

1. TITLE OF THE CERTIFICATE (ES)

Certificado de Profesionalidad de nivel 3 en
FMEF0308 PRODUCCIÓN EN FUNDICIÓN Y PULVIMETALURGIA

2. TRANSLATED TITLE OF THE CERTIFICATE (EN)

Professional Certificate Level 3 in
FMEF0308 SMELTING AND POWDER-METALLURGY PRODUCTION
(This translation has no legal status)

3. PROFILE OF SKILLS AND COMPETENCES

The holder of this certificate will have acquired the **general competence** to determine the operational processes of smelting and powder-metallurgy production and program the automatic manufacturing systems, as well as organising and supervising production, based on technical process documentation, using criteria of quality, safety and environmental protection. This general competence is divided into the following **skills units** (UC):

- Define operational smelting processes (UC0589_3).
- Define operational powder-metallurgy processes (UC0590_3).
- Program automatic systems in metal working (UC0591_3).
- Supervise production in metal working (UC0592_3).

The professional skills are acquired through the **learning outcomes** defined within the related Training Modules (MF):

- Smelting processes (MF0589_3).
- Powder-metallurgy processes (MF0590_3).
- Automatic systems in metal working (MF0591_3).
- Supervision and control of production processes in metal working (MF0592_3).
- Practical training at the workplace in Smelting and powder-metallurgy production (MP0040)

(See legal basis for all learning outcomes information acquired by the holder of this Certificate in each MF).

As a reference the learning outcomes include in the Practical training at the workplace that complete and reinforce the learning outcomes acquired in the other training modules, are:

- Carry out a technical and financial study for the manufacture of a product by smelting or powder metallurgy.
- Develop processes for smelting or powder metallurgy, based on the requirements of a specific product.
- Check the automated production systems used in mechanical manufacture, identifying the resources related to robots, handling systems and the computer integrated manufacturing (CIM) environment.
- Take part in the preparation of programs for robots, handling and flexible manufacturing systems (MFS) to obtain machine manufactured products.
- Collaborate on operations for preparing, executing and controlling automated systems to obtain machine manufactured products.
- Collaborate on establishing programmes and actions for maintaining production resources and ensuring compliance.
- Monitor the standards for prevention of occupational risk and environmental protection applicable to the management of machine manufacturing processes.
- Take part in the company's working processes, following the rules and instructions established at the workplace.

4. RANGE OF OCCUPATIONS ACCESSIBLE TO THE HOLDER OF THIS CERTIFICATE

The holder of this certificate may work in areas of production and planning of the production process, in companies dedicated to metal working manufacture by smelting and powder-metallurgy. The most pertinent occupations and positions are:

- Smelting process technician.
- Head of smelting process facilities.
- Powder-metallurgy process technician.
- Head of facilities in powder-metallurgy processes.
- Moulding supervisor.
- Automated casting system programmer.

5. OFFICIAL BASIS OF THE CERTIFICATE

Name and status of the national/regional authority providing accreditation/recognition of the certificate

The Ministry of Employment and Social Security or the corresponding autonomous regional administration within the scope of its competence, in the name of the King. The certificate is valid throughout Spain.

Level of the certificate

The Professional Certificate Level 3 of the National Repertoire of Professional Certificates corresponds to level 4 of the International Standard Classification of Education (ISCED-P 2011).

The European Qualification Framework (EQF) level:

Grading scale/Pass requirements

The grading scale and pass level of the training modules are expressed on a scale of 0 to 10. The minimum score for a pass is 5 in every training module including a pass in the practical training at the workplace module.

The grading system is as follows:

- FAIL: 0 to 4.9
- PASS-SATISFACTORY: 5 to 6.9
- PASS-GOOD: 7 to 8.9
- PASS-EXCELLENT: 9 to 10

Access to next level of education/training

This Professional Certificate Level 3 gives access to Professional Certificate Level 3 within the same professional area and family.

For validation purposes, the educational authorities will recognise the professional module or modules of the VET diplomas corresponding to the skills units included in the training modules of this certificate.

Legal basis

Royal Decree 1969/2008 of 28 November, establishing three professional certificates in the professional family Metal working, which are included in the National Repertoire of Professional Certificates. (Appendix III, Code: FMEF0308)

6. OFFICIALLY RECOGNISED WAYS OF ACQUIRING THE CERTIFICATE

This certificate may be acquired by:

1. Training: Completion with a pass grade of the face-to-face or online training programme.
2. Recognition of the professional skills acquired through professional experience or non-formal training (prior learning): Completion of a process of skills evaluation and accreditation in all the skills units making up the professional certificate.
3. Dual training: Completion of a training and apprenticeship contract, which may range from 1 year (or 6 months, if stipulated as such in the collective agreement) to 3 years, during which effective working time is combined with time dedicated to training under the training programme for the professional certificate.

The training method (number 1 above) requires successful completion of the training modules and the practical training at the workplace:

| Description of vocational training received | Percentage of total programme (%) | Duration (hours) |
|---|-----------------------------------|------------------|
| Training modules | 79 | 440 |
| Practical training at the workplace | 21 | 120 |
| Total duration of training leading to the certificate | | 560 |
| <p>Entry/access requirements:</p> <ul style="list-style-type: none"> - <i>Bachiller</i> Diploma (upper secondary education); or - Professional Certificate Level 2 in the same professional area. - If neither of the above or higher certifications are held, a pass in the key skills tests. <p>Additional information: Professional certificates are instruments for official accreditation of the professional qualifications in the National Catalogue of Professional Qualifications for all economic activities, within the scope of the labour administration. The National Repertoire of Professional Certificates is divided into three qualification levels (Level 1, Level 2 and Level 3), and by sectors into 26 professional families and 102 professional areas. More information is available at: www.sepe.es</p> <p>National Europass Centre: www.oapee.es</p> | | |

(*) **Explanatory note:** This document is designed to provide additional information about the specified certificate, but has no legal status in itself. The format of the description is based on the following texts: Council Resolution 93/C 49/01 of 3 December 1992 on the transparency of qualifications; Council Resolution 96/C 224/04 of 15 July 1996 on the transparency of vocational training certificates; and Recommendation 2001/613/EC of the European Parliament and of the Council of 10 July 2001 on mobility within the Community for students, persons undergoing training, volunteers, teachers and trainers.

More information is available at: <http://europass.cedefop.eu.int>

Information on Professional Certificates of the Map of Qualifications and Vocational Training in Spain

