



Australian Government

Assessment Requirements for MSMPCII295 Operate manufacturing equipment

Release: 1

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Modification History

Release 1. Supersedes and is equivalent to MSAPCII295A Operate manufacturing equipment

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria, and demonstrate the ability to:

- carry out the day-to-day operation of a routine piece of production equipment, meeting the demands of productivity and quality while resolving routine problems
- follow work instructions, operating procedures and inspection practices to:
 - minimise the risk of injury to self or others
 - prevent damage to goods, equipment or products
 - achieve required production output and product quality
 - modify activities to cater for variations in workplace contexts and environment
- use hand tools and power equipment correctly and safely
- perform normal operator maintenance of work area to enable work to be conducted safely and efficiently
- check specifications and work requirements
- recognise early warning signs of equipment/processes needing attention, including changes to operating conditions, product quality and amount of waste
- make pre-start visual checks, including completing checklists and checking that safety guards and gates are in position and are operational
- use start-up and shutdown processes
- monitor equipment operation as shown by gauges and charts (e.g. speed, hours on line, pressure, temperature, flow and vibration)
- monitor equipment using the senses of smell, sight, sound and feel, as appropriate
- monitor product quality, production rate and defect rate
- report process variations to ensure process conditions are maintained within limits
- respond signals and alarms immediately
- check product for quality and conformity to specifications
- address non-conforming products/materials in accordance with procedures
- identify and rectify/report routine process problems
- complete proforma production logs and reports
- communicate and work effectively and safely with others
- comply with work health and safety (WHS) requirements and safety instructions
- apply safe handling requirements for equipment, products and materials, including the use of personal protective equipment (PPE)
- collect, organise and understand information related to equipment operation

- use mathematical ideas and techniques for measuring product specifications and estimating materials requirements
- follow instructions and specifications and ask for help where needed
- prepare and plan the work
- modify activities to cater for variations in workplace contexts and environment.

Knowledge Evidence

Must provide evidence that demonstrates knowledge of:

- major components and functions of the equipment
- principles of equipment operation
- equipment operating parameters
- equipment and product variables and their interactions
- critical material properties, settings and readings
- impact of materials and properties
- construction and limitations of the equipment
- out-of-specification situations
- distinguishing between causes of faults, including:
 - raw materials
 - instrument failure/malfunction
 - electrical failure/malfunction
 - mechanical failure/malfunction
 - variations in product parameters (temperature, flows, pressure and levels).

Assessment Conditions

- Assessment must occur in a simulated environment or a workplace on an operating item of production equipment.
- Workplace for this unit covers a manufacturing environment specifically established for learning introductory manufacturing skills. It may be:
 - a school classroom or workshop equipped to teach manufacturing principles and practices
 - RTO premises equipped to teach manufacturing principles and practices with access to an operating item of production equipment over an extended time
 - an enterprise environment where above average supervision exists and training is occurring. The normal production imperatives have been modified to take into account the training being delivered.
- This unit must always be assessed holistically in conjunction with other units of competency that form part of a specified job function.
- Foundation skills are integral to competent performance of the unit and should not be assessed separately.
- Performance must be demonstrated consistently over a period of time.
- Materials and equipment must include:

- workplace procedures such as work instructions, standard operating procedures (SOPs), batch sheets. They may be written, verbal, computer based or in some other form.
- routine or common manufacturing equipment suitable for students operating in a simulated or trial manufacturing environment where there is a high degree of direct supervision.
- Equipment / materials include but are not limited to one or more of the following:
 - guillotines
 - bending and folding machines
 - non CNC lathes, especially bench and training lathes
 - soldering equipment
 - pedestal drills
 - bench grinders
 - records including log sheets/books, job/work sheets, electronic/paper records, verbal/voicemail/email reports
- Assessors must:
 - as a minimum, satisfy the Standards for Registered Training Organisations 2015 assessor requirements
 - have vocational competency in the manufacturing industry at least to the level being assessed, with broad industry knowledge and experience, usually combined with a relevant industry qualification
 - be familiar with the current skills and knowledge used and have relevant, current experience in the manufacturing industry.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=d1287d36-dff4-4e9f-ad2c-9d6270054027>