

1. TITLE OF THE CERTIFICATE (ES)

**Certificado de Profesionalidad de nivel 3 en
QUIA0112 ORGANIZACIÓN Y CONTROL DE ENSAYOS DESTRUCTIVOS DE CARACTERIZACIÓN DE MATERIALES Y PRODUCTOS**

2. TRANSLATED TITLE OF THE CERTIFICATE (EN)

**Professional Certificate Level 3 in
QUIA0112 ORGANISATION AND MONITORING OF DESTRUCTIVE TESTING OF MATERIALS AND PRODUCTS CHARACTERIZATION
(This translation has no legal status)**

3. PROFILE OF SKILLS AND COMPETENCES

The holder of this certificate will have acquired the **general competence** to organize, monitor, and if necessary, make Destructive Testings (DT) oriented to the analysis and quality control of materials, semi-manufactured and manufactured products (specimens), welded joints, equipment or components in service, acting under national procedures and regulations and/or internationally recognised standards, evaluating and recording the results, and complying with occupational risks prevention plans and environmental risks associated. This general competence is divided into the following **skill units** (UC):

- Organise and manage the activity of the laboratory using specific procedures and standards (UC0052_3).
- Identified the properties of materials and products associated with their manufacturing or production processes (UC2197_3).
- Organise, supervise and perform the calibration and verification of the equipment and metrological tests and evaluate their results (UC2198_3).
- Organise and manage the occupational risks prevention measures during destructive testing (UC2203_3).
- Organise, monitor and perform metallographic, hardness and crash tests, and other superficial mechanical tests on materials, products and welded joints, and evaluate their results (UC2200_3).
- Organise, monitor and perform test for optical, electromagnetic, rheological and granulometric properties on materials and products and evaluate their results (UC2201_3).
- Organise, monitor, and perform environmental and thermal tests on materials and products, and evaluate their results (UC2202_3).
- Organise, supervise and perform tests of materials and products in the combination machine and evaluate their results (UC2199_3).

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

- Quality in the laboratory (MF0052_3).
- Recognition of materials and products properties related to their manufacturing process (MF2197_3).
- Organise, supervise and perform the calibration and verification of the measurement equipment and metrological tests (MF2198_3).
- Organization and management of occupational risks prevention measures during destructive testing (MF2203_3).
- Organization, monitoring and implementation of metallographic, hardness and crash testing, and other superficial mechanical testing on materials, products and welded joints (MF2200_3).
- Organization, monitoring and testing of optical, electromagnetic, rheological and granulometric properties in materials and products (MF2201_3).
- Organization, supervision and implementation of environmental and thermal testing on materials and products (MF2202_3).
- Organization, monitoring and testing of materials and products in the combination machine (MF2199_3).
- Practical training at the workplace in organization and monitoring of destructive testing of materials and products characterization.

(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:

- Cooperate in the execution of operations of some of the methods specified in the certificate on a testing object.

3. PROFILE OF SKILLS AND COMPETENCES
<ul style="list-style-type: none"> – Assist in monitoring operations to be carried out in a material or product to be tested, with any of the various tests and/or methods specified in the certificate. – Make a report of the results of the tests. – Participate in the working processes of the company, following the rules and instructions established at the workplace.

4. RANGE OF OCCUPATIONS ACCESSIBLE TO THE HOLDER OF THIS CERTIFICATE
<p>The holder of this certificate may work in any industrial, construction and civil works sectors. Within the industrial sectors in: the iron and steel industry; mechanical manufacturing (automotive, naval, etc.); plastics; aviation and aerospace; textile, clothing and leather; paper and paperboard; wood and similar; glass and ceramics; among others, manufacturing processes and formed of metallic and non-metallic materials, and their joints. The most relevant occupations and work positions are:</p> <ul style="list-style-type: none"> – Technician of destructive testing on quality control of welded joints. – Technician of destructive testing on mechanical manufactured products. – Technician of destructive testing on iron and steel industry. – Technician of destructive testing on specimens on service. – Analyst of destructive tests in the sector of construction and maintenance of aircrafts, ships and automotive manufacture. – Analyst of destructive tests on Technology and research centers. – Analyst of destructive tests on materials and manufactured products. – Analyst of destructive tests in building and civil works. – Analyst of destructive tests of containers and packaging. – Analyst of destructive tests of materials and textile, clothing and leather, wood and cork and glass and ceramics manufacture. – Analyst of destructive tests on plastics, elastomers and composites. <p>The holder of this professional certificate has recognition of the basic level training in labour risk prevention, according to Annex IV of the Royal Decree 39/1997 of 17 of January approving the Labour Risks Prevention Act.</p>

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

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 989/2013 of December 13th, by which three professional certificates of the professional family Chemicals, included in the National Repertoire of professional certificates are established, and certain professional certificates of the professional family "Wood, furniture and cork", established in the Royal Decree 1968/2008, of November 28th and Royal Decree 717/2011 of May 20th are updated. (Appendix III, Code: QUIA0112)

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	86	760
Practical training at the workplace	14	120
Total duration of training leading to the certificate		880

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.sepie.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

