



FORMACIÓN

INP-Electrical Equipment

Type: eLearning || **Length:** 5 hours || **Price:** consult our website

Certificate

Following the successful ending, a **Certificate of completion of the INP-Electrical Equipment** course is issued by Bureau Veritas Business School.

Introduction

Technical staff operating, inspecting or maintaining the electrical equipment of installations in an international industrial environment should know in depth and perfectly different aspects such as: Selection and erection of a wiring system besides the identification of conductors from different countries and the usual inspection and test plan for cables; the schema of the reasons of each typical and most common inspection and test plan and their details; the purpose of the tests, standards and procedures, the knowledge about the typical acceptance criteria, mistakes, instruments and equipment needed, etc.

This training is not intended to cover or address the requirements and acceptance criteria of every country because these could surely vary. It is intended to ensure that the fundamental principles and practices are understood and in line with IEC requirements.

Intended Audience

- Mechanical & electrical engineers.
- Electrical equipment inspectors.
- Technical staff working in production area.
- Technical staff working in maintenance area.

Course Objectives

This course has the following objectives:

- Having a clear idea on the different types of cables, their construction and terminology.
- Being able to use electrical formulas and understanding American Wire Gauge as well as its current ratings and conductor resistance.
- Studying how the generators and motors work and their main standards.
- Knowing the different types of generators and motors understanding their advantages and disadvantages in order to decide which one is better for any particular requirement.
- Having a clear idea on how the electrical transformers work and how to proceed for inspection, achieving the technical and theoretical background.
- Becoming familiar with the terminology and the construction of electrical transformers.



Program

- Electrical cables
 - Objectives
 - Different types of cables
 - Construction and terminology
 - The standards
 - Electrical formulas
 - AWG – American Wire Gauge
 - Wire gauges – current ratings
 - Conductor resistance
 - Conductor inductance
 - Conductor capacitance
 - Selection and erection of wiring system
 - Identification of conductors
 - The usual inspection and test plan

- Electrical motors & generators
 - Objectives
 - Principles of functions generators / motors
 - Terminology
 - How do electric motors work?
 - How do electric AC generators work?
 - Motor generator construction
 - Inspections and test plan for AC generator
 - Inspections and test plan for induction motor
 - Electrical formulas
 - Main standards
 - Frequency and speed of electrical motors
 - IEC – NEMA standards torques
 - Comparison of motors types
 - Electrical motors – starting devices
 - Asynchronous motors – motor protection
 - Electrical motor efficiency

- Inspection on electrical transformers
 - Objectives
 - Work principle
 - Terminology
 - Construction
 - Reference standards
 - Typical inspection and test plan
 - Test details and related

Contact

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