

Systems are often designed using a system block diagram that considers the 'input, process and output' of a system. How the system will work is the 'process' and the 'input' is the part of the system that enables the process to start happening.

Q10: This unit identifies the competences you need to assemble electrical or electronic components to mechanical equipment, in accordance with approved procedures. You will be required to check that specified components are available and fit for purpose, to obtain all relevant and current documentation, to obtain the tools and equipment required for the assembly operations and to check that they are in a safe and usable condition. In carrying out the assembly operations, you will be required to follow company procedures and specified assembly techniques, in order to fit the electrical or electronic components to the mechanical assembly.

Q11: Components should be handled by the edges when possible. Avoid touching the component leads. Hand creams and lotions containing silicone must not be used since they can cause solderability and epoxy adhesion problems. Lotions specifically formulated to prevent contamination of circuit boards are available.

Q12: In carrying out the assembly operations, you will be required to work to instructions in order to produce the required assembly. The assembly activities will include making all necessary checks and adjustments, to ensure the components are correctly orientated, positioned and aligned, that moving parts have the correct working clearances, all fasteners are tightened to the correct torque and that the assembled parts are checked for completeness and function as per the specification. On completion of the assembly activities, you will be expected to return all tools and equipment to the correct location, and to leave the work area in a safe and tidy condition.

Q13: Your responsibilities will require you to comply with organisational policy and procedures for the assembly activities undertaken, and to report any problems with the assembly activities, materials or equipment that you cannot personally resolve, or are outside your permitted authority, to the relevant people. There is a multitude of methods available to perform accurate alignment, any of which can deliver the desired result. However, several precision tools are commonly used in alignment work. dial indicators, parallel blocks, taper gauges, feeler gauges and a tape measure.

Q14: Your responsibilities will require you to comply with organisational policy and procedures for the assembly activities undertaken, and to report any problems with the assembly activities, materials or equipment that you cannot personally resolve, or are outside your permitted authority, to the relevant people. You will be expected to work to instructions, with a minimum of supervision, taking personal responsibility for your own actions