCESS

- > **Injection moulding process**
- > Injection Unit
- > Clamping Unit
- > Peripheral equipment
- > Process stages
- > **4.2 Injected part defects**
- > Aesthetic defects.
- > Dimensional troubleshooting.
- > Defects that affect final mechanical properties.

Open calls

From 17 Jan to 16 Dec 2022

📍 Online

Teaching Staff



Víctor Sevilla Núñez

Personal investigador de AIMPLAS /
AIMPLAS Researcher

Methodology

- The course has been designed to be taught online through AIMPLAS Plastics Academy, providing flexibility to follow it, at any time and from any place.
 - The course is modular and consists of interactive multimedia contents. AIMPLAS professional technicians collaborate in its development and implementation, and, through personalised tutorials and other tools offered by the web will help the student to understand everything related to the injection moulding and moulds.
 - A Q&A videoconference session with a maximum duration of one hour.
 - You will have two months to complete the course.
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Organized by:

