

1. TITLE OF THE CERTIFICATE (ES)

**Certificado de Profesionalidad de nivel 3 en
FMEC0209 DISEÑO DE TUBERÍA INDUSTRIAL**

2. TRANSLATED TITLE OF THE CERTIFICATE (EN)

**Professional Certificate Level 3 in
FMEC0209 INDUSTRY PIPING DESIGN
(This translation has no legal status)**

3. PROFILE OF SKILLS AND COMPETENCES

The holder of this certificate will have acquired the **general competence** to design and prepare technical documentation on industrial piping installations, based on prior designs and basic engineering instructions, while complying with regulations and following quality, safety and environmental risks prevention criteria. This general competence is divided into the following **skills units** (UC):

- Design industrial piping systems (UC1149_3).
- Design industrial piping installations (UC1150_3).
- Prepare the technical documentation of metal construction products (UC1148_3).

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

- Industrial piping systems design (MF1149_3).
- Industrial piping installations design (MF1150_3).
- Technical documentation for metallic construction products (MF1148_3).
- Practical training at the workplace in Industry piping design (MP0181)

(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:

- Design piping installation schemes, complying with the standards governing occupational risk and environmental prevention.
- Draw isometrics for the manufacture and assembly of industrial piping, complying with the standards governing quality and occupational and environmental risk prevention.
- Prepare cutting, forming and machining specifications for the manufacture of industrial piping, complying with the standards governing quality and occupational and environmental risk prevention.
- 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 on defining and developing industrial piping installations, based on initial designs and basic engineering instructions. The holder may work in the petrochemical, industrial, or naval and railway repair and construction sectors. The most pertinent occupations and positions are:

- Piping design draughtsman.
- CAD piping technician.
- Piping development technician.
- Design draughtsman.
- Technical industrial designer.

5. OFFICIAL BASIS OF THE CERTIFICATE	
<p style="text-align: center;">Name and status of the national/regional authority providing accreditation/recognition of the certificate</p> <p>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.</p>	
<p style="text-align: center;">Level of the certificate</p> <p>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).</p> <p>The European Qualification Framework (EQF) level:</p>	
<p style="text-align: center;">Grading scale/Pass requirements</p> <p>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.</p> <p>The grading system is as follows:</p> <ul style="list-style-type: none"> - FAIL: 0 to 4.9 - PASS-SATISFACTORY: 5 to 6.9 - PASS-GOOD: 7 to 8.9 - PASS-EXCELLENT: 9 to 10 	
<p style="text-align: center;">Access to next level of education/training</p> <p>This Professional Certificate Level 3 gives access to Professional Certificate Level 3 within the same professional area and family.</p> <p>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.</p>	
<p style="text-align: center;">Legal basis</p> <p>Royal Decree 684/2011 of 13 May, establishing twelve professional certificates in the professional family Metal working, which are included in the National Repertoire of Professional Certificates. (Appendix VII, Code: FMEC0209)</p>	

6. OFFICIALLY RECOGNISED WAYS OF ACQUIRING THE CERTIFICATE		
<p>This certificate may be acquired by:</p> <ol style="list-style-type: none"> 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. <p>The training method (number 1 above) requires successful completion of the training modules and the practical training at the workplace:</p>		
Description of vocational training received	Percentage of total programme (%)	Duration (hours)
Training modules	92	440
Practical training at the workplace	8	40
Total duration of training leading to the certificate		480

Entry/access requirements:

- *Bachiller* 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.

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

National Europass Centre: www.oapee.es

(*) **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

