

Assessment Evidence Guide

For

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Level-4

Destructive Testing Technician
(Formative Assessment)

8th -12th March 2021



**National Vocational & Technical
Training Commission**

Title of Qualification: Destructive Testing Technician	CS Code:	Level:	Version:
Competency Standard Title: Perform Impact Tests	Assessment Date (DD/MM/YY): Assessment Time:		

Candidate Details	Name: Registration/Roll Number:.....
Guidance for Candidate	<p>To meet this standard, you are required to complete the following within the given time frame (for practical demonstration & assessment):</p> <p>Assessment Task 1: Candidate is required to: Measure toughness of the specimen by using Izod Impact Test</p> <p>Assessment Task 2: Candidate is required to: Measure Toughness of the specimen by using Charpy Impact Test</p> <p>And complete:</p> <ol style="list-style-type: none"> 1. Knowledge assessment test (Written or Oral) 2. Portfolios at the time of assessment (if any)
Minimum Evidence Required	<p>During a practical assessment, under observation by an assessor, you will complete:</p> <p>Assessment Task 1</p> <ul style="list-style-type: none"> • Check the dimensions of Izod specimen with the help of measuring instrument as per ASTM standard. • Adjust the initial position of the hammer. • Calculate the initial potential energy of the hammer. • Clamp the standard specimen in the anvil • Drop the hammer to strike it with standard specimen. • Calculate the final potential energy of the hammer. • Calculate the toughness of the specimen material

	<p>During a practical assessment, under observation by an assessor, you will complete:</p> <p>Assessment Task 2</p> <ul style="list-style-type: none"> • Check the dimensions of Charpy specimen, received from workshop, with Vernier calliper as per ASTM standard. • Adjust the initial position of the hammer. • Calculate the initial potential energy of the hammer. • Clamp the standard specimen in the anvil • Drop the hammer to strike it with standard specimen. • Calculate the final potential energy of the hammer. • Calculate the toughness of the specimen material
	<p>Portfolios required at the time of assessment (if any) for</p>

Continued on following page

Assessors Judgment Guide (to be completed by the Assessor and signed both by the assessor and the candidate after the assessment)

Candidate Details	Name: Registration/Roll Number: Candidate Signature:
Assessment Outcome	COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/> Name of the Assessor: Assessor's code: Signature of the Assessor:

Assessment Summary (to be filled by the assessor)							
Activity	Method					Result	
Nature of Activity	Written	Oral	Observation	Portfolio	Role Play	Competent	Not Yet Competent
Practical Skill Demonstration			✓				
Knowledge Assessment	✓	✓					
Other Requirement							

Each Assessment Task (with performance criteria)				
Assessment Task 1		Description of assessment task 1		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
	Check the dimensions of Izod specimen with the help of measuring instrument as per ASTM standard.			
	Adjust the initial position of the hammer.			
	Calculate the initial potential energy of the hammer.			
	Clamp the standard specimen in the anvil			
	Drop the hammer to strike it with standard specimen.			
	Calculate the final potential energy of the hammer.			
	Calculate the toughness of the specimen material			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Assessment Task 2		Description of assessment task 2		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
	Check the dimensions of Charpy specimen, received from workshop, with Vernier calliper as per ASTM standard.			
	Adjust the initial position of the hammer.			
	Calculate the initial potential energy of the hammer.			
	Clamp the standard specimen in the anvil			
	Drop the hammer to strike it with standard specimen.			
	Calculate the final potential energy of the hammer.			
	Calculate the toughness of the specimen material			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		
Each Assessment Task (with performance criteria)				

Title of Qualification: Destructive Testing Technician	CS Code:	Level:	Version: 01
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Competency Standard Title: Perform impact tests	Assessment Date (DD/MM/YY): Assessment Time: 30 min
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Guidance for Candidate	To complete your assessment for this Competency Standard, you need to answer the questions on the following pages successfully.
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Assessors Guide (to be completed by the Assessor and signed both by the assessor and the candidate after the assessment)

Candidate Details	Name:.....Registration/Roll Number: Candidate Signature:
Written Assessment Outcome	COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/> Name of the Assessor: Assessor's code: Signature of the Assessor:

Title of Qualification:	CS Code:	Level:	Version: 01
Competency Standard Title:	Assessment Date (DD/MM/YY): Assessment Time: 30 min		

WRITTEN ASSESSMENT

Question	Candidate's answer
1. Define Toughness.	The ability of a material to absorb energy and deform plastically is known as toughness.
2. How toughness is measured?	Toughness is measured in the form of energy in joules. It is measured with the help of impact test.
3. What is potential energy?	The energy of an object due to its position is known as potential energy. It depends on height of the object.
4. What is the formula of potential energy?	Potential energy is measured by the formula " mgh ". Where, "m" is mass of the object, "g" is the gravitational acceleration and "h" is the height of the object.
5. What is the basic difference between charpy and izod impact test?	The basic principle of these two types of tests is same. The difference between these two tests is the design of standard work piece and the method of clamping of work piece in anvil.