

9.a/b Utilize, choose, customize monitoring and data management systems (*monitor automated machines, record test data*)

Assessment criteria	Knowledge
<p>LO9b.1: Performs the assembly of the installation and verifies the operation and commissioning of monitoring and data management systems</p> <p>1. Assembles communications installation of the associated automated systems, interpreting schematics and applying assembly techniques</p> <p>Data acquisition Intelligent sensors, IoT</p> <p>2. Complies with the standards for the prevention of occupational hazards and environmental protection in the assembly, identifying (9b) the associated risks, measures and equipment to prevent them.</p>	<p>1. Assembles communications installation of the associated automated systems</p> <p>1.1 Installation and maintenance procedures.</p> <p>1.2 Preparation of assembly plans.</p> <p>1.3 Rethinking of installations (9b).</p> <p>1.4 Techniques of assembly.</p> <p>1.5 Installation and connection of equipment and plant elements.</p> <p>1.6 Making of adjustments.</p> <p>1.7 Assembly operations and functional tests.</p> <p>1.8 Regulation and commissioning of the system (9b)</p> <p>2. Risk prevention, safety and environmental protection in the installation of automated electrical and electronic systems:</p> <p>2.1 Regulations for the prevention of occupational hazards.</p> <p>2.2 Prevention of occupational hazards in assembly processes.</p> <p>2.3 Personal protective equipment: characteristics and criteria for use. Collective protection. Means and equipment protective.</p>
	<p>Skills</p>
	<p>1. Assembles communications installations of the associated automated systems, interpreting schemes and applying mounting techniques.</p> <p>2.1 Replace the wiring of some PLC inputs and outputs, which control the pneumatic and/or hydraulic, electrical, and mechanical technologies, and a manipulator and/or robot used, by the appropriate field diver, maintaining reliable and quality operation.</p> <p>2.2 Implements an industrial diver, replacing some inputs and outputs of the PLCs, which control the pneumatic and/or hydraulic, electrical and mechanical technologies, and a</p>

	<p>manipulator and/or robot used, by periphery decentralized, maintaining reliable and quality operation.</p> <p>2.3 Communicates programmable automata and PCs with an industrial diver, at the cell level and at the field or process level, connecting sensors and actuators to automation control systems (automata, PC and operator terminals, among others), obtaining a reliable and quality operation.</p> <p>2.4 Implements an industrial network for communication between PLCs and for the connection of two cell PLCs or automated production system through the telephone network (9b)</p> <p>3. Complies with the standards for the prevention of occupational hazards and environmental protection in the assembly, identifying the associated risks, measures and equipment to prevent them.</p> <p>3.1 It identifies the risks and the level of danger involved in the handling of materials, tools, equipment, machinery and means of transport.</p> <p>3.2 Operates with machines and tools, respecting safety standards.</p> <p>3.3 Identifies the most frequent causes of accidents in the handling of materials, tools, cutting and forming machines, among others.</p> <p>3.4 Recognizes the safety features, personal and collective protective equipment (footwear, eye protection, clothing, etc.) to be used in the different assembly operations.</p> <p>3.5 Identifies the correct use of safety elements and personal and collective protective equipment.</p> <p>3.6 Relates the handling of materials, tools and machines to safety and personal protection measures required.</p> <p>3.7 Values the order and cleanliness of installations and equipment as the first risk prevention factor.</p>
	<p>Transferable skills</p> <ul style="list-style-type: none"> • Understand descriptions, specifications, manuals and other info typical of the profession in English and prepare them for next phase of project/Customer in understandable manner • Ability to communicate effectively, orally and in writing with “engineering” community and with “society”,

	extrapolating concepts for “non-experts) through an abstraction approach
--	--