

## Issuing and controlling materials for engineering activities

---

### Overview

This standard identifies the competences you need to issue materials and maintain stock control for the implementation of engineering activities, in accordance with approved procedures. You will be required to apply appropriate methods and approaches for issuing and controlling stocks of materials.

Your responsibilities will require you to comply with organisational policy and procedures for issuing the materials for the engineering activities, and to report any problems that you cannot personally resolve, or that are outside your permitted authority, to the relevant people. You will be expected to work to instructions, either alone or in conjunction with others, taking personal responsibility for your own actions and for the quality and accuracy of the work that you carry out.

Your underpinning knowledge will be sufficient to provide a sound basis for your work, and will enable you to adopt an informed approach to the issue and stock control of materials for the specified engineering activities. You will have an understanding of the engineering activities for which the materials are required, in sufficient detail to enable you to carry out the activities to the required standards.

You will be aware of any health, safety and environmental requirements applicable to the materials used, and their safe storage and handling requirements. You will be required to demonstrate safe working practices throughout, and will understand the responsibility you owe to yourself and others in the workplace

## Issuing and controlling materials for engineering activities

---

### Performance criteria

You must be able to:

1. work safely at all times, complying with health and safety and other relevant regulations, directives and guidelines
2. ensure that you have all the necessary information needed to determine the material requirements
3. use the information collected to determine the materials required and their methods of supply
4. control the delivery of the materials for the engineering activities
5. use suitable procedures to ensure that you maintain adequate stock levels
6. ensure that materials are stored in an appropriate location and environment
7. identify and deal with potential problems which may influence the control or availability of the materials

Issuing and controlling materials for engineering activities

---

## Knowledge and understanding

## You need to know and understand:

1. how to access information on health and safety regulations and guidelines relating to the engineering materials required
2. how to obtain information on the engineering materials and stock requirements, and the types of information available (such as customer requirements and instructions, quality control requirements, product specification, material specifications)
3. the various types of material used in the engineering activities (such as raw materials, consumable materials, bought-in specific components and general engineering stock items)
4. how to access and use the appropriate information and documentation systems
5. how to obtain stock control information, delivery and storage requirements
6. how to check the validity of documentation used in the material issuing and stock control activities
7. the organisational requirement for storing and moving materials
8. the methods used to determine how the material will be delivered (such as quantity, cut to size, in a container, frequency)
9. the importance of providing the right materials at the right time
10. the methods for determining when stock needs replenishing, and how to maintain the stock levels
11. the factors to be taken into account when determining the storage of materials, especially those covering working conditions and safety
12. the issues that could occur when obtaining and moving materials, and how to resolve them
13. the importance of maintaining records on material control; what needs to be recorded, and where records are kept
14. the types of problem that can occur when issuing materials and maintaining stock, and how these problems can be overcome
- 15.

the extent of your own authority and to whom you should report in the event of problems that you cannot resolve

---

### Scope/range related to performance criteria

1. Carry out **all** of the following during the material handling and controlling activities:
  1. adhere to procedures or systems in place for risk assessment, COSHH, personal protective equipment (PPE) and other relevant safety regulations
  2. exercise care and control over the documentation used at all times
  3. collect relevant information on the stock requirements, delivery methods and storage facilities
  4. seek out additional information where there are gaps or deficiencies in the information obtained
  5. ensure that all lifting and handling equipment and accessories are safe to use, and are within current certification dates
  6. ensure that all materials are stored safely and correctly, as appropriate to their type and, where appropriate, are stored in accordance with recommended or health and safety requirements
  7. return all documentation and equipment to the correct location on completion of the activities
2. Issue and control **three** of the following types of materials:
  1. raw materials (such as sheet, bars, castings)
  2. general stock items (such as mechanical fasteners)
  3. bought-in components (such as bearings, electrical or electronic components)
  4. safety equipment (such as gloves, goggles, barrier creams, clothing)
  5. consumable materials (such as lubricants, packaging)
3. Issue and control materials for **one** of the following engineering activities:
  1. manufacturing activities (such as machining, detail fitting, fabrication of components, pressing)
  2. material processing activities (such as heat treatment, casting, injection moulding, purification)
  3. composite manufacture (such as wet lay-up, pre-preg laminating, resin infusion, blow moulding)
  4. finishing activities (such as stripping finishes, painting, plating, anodising, veneering, lacquering)
  5. assembly activities (such as mechanical, structural, fluid power, electrical/electronic, woodworking)

Issuing and controlling materials for engineering activities

---

6. installation activities (such as mechanical, electrical/electronic, avionic, structural, environmental equipment)
  7. plant and equipment (such as site preparation, plant layout, equipment changeover, equipment replacement)
  8. equipment capability studies/performance measurement
  9. maintenance activities (such as replacement of components, repair activities, general servicing)
  10. research and development (including testing and trialling)
  11. safety and environmental engineering
  12. quality control/quality assurance
  13. commissioning/decommissioning
4. Use relevant information during the material issuing and stock control activities, from **two** of the following sources:
1. specifications
  2. material requisitions
  3. standard operating procedures
  4. works orders
  5. planning documentation
  6. stores stock level documentation
  7. purchase orders
  8. manufacturing department
5. Maintain the material and stock control system, using **one** of the following:
1. just-in-time ordering
  2. electronic ordering
  3. monitored response
  4. customer request
  5. stock level replacement
  6. contact order system
  7. date order replenish
6. Distribute materials, taking into account **all** of the following:
1. information on material requisition/route cards
  2. type and specification of material
  3. timing of the delivery
  4. location of the delivery
  5. how the materials are to be presented (such as cut to size, weighed in batches, counted out)
  6. quantity of material required (such as total quantities, quantity per delivery, quantity per container)
  7. types of container to be used
  8. handling requirements

7. Receive materials into stock, to include carrying out **four** of the following:

1. quality checks
2. quantity checks
3. creating suitable storage space
4. arranging material handling (such as lifting, transportation, use of automated storage system)
- 5.

completing all relevant documentation and material stock control records (such as manually or electronically)

## Issuing and controlling materials for engineering activities

Developed by	Enginuity
Version Number	2
Date Approved	28 Feb 2015
Indicative Review Date	30 Mar 2018
Validity	Current
Status	Original
Originating Organisation	Semta
Original URN	SEMTS2-20
Relevant Occupations	Engineering, Engineering and Manufacturing Technologies
Suite	Engineering Technical Support Suite 2
Keywords	Engineering; technical support; issuing materials; controlling materials; stock control; materials; storage; handling; materials requirements; material processing