

# EUROPASS CERTIFICATE SUPPLEMENT

## TITLE OF THE DIPLOMA (ES)

*Técnico en Impresión Gráfica*

## TRANSLATED TITLE OF THE DIPLOMA (EN)<sup>(1)</sup>

*Technician in Graphic Printing*

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(1) This translation has no legal status.

## DIPLOMA DESCRIPTION

### The holder of this diploma will have acquired the General Competence with regard to:

Carries out the activities related to mechanical adjustments, intonation and image record to produce leaflets either by means of conventional systems (offset printing, flexography and screen printing) or by using digital means, monitoring and maintaining the machines and auxiliary equipment to obtain a quality production in the established time, complying with the rules on labour risk prevention and environmental protection.

**Within this framework, the PROFESSIONAL MODULES and their respective LEARNING OUTCOMES acquired by the holder are listed below:**

### “Offset Machines Preparation and Setting up”

The holder:

- Assesses the work flow in the graphic process, identifying the specifications during its different stages.
- Adjusts the way the paper passes through the machine, interpreting the functioning of feed and transport mechanisms.
- Adjusts the printing unit, identifying and differentiating between the cylinder body, the bevel, the sheet thickness and the blanket overlay.
- Prepares the inking and dampening rollers, differentiating the functions of their parts.
- Regulates the finishing devices, developing the technical features and instructions of the graphic product to be manufactured.
- Applies preventive maintenance to offset machines, interpreting the maintenance plan.
- Applies the rules on labour risk prevention and environmental protection, identifying the risks associated to his/her professional activity and applying the measures and the equipment to prevent them.

### “Offset Print Run Development”

The holder:

- Registers the printout, identifying and organizing the functioning of the frontal and lateral guide.
- Tunes the colours of the printout, relating the colour adjustment to the balance between water and ink, the print pressure and the type of paper used.
- Assesses the first press OK, analyzing the technical instructions referenced in the work order.
- Produces printouts by means of an offset machine, applying the technical instructions of the offset print run.
- Carries out the preventive maintenance and cleans the machine, assessing the different regularities and the manufacturer's instructions.
- Applies the rules on labour risk prevention and environmental protection, identifying the risks associated to his/her professional activity and the measures and the equipment to prevent them.

### “Flexography Printing”

The holder:

- Adjusts the way of the coil or plate that is going to print in the flexographic printing machine passes, deciding the route of the printing support through the mechanisms.
- Prepares the printer form as well as the elements of the plate roller, identifying the parameters to assemble them, according to the features of the print out.
- Adjusts the printing bodies and the mechanic elements of the cylinders, interpreting the technical features of the work to execute.
- Tunes and registers the print out in the flexographic printing machine in both a flexographic and in a digital way, applying the parameters that must be controlled and relating them to the print out to be obtained.
- Develops the print run of the support in the flexographic machine, working out the process's technical conditions.
- Carries out the operations for a row conversion of the support, relating and applying the different procedures to the treatment of the print out to be obtained.
- Carries out the maintenance and cleans the machine, the equipment and the tools, developing the manufacturer's instructions.

- Applies the rules on labour risk prevention and environmental protection, identifying the risks associated to his/her professional activity and the measures and the equipment to prevent them.

### **“Screen Printing”**

The holder:

- Carries out the screen processing, recognising the technical features of its parts
- Carries out the printing form by means of a direct system, from the computer to the screen, relating the file formats and the elements these contain to the quality of the image obtained.
- Adjusts the screen printing machine, differentiating the functions of its parts.
- Registers and adjusts the colours of the printout, defining the position of the image on the support and applying the thickness of the ink layer.
- Carries out the screen printing print run, deducing from the printout the technical instructions established.
- Carries out the maintenance and cleans the machine, establishing the manufacturer's periodicity and applying the maintenance plan.
- Applies the rules on labour risk prevention and environmental protection, identifying the risks associated to his/her professional activity and the measures and the equipment to prevent them.

### **“Digital Printing”**

The holder:

- Executes computer files, inter-linking the compatibility of the formats, the versions and the elements that contain.
- Normalizes computer files, interpreting the potential problems in its constituent parts and the type of work to carry out.
- Sets up the raster image processor (rip), applying the programme's tools relating the features of the work to the instructions of the parameters available.
- Prepares the raw materials and the consumables, recognizing the instructions related to quality and quantity and calculating the material requirements for the work.
- Prepares the digital press machine, interpreting the setting and the type of support to be printed.
- Executes the print run in digital printing machines, applying the qualities of the first press ok.
- Carries out the preventive maintenance of the machine, identifying the different periods and interpreting the instructions of the manufacturer.

### **“Preparation of Printing Materials”**

The holder:

- Prepares the paper to be used in the printing process, identifying its properties and developing the stacking in the machine.
- Sets up other supports that are used in the printing process, showing its features.
- Sets up the forms of the screen or flexographic printing machine for the printing, distinguishing their properties.
- Checks and places the offset printing form, analyzing the graphic elements constituting it.
- Prepares the inks for the printing, checking their rheological properties.
- Prepares special colours, developing and calculating colour mixtures.
- Prepares the dampening solution, determining the concentration of the products.

### **“Bas Relief Printing”**

The holder:

- Adjust the printing unit of the rotogravure printing machine, identifying amongst its elements: The print cylinder, the pressure cylinder and the inking system.
- Registers and adjusts the colour of the rotogravure printing, describing the printing effects.
- Carries out the print run in rotogravure, describing the printing defects.
- Adjusts and sets up the pad printing machine, identifying the printing form and choosing the pads, the carrying elements base and the most suitable inks.
- Carries out the pad print out , analyzing the qualities of the press ok
- Carries out the preventive maintenance and cleans the pad printing machine, identifying the technical documentation and applying the security and protection measures, established in the plan for risk prevention and environmental protection.

### **“Professional Training and Guidance”**

The holder:

- Selects job opportunities, identifying the different possibilities of labour integration, and the alternatives of lifelong learning.
- Applies teamwork strategies, assessing their effectiveness and efficiency on the achievement of the company's goals.
- Exercises rights and complies with the duties derived from his/her labour relationships, recognising them in the different job contracts
- Determines the protective action of the Spanish Health Service in view of the different covered eventualities, identifying the different types of assistance.

- Assesses the risks derived from his/her activity, analysing the job conditions and the risk factors present in his/her labour setting.
- Participates in the development of a risk prevention plan in a small enterprise, identifying the responsibilities of all the agents involved.
- Applies protection and prevention measures, analysing the risk situations in the labour setting of the Technician in Graphic Printing.

#### **“Business and Entrepreneurial Initiative”**

The holder:

- Recognises the skills related to entrepreneurial initiative, analysing the requirements derived from the different job positions and business activities.
- Defines the opportunity to create a small enterprise, assessing the impact on the sphere of action and incorporating ethic values.
- Carries out the activities for the setting-up and implementation of a company, choosing its legal structure and identifying the associated legal obligations.
- Carries out basic administrative and financial management activities of an SME, identifying the main accounting and tax obligations and filling in documentation.

#### **“On the Job Training”**

The holder:

- Identifies the company’s structure and organization relating both to service provision.
- Applies labour and ethic habits in his/her professional activity according to the characteristics of the job position and the procedures established by the company.
- Prepares the materials for print production, relating their technical characteristics to the work order.
- Adjusts the part of the offset printing machine, relating its mechanisms and applying the preparation procedures of the marker, the printing body and the finishings.
- Develops the offset print run, applying the technical instructions specified in the work order.
- Produces printouts by means of the flexography method, applying the technical specifications in the work order.
- Produces printouts by means of the screen printing method, applying the technical specifications in the work order.
- Produces printouts by means of the digital printing method, applying the technical specifications in the work order.

### **RANGE OF OCCUPATIONS ACCESSIBLE TO THE HOLDER OF THE DIPLOMA**

The Technician in Graphic Printing works in companies devoted to Graphic Arts in general, with the following sections: Offset flexography, screen or digital printing. He/she also works for companies devoted to book printing, editing of periodical publications, paper packaging manufacture, plastics, and corrugated cardboard, paper and cardboard products, advertisement printing, textile and ceramic printing, as well as by means of other products.

The most relevant occupations or jobs are the following:

- General Offset Machine Operator
- Offset Printing Machine Minder
- Offset Printing Technician
- Flexography Plates Assembler
- Flexography Machine Operator
- Flexography Printing Machine Minder
- Rotogravure Machine Operator
- Digital Printer
- Digital printing Technician
- Screen Printing Technician
- Screen Printing

### **AWARD, ACCREDITATION AND LEVEL OF THE DIPLOMA**

**Name of the body awarding the diploma on behalf of the King of Spain:** Spanish Ministry of Education or the different Autonomous Communities according to their areas of competence. The title has academic and professional validity throughout Spain.

**Official duration of the education/ training leading to the diploma:** 2000 hours.

#### **Level of the diploma (national or international)**

- NATIONAL: Post-Compulsory Secondary Education
- INTERNATIONAL:
  - Level 3 of the International Standard Classification of Education (ISCED3).
  - Level \_\_\_\_\_ of the European Qualifications Framework (EQF\_\_\_).

**Entry requirements:** Holding the Certificate in Compulsory Secondary Education or holding the corresponding access test.

**Access to next level of education/training:** This diploma may provide access to Higher Technical Cycles provided that an entrance exam is passed.

**Legal basis:** Basic regulation according to which the diploma is established:

- Minimum teaching requirements established by the State: Royal Decree 1590/2011, of 4 November, according to which the diploma of Technician in Graphic Printing and its corresponding minimum teaching requirements are established.

**Explanatory note:** This document is designed to provide additional information about the specified diploma and does not have any legal status in itself. An Annex I may be added and will be filled in by the corresponding Autonomous Community.

### INFORMATION ON THE EDUCATION SYSTEM

