Learning Resource

MSACMT251A Apply quality standards

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# Section 1: Quality in the workplace

## Quality

Quality means different things to different people. One person might call an expensive car a quality product because they like the make and model. Another person might call an old car a quality product because it was cheap and runs well.

Quality means giving the customer what they want. The person who owns the car is the customer. Therefore even though the cars are very different, both can be called quality products because both customers are happy.

Quality can also describe services. For example when raw materials are delivered on time and with the right paperwork we can say that we received a quality service from the forklift driver.

External customers are found outside the workplace. For example if your workplace makes automotive parts then your customer may be a car manufacturer. The external customer wants the right amount of product made to their specification and delivered on time.

Internal customers are found inside the workplace. Your internal customers depend on you to do a quality job. For example your supervisor may depend on you to report problems in production and the forklift driver may depend on you to give them ten minutes warning before you run out of supplies. When you do a quality job, they can also do a quality job.

You are also an internal customer. For example you may depend on the forklift driver to supply the correct materials when you need it. When they do a quality job, you can also do a quality job.

**Activity 1.1**

List three internal customers and what they expect of you.

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| --- | --- |
| Internal customer | What they expect of you |
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## Workplace standards

Workplace standards tell us how to work safely, correctly and consistently to meet internal and external customer demands. Each workplace has different workplace standards. It is important that you understand the standards used in your workplace.

Here are some examples of workplace standards:

1. Customer requirements

We can only deliver quality products and services if we know what our customers want. We find this out by talking to the customer. For example sales representatives talk to external customers to find out what they want in a product, how much they want and when they want it delivered. The information collected is used to develop workplace standards such as product specifications, production schedules and job cards.

1. Industry standards

Industry codes and standards describe what industry has decided is the minimum requirement for all manufacturers. For example industry product standards tell us how a product should look and behave regardless of where it is made.

1. Patterns, designs and recipes

Patterns, designs and recipes describe exactly how a job should be done. For example a recipe in a coating plant lists the raw materials and how they should be mixed to make the coating needed.

1. Procedures and work instructions

Procedures and work instructions explain how to do things safely and correctly in the workplace. There may be procedures for using the equipment, quality checking the product and working safely.

1. Manufacturer’s instructions

Most materials and equipment come with manufacturer’s instructions. For example a new item of equipment comes with an equipment manual that includes information on how the equipment should be installed, used and maintained including safety do’s and don’ts.

**Activity 1.2**

Give three examples of workplace standards in your work area.

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## Applying the standards

It is important to continuously check your work. Workplace standards are what you measure your work against. How you check your work depends on the procedures in your workplace.

For example a mixing operator on a coating line may tick each item on the recipe card to check that they have weighed and added each ingredient correctly. They then compare the total weight of the mix against the total weight on the recipe card to double check that they have not made a mistake.

Some checks involve following simple steps. For example you may be cutting aluminium to a certain size. By checking that the production process is set up correctly and measuring the product you know that you are making a quality product.

Some checks mean being observant. For example workplace standards require workers to report anything unsafe to help make the workplace safer. This means that while working workers must continuously check that what they see, hear, smell and touch is safe. An unusual smell or strange vibration may mean there is a problem.

**Activity 1.3**

List three continuous checks you perform to meet workplace standards.

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# Section 2: Checking quality

## Quality specifications

A quality specification is a type of workplace standard. Quality specifications describe all the properties of a raw material, component or final product that are important to the customer. These important properties are called quality parameters.

Here is an example of a quality specification for steel sleepers:

|  |  |
| --- | --- |
| Steel sleeper quality specification | |
| Quality parameter | Requirement |
| Length | 2500 mm to 2510 mm |
| Width (at base) | 250 mm to 260 mm |
| Width (at seat) | 150 mm to 160 mm |
| Depth | 95 mm to 100 mm |
| Thickness (at shoulder) | 7.5 mm to 10.0 mm |

Steel sleepers are used in the construction of railway tracks and must be made to the correct size. In the above example the properties important to the customer are listed on the left hand side. The requirements for each property are listed on the right hand side. For example the length of steel sleepers must measure between 2500 mm and 2510 mm.

Notice that the requirements are not exact measurements but minimum and maximum measurements. Often customers don’t expect exact measurements, but they do expect to receive a product that consistently meets the quality specification.

Quality specifications for different raw materials, components and final products can look very different. Below is another example of a quality specification. This one is a raw material specification for Phthalocyanine Green pigment.

|  |  |
| --- | --- |
| Phthalocyanine Green pigment quality specification | |
| Quality parameter | Requirement |
| Chemical formula | C32 N8 Cl14 – 16Cu |
| Specific gravity | 1.5 to 1.6 |
| Bulk density (g/cm3) | 0.42 – 0.48 |
| pH | Neutral |
| Oil absorption (ml/100gm ) | 35 to 45 |
| Moisture content | 0.5 % max |
| Heat fastness | 2100C for 10 min |
| Grift content | 200ppm max |
| Water soluble | 0.5 % max |

It’s not surprising that the quality parameters for Phthalocyanine Green pigment are very different to those for steel sleepers. They are different materials that have different uses and different customers.

**Activity 2.1**

Give an example of a raw material or component quality specification used in your workplace.

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## Quality checks

Quality checks identify whether raw materials, components and finished products meet quality specifications. Meeting quality specifications is very important because it keeps customers happy, production runs smoothly and costs are minimised.

Quality checks identify quality problems. Quality problems that are identified early can be fixed before they reach the customer, whether this is the internal customer in the next step of the production process or the external customer who buys the final product.

Quality checks can be carried out at any stage in the production process. Production inputs such as raw materials and components can be checked before they are used, work in progress can be checked during production processing and the final product can be checked before it is sent to the customer.

Checking raw materials and components before they are used in production prevents problems, saving time and money. For example automotive air bag manufacturers buy components, such as initiators, and use them to assemble the complete air bag module. Initiators must be carefully checked against quality specifications before they are assembled so that a quality air bag module can be manufactured.

Often raw materials and components are checked by the external supplier saving manufacturers time and money. For example a rubber supplier checks batches of rubber compound and prepares test certificates that are sent with every delivery. The manufacturer receiving the delivery checks the test certificate to make sure that it matches the batch number of the rubber compound being delivered and that the results meet the quality specification.

Here’s an example of a test certificate for a conveyor belt:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ABC Metals P/L  Certificate of Conformance | | | | | |
| Job number: | | **672836** | | | |
| Part number: | | **BELT8973** | | | |
| Date of manufacture: | | **15/1/2011** | | | |
|  |  | |  | |  |
| Test | | Unit | Specification | | Result |
| Tensile strength | | Mpa | 15 min | | **16.1** |
| Elongation at break | | % | 350 min | | **502** |
| Abrasion | | mm3 | 250 max | | **198** |
| Conclusion: | I certify that this product are been manufactured in accordance with the required specifications. | | | | |
| Signature: | **D. Gold** | | | Date: | **15/1/2011** |
|  |  | |  | |  |

Work in progress and final products might be checked by the operator, a technician or a machine. Machines can automatically monitor product quality against quality specifications and alert operators to problems. For example a plastic cap manufacturer uses a camera linked to a computer to check the size and shape of caps manufactured. An alarm is heard whenever a problem is found so that action can be taken.

If only manufacturing two or three products each week, it may be reasonable to check each one carefully against the quality specification. However, if making 100,000 products a week it’s too hard and too expensive to check every item against the quality specification. In this case sampling is needed. Sampling means only checking some of the products made.

For example at Box Solutions the operator takes a sample of five boxes off the production line every half hour for checking. The sample is measured and compared to the quality specification. The check is used to make a decision about the quality of the whole production run.

**Activity 2.2**

List three quality checks performed in your workplace.

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## Types of quality checks

There are many different types of quality checks. Some quality checks are inspections and some are tests.

Inspections involve examining an item and comparing it to a standard such as an approved sample, pattern, template, guide or drawing. Inspection can tell us a lot about quality such as finish, colour and whether there is any damage or imperfections. Inspections include checking items by sight, sound, feel, smell or even taste to find problems such as cuts, scratches, missing pieces or crooked seams. For example a production worker making powder coated engine blocks checks the finish by looking for orange peeling and other surface defects compared to the approved sample. Inspections can also include checking that parts fit, move correctly, and are properly lubricated.

Tests involve measuring or analysing the chemical or physical properties of an item and comparing it to a specification.

For example a petrochemical company may use a gas chromatograph to measure the sulphur content of its fuels or a steel sleeper manufacturer may use a measuring tape to measure the length of its steel sleepers.

Tests can also be used to check if a product is working correctly. For example a manufacturer may do a test run to check that a product or component works properly.

**Activity 2.3**

Explain how quality checks are performed using two examples from your workplace.

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## Checking results

The results of quality checks are compared to the quality specification to tell us if the raw material, product or component meets customer expectations or if there is a problem. If a quality check shows that an item meets the quality specification, we say that it is conforming. If it does not, we say that it is nonconforming.

For example a production line makes reinforcing wire. The quality specification for the diameter is 3.15mm +/- 0.05mm. This means that the measurement of the diameter must fall between 3.10mm and 3.20mm to meet the specification. Therefore if it is smaller than 3.10mm or bigger than 3.20mm it does not meet the specification. A worker checks the diameter of the wire every 30 minutes. If it falls within the specification he knows that he is making a quality product. If it falls outside the specification he knows that there may be a quality problem.

**Activity 2.4**

Give the results of two quality checks you have performed including the quality parameter, the specification, the result and whether the check met the specification.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Quality parameter | Specification | Result | Met specification |
| Example | Length of product | 20.00-22.00mm | 21.15mm | Yes |
|  |  |  |  |  |
|  |  |  |  |  |

# Section 3: Measurement

## Measuring equipment

Physical properties can be measured and described using numbers. For example you can measure the length of a steel sleeper or the temperature of molten glass.

When you measure something you use measuring equipment. There are many types of measuring equipment. Different types of measuring equipment measure different properties. Here are some typical examples:

|  |  |
| --- | --- |
| Measuring equipment | Property measured |
| Scale | Weight |
| Tape measure, micrometer, vernier calliper | Dimensions - Length, width, thickness |
| Pressure gauge | Pressure |
| Timer | Time |
| Thermometer | Temperature |
| Speedometer | Speed |
| Measuring cylinder | Volume |

All measuring equipment must be maintained to ensure that it is working properly and giving accurate readings.

Activity 3.1

List two types of measuring equipment used in your workplace and the properties measured.

|  |  |
| --- | --- |
| Measuring equipment | Property measured |
| 1. |  |
| 2. |  |

## Units of measurement

Units of measurement are standards for measurement. Different properties are measured using different units of measurement. An hour is an example of a unit of measurement for time and a metre is an example of a unit of measurement for length.

Many properties can be measured using more than one type of unit of measurement. For example temperature can be measured using degrees Celsius or degrees Fahrenheit and distance can be measured in kilometres or miles.

There are two main types of units of measurement: metric units and imperial units. Examples of metric units include millimetres, grams and litres. Examples of imperial units include inches, ounces and gallons. In Australia we usually use metric units unless we are working with suppliers or customers from countries that use imperial units.

Units of measurement are often written as symbols. For example 2 centimetres is written as 2 cm. It’s important to be familiar with these symbols. Here are some examples of typical symbols used for metric units of measurement:

|  |  |
| --- | --- |
| Unit of measure | Symbol |
| millimetre | mm |
| centimetre | cm |
| gram | g |
| kilogram | kg |
| degrees Celsius | °C |
| litre | L |
| kilopascals | kPa |

Different measuring equipment use different units of measurement. For example a thermometer on a food storage fridge measures temperature in degrees Celsius (°C), while scales on a production line measure weight in grams (g).

Some measuring equipment also show readings in more than one unit of measurement. For example a pressure gauge like the one below gives readings in both pounds per square inch (psi) and bar.



When taking and using measurements remember to always be clear about the unit of measure used.

Activity 3.2

List two types of properties measured and the units of measurement used in your workplace.

|  |  |
| --- | --- |
| Property | Unit of measure |
|  |  |
|  |  |

## Taking measurements

When taking measurements here are some things to remember:

1. Follow procedures

Workplace procedures provide important information on what measuring equipment to use, how to use it, when and how to take a reading, the number of readings to take and how to record the results. Procedures also give the level of accuracy required, for example how many decimal places to record. Always follow the correct procedures for taking measurements.

1. Use the correct unit of measurement

The unit of measurement makes a big difference to the meaning of a number. For example, when measuring length, the number 2 on its own does not make sense. It could mean 2 millimetres, 2 centimetres or 2 inches. Always make sure that you use the correct unit of measurement.

1. Work safely

When measuring report any unsafe conditions, as well as tools and equipment that may be dangerous. It is important to speak up about safety concerns and ideas to improve workplace safety.

Some measurements may be made in hazardous conditions. For example, you may need to take readings in a cramped area close to hot equipment or near moving parts. Or you may need to be strapped into a safety harness to take measurements at a great height. Always perform measurements following safe work practices and wear the required protective equipment.

1. Be accurate

Taking and recording readings must be done carefully. Errors in taking and recording readings can lead to problems and safety hazards.

Simple things like keeping the tape measure straight when measuring a length of timber can make a big difference to the accuracy of the reading.

Take readings at the right time. Some properties change depending on the stage of the process so it is important to take readings at the right time. For example taking a temperature when a machine hasn’t warmed up will give a false reading.

Read the measurement correctly. For example a dial must be read with your eyes at the same level as the dial because reading on an angle will give a wrong result.

Be careful when recording. A common error is reading the correct measurement but recording the wrong result.

1. Minimise errors

Be aware of situations that can cause reading errors such as lights that are too bright or too dim or equipment that is fogging or greasy.

Activity 3.3

Describe the correct procedure for taking a measurement using an example from your workplace.

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# Section 4: Acting and recording

## Taking action

Often when the results don’t meet the quality specification something needs to be done. This is called taking action. Action must always be taken following workplace procedures and according to your job and skill level. Taking no action or taking the wrong action can make the problem worse or the workplace unsafe. If you are not sure what to do, ask for help.

Quality check errors can make it look like there is a problem, when there is no problem. Therefore sometimes taking action means repeating the quality check. For example a worker reported that a batch of calcium carbonate filler did not meet the colour specification. The worker asked someone else to double check their results and discovered that they had used the wrong colour standard. Using the correct colour standard the repeated test showed that the raw material met the specification.

Sometimes taking action means isolating the problem. This means keeping the problem raw materials, components or products separate. For example a packer visually inspects a product and discovers that the wrong label is being used. Production has been running with the current batch of labels for two hours. Following workplace procedures the worker took action by placing a hold sticker on all the boxes made in the last two hours and asking the forklift driver to take the boxes to the hold area. Isolating the product means that the nonconforming product will not go to the customer.

When action is taken to correct a problem we call this corrective action. For example, a quality check showed several steel rods were too long and didn’t meet the quality specification. The inspector reported the problem to the production supervisor who decided that the steel rods could be recut to the correct size. This is corrective action.

Sometimes taking action can mean investigating the problem. This means trying to find out what caused the problem so that action can be taken to prevent a problem from happening again. Fixing the cause of a problem is called preventative action. In the example above the production supervisor investigated what caused the steel rods to be cut to the wrong length and found that the equipment had not been set up correctly by the operator. This was because the operator did not follow the correct set up procedure. An easy to follow checklist for setting up the equipment was developed and displayed next to the production line to stop this from happening again. This is preventative action.

Activity 4.1

Give an example of a problem that was found in your workplace and the action taken. Why is it important to take action promptly?

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## Reporting

Sometimes taking action means reporting the problem to the right person. That person could be a supervisor, a technician or a maintenance worker. When reporting problems always be sure to follow workplace procedures. Explain the problem clearly and include the type of problem, where it is and how you found it. Let them know if immediate attention is needed or if there are any safety concerns.

Depending on the workplace the report could be verbal (you tell someone about the problem), written (you write it down or fill in a form using pen and paper or on a computer) or visual (you show someone the problem).

For example an operator working on a laminating line checks the temperature of the cooling bath. The temperature is 24°C and the quality specification says that the temperature should not drop below 25°C. The operator follows workplace procedures and contacts the maintenance department. They tell maintenance that when they checked the temperature of cooling bath on the laminating line a minute ago, it was only 24°C and asked for help.

Activity 4.2

Give an example of a quality problem you have reported. Who did you contact and what information did you give them?

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## Recording

It’s important that quality checks are recorded correctly and accurately. They provide information about the quality of raw materials, components and products that could be helpful today and in the future to investigate problems and improve quality.

Different workplaces ask workers to record quality checks in different ways. Some use pen and paper and some use computers. Some record just the data and some may include photographs or graphs. It is important that you are familiar with the way in which quality checks are recorded in your workplace.

Double check all entries to make sure that the correct information has been recorded.

Here’s an example of an inspection report used to record product weight measurements at an injection moulding company.

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Inspection report | | | | | | | | | | |
| Machine | Date | | | Shift | | | | Product Code | | |
| **1B** | **10/2/2011** | | | **A/S** | | | | **Jks78** | | |
| Characteristic | Frequency | | | Lower Weight | | | | Upper Weight | | |
| **Weight** | **Every hour** | | | **2.15g** | | | | **2.45g** | | |
| Time | 1st | 2nd | 3rd | | 4th | 5th | 6th | | 7th | 8th |
| **3pm** | **2.16** | **2.16** | **2.18** | | **2.22** | **2.26** | **2.32** | | **2.17** | **2.18** |
| **4pm** | **2.21** | **2.26** | **2.32** | | **2.22** | **2.27** | **2.27** | | **2.33** | **2.21** |
| **5pm** | **2.32** | **2.28** | **2.29** | | **2.26** | **2.32** | **2.29** | | **2.36** | **2.38** |
| **6pm** | **-** | **-** | **-** | | **-** | **-** | **-** | | **-** | **-** |
| **7pm** | **-** | **-** | **-** | | **-** | **-** | **-** | | **-** | **-** |
| **8pm** | **-** | **-** | **-** | | **-** | **-** | **-** | | **-** | **-** |
| **9pm** | **-** | **-** | **-** | | **-** | **-** | **-** | | **-** | **-** |
| **10pm** | **-** | **-** | **-** | | **-** | **-** | **-** | | **-** | **-** |
| Comments | | | | | | | | | | |
| **5.30pm - Shut down and clean down for scheduled maintenance** | | | | | | | | | | |

When recording quality checks include all the relevant information following workplace procedures. Remember to always include the right information at the right level of detail. Too much or too little information may make it difficult to investigate problems. Usually the workplace form will help you do this by giving you boxes to fill out like in the example above.

Information needed may include:

1. The date.
2. The product name and code.
3. The production line or machine number.
4. The production shift.
5. Number of items/production rate.
6. The time of the quality check.
7. The quality parameter and the specification.
8. Your name.
9. The unit of measurement.
10. The quality check result.
11. Comments such as actions taken and causes of delays.

Activity 4.3

Give an example of how quality checks are recorded in your workplace.

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# Assessment Instrument

This assessment instrument is designed to be used after training in the following competency:

* MSACMT251A: Apply quality standards

The purpose of this assessment is to confirm that you can perform to the standard expected in the workplace as expressed in the unit of competency above.

The assessment combines the following assessment methods:

* Observation checklist to record skills demonstrated in the workplace.
* Third party report to record skills observed by a third party observer.
* Questions to demonstrate underpinning knowledge.
* Examples of workplace documents.
* Learning activities.

You should feel free to ask questions and clarify anything that is unclear or you think is unfair during the assessment.

## Assessment task: Observation

### Instructions to candidate

This method of assessment involves observation of workplace performance as part of normal workplace activities.

The observation will be conducted at a time and place and over a period of time agreed between you and your assessor/observer. You will be provided with the resources and equipment you need for the observation.

The Observation Checklist will be used by your assessor/observer to record evidence demonstrated for the unit of competency and the employability skills. You will need to demonstrate your workplace performance against each of the criteria.

At the end of the observation your assessor/observer will make an overall decision about your performance and provide feedback.

|  |  |  |  |
| --- | --- | --- | --- |
| MSACMT251A Observation Checklist | | | |
| Did the candidate: | Yes | No | Not Observed |
| Assess own work | | | |
| Continuously check completed work against workplace standards relevant to the operation being undertaken? | 🞏 | 🞏 | 🞏 |
| Demonstrate an understanding of how the work activities and completed work relate to the next production process or processes and to the final products concerned? | 🞏 | 🞏 | 🞏 |
| Identify and isolate faulty pieces/components or final products/batches? | 🞏 | 🞏 | 🞏 |
| Record and/or report the faults and any identified causes to the supervisor concerned where required in accordance with workplace procedures? | 🞏 | 🞏 | 🞏 |
| Assess quality of received component parts/materials | | | |
| Continuously check received materials, component parts or final products against workplace standards and specifications for conformance? | 🞏 | 🞏 | 🞏 |
| Demonstrate an understanding of how the received materials or component parts relate to the current operation and how they contribute to the final quality of the product? | 🞏 | 🞏 | 🞏 |
| Identify and isolate faulty material or component parts related to the operator's work? | 🞏 | 🞏 | 🞏 |
| Record and/or report the faults and any identified causes to the supervisor concerned where required, in accordance with workplace procedures? | 🞏 | 🞏 | 🞏 |
| Identify causes of any identified faults and take corrective action specified in the workplace procedures? | 🞏 | 🞏 | 🞏 |
| Measure parts/materials | | | |
| Measure materials, component parts or products, as required, using the appropriate measuring instruments in accordance with workplace procedures? | 🞏 | 🞏 | 🞏 |
| Record information on production indicator | | | |
| Record basic information on the quality and other indicators of production performance in accordance with workplace procedures? | 🞏 | 🞏 | 🞏 |
| Investigate causes of quality deviations | | | |
| Investigate and report causes of deviations from specified quality standards for materials, component parts or final products, as required, using the appropriate measuring techniques in accordance with workplace procedures? | 🞏 | 🞏 | 🞏 |
| Recommend suitable preventative action based on workplace quality standards and the identified causes of deviations from specified quality standards of materials, component parts or final products? | 🞏 | 🞏 | 🞏 |

|  |  |  |  |
| --- | --- | --- | --- |
| The candidate’s performance was: | Not satisfactory 🞏 | | Satisfactory 🞏 |
| Comments: | | | |
| Candidate’s name: | | Signature: | |
| Assessor/Observer name: | | Signature: | |

## Assessment task: Third Party Report

### Instructions to candidate

This method of assessment involves review of workplace performance as part of normal workplace activities.

The third party will be a supervisor or colleague familiar with your workplace performance.

The Third Party Report will be used by your third party to record evidence demonstrated for the unit of competency and the employability skills.

At the end of the report your third party will make an overall decision about your performance and provide feedback.

|  |  |  |  |
| --- | --- | --- | --- |
| MSACMT251A Third Party Report | | | |
| Does the candidate: | Yes | No | Unsure |
| Assess own work | | | |
| Continuously check completed work against workplace standards relevant to the operation being undertaken? | 🞏 | 🞏 | 🞏 |
| Demonstrate an understanding of how the work activities and completed work relate to the next production process or processes and to the final products concerned? | 🞏 | 🞏 | 🞏 |
| Identify and isolate faulty pieces/components or final products/batches? | 🞏 | 🞏 | 🞏 |
| Record and/or report the faults and any identified causes to the supervisor concerned where required in accordance with workplace procedures? | 🞏 | 🞏 | 🞏 |
| Assess quality of received component parts/materials | | | |
| Continuously check received materials, component parts or final products against workplace standards and specifications for conformance? | 🞏 | 🞏 | 🞏 |
| Demonstrate an understanding of how the received materials or component parts relate to the current operation and how they contribute to the final quality of the product? | 🞏 | 🞏 | 🞏 |
| Identify and isolate faulty material or component parts related to the operator's work? | 🞏 | 🞏 | 🞏 |
| Record and/or report the faults and any identified causes to the supervisor concerned where required, in accordance with workplace procedures? | 🞏 | 🞏 | 🞏 |
| Identify causes of any identified faults and take corrective action specified in the workplace procedures? | 🞏 | 🞏 | 🞏 |
| Measure parts/materials | | | |
| Measure materials, component parts or products, as required, using the appropriate measuring instruments in accordance with workplace procedures? | 🞏 | 🞏 | 🞏 |
| Record information on production indicator | | | |
| Record basic information on the quality and other indicators of production performance in accordance with workplace procedures? | 🞏 | 🞏 | 🞏 |
| Investigate causes of quality deviations | | | |
| Investigate and report causes of deviations from specified quality standards for materials, component parts or final products, as required, using the appropriate measuring techniques in accordance with workplace procedures? | 🞏 | 🞏 | 🞏 |
| Recommend suitable preventative action based on workplace quality standards and the identified causes of deviations from specified quality standards of materials, component parts or final products? | 🞏 | 🞏 | 🞏 |

|  |  |  |  |
| --- | --- | --- | --- |
| The candidate’s performance was: | Not satisfactory 🞏 | | Satisfactory 🞏 |
| Comments: | | | |
| Candidate’s name: | | Signature: | |
| Third party name: | | Signature: | |

## Assessment task: Questions

### Instructions to candidate

This method of assessment involves answering questions to demonstrate underpinning knowledge.

Questions can be answered in writing or verbally in an interview. Interviews will be conducted at a time and place and over a period of time agreed between you and your assessor. Your assessor will record your responses. You will be provided with the resources and equipment you need.

You will need to answer all questions.

At the end of the questions your assessor will make an overall decision about your performance and provide feedback.

|  |
| --- |
| Question Sheet |
| 1. Explain how your work activities and completed work relate to the next step in the production process and to the final product. |
| 1. Explain how the materials / components used contribute to the final product. |
| 1. How do you check the quality of your work and why is it important? |
| 1. Describe an example where a quality check helped to identify a problem with the equipment. |

|  |  |  |  |
| --- | --- | --- | --- |
| The candidate’s performance was: | Not satisfactory 🞏 | | Satisfactory 🞏 |
| Assessor’s comments: | | | |
| Candidate’s name: | | Signature: | |
| Assessor name: | | Signature: | |

## Assessment task: Workplace documents

### Instructions to candidate

This method of assessment requires you to provide examples of workplace documents that you have completed as part of your normal workplace activities.

You will need to provide five samples of workplace documents that you have completed recently. These may include inspection reports, test reports, quality reports, daily production reports, equipment logs and non compliance reports.

The Workplace Documents Checklist will be used by your assessor to record evidence demonstrated for the unit of competency and the employability skills. You will need to demonstrate your workplace performance against each of the following criteria:

* clear
* accurate
* concise
* correct spelling and grammar
* complies with work procedures
* complete.

At the end of the assessment your assessor will make an overall decision about your performance and provide feedback.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Workplace documents checklist | | | | | |
| Documents provided (document name and date completed):  1.  2.  3.  4.  5. | | | | | |
| Documents provided are: | 1. | 2. | 3. | 4. | 5. |
| Clear | Yes🞏  No 🞏 | Yes🞏  No 🞏 | Yes🞏  No 🞏 | Yes🞏  No 🞏 | Yes🞏  No 🞏 |
| Accurate | Yes🞏  No 🞏 | Yes🞏  No 🞏 | Yes🞏  No 🞏 | Yes🞏  No 🞏 | Yes🞏  No 🞏 |
| Concise | Yes🞏  No 🞏 | Yes🞏  No 🞏 | Yes🞏  No 🞏 | Yes🞏  No 🞏 | Yes🞏  No 🞏 |
| Correct spelling and grammar | Yes🞏  No 🞏 | Yes🞏  No 🞏 | Yes🞏  No 🞏 | Yes🞏  No 🞏 | Yes🞏  No 🞏 |
| Complies with work procedures | Yes🞏  No 🞏 | Yes🞏  No 🞏 | Yes🞏  No 🞏 | Yes🞏  No 🞏 | Yes🞏  No 🞏 |
| Complete | Yes🞏  No 🞏 | Yes🞏  No 🞏 | Yes🞏  No 🞏 | Yes🞏  No 🞏 | Yes🞏  No 🞏 |

|  |  |  |  |
| --- | --- | --- | --- |
| The candidate’s performance was: | Not satisfactory 🞏 | | Satisfactory 🞏 |
| Comments: | | | |
| Candidate’s name: | | Signature: | |
| Assessor name: | | Signature: | |

## Assessment task: Activities

### Instructions to candidate

This method of assessment involves completing the activities in the learning resource to demonstrate underpinning knowledge.

Activities can be completed in writing or verbally in an interview. Interviews will be conducted at a time and place and over a period of time agreed between you and your assessor. Your assessor will record your responses. You will be provided with the resources and equipment you need.

You will need to complete all activities.

At the end of the activities your assessor will make an overall decision about your performance and provide feedback.