

Instruction Sheet for the Candidate

Qualification	National Vocational Certificate in Metal Forming & Processing Level 3
Competency Standard	Perform Basic Grinding Operations
Purpose of Assessment	Formative Assessment
Candidate Details	Name_____ Registration/Roll Number_____
Guidance for Candidate	To meet this standard, you are required to complete the following within 04 Hrs. time frame (for practical demonstration & assessment): <ul style="list-style-type: none"> • Install Grinding wheel on the machine • Dress the Grinding Wheel • Prepare single point cutting tool • Perform surface Grinding
Time: 04 Hrs.	During a practical assessment, under observation by an assessor, you are required to
Minimum Evidence Required	P1. Select the right tool for removing the safety guard of grinding wheel. P2. Remove the safety guard of grinding wheel. P3. Select the wheel type according to material/speed. P4. Mount the wheel on the spindle. P5. Balance the wheel. P6. Put back the safety covers. P7. Inspect the wheel for proper mounting and balancing. P1. Select dressing tools P2. Inspect that wheel is properly mounted. P3. Use proper dressing tool to remove the burring material from grinding wheel. P4. Inspect the grinding wheel after dressing. P1. Identify single point cutting tool geometry P2. Give the angle to the cutting tool according to cutting requirement. P3. Inspect the cutting tool P1. Inspect the job before grinding P2. Perform job mounting and alignment on grinding machine P3. Perform surface grinding operation as per job requirement

Self-Assessment Checklist

Candidate Name	
Registration No.	
Qualification	National Vocational Certificate in Metal Forming & Processing Level 3
Competency Standard	Perform Basic Grinding Operations
Purpose of Assessment	Formative Assessment
Assessment Task	<ul style="list-style-type: none"> • Install Grinding wheel on the machine • Dress the Grinding Wheel • Prepare single point cutting tool • Perform surface Grinding

I can.....

Performance Criteria	Yes	No
P1. Select the right tool for removing the safety guard of grinding wheel.	<input type="checkbox"/>	<input type="checkbox"/>
P2. Remove the safety guard of grinding wheel.	<input type="checkbox"/>	<input type="checkbox"/>
P3. Select the wheel type according to material/speed.	<input type="checkbox"/>	<input type="checkbox"/>
P4. Mount the wheel on the spindle.	<input type="checkbox"/>	<input type="checkbox"/>
P5. Balance the wheel.	<input type="checkbox"/>	<input type="checkbox"/>
P6. Put back the safety covers.	<input type="checkbox"/>	<input type="checkbox"/>
P7. Inspect the wheel for proper mounting and balancing.	<input type="checkbox"/>	<input type="checkbox"/>
P8. Select dressing tools	<input type="checkbox"/>	<input type="checkbox"/>
P9. Inspect that wheel is properly mounted.	<input type="checkbox"/>	<input type="checkbox"/>
P10. Use proper dressing tool to remove the burring material from grinding wheel.	<input type="checkbox"/>	<input type="checkbox"/>
P11. Inspect the grinding wheel after dressing.	<input type="checkbox"/>	<input type="checkbox"/>
P12. Identify single point cutting tool geometry	<input type="checkbox"/>	<input type="checkbox"/>
P13. Give the angle to the cutting tool according to cutting requirement.	<input type="checkbox"/>	<input type="checkbox"/>
P14. Inspect the cutting tool	<input type="checkbox"/>	<input type="checkbox"/>
P15. Inspect the job before grinding	<input type="checkbox"/>	<input type="checkbox"/>
P16. Perform job mounting and alignment on grinding machine	<input type="checkbox"/>	<input type="checkbox"/>
P17. Perform surface grinding operation as per job requirement	<input type="checkbox"/>	<input type="checkbox"/>

Candidate's Signature _____ Assessor's Signature _____

Date: _____

Assessors Judgment Guide

Qualification	National Vocational Certificate in Metal Forming & Processing Level 3
Competency Standard	Perform Basic Grinding Operations
Purpose of Assessment	Formative Assessment
Candidate Details	Name: _____ Registration/Roll Number: _____ Signature: _____
Assessment Outcome	<div style="display: flex; justify-content: space-between; align-items: center;"> COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/> </div> Name of the Assessor _____ Assessor's code: _____ Signature: _____

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							

Observation Checklist

Assessment Task	<ul style="list-style-type: none"> Install Grinding wheel on the machine Dress the Grinding Wheel Prepare single point cutting tool Perform surface Grinding 			
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1.	Select the right tool for removing the safety guard of grinding wheel.			
2.	Remove the safety guard of grinding wheel.			
3.	Select the wheel type according to material/speed.			
4.	Mount the wheel on the spindle.			
5.	Balance the wheel.			
6.	Put back the safety covers.			
7.	Inspect the wheel for proper mounting and balancing.			
8.	Select dressing tools			
9.	Inspect that wheel is properly mounted.			
10.	Use proper dressing tool to remove the burring material from grinding wheel.			
11.	Inspect the grinding wheel after dressing.			
12.	Identify single point cutting tool geometry			
13.	Give the angle to the cutting tool according to cutting requirement.			
14.	Inspect the cutting tool			
15.	Inspect the job before grinding			
16.	Perform job mounting and alignment on grinding machine			
17.	Perform surface grinding operation as per job requirement			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Knowledge Assessment

Qualification	National Vocational Certificate in Metal Forming & Processing Level 3
Competency Standard	Perform Basic Grinding Operations
Purpose of Assessment	Formative Assessment
Candidate Details	Name: _____ Registration/Roll Number: _____ Candidate Signature: _____
Assessment Outcome	<div style="display: flex; justify-content: space-around; align-items: center;"> COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/> </div> Name of the Assessor: _____ Assessor's code: _____ Signature of the Assessor: _____

Candidate's response is not required to be identical, but similar concepts and/or keywords must be used. Oral questioning may be used to clarify candidate understanding of topic and its application.

Questions (Candidate confidently answered questions correctly and demonstrated understanding of the topics and their application)		Satisfactory	Not Satisfactory
1.	Enlist the types of grinding machines.		
2.	Enlist types of grinding wheels.		
3.	Enlist the types of measuring/marketing tools.		

4.	Define clamping/holding methods.		
5.	Enlist the types of different cutting tools.		

Feedback to the Candidate	
Candidate's Signature_____	Assessor's Signature _____