

Assessment Evidence Guide

For

“Fettling Operator”

Level-2

Module name
(Formative Assessment)

8th -12th March 2021



National Vocational & Technical
Training Commission

Title of Qualification: Fettling Operator	CS Code:	Level: 2	Version: 01
Competency Standard Title: Perform welding operations	Assessment Date (DD/MM/YY): Assessment Time: 1 hour		

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: Perform oxy-acetylene flame cutting operations</p> <p>Assessment Task 2: Candidate is required to: Perform Shielded Metal Arc Welding (SMAW)</p> <p>Assessment Task 3: Candidate is required to: Perform Post Welding Operations</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"> • Take Work piece as per drawing • Set the flame of welding cutting torch in oxidizing flame as per standard • Start cutting for one side of work piece • Maintain standard distance between welding torch nozzle and work piece • Complete the cut as per standard <p>Assessment Task 2</p> <ul style="list-style-type: none"> • Adjust welding parameters (current, voltage etc.) as per welding procedure specifications/job requirement to produce acceptable weld • Maintain gap between electrode and base metal as per standard practices • Carry out welding as per given metal properties. • Deposit root pass as per welding procedure specifications/job requirements

	<ul style="list-style-type: none"> • Deposit filling passes as per welding procedure specifications/job requirements • Deposit capping pass as per welding procedure specifications/job requirements • Check root, filling and capping passes for any visual discontinuities as per acceptance standards
	Assessment Task 3 <ul style="list-style-type: none"> • Carry out finishing work of welds following standard procedures • Inspect weld visually and mark any visual defects, as required • Carry out repair work in accordance with approved procedures, as required • Clean work area in accordance with workplace safety practices
	Portfolios required at the time of assessment (if any) for

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
1.	Take Work piece as per drawing			
2.	Set the flame of welding cutting torch in oxidizing flame as per standard			
3.	Start cutting for one side of work piece			
4.	Maintain standard distance between welding torch nozzle and work piece			
5.	Complete the cut as per standard			
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
6.	Adjust welding parameters (current, voltage etc.) as per welding procedure specifications/job requirement to produce acceptable weld			
7.	Maintain gap between electrode and base metal as per standard practices			
8.	Carry out welding as per given metal properties.			
9.	Deposit root pass as per welding procedure specifications/job requirements			
10.	Deposit filling passes as per welding procedure specifications/job requirements			
11.	Deposit capping pass as per welding procedure specifications/job requirements			
12.	Check root, filling and capping passes for any visual discontinuities as per acceptance standards			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Assessment Task 3		Description of assessment task 2		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1.	Carry out finishing work of welds following standard procedures			
2.	Inspect weld visually and mark any visual defects, as required			
3.	Carry out repair work in accordance with approved procedures, as required			
4.	Clean work area in accordance with workplace safety practices			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Title of Qualification: Fettleling Operator	CS Code:	Level:2	Version: 01
Competency Standard Title: Perform welding operations	Assessment Date (DD/MM/YY): Assessment Time: 30 min		

Guidance for Candidate	To complete your assessment for this Competency Standard, you need to answer the questions on the following pages successfully.
------------------------	--

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: Fettling Operator	CS Code:	Level: 2	Version: 01
Competency Standard Title: Perform welding operations	Assessment Date (DD/MM/YY): Assessment Time: 30 min		

WRITTEN ASSESSMENT

Question	Candidate's answer
1. Describe types of welding.	<ul style="list-style-type: none"> • MIG Welding - Gas Metal Arc Welding (GMAW) • TIG Welding - Gas Tungsten Arc Welding (GTAW) • Stick Welding - Shielded Metal Arc Welding (SMAW) • Flux Welding - Cored Arc Welding (FCAW) • Energy Beam Welding (EBW) • Atomic Hydrogen Welding (AHW) • Gas Tungsten-Arc Welding. • Plasma Arc Welding.
2. What is WPS in welding?	<ul style="list-style-type: none"> • Welding Procedure Specification, or WPS, is a document that serves as a guide for the effective creation of a weld that meets all applicable code requirements and production standards. Think of a WPS as a recipe for welders.
3. Define different types of joints in welding.	<ul style="list-style-type: none"> • Butt joint. • Tee joint. • Corner joint. • Lap joint. • Edge joint
4. What is difference between soldering and brazing?	<ul style="list-style-type: none"> • Filler metal used in soldering as a melting point less than 800°F(427°C) whereas that in brazing has melting point above 800°F(427°C) • Soldering is possible only in similar sheet metals as well as thin metals. Brazing is suitable in similar or dissimilar as well as thicker metal parts. • Preheating of base metal does not require in soldering. Preheating requires in brazing. • Soldering is mainly used in the electrical industry for permanent connection between the electronic components; it is commonly used in electronics, arts and crafts, and metal work from flashing to jewelry. It is mostly used to join wires to leads of components such as switches.