

071506T4MTM

MECHANICAL TECHNOLOGY AND MAINTENANCE TECHNICIAN LEVEL 6

ENG/OS/MEM/CR/04/06

Perform Lathe Operations

July/August 2025



**TVET CURRICULUM DEVELOPMENT, ASSESSMENT AND CERTIFICATION
COUNCIL (TVET CDACC)**

PRACTICAL ASSESSMENT

INSTRUCTIONS TO CANDIDATE

1. The duration of this practical will be guided by your assessor.
2. You are required to perform the following tasks:
 - i. Produce the component shown on the working drawing as per working drawing
 - ii. Inspect the finished work and record in the form “**Candidate’s Inspection Checklist for the Finished Work**” provided in Appendix 1.

3. You have been provided with the following resources for the practical tasks

- Mild steel round bar:
 - Ø 25 mm × 90 mm (1 off)
- Mild steel round bar:
 - Ø 50 mm × 70 mm (2 off)
- Lathe machine and its accessories
- Assorted lathe spanners
- Allen keys
- Thread pitch gauge
- Radius gauge
- Square thread cutting tool pitch 4 mm
- Parting tool
- Assorted drill bits –Assorted sizes (Ø 8, Ø 12, Ø 15, Ø 18, Ø 22 mm)
- Grooving tool
- Turning tool
- Knurling tool
- Boring tool
- Cutting fluid
- Center drill
- Chuck keys
- Vernier calipers
- Scriber
- Cotton waste
- Soft brush

Take Note:

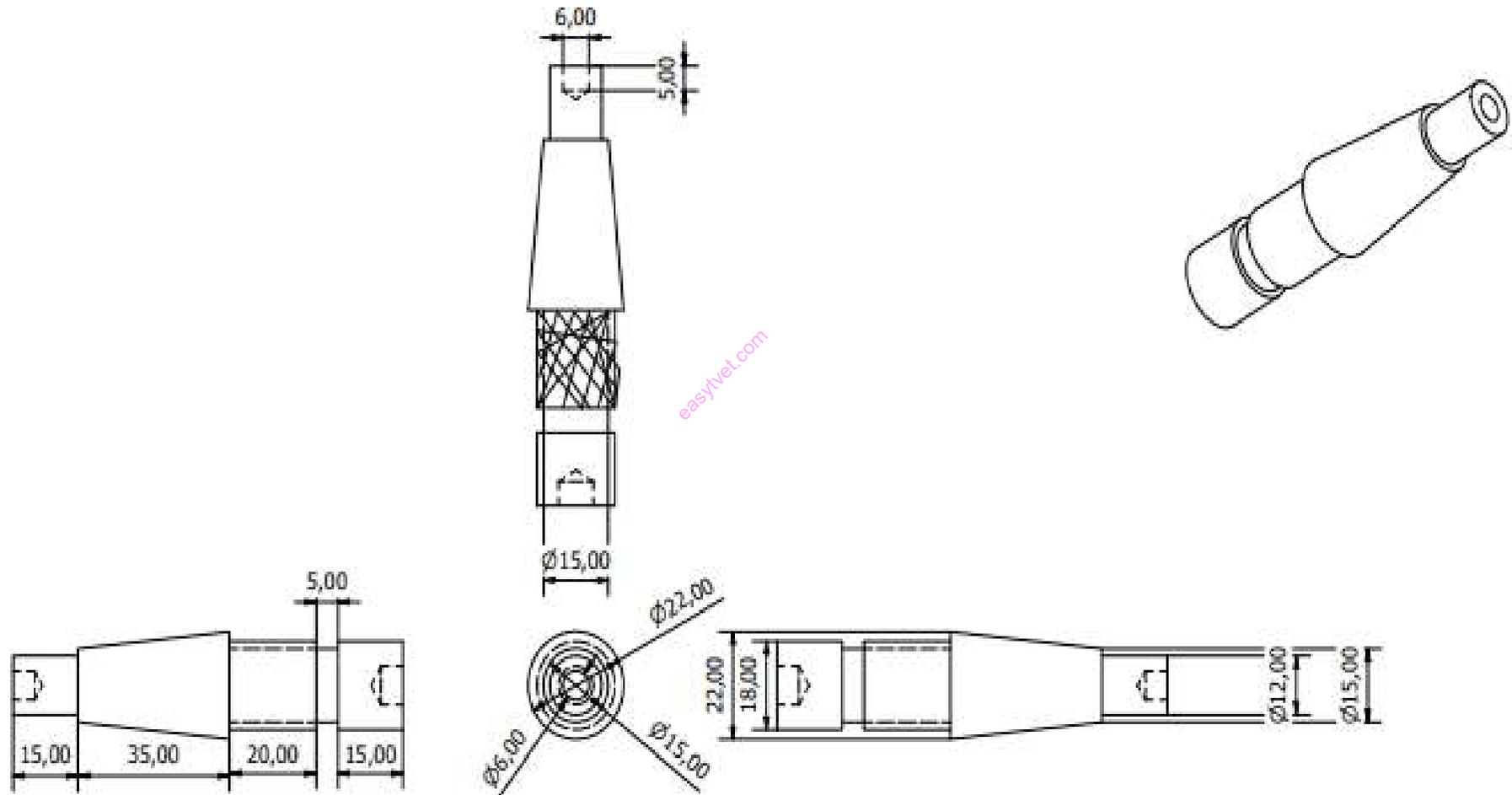
All dimensions are in mm

Tolerance ± 0.02

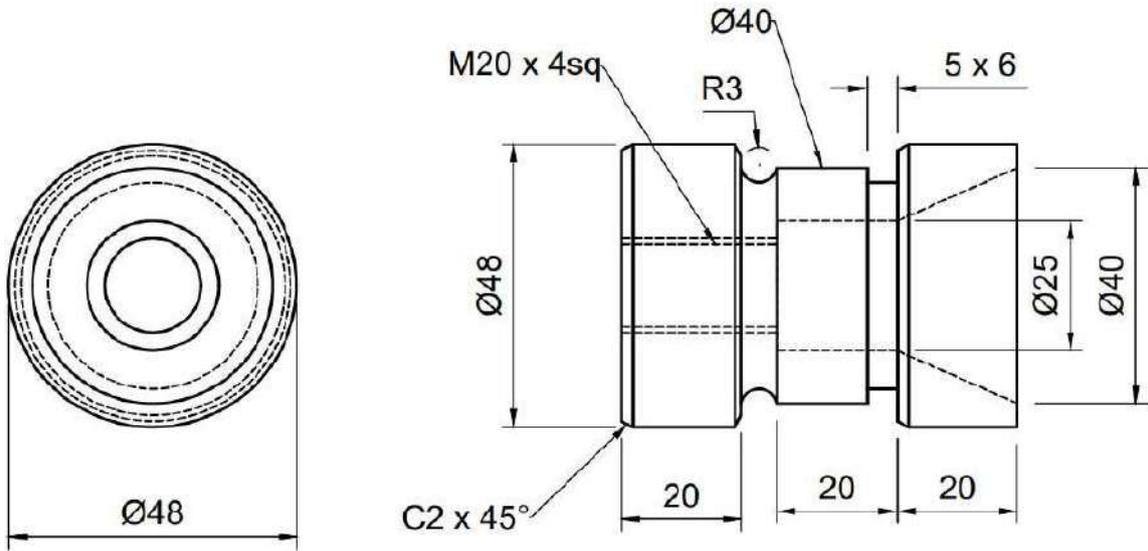
ALL chamfers: C2× 45°

WORKING DRAWING

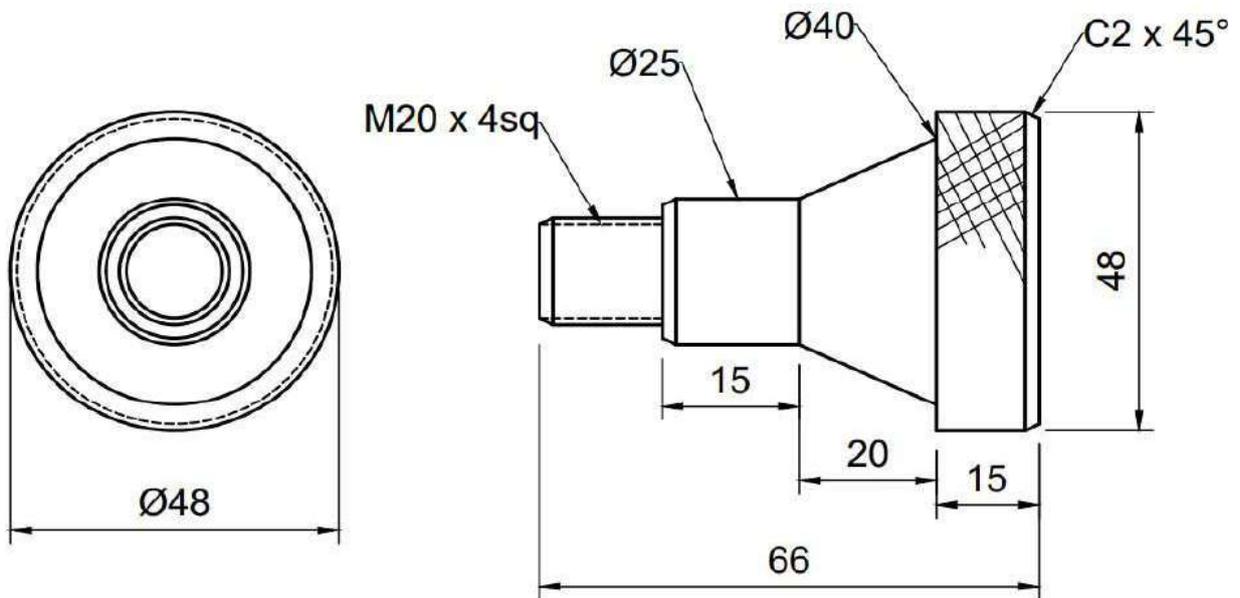
MAIN SHAFT



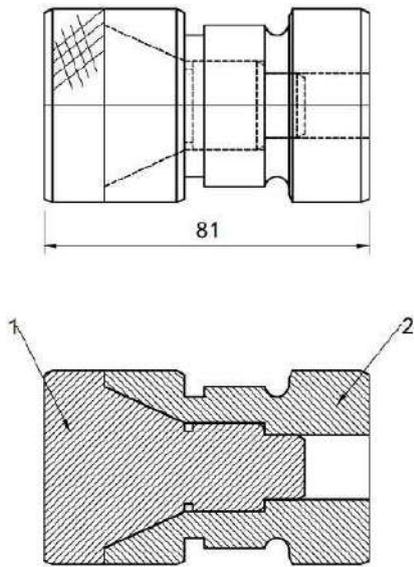
PART 1



PART 2
WORKING DRAWING



Part 2



2	Part 2	1
1	Part 1	1
Sn no	Part Name	no off

APPENDIX 1. INSPECTION CHECK LIST

No	Basic Dimensions All dimensions are in mm Tolerance ± 0.02	Candidate Measurements	Assessor's Measurement
Main shaft			
Diameters			
1.	22		
2.	15		
3.	12		
4.	6		
linear measurements			
5.	15		
6.	35		
7.	20		
8.	5		
9.	15		
No	Basic Dimensions All dimensions are in mm Tolerance ± 0.02	Candidate Measurements	Assessor's Measurement

PART 1.			
	Diameters		
1.	48		
2.	40		
	linear measurements		
3.	20 x 2		
4.	5		
PART 2.			
	Diameters		
5.	25		
	linear measurements		
6.	66		
7.	16		
8.	15		

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