

Assessment Evidence Guide

For

“Dies and Mould Technology”

Level-5

Design Moulds
(Formative Assessment)

1st -5th March 2021



**National Vocational & Technical
Training Commission**

| | | | |
|--|---|----------|-------------|
| Title of Qualification: National Vocational Certificate Level 5, in (Dies and Mould Technology) "Associate Engineer" | CS Code: | Level: 5 | Version: 01 |
| Competency Standard Title: Design Moulds | Assessment Date (DD/MM/YY): Assessment Time: | | |

| | |
|---------------------------|--|
| 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 design a Blow Mould of product assign by assessor, using CAD software.</p> <p>Assessment Task 2: Candidate is required to design Injection Mould of product assign by assessor, using CAD software.</p> <p>Assessment Task 3: Candidate is required to design Die Casting Mould of product assign by assessor, using CAD software.</p> <p>Assessment Task 4: Candidate is required to design Vacuum Mould of product assign by assessor, using CAD software.</p> <p>And complete:</p> <ol style="list-style-type: none"> Knowledge assessment test (Written or Oral) 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:Prepare a 3D Model for Blow Mould and detailed drawings of required workpiece</p> <p>Performance Criteria 2:Prepare a conceptual Design of Blow Mould as per size of the machine</p> <p>Performance Criteria 3:Prepare 3D part and assembly modelling of all components of blow mould according to conceptual design</p> <p>Performance Criteria 4:Prepare 2D assembly drawings and detailed drawings of all components of blow mould</p> <p>Performance Criteria 5:Prepare a Bill of Quantity (BOQ) of all components of Blow Mould as per final design</p> <p>Assessment Task 2</p> <p>Performance Criteria 1:Prepare a 3D Model for Injection Mould and detailed drawings of required workpiece</p> <p>Performance Criteria 2:Prepare a conceptual Design of Injection Mould as per size of the machine</p> <p>Performance Criteria 3:Prepare 3D part and assembly modelling of all components of Injection mould according to conceptual design</p> <p>Performance Criteria 4:Prepare 2D assembly drawings and detailed drawings of all components of Injection mould</p> |

| | |
|--|---|
| | Performance Criteria 5: Prepare a Bill of Quantity (BOQ) of all components of Injection Mould as per final design |
| | Assessment Task 3 Performance Criteria 1: Prepare a 3D Model for Die Casting and detailed drawings of required workpiece Performance Criteria 2: Prepare a conceptual Design of Die Casting Mould as per size of the machine Performance Criteria 3: Prepare 3D part and assembly modelling of all components of Die Casting according to conceptual design Performance Criteria 4: Prepare 2D assembly drawings and detailed drawings of all components of Die Casting mould Performance Criteria 5: Prepare a Bill of Quantity (BOQ) of all components of Die Casting Mould as per final design |
| | Assessment Task 4 Performance Criteria 1: Prepare a 3D Model for Vacuum Mould and detailed drawings of required workpiece Performance Criteria 2: Prepare a conceptual Design of Vacuum Mould as per required product Performance Criteria 3: Prepare 3D part and assembly modelling of all components of Vacuum Mould according to conceptual design Performance Criteria 4: Prepare 2D assembly drawings and detailed drawings of all components of Vacuum Mould Performance Criteria 5: Prepare a Bill of Quantity (BOQ) of all components of Vacuum Mould as per final design |

Continued on following page

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 design a Blow Mould of product assign by assessor, using CAD software. | | |
| During the practical assessment, candidate demonstrated the following: | | Yes | No | Remarks |
| 1. | Prepare a 3D Model for Blow Mould and detailed drawings of required workpiece | | | |
| 2. | Prepare a conceptual Design of Blow Mould as per size of the machine | | | |
| 3. | Prepare 3D part and assembly modelling of all components of blow mould according to conceptual design | | | |
| 4. | Prepare 2D assembly drawings and detailed drawings of all components of blow mould | | | |
| 5. | Prepare a Bill of Quantity (BOQ) of all components of Blow Mould as per final design | | | |
| Competent <input type="checkbox"/> | | Not Yet Competent <input type="checkbox"/> | | |

| | | | | |
|--|--|---|----|---------|
| Assessment Task 2 | | Description of assessment task 2 Candidate is required to design Injection Mould of product assign by assessor, using CAD software. | | |
| During the practical assessment, candidate demonstrated the following: | | Yes | No | Remarks |
| 1. | Prepare a 3D Model for Injection Mould and detailed drawings of required workpiece | | | |
| 2. | Prepare a conceptual Design of Injection Mould as per size of the machine | | | |
| 3. | Prepare 3D part and assembly modelling of all components of Injection mould according to conceptual design | | | |
| 4. | Prepare 2D assembly drawings and detailed drawings of all components of Injection mould | | | |
| 5. | Prepare a Bill of Quantity (BOQ) of all components of Injection Mould as per final design | | | |
| Competent <input type="checkbox"/> | | Not Yet Competent <input type="checkbox"/> | | |

| | | | | |
|--|--|---|----|---------|
| Assessment Task 3 | | Description of assessment task 3 Candidate is required to design Die Casting Mould of product assign by assessor, using CAD software. | | |
| During the practical assessment, candidate demonstrated the following: | | Yes | No | Remarks |
| 1. | Prepare a 3D Model for Die Casting and detailed drawings of required workpiece | | | |
| 2. | Prepare a conceptual Design of Die Casting Mould as per size of the machine | | | |
| 3. | Prepare 3D part and assembly modelling of all components of Die Casting according to conceptual design | | | |
| 4. | Prepare 2D assembly drawings and detailed drawings of all components of Die Casting mould | | | |
| 5. | Prepare a Bill of Quantity (BOQ) of all components of Die Casting Mould as per final design | | | |
| Competent <input type="checkbox"/> | | Not Yet Competent <input type="checkbox"/> | | |

| | | | | |
|--|---|---|----|---------|
| Assessment Task 4 | | Description of assessment task4 | | |
| | | Candidate is required to design Vacuum Mould of product assign by assessor, using CAD software. | | |
| During the practical assessment, candidate demonstrated the following: | | Yes | No | Remarks |
| | Prepare a 3D Model for Vacuum Mould and detailed drawings of required workpiece | | | |
| | Prepare a conceptual Design of Vacuum Mould as per required product | | | |
| | Prepare 3D part and assembly modelling of all components of Vacuum Mould according to conceptual design | | | |
| | Prepare 2D assembly drawings and detailed drawings of all components of Vacuum Mould | | | |
| | Prepare a Bill of Quantity (BOQ) of all components of Vacuum Mould as per final design | | | |
| Competent <input type="checkbox"/> | | Not Yet Competent <input type="checkbox"/> | | |