

1. TITLE OF THE CERTIFICATE (ES)

Certificado de Profesionalidad de nivel 2 en
IEXM0809 EXCAVACIÓN A CIELO ABIERTO CON EXPLOSIVOS

2. TRANSLATED TITLE OF THE CERTIFICATE (EN)

Professional Certificate Level 2 in
IEXM0809 OPEN-PIT BLASTING
(This translation has no legal status)

3. PROFILE OF SKILLS AND COMPETENCES

The holder of this certificate will have acquired the **general competence** to carry out open-pit excavation for the extraction of mineral ores or the construction of civil engineering works, by techniques of perforation and blasting, and earth support, in accordance with the regulations on occupational risk prevention and environmental protection. This general competence is divided into the following **skills units** (UC):

- Carry out open-pit drilling (UC1378_2).
- Stabilise banks in open-pit excavations (UC1379_2).
- Collaborate on risk prevention in open-pit excavations (UC1380_2).
- Carry out concrete projection (UC0420_2).
- Carry out open-pit blasting (UC0426_2).

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

- Open-pit drilling (MF1378_2).
- Stabilisation of banks in open-pit excavations (MF1379_2).
- Risk prevention in open-pit excavations (MF1380_2).
- Concrete projection (MF0420_2).
- Open-pit blasting (MF0426_2).
- Practical training at the workplace in open-pit blasting (MP0239)

(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:

- Collaborate on the handling and maintenance of the drilling equipment in accordance with the instructions and safety conditions.
- Participate in the work of clearing and sustaining banks, in conditions of safety.
- Identify risks and propose measures to adopt at different stages of the open-pit blasting process.
- Participate in the work of sustaining banks by concrete projection, in conditions of safety.
- Carry out the blasting in accordance with established procedures, following the instructions and under the supervision of a manager.
- 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 companies dedicated to open-pit excavations, either with or without the subsequent use of the excavated materials. The holder may work in the extractive and construction industries. In extractive industries within extraction of energy ores (anthracite, coal, lignite and peat); extraction of uranium and thorium ores; extraction of metallic ores; extraction of non-metallic and non-energy ores (stone, sands and clays, ores for fertilizers and chemical products, gem salt and others). In the construction sector in demolition and excavations; major civil engineering works on the surface and at height; other construction works; construction and repair of railway track; construction of roads, highways, airports and sports facilities; hydraulic works; other specialised works. The most pertinent occupations and positions are:

- Miner, in general.
- Coal and other mineral extraction miner.
- Powder monkey.
- Operator of mineral extraction machines, in general.
- Drill operator (mines).
- Earth moving mining machinery driver/operator.

Requirements for exercising the profession:

The professional activities of the workers in underground mining operations, with respect to the general and specific safety regulations for the particular job, are subject to regulation by the competent government authority. The professional activities of the mobile machinery operators in open-pit mining are subject to regulation by the competent government authority. The professional activity of blasting with explosives is subject to regulation by the competent government authority. "Formación preventiva para el desempeño del puesto de trabajo" (Preventive training for the job), specified in the Complementary Technical Instruction (ITC 02.1.02) of the General Regulation on Mining Safety Rules, approved by Royal Decree 863/1985 of 2 April.

For open-pit blasting, specific authorisation for the use of explosives, granted by the functional area of Industry and Energy of the corresponding Government Delegation, pursuant to the Explosives Regulation.

For open-pit drilling, in some autonomous regions the competent mining authority will require a specific authorisation for borehole drilling according to the type of machine, as established by Royal Decree 863/1985, approving the General Regulation on Mining Safety Rules and Complementary Technical Instructions (ITC 07.1.03).

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 2 of the National Repertoire of Professional Certificates corresponds to level 3 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

5. OFFICIAL BASIS OF THE CERTIFICATE

Access to next level of education/training

This Professional Certificate Level 2 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 713/2011 of 20 May, establishing twelve professional certificates in the professional family Extractive Industries, which are included in the National Repertoire of Professional Certificates, and updating the professional certificates established in Royal Decree 1217/2009 of 17 July. (Appendix X, Code: IEXM0809)

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	87	530
Practical training at the workplace	13	80
Total duration of training leading to the certificate		610

Entry/access requirements:

- Compulsory Secondary Education Diploma (Lower secondary education); or
- Professional Certificate Level 1 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

