MCMT221A Apply Just in Time (JIT) procedures

Release: 1

Modification History

Not Available

INTRODUCTION

Unit Descriptor	This unit covers the knowledge and skills needed to work in a JIT system.
Application of the Unit	In a typical scenario, a person working in an organisation following JIT will need to follow procedures which are specific to JIT such as the controlled flow of material (e.g. the use of kanban, and elimination of waste etc). This will involve the operator in the application of the pull system to their job and the authorisation of product/material flows, in accordance with procedures and their level of authority
Unit Sector	MCM Tools

ELEMENT

PERFORMANCE CRITERIA

1. Respond to indicator of demand

1.1 Identify pull of product through work role
1.2 Recognise indicator of flow authorisation
1.3 Identify production required

2. Make products to demand

2.1 Make product as required by ticket
2.2 Identify any factors likely to prevent demand being satisfied
2.3 Take action in accordance with procedures

3. Update demand information as required

3.1 Record information on ticket to procedures as required
3.2 Facilitate operation of flow authorisation as part of work

4. Recommend improvements

4.1 Examine the operation of the JIT system as it relates to own work
4.2 Identify areas for improvement
4.3 Recommend improvements

SkillsDMC

RANGE STATEMENT

The Range Statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording in the Performance Criteria is detailed below. Add any essential operating conditions that may be present with training and assessment depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts.

Just in time (JIT)	Just in time (JIT) is a production scheduling concept that calls for any item needed at a production operation - whether raw material, finished item, or anything in between, to be produced and available precisely when needed, neither a moment earlier nor a moment later.
Flow authorisation	A system which authorises the worker to make a product without reference to another authority.
Indicator of demand	May be kanban bin, ticket or similar, or may be some other indicator of demand pull.In some plants, this may also include authorisation using SCADA software.
Ticket	Ticket may be a kanban or some other record, paper or electronic which constitutes the whole or part of the flow authorising system. Where kanban bins are used, there may be no other record.
Kanban	Kanban - a card or sheet used to authorize production or movement of an item. When fully implemented, kanban operates according to the following rules:

- all production and movement of parts and material take place only as required by a downstream operation, i.e. all manufacturing and procurement are ultimately driven by the requirements of final assembly or the equivalent
- the specific tool which authorizes production or movement is called a kanban. The word literally means card or sign, but it can legitimately refer to a container or other authorizing device. Kanban have various formats and content as appropriate for their usage (e.g. kanban for a vendor is different than a kanban for an internal machining operation).

Kanban is typically applied to batch type operation and the production is measured in units produced. In continuous manufacturing organisations,

production is measured in terms of production rate (e.g. kg/h, tonne/day) and rate is increased/decreased according to the flow authorisation which may be a kanban (e.g. ticket, order from a supplier) or may be a SCADA signal from a remote facility (e.g. customer tank) saying that resupply is required or similar.

SCADA	System Control and Data Acquisition (SCADA) is a general term applied to a number of systems which automatically collect critical process data, perform required mathematical manipulations on it and then make control decisions and/or give required information personnel for action.
Pull system	A pull system is a manufacturing planning system based on making on demand as opposed to a push system based on making for stock using a sales forecast.
Procedures	Procedures include all work instructions, standard operating procedures, formulas/recipes, batch sheets, temporary instructions and similar instructions provided for the smooth running of the plant. They may be written, verbal, computer based or in some other form.
	For the purposes of this Training Package, ' procedures' also includes good operating practice as may be defined by industry codes of practice (e.g. Good Manufacturing Practice (GMP), Responsible Care) and government regulations.

EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the Performance Criteria, required skills and knowledge, the Range Statement and the Assessment Guidelines for this Training Package.

Overview of assessment requirements	The person will work in a JIT system, using it to authorise their own work, facilitating its operation and recommending improvements.
What critical aspects of evidence are required to demonstrate competency in	Evidence of the routine and smooth integration of JIT into their daily work

this unit?

In what context should assessment occur?	Assessment will need to occur in an organisation using JIT.

Are there any other units which could or should be assessed with this unit or which relate directly to this unit?	This unit should be assessed concurrently with relevant technical units dealing with the manufacture of product, or other units where JIT is relevant.

This unit is related to:

• MCMT421A Facilitate a Just in Time (JIT) system, and

• MCMT621A Develop a Just in Time (JIT) system which cover the intermediate and highest skill levels in CMI respectively.

What method of assessment should apply?	Assessors must be satisfied that the person can consistently perform the unit as a whole, as defined by the elements, performance criteria, skills and knowledge. A holistic approach should be taken to the assessment.

Assessors should gather sufficient, fair, valid, reliable, authentic and current evidence from a range of sources. Sources of evidence may include direct observation, reports from supervisors, peers and colleagues, project work, samples, organisation records and questioning. Assessment should not require language, literacy or numeracy skills beyond those required for the unit.

The assessee will have access to all techniques, procedures, information, resources and aids which would normally be available in the workplace.

The method of assessment should be discussed and agreed with the assessee prior to the commencement of the assessment.

What evidence is required for demonstration of consistent performance?	This competency should be a routine part of the job and there should be evidence of it being consistently and routinely applied.

What skills and knowledge are needed to achieve the performance criteria?	Skills

• reading

• recording

• communication

• planning.

Knowledge

- relevant flow authorisations, kanban for the job
- JIT methods relevant to job
- procedures for recommending improvements
- technical competence to do the job.

What are the specific resource requirements for this unit?	Access to an organisation using JIT.