

Assessment Evidence Guide
For
“Associate Engineer in
Dies and Moulds
Technology (Machinist)”

Level-2

(Summative Assessment)

1st -5th March 2021



National Vocational & Technical
Training Commission

Title of Qualification: National Vocational Certificate Level 2, in (Associate Engineer in Dies and Mould Technology) "Machinist"	CS Code:	Level: 2	Version: 01
Competency Standard Title: A-Maintain Personal Health, hygiene and safety B-Perform basic communication skills C-Perform Basic Computer operations D-Perform Calculations and Estimation for Mechanical Work E-Carryout General Maintenance F-Perform Bench Works G-Perform Shaper and Planar Operations H-Perform Basic Grinding Operations I-Perform Lathe Operations J-Perform Basic Milling Operations K-Perform Engineering Drawing	Assessment Date (DD/MM/YY): Assessment Time: 8 hours		

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 make a product according to any drawing assigned by assessor (see ANNEX-1, ANNEX-2 and ANNEX-3), including following operations:</p> <ul style="list-style-type: none"> • Bench Work • Shaping/planning • Milling • Lathe • Surface Grinding <p style="text-align: center;">Note: Candidate must Display/Present Final Project</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> <p>Performance Criteria 1: Comply with Health, hygiene and safety precautions before starting work</p> <p>Performance Criteria 2: Mark layout of job as per drawing using appropriate marking tool</p> <p>Performance Criteria 3: Perform sawing according to the instructions</p> <p>Performance Criteria 4: Perform filing as per standard procedure</p> <p>Performance Criteria 5: Perform drilling/reaming as per standard procedures</p> <p>Performance Criteria 6: Perform post drilling operations</p> <p>Performance Criteria 7: Perform tapping as per job specification</p> <p>Performance Criteria 8: Perform the shaper/planer operations on workpiece to get flatness as per requirements</p> <p>Performance Criteria 9: Perform grinding operation on job as per standard procedure.</p> <p>Performance Criteria 10: Clean & deburr the workpiece</p> <p>Performance Criteria 11: Verify dimensional and geometrical accuracy at suitable intervals.</p> <p>Performance Criteria 12: Perform facing/ turning operation as per standard procedure (where required)</p> <p>Performance Criteria 13: Set machine gear drive mechanism and other parameters as per job specifications</p> <p>Performance Criteria 14: Centring the work piece as per SOPs.</p> <p>Performance Criteria 15: Ensure final clamping as per requirement.</p> <p>Performance Criteria 16: Engage half nut lever at specific point on thread dial.</p> <p>Performance Criteria 17: Perform thread cutting operation on job as per requirement</p> <p>Performance Criteria 18: Carry out machining operation for Knurling as per standard procedure (where required)</p> <p>Performance Criteria 19: Perform Face milling as per given instructions</p> <p>Performance Criteria 20: Perform Side milling as per given instructions</p> <p>Performance Criteria 21: Perform Slot milling as per given instructions</p> <p>Performance Criteria 22: Perform Drilling as per given instructions</p> <p>Performance Criteria 23: Perform Counter boring as per given instructions</p> <p>Performance Criteria 24: Wear, adjust, and maintain personal protective equipment to ensure correct fit and optimum protection in compliance with company procedures.</p> <p>Performance Criteria 25: Ensure personal protective equipment is cleaned and stored in proper place.</p> <p>Performance Criteria 26: Maintain cleanliness and hygiene as per organizational policy</p>
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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							

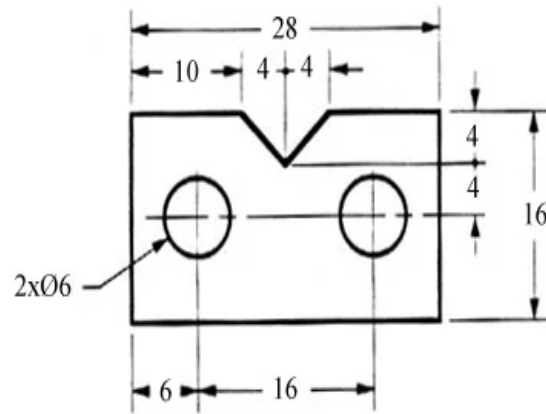
Each Assessment Task (with performance criteria)				
Assessment Task 1		Description of assessment task 1 Candidate is required to make a product according to any drawing assign by assessor (see ANNEX-1, ANNEX-2 and ANNEX-3), including following operations: <ul style="list-style-type: none"> ○ Bench Work ○ Shaping/planning ○ Milling ○ Lathe ○ Surface Grinding 		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1.	Comply with Health, hygiene and safety precautions before starting work			
2.	Mark layout of job as per drawing using appropriate marking tool			
3.	Perform sawing according to the instructions			
4.	Perform filing as per standard procedure			
5.	Perform drilling/reaming as per standard procedures			
6.	Perform post drilling operations			
7.	Perform taping as per job specification			
8.	Perform the shaper/planer operations on workpiece to get flatness as per requirements			
9.	Perform grinding operation on job as per standard procedure.			
10.	Clean & deburr the workpiece			
11.	Verify dimensional and geometrical accuracy at suitable intervals.			
12.	Perform facing/ turning operation as per standard procedure (where required)			
13.	Set machine gear drive mechanism and other parameters as per job specifications			
14.	Centring the work piece as per SOPs.			
15.	Ensure final clamping as per requirement.			
16.	Engage half nut lever at specific point on thread dial.			
17.	Perform thread cutting operation on job as per requirement			
18.	Carry out machining operation for Knurling as per standard procedure (where required)			
19.	Perform Face milling as per given instructions			
20.	Perform Side milling as per given instructions			

21.	Perform Slot milling as per given instructions			
22.	Perform Drilling as per given instructions			
23.	Perform Counter boring as per given instructions			
24.	Wear, adjust, and maintain personal protective equipment to ensure correct fit and optimum protection in compliance with company procedures.			
25.	Ensure personal protective equipment is cleaned and stored in proper place			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Portfolio		Description of assessment (Portfolio)		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1.	Comply with Health, hygiene and safety precautions before starting work			
2.	Mark layout of job as per drawing using appropriate marking tool			
3.	Perform sawing according to the instructions			
4.	Perform filing as per standard procedure			
5.	Perform drilling/reaming as per standard procedures			
6.	Perform post drilling operations			
7.	Perform taping as per job specification			
8.	Perform the shaper/planer operations on workpiece to get flatness as per requirements			
9.	Perform grinding operation on job as per standard procedure.			
10.	Clean & deburr the workpiece			
11.	Verify dimensional and geometrical accuracy at suitable intervals.			
12.	Perform facing/ turning operation as per standard procedure (where required)			
13.	Set machine gear drive mechanism and other parameters as per job specifications			
14.	Centring the work piece as per SOPs.			
15.	Ensure final clamping as per requirement.			
16.	Engage half nut lever at specific point on thread dial.			
17.	Perform thread cutting operation on job as per requirement			
18.	Carry out machining operation for Knurling as per standard procedure (where required)			
19.	Perform Face milling as per given instructions			
20.	Perform Side milling as per given instructions			
21.	Perform Slot milling as per given instructions			
22.	Perform Drilling as per given instructions			

23.	○ Perform Counter boring as per given instructions			
24.	Wear, adjust, and maintain personal protective equipment to ensure correct fit and optimum protection in compliance with company procedures.			
25.	Ensure personal protective equipment is cleaned and stored in proper place			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

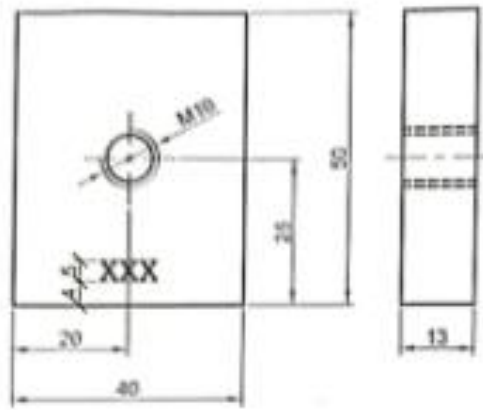
ANNEX-1



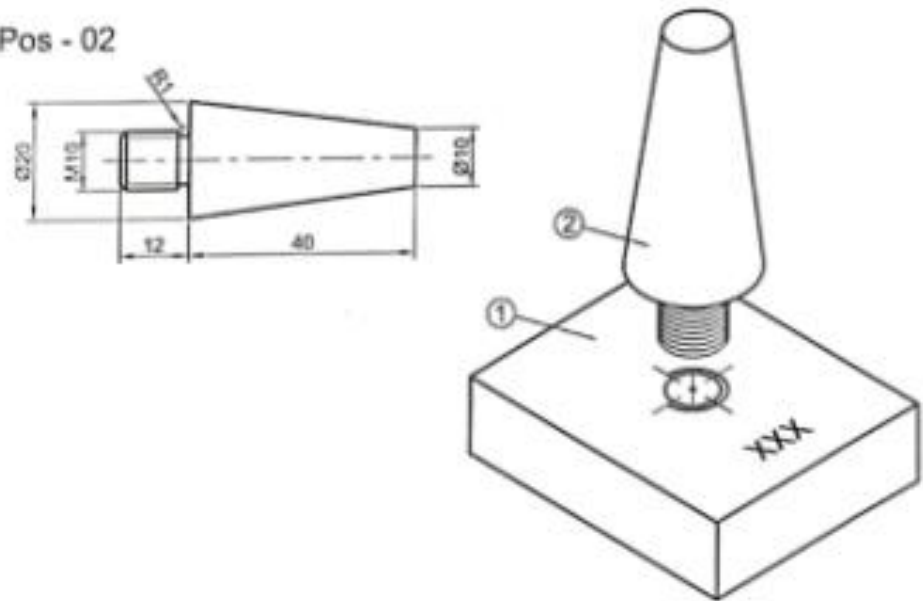
10MM Thick Block

ANNEX-2

Pos - 01



Pos - 02



ANNEX-3

