

Written Assessment Guide
For
**“Dies and Mould
Technology”**
Level 2

Perform Basic Grinding Operations

1st -5th March 2021



**National Vocational & Technical
Training Commission**

Title of Qualification: National Vocational Certificate Level 2, in (Dies and Mould Technology) "Machinist"	CS Code:	Level: 2	Version: 01
Competency Standard Title: Perform Basic Grinding Operations Maintain Personal Health, hygiene and safety Perform Basic Communication skills Carryout General Maintenance	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.
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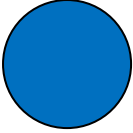

Assessors Guide (to be completed by the Assessor and signed both by the assessor and the candidate after the assessment)

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:

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WRITTEN ASSESSMENT

Question	Candidate's answer
1. Write down any 3 main parts of Grinding machine	A. Bed, table, headstock, tail stock, wheel head, cross feed, wheel guard, etc.
2. Write different types of Grinding machines	A. Surface grinding machines, Cylindrical grinding machine, Tool and Cutter grinding machine, Center less grinding machine, Jig grinding machine, Pedestal grinder, Disc grinder, Cut off grinding machine, etc.
3. What is the process of Grinding?	A. Grinding is machining process that used to rubbing material from a work piece via grinding wheel
4. Write down types of Grinding wheel according to bonding material	A. Vitrified, Silicate, Shellac, Resinoid, Rubber, Oxycloride Bond
5. Write down types of Grinding wheel according to Grit size	A. Coarse (10-24), Medium (30-60), Fine (80-180), Very fine (220-1000)
6. Write down types of Grinding wheel according to Abrasive material	A. Natural abrasive (Sand stone, Emery, Corundum, Diamond). Artificial Abrasive (Silicon carbide, Aluminum Oxide, Synthetic diamond)
7. Classify grinding wheels according to shape of wheel	A. Straight, One/two side recessed, Taper faced, Cup shaped, Cylindrical shaped, Flaring cup, Saucer wheel, segmented wheel, dish wheel, etc.
8. Write down types of Grinding wheel Dressers	A. Washer/mechanical dresser and Diamond tipped wheel dresser

Question	Candidate's answer
9. State cutting fluids used in Grinding operation	A. Soluble Oil, Kerosene Oil, Truncated Oil, Pure water, etc.
10. How a Grinding wheel is coded?	A. W- (Manufacturer's Abrasive Symbol) , A- (Abrasive type), 50 (Grain size), L- (Grade (Soft/medium/hard)), 5- (Structure type), R- (Bond type), 17- (Manufacturer's Symbol), etc.
11. Blue circle 	A. Mandatory action
12. What are the 3P's in first aid?	A. "Three P's" <ul style="list-style-type: none"> • Preserve life • Prevent further injury • Provide pain relief
13. Yellow triangle with black outline and zigzag arrow 	A. Warning sign – a sign giving warning of a hazard or danger (e.g. 'danger: electricity')
14. What is housekeeping checklist?	A. A workplace housekeeping checklist is a tool used to ensure that the workplace is well organized, hygienic, and safe for all employees.
15. What is the use of oil in machinery?	A. Oils are used to reduce the friction, heat, and wear between mechanical components that are in contact with each other.