

Instruction Sheet for the Candidate

Qualification	National Vocational Certificate in Metal Forming & Processing Level 2
Competency Standard	Perform Drilling Operation
Purpose of Assessment	Formative Assessment
Candidate Details	Name _____ Registration/Roll Number _____
Guidance for Candidate	<p>To meet this standard, you are required to complete the following within 04 Hrs. time frame (for practical demonstration & assessment):</p> <ul style="list-style-type: none"> • Carryout drilling • Carryout Counter Sinking and counter boring • Carryout Reaming • Carryout Tapping
Time: 04 Hrs.	During a practical assessment, under observation by an assessor, you are required to
Minimum Evidence Required	<p>Carryout drilling</p> <ol style="list-style-type: none"> 1. Identify the required tools and equipment as per job requirement 2. Interpret the given drawing 3. Select tool & clamping device according to the job requirement. 4. Use the marking tool and measuring instruments as per job requirement. 5. Clamp the work piece as per job requirement. 6. Perform drilling as per standard procedures 7. Perform post drilling operations 8. Check quality of the component at suitable intervals. 9. Verify the final job with the given drawing <p>Carryout Counter Sinking and counter boring</p> <ol style="list-style-type: none"> 1. Identify the required tools and equipment as per job requirement 2. Interpret the given drawing 3. Select marking tool and mark layout of job as per drawing 4. Select clamping device and clamp the work piece 5. Select counter sinking tool according to the drawing 6. Perform drilling operation as per drawing 7. Perform counter sinking and counter boring as per standard procedures 8. Verify the final job with the given drawing <p>Carryout Reaming</p> <ol style="list-style-type: none"> 1. Identify the required tools and equipment as per job requirement 2. Interpret the given drawing 3. Select marking tool and mark layout of job as per drawing

	<ol style="list-style-type: none"> 4. Select clamping device and clamp the work piece as per job requirement 5. Select reamer according to the job specification 6. Perform drilling to produce hole according to the size of reamer 7. Perform reaming as per job specification 8. Verify the final job with given drawing <p>Carryout Tapping</p> <ol style="list-style-type: none"> 1. Identify the required tools and equipment as per job requirement 2. Interpret the given drawing 3. Select marking tool and mark layout of job as per drawing 4. Select clamping device and clamp the work piece as per job requirement 5. Select tap according to the job specification 6. Perform drilling to produce hole according to tap size 7. Perform tapping as per job specification 8. Verify the final job with given drawing
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Self-Assessment Checklist

Candidate Name	
Registration No.	
Qualification	National Vocational Certificate in Metal Forming & Processing Level 2
Competency Standard	Perform Drilling Operation
Purpose of Assessment	Formative Assessment
Assessment Task	<ul style="list-style-type: none"> Carryout drilling Carryout Counter Sinking and counter boring Carryout Reaming Carryout Tapping

I can.....

Performance Criteria	Yes	No
1. Identify the required tools and equipment as per job requirement	<input type="checkbox"/>	<input type="checkbox"/>
2. Interpret the given drawing	<input type="checkbox"/>	<input type="checkbox"/>
3. Select tool & clamping device according to the job requirement.	<input type="checkbox"/>	<input type="checkbox"/>
4. Use the marking tool and measuring instruments as per job requirement.	<input type="checkbox"/>	<input type="checkbox"/>
5. Clamp the work piece as per job requirement.	<input type="checkbox"/>	<input type="checkbox"/>
6. Perform drilling as per standard procedures	<input type="checkbox"/>	<input type="checkbox"/>
7. Perform post drilling operations	<input type="checkbox"/>	<input type="checkbox"/>
8. Check quality of the component at suitable intervals.	<input type="checkbox"/>	<input type="checkbox"/>
9. Verify the final job with the given drawing	<input type="checkbox"/>	<input type="checkbox"/>
10. Identify the required tools and equipment as per job requirement		
11. Interpret the given drawing		
12. Select marking tool and mark layout of job as per drawing		
13. Select clamping device and clamp the work piece		
14. Select counter sinking tool according to the drawing		
15. Perform drilling operation as per drawing		
16. Perform counter sinking and counter boring as per standard procedures		
17. Verify the final job with the given drawing		

18. Identify the required tools and equipment as per job requirement	<input type="text"/>	<input type="text"/>
19. Interpret the given drawing	<input type="text"/>	<input type="text"/>
20. Select marking tool and mark layout of job as per drawing	<input type="text"/>	<input type="text"/>
21. Select clamping device and clamp the work piece as per job requirement	<input type="text"/>	<input type="text"/>
22. Select reamer according to the job specification	<input type="text"/>	<input type="text"/>
23. Perform drilling to produce hole according to the size of reamer	<input type="text"/>	<input type="text"/>
24. Perform reaming as per job specification	<input type="text"/>	<input type="text"/>
25. Verify the final job with given drawing	<input type="text"/>	<input type="text"/>
26. Identify the required tools and equipment as per job requirement	<input type="text"/>	<input type="text"/>
27. Interpret the given drawing	<input type="text"/>	<input type="text"/>
28. Select marking tool and mark layout of job as per drawing	<input type="text"/>	<input type="text"/>
29. Select clamping device and clamp the work piece as per job requirement	<input type="text"/>	<input type="text"/>
30. Select tap according to the job specification	<input type="text"/>	<input type="text"/>
31. Perform drilling to produce hole according to tap size	<input type="text"/>	<input type="text"/>
32. Perform tapping as per job specification	<input type="text"/>	<input type="text"/>
33. Verify the final job with given drawing	<input type="text"/>	<input type="text"/>

Candidate's Signature _____ Assessor's Signature _____

Date: _____

Assessors Judgment Guide

Qualification	National Vocational Certificate in Metal Forming & Processing Level 2
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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"> • Carryout drilling • Carryout Counter Sinking and counter boring • Carryout Reaming • Carryout Tapping 		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1.	Identify the required tools and equipment as per job requirement			
2.	Interpret the given drawing			
3.	Select tool & clamping device according to the job requirement.			
4.	Use the marking tool and measuring instruments as per job requirement.			
5.	Clamp the work piece as per job requirement.			
6.	Perform drilling as per standard procedures			
7.	Perform post drilling operations			
8.	Check quality of the component at suitable intervals.			
9.	Verify the final job with the given drawing			
10.	Identify the required tools and equipment as per job requirement			
11.	Interpret the given drawing			
12.	Select marking tool and mark layout of job as per drawing			
13.	Select clamping device and clamp the work piece			
14.	Select counter sinking tool according to the drawing			
15.	Perform drilling operation as per drawing			
16.	Perform counter sinking and counter boring as per standard procedures			
17.	Verify the final job with the given drawing			
18.	Identify the required tools and equipment as per job requirement			
19.	Interpret the given drawing			

20.	Select marking tool and mark layout of job as per drawing			
21.	Select clamping device and clamp the work piece as per job requirement			
22.	Select reamer according to the job specification			
23.	Perform drilling to produce hole according to the size of reamer			
24.	Perform reaming as per job specification			
25.	Verify the final job with given drawing			
26.	Identify the required tools and equipment as per job requirement			
27.	Interpret the given drawing			
28.	Select marking tool and mark layout of job as per drawing			
29.	Select clamping device and clamp the work piece as per job requirement			
30.	Select tap according to the job specification			
31.	Perform drilling to produce hole according to tap size			
32.	Perform tapping as per job specification			
33.	Verify the final job with given drawing			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Knowledge Assessment

Qualification	National Vocational Certificate in Metal Forming & Processing Level 2
Competency Standard	Perform Drilling Operation
Purpose of Assessment	Formative 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: _____

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.	Define basic engineering drawing		
2.	Enlist types and uses of layout tools		
3.	Enlist methods of taping		

4.	Enlist types of drilling tools		
5.	Define application of reamers		

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