



# **Competency Standard (CS)**

**Forming & Pressing**

**Level-2**

**Ceramic Sector**

**Competency Standard Code: CS-CER-F&P-L2-EN-V1**



**National Skills Development Authority  
Chief Advisor's Office  
Government of the People's Republic of Bangladesh**



## Copyright

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This Competency Standard for **Forming & Pressing** is a document for the development of curricula, teaching and learning materials, and assessment tools. It also serves as the document for providing training consistent with the requirements of industry in order to meet the qualification of individuals who graduated through the established standard via competency-based assessment for a relevant job.

Public and private institutions may use the information contained in this standard for activities benefitting Bangladesh.

## Introduction

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The NSDA aims to enhance an individual's employability by certifying completeness with skills. NSDA works to expand the skilling capacity of identified public and private training providers qualitatively and quantitatively. It also aims to establish and operationalize a responsive skill ecosystem and delivery mechanism through a combination of Well-defined set of mechanisms and necessary technical supports.

Key priority economic growth sectors identified by the government have been targeted by NSDA to improve current job skills along with existing workforce to ensure required skills to industry standards. Training providers are encouraged and supported to work with industry to address identified skills and knowledge to enable industry growth and increased employment through the provision of market responsive inclusive skills training program. " **Forming & pressing**" is selected as one of the priority occupations of **Ceramic** Sector. This standard is developed to adopt a demand driven approach to training with effective inputs from Industry Skills Councils, employer associations and employers.

Generally, a competency standard LEorms curriculum, learning materials, assessment and certification of trainees enrolled in Skills Training. Trainees who successfully pass the assessment will receive a qualification in the Bangladesh National Qualification Framework (BNQF) and will be listed on the NSDA's online portal.

This competency standard is developed to improve skills and knowledge in accordance with the job roles, duties and tasks of the occupation and ensure that the required skills and knowledge are aligned to industry requirements. A series of stakeholder consultations, workshops were held to develop this document.

The document also details the format, sequencing, wording and layout of the Competency Standard for an occupation which is comprised of Units of Competence and its corresponding elements.

## Overview

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A **Competency Standard** is a written specification of the knowledge, skills and attitudes required for the performance of an occupation, trade or job corresponding to the industry standard of performance required in the workplace.

The purpose of a competency standards is to:

- provide a consistent and reliable set of parts for training, recognising and assessing people's skills, and may also have optional support materials
- enable industry recognised qualifications to be awarded through direct assessment of workplace competencies
- encourage the development and delivery of flexible training which suits individual and industry requirements
- encourage learning and assessment in a work-related environment which leads to verifiable workplace outcomes

Competency standards are developed by a working group comprised of occupation specific experts, academicians, representatives from NSDA and ISC to identify the competencies required of an occupation in **Ceramice Sector**.

Competency standards describe the knowledge, skills and attitude needed to perform effectively in the workplace. CS acknowledge that people can achieve technical and vocational competency in many ways by emphasising what the learner can do, not how or where they learned to do it.

With competency standards, training and assessment may be conducted at the workplace or at training institute or any combination of these.

Competency standards consist of a number of units of competency. A unit of competency describes a distinct work activity that would normally be undertaken by one person in accordance with industry standards.

Units of competency are documented in a standard format that comprises of:

- unit title
- nominal duration
- unit code
- unit descriptor
- elements and performance criteria
- variables and range statement
- curricular content guide
- assessment evidence guides

Together, all the parts of a unit of competency:

- describe a work activity
- guide the assessor to determine whether the candidate is competent or not yet competent

The ensuing sections of this document comprise of a description of the relevant occupation, trade or job with all the key parts of a unit of competency, including:

- a chart with an overview of all Units of Competency for the relevant occupation, trade or job including the Unit Codes and the Unit of Competency titles and corresponding Elements
- the Competency Standard that includes the Unit of Competency, Unit Descriptor, Elements and Performance Criteria, Range of Variables, Curricular Content Guide and Assessment Evidence Guide.

## Competency Standards for National Skill Certificate – 2 in Forming & Pressing, Ceramice Sector

### Level Descriptors of Skills Sector, BNQF Level 1-6

| Level & Job classification                     | Knowledge Domain                                                                                                                                                                                   | Skills Domain                                                                                                                                                                                                                                                                                    | Responsibility Domain                                                                                                                                                                    |
|------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 6-Mid-Level Manager/<br>Sub Assistant Engineer | Comprehensive actual and theoretical knowledge within a specific work or study area with an awareness of the validity and limits of that knowledge, able to analyse, compare, relate and evaluate. | Specialised and wider range of cognitive and practical skills required to provide leadership in the development of creative solutions to defined problems. Communicate professional issues and solutions to the team and to external partners/users.                                             | Work under broad guidance and self-motivation to execute strategic and operational plan/s. Lead lower-level management. Diagnose and resolve problems within and among work groups.      |
| 5-Supervisor                                   | Broad knowledge of the underlying, concepts, principles, and processes in a specific work or study area, able to scrutinize and break LEormation into parts by identifying motives or causes.      | Broad range of cognitive and practical skills required to generate solutions to specific problems in one or more work or study areas. Communicate practice-related problems and possible solutions to external partners.                                                                         | Work under guidance of management and self-direction to resolve specific issues. Lead and take responsibility for the work and actions of group/team members. Bridge between management. |
| 4-Highly Skilled Worker                        | Broader knowledge of the underlying, concepts, principles, and processes in a specific work or study area, able to solve problems to new situations by comparing and applying acquired knowledge.  | A range of cognitive and practical skills required to accomplish tasks and solve problems by selecting and applying the full range of methods, tools, materials and LEormation. Communicate using technical terminology and IT technology with partners and users as per workplace requirements. | Work under minimal supervision in specific contexts in response to workplace requirements. Resolve technical issues in response to workplace requirements and lead/guide a team/ group.  |
| 3-Skilled Worker                               | Moderately broad knowledge in a specific work or study area, able to perceive ideas and abstract from drawing and design according to workplace requirements.                                      | Basic cognitive and practical skills required to use relevant LEormation in order to carry out tasks and to solve routine problems using simple rules and tools. Communicate with his team and limited external partners upholding the values, nature and culture of the workplace               | Work or study under supervision with considerable autonomy. Participate in teams and responsible for group coordination.                                                                 |
| 2-Semi Skilled Worker                          | Basic understanding of underpinning knowledge in a specific work or study area, able to interpret and apply common occupational terms and instructions.                                            | Skills required to carry out simple tasks, communicate with his team in the workplace presenting and discussing results of his work with required clarity.                                                                                                                                       | Work or study under supervision in a structured context with limited scope of manipulation                                                                                               |
| 1 –Basic Skilled Worker                        | Elementary understanding of ability to interpret the underpinning knowledge in a specific study area, able to interpret common occupational terms and instructions.                                | Specific Basic skills required to carry out simple tasks. Interpret occupational terms and present the results of own work within guided work environment/ under supervision.                                                                                                                    | Work under direct supervision in a structured context with limited range of responsibilities.                                                                                            |

## List of Abbreviations

|      |                                                |
|------|------------------------------------------------|
| NSDA | - National Skills Development Authority        |
| CS   | - Competency Standard                          |
| SCVC | - Standard and Curriculum Validation Committee |
| ISC  | - Industry Skills Council                      |
| CBLM | - Competency Based Learning Material           |
| UoC  | - Unit of Competency                           |
| PPE  | - Personal Protective Equipment                |
| OSH  | - Occupational Safety and Health               |
| CBC  | - Competency Based Curriculum                  |
| CER  | - Ceramic Sector                               |
| BNQF | - Bangladesh National Qualification Framework  |
| F&P  | - Forming & Pressing                           |
| STP  | - Skills Training Provider                     |
| SOP  | - Standard Operating Procedure                 |
| UoC  | - Unit of Competency                           |
| 4 IR | - 4th Industrial Revolution                    |





Approved by  
41<sup>st</sup> Authority Meeting of NSDA  
Held on 25.03.2025



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**Competency Standards for National Skill Certificate – 2 in  
Forming  
Course Structure**

| SL                                        | Unit Code and Title  |                                                                                | UoC Level | Nominal Hours |
|-------------------------------------------|----------------------|--------------------------------------------------------------------------------|-----------|---------------|
| Generic Units of Competencies             |                      |                                                                                |           | 40            |
| 1.                                        | GU-01-L1-V1          | Perform Computations Using Basic Mathematical Concepts                         | 1         | 15            |
| 2.                                        | GU-02-L1-V1          | Apply OSH Procedure in the Workplace                                           | 1         | 15            |
| 3.                                        | GU-06-L1-V1          | Practice House Keeping Procedure                                               | 1         | 10            |
| Sector Specific Units of Competencies     |                      |                                                                                |           | 30            |
| 4.                                        | SU- CER -01-L1-V1    | Interpret Fundamental Issues to work in the Ceramic Sector                     | 1         | 15            |
| 5.                                        | SU- CER -02-L1-V1    | Use Measuring and Checking Tools and Instruments                               | 1         | 15            |
| Occupation Specific Units of Competencies |                      |                                                                                |           | 270           |
| 6.                                        | OU-CER-F&P-01-L2-V1  | Make Product by Solid and Drain Casting Process for Tableware and Sanitaryware | 2         | 90            |
| 7.                                        | OU-CER- F&P-02-L2-V1 | Make Product by Jiggering and Jollying Process for Tableware                   | 2         | 100           |
| 8.                                        | OU-CER- F&P-03-L2-V1 | Make Tiles by Pressing Process                                                 | 2         | 80            |
| Total Learning Hours                      |                      |                                                                                |           | 340           |
| Workplace Visit                           |                      |                                                                                |           | 20            |
| Totoal Nominal Hours                      |                      |                                                                                |           | 360           |

## Units & Elements at a Glance:

### Generic Units of Competencies (40 hours)

| Code               | Unit of Competency                                                    | Elements of Competency                                                                                                                                                                                                                                                  | Duration (Hours) |
|--------------------|-----------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|
| GU-01-L1-V1        | Perform Computations. Using Basic Mathematical Concepts               | <ol style="list-style-type: none"> <li>1. Identify calculation requirements in the workplace</li> <li>2. Select appropriate mathematical methods for the calculation.</li> <li>1. Use tool/instrument to perform calculations.</li> </ol>                               | 15               |
| GU-02-L1-V1        | Apply Occupational Safety and Health (OHS) Procedure in the Workplace | <ol style="list-style-type: none"> <li>1. Identify OSH policies and procedures</li> <li>2. Follow OSH procedure</li> <li>3. Report hazards and risks</li> <li>4. Respond to emergencies</li> <li>5. Maintain personal well-being.</li> </ol>                            | 15               |
| GU-06-L1-V1        | Practice House Keeping Procedure                                      | <ol style="list-style-type: none"> <li>1. Sort and remove unnecessary items</li> <li>2. Arrange items</li> <li>3. Maintain work area, tools and equipment</li> <li>4. Follow standardized work process and procedure</li> <li>5. Perform work spontaneously.</li> </ol> | 10               |
| <b>Total Hours</b> |                                                                       |                                                                                                                                                                                                                                                                         | <b>40</b>        |

### Sector Specific Units of Competencies (30 Hours)

| Code               | Unit of Competency                                         | Elements of Competency                                                                                                                                                                                                                                                                                                                                     | Duration (Hours) |
|--------------------|------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|
| SU-CER-01-L1-V1    | Interpret Fundamental Issues to Work in the Ceramic Sector | <ol style="list-style-type: none"> <li>1. Interpret job roles and responsibilities</li> <li>2. Identify and observe OSH in the manufacturing industries</li> <li>3. Plan work activities</li> <li>4. Work with others.</li> </ol>                                                                                                                          | 15               |
| SU-CER-02-L1-V1    | Use Measuring and Checking Tools and Instruments           | <ol style="list-style-type: none"> <li>1. Prepare for work</li> <li>2. Select the job to be measured and checked</li> <li>3. Select measuring and checking tools and instruments</li> <li>4. Take and check measurements</li> <li>5. Measurements are recorded and communicated</li> <li>6. Clean and store measuring and checking instruments.</li> </ol> | 15               |
| <b>Total Hours</b> |                                                            |                                                                                                                                                                                                                                                                                                                                                            | <b>30</b>        |

### Occupation Specific Units of Competencies (270 Hours)

| Code                   | Unit of Competency                                                             | Elements of Competency                                                                                                                                                                                                                                                                                                                                     | Hours      |
|------------------------|--------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| OU-CER-F&P - 01-L2-V1  | Make Product by Solid and Drain Casting Process for Tableware and Sanitaryware | <ol style="list-style-type: none"> <li>1. Prepare for work</li> <li>2. Prepare mould for casting process</li> <li>3. Fill the mould</li> <li>4. Maintain the casting thickness and time</li> <li>5. Remove green product from mould</li> <li>6. Achieve the desired green product</li> <li>7. Clean and maintain work area, tools and equipment</li> </ol> | 90         |
| OU-CER- F&P - 02-L2-V1 | Make Product by Jiggering and Jollying Process for Tableware                   | <ol style="list-style-type: none"> <li>1. Follow OSH practices</li> <li>2. Prepare machine</li> <li>3. Start the machine</li> <li>4. Cut the body clay</li> <li>5. Operate the machine</li> <li>6. Clean and maintain work area, tools and equipment</li> </ol>                                                                                            | 100        |
| OU-CER- F&P - 03-L2-V1 | Make Tiles by Pressing Process                                                 | <ol style="list-style-type: none"> <li>1. Follow OSH practices</li> <li>2. Check condition and prepare the press machine</li> <li>3. Prepare product by pressing process</li> <li>4. Remove green product from mould</li> <li>5. Achieve the desired green product</li> <li>6. Clean and maintain work area, tools and equipment</li> </ol>                | 80         |
| <b>Total Hours</b>     |                                                                                |                                                                                                                                                                                                                                                                                                                                                            | <b>270</b> |

## **Generic Unit of Competenceis**



| Unit Code and Title                                             | GU-01-L1-V1: Perform Computations Using Basic Mathematical Concepts                                                                                                                                                                                                                                                                                                                              |
|-----------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Unit Descriptor                                                 | <p>This unit of competency requires the knowledge, skills and attitude to perform computations using basic mathematical concepts in the workplace.</p> <p>It specifically includes the tasks of identifying calculation requirements in the workplace, selecting appropriate mathematical method/concept for the calculation and using appropriate instruments tools to perform calculation.</p> |
| Nominal Hours                                                   | 15 Hours                                                                                                                                                                                                                                                                                                                                                                                         |
| Elements of Competency                                          | <p><b>Performance Criteria</b></p> <p><b><u>Bold &amp; Underlined</u></b> terms are elaborated in the Range of Variables Training Components</p>                                                                                                                                                                                                                                                 |
| 1. Identify calculation requirements in the workplace           | <p>1.1 Job requirements are identified;</p> <p>1.2 <b><u>Measurements</u></b> are selected in accordance with job requirement;</p> <p>1.3 Calculation requirements are identified from <b><u>workplace Information.</u></b></p>                                                                                                                                                                  |
| 2. Select appropriate mathematical methods for the calculation. | <p>2.1 Mathematical methods are identified;</p> <p>2.2 <b><u>Appropriate method</u></b> is selected to carry out the calculation requirements;</p> <p>2.3 Tolerance and clearance limits are identified and adjusted according to the job requirements.</p>                                                                                                                                      |
| 3. Use tool/instrument to perform calculations                  | <p>3.1 Work instructions are confirmed and applied to the job in hand;</p> <p>3.2 Materials to be measured are identified as per job specification;</p> <p>3.3 Appropriate <b><u>tool/ instrument</u></b> is selected based on materials to be measured.</p>                                                                                                                                     |
| <b>Range of Variables</b>                                       |                                                                                                                                                                                                                                                                                                                                                                                                  |
| Variable                                                        | Range (may include but not limited to)                                                                                                                                                                                                                                                                                                                                                           |
| 1. Measurements                                                 | <p>1.1 Length</p> <p>1.2 Width</p> <p>1.3 Weight</p> <p>1.4 Volume</p> <p>1.5 Tolerance</p>                                                                                                                                                                                                                                                                                                      |
| 2. workplace Information                                        | <p>2.1 Job Order</p> <p>2.2 Design</p> <p>2.3 Working drawing</p> <p>2.4 Verbal instructions</p> <p>2.5 Written Instruction</p>                                                                                                                                                                                                                                                                  |
| 3. Appropriate method                                           | <p>3.1 Addition</p> <p>3.2 Subtraction</p> <p>3.3 Division</p> <p>3.4 Multiplication</p> <p>3.5 Conversion</p>                                                                                                                                                                                                                                                                                   |

|                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                         | 3.6 Percentage and ratio calculation                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 4. Tool/ Instrument                                                                                                                                                                     | 4.1 Calculator<br>4.2 Scale<br>4.3 Measuring tape<br>4.4 Marker                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Evidence Guide</b><br>The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency. |                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 1. Critical Aspects of Competency                                                                                                                                                       | Assessment required evidence that the candidate:<br>1.1 Identified calculation requirements from workplace LEormation<br>1.2 Selected appropriate method to carry out the calculation requirements<br>1.3 Selected measurements<br>1.4 Selected appropriate methods<br>1.5 Used tool/instrument<br>1.6 Added numbers<br>1.7 Subtracted numbers<br>1.8 Multiplied numbers<br>1.9 Divided numbers<br>1.10 Completed calculations using appropriate tools/instruments. |
| 2. Underpinning Knowledge                                                                                                                                                               | 2.1. Numerical concept<br>2.2. Basic mathematical methods such as addition, subtraction<br>2.3. multiplication and division and percentage<br>2.4. Mathematical language, symbols and terminology<br>2.5. Measuring units.                                                                                                                                                                                                                                          |
| 3. Underpinning Skills                                                                                                                                                                  | 3.1 Interpreting numerical concept<br>3.2 Interpreting mathematical methods such as addition, subtraction, multiplication and division and percentage<br>3.3 Interpreting mathematical language, symbols and terminology<br>3.4 Interpreting measuring units.                                                                                                                                                                                                       |
| 4. Underpinning Attitudes                                                                                                                                                               | 4.1. Commitment to occupational health and safety<br>4.2. Environmental concerns<br>4.3. Eagerness to learn<br>4.4. Tidiness and timeliness<br>4.5. Respect for rights of peers and seniors in workplace<br>4.6. Communication with peers and seniors in workplace.                                                                                                                                                                                                 |
| 5. Resource Implications                                                                                                                                                                | 5.1. Work place<br>5.2. Materials relevant to the proposed activity<br>5.3. All tools, equipment, material and documentation required.<br>5.4. Relevant specifications or work instructions.                                                                                                                                                                                                                                                                        |
| 6. Methods of Assessment                                                                                                                                                                | Assessment methods may include but not limited to:<br>6.1. Written Test                                                                                                                                                                                                                                                                                                                                                                                             |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                        |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 6.2. Demonstration<br>6.3. Oral Questioning<br>6.4. Portfolio                                                                                                                                                          |
| 7. Context of Assessment                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 7.1 Competency assessment must be done in a training center or in an actual or simulated workplace after completion of the training module;<br>7.2 Assessment should be done by an NSDA certified/ nominated assessor. |
| <b>Accreditation Requirements</b><br>Training Providers must be accredited by National Skills Development Authority (NSDA), the National Quality Assurance Body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of qualification under BNQF. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by NSDA. |                                                                                                                                                                                                                        |

| Unit Code and Title                     | GU-02-L1-V1: Apply Occupational Safety and Health (OSH) Procedure in the Workplace                                                                                                                                                                                                                                                                                                       |
|-----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Unit Descriptor                         | <p>This unit covers the knowledge, skills and attitudes required to apply occupational safety and health (OSH) procedure in the workplace.</p> <p>It specifically includes identifying OSH policies and procedures, following OSH procedure, reporting hazards and risks, responding to emergencies, and maintaining personal well-being.</p>                                            |
| Nominal Hours                           | 15 Hours                                                                                                                                                                                                                                                                                                                                                                                 |
| Elements of Competency                  | <b>Performance Criteria</b><br><b><u>Bold &amp; Underlined</u></b> terms are elaborated in the Range of Variables                                                                                                                                                                                                                                                                        |
| 1. Identify OSH policies and procedures | 1.1. <b><u>OHS policies</u></b> and <b><u>safe operating procedures</u></b> are accessed and stated;<br>1.2. <b><u>Safety signs and symbols</u></b> are identified and followed;<br>1.3. Emergency response, evacuation procedures and other contingency measures are determined according to workplace requirements.                                                                    |
| 2. Follow OSH procedure                 | 2.1 <b><u>Personal protective equipment (PPE)</u></b> is selected and collected as required;<br>2.2 Personal protective equipment (PPE) is correctly used in accordance with organization OSH procedures and practices;<br>2.3 A clear and tidy workplace is maintained as per workplace standard;<br>2.4 PPE is maintained to keep them operational and compliant with OHS regulations. |
| 3. Report hazards and risks.            | 3.1 <b><u>Hazards</u></b> and risks are identified, assessed and controlled;<br>3.2 Incidents arising from hazards and risks are reported to designated authority.                                                                                                                                                                                                                       |
| 4. Respond to emergencies               | 4.1 Alarms and warning devices are responded;<br>4.2 Workplace <b><u>emergency procedures</u></b> are followed;<br>4.3 <b><u>Contingency measures</u></b> during workplace accidents, fire and other emergencies are recognized and followed in accordance with organization procedures;<br>4.4 First aid procedures is applied during emergency situations.                             |
| 5. Maintain personal well-being         | 5.1 OHS policies and procedures are adhered to;<br>5.2 OHS awareness programs are participated in as per workplace guidelines and procedures;<br>5.3 Corrective actions are implemented to correct unsafe condition in the workplace;<br>5.4 <b><u>“Fit to work” records</u></b> are updated and maintained according to workplace requirements.                                         |
| Range of Variables                      |                                                                                                                                                                                                                                                                                                                                                                                          |

| <b>Variables</b>                       | <b>Range (may include but not limited to):</b>                                                                                                                                                                                  |
|----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. OHS policies                        | 1.1. Bangladesh standards for OHS<br>1.2. Fire Safety Rules and Regulations<br>1.3. Code of Practice<br>1.4. Industry Guidelines                                                                                                |
| 2. Safe operating procedures           | 2.1 Orientation on emergency exits, fire extinguishers, fire escape, etc.<br>2.2 Emergency procedures<br>2.3 First Aid procedures<br>2.4 Tagging procedures<br>2.5 Use of PPE<br>2.6 Safety procedures for hazardous substances |
| 3. Safety signs and symbols            | 3.1 Direction signs (exit, emergency exit, etc.)<br>3.2 First aid signs<br>3.3 Danger Tags<br>3.4 Hazard signs<br>3.5 Safety tags<br>3.6 Warning signs                                                                          |
| 4. Personal Protective Equipment (PPE) | 4.1 Gas Mask<br>4.2 Gloves<br>4.3 Safety boots<br>4.4 Face mask<br>4.5 Overalls<br>4.6 Goggles and safety glasses<br>4.7 Sun block<br>4.8 Chemical/Gas detectors                                                                |
| 5. Hazards                             | 5.1 Chemical hazards<br>5.2 Biological hazards<br>5.3 Physical Hazards<br>5.4 Mechanical and Electrical Hazard<br>5.5 Mental hazard<br>5.6 Ergonomic hazard                                                                     |
| 6. Emergency Procedures                | 6.1 Fire fighting<br>6.2 Earthquake<br>6.3 Medical and first aid<br>6.4 Evacuation                                                                                                                                              |
| 7. Contingency measures                | 7.1 Evacuation<br>7.2 Isolation<br>7.3 Decontamination                                                                                                                                                                          |
| 8. “Fit to Work” records               | 8.1 Medical Certificate every year<br>8.2 Accident reports, if any<br>8.3 Eye vision certificate                                                                                                                                |

| <b>Evidence Guide</b><br>The evidence must be authentic, valid, sufficient, reliable, consistent, recent and meet all requirements of current version of the Unit of Competency |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Critical aspects of competency                                                                                                                                               | Assessment required evidence that the candidate: <ul style="list-style-type: none"> <li>1.1 stated OHS policies and safe operating procedures</li> <li>1.2 followed safety signs and symbols</li> <li>1.3 used personal protective equipment (PPE)</li> <li>1.4 maintained workplace clear and tidy</li> <li>1.5 assessed and Controlled hazards</li> <li>1.6 followed emergency procedures</li> <li>1.7 responded to emergencies</li> <li>1.8 maintained personal well-being.</li> </ul> |
| 2. Underpinning knowledge                                                                                                                                                       | <ul style="list-style-type: none"> <li>2.1 Define OHS</li> <li>2.2 OHS Workplace Policies and Procedures</li> <li>2.3 Work Safety Procedures</li> <li>2.4 Emergency Procedures</li> <li>2.5 Hazard control procedure</li> <li>2.6 Different types of Hazards</li> <li>2.7 PPE and there uses</li> <li>2.8 Personal Hygiene Practices</li> <li>2.9 OHS Awareness.</li> </ul>                                                                                                               |
| 3. Underpinning skills                                                                                                                                                          | <ul style="list-style-type: none"> <li>3.1 Accessing OHS policies</li> <li>3.2 Handling of PPE</li> <li>3.3 Handling cleaning tools and equipment</li> <li>3.4 Writing report</li> <li>3.5 Responding to emergency procedures.</li> </ul>                                                                                                                                                                                                                                                 |
| 4. Required attitude                                                                                                                                                            | <ul style="list-style-type: none"> <li>4.1 Commitment to occupational health and safety</li> <li>4.2 Sincere and honest to duties</li> <li>4.3 Promptness in carrying out activities</li> <li>4.4 Environmental concerns</li> <li>4.5 Eagerness to learn</li> <li>4.6 Tidiness and timeliness</li> <li>4.7 Respect of peers and seniors in workplace</li> <li>4.8 Communicate with peers and seniors in workplace.</li> </ul>                                                             |
| 5. Resource implications                                                                                                                                                        | <ul style="list-style-type: none"> <li>5.1 Workplace</li> <li>5.2 Equipment and outfits appropriate in applying safety measures</li> <li>5.3 Tools, materials and documentation required</li> <li>5.4 OHS Policies and Procedures.</li> </ul>                                                                                                                                                                                                                                             |
| 6. Methods of assessment                                                                                                                                                        | Assessment methods may include but not limited to: <ul style="list-style-type: none"> <li>6.1 Written test</li> <li>6.2 Demonstration</li> <li>6.3 Oral Questioning</li> </ul>                                                                                                                                                                                                                                                                                                            |

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| 7. Context of Assessment                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <p>7.1 Competency assessment must be done in a training center or in an actual or simulated workplace after completion of the training module</p> <p>7.2 Assessment should be done by an NSDA certified/nominated assessor.</p> |
| <p><b>Accreditation Requirements</b></p> <p>Training Providers must be accredited by National Skills Development Authority (NSDA), the National Quality Assurance Body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of qualification under BNQF. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by NSDA.</p> |                                                                                                                                                                                                                                 |

| Unit Code and Title                               | GU-06-L1-V1: Practice House Keeping Procedure                                                                                                                                                                                                                                                                                                                                                                       |
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| Unit Descriptor                                   | <p>This unit covers the knowledge, skills and attitude required to Practice housekeeping procedure.</p> <p>It specifically includes sorting and removing unnecessary items, arranging items, maintaining work area, tools and equipment, following standardized work process and procedure and performing work spontaneously.</p>                                                                                   |
| Nominal Hours                                     | 10 Hours                                                                                                                                                                                                                                                                                                                                                                                                            |
| Elements of Competency                            | <b>Performance Criteria</b><br><u><b>Bold underlined</b></u> terms are elaborated in the Range of Variables                                                                                                                                                                                                                                                                                                         |
| 1. Sort and remove unnecessary items              | 1.1 Reusable, recyclable materials are sorted in accordance with company/office procedures;<br>1.2 <u><b>Unnecessary items</b></u> are removed and disposed of in accordance with company or office procedures.                                                                                                                                                                                                     |
| 2. Arrange items                                  | 2.1 Items are arranged in accordance with company/office housekeeping procedures;<br>2.2 Work area is arranged according to job requirements;<br>2.3 Activities are prioritized based on instructions;<br>2.4 Items are provided with clear and visible <u><b>identification marks</b></u> based on procedure;<br>2.5 Safety equipment and evacuation passages are kept clear and accessible based on instructions. |
| 3. Maintain work area, tools and equipment        | 3.1 Cleanliness and orderliness of work area is maintained in accordance with company/office procedures;<br>3.2 Tools and equipment are cleaned in accordance with manufacturer's instructions/manual;<br>3.3 <u><b>Minor repairs</b></u> are performed on tools and equipment in accordance with manufacturer's instruction/manual;<br>3.4 Defective tools and equipment are reported to immediate supervisor.     |
| 4. Follow standardized work process and procedure | 4.1 Materials for common use are maintained in designated area based on procedures;<br>4.2 Work is performed according to standard work procedures. Abnormal incidents are reported to immediate supervisor.                                                                                                                                                                                                        |
| 5. Perform work spontaneously                     | 5.1 Work is performed as per instruction;<br>5.2 Company and office <u><b>decorum</b></u> are followed and complied with;<br>5.3 Work is performed in accordance with OSH requirements.                                                                                                                                                                                                                             |
| <b>Range of Variables</b>                         |                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Variable                                          | Range (may include but not limited to):                                                                                                                                                                                                                                                                                                                                                                             |



|                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                |
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| 1. Unnecessary items                                                                                                                                                             | 1.1 Non-recyclable materials<br>1.2 Pictures, posters and other materials not related to work activity<br>1.3 Unserviceable tools and equipment<br>1.4 Waste materials                                                                                                                                                                         |
| 2. Identification marks                                                                                                                                                          | 2.1 Color coding<br>2.2 Labels<br>2.3 Tags                                                                                                                                                                                                                                                                                                     |
| 3. Minor repairs                                                                                                                                                                 | 3.1 Application of lubricants<br>3.2 Replacement of parts<br>3.3 Sharpening of tools<br>3.4 Tightening of nuts, bolts and screws                                                                                                                                                                                                               |
| 4. Decorum                                                                                                                                                                       | 4.1 Behavior<br>4.2 Company/office rules and regulations<br>4.3 Company/office uniform                                                                                                                                                                                                                                                         |
| <b>Evidence Guide</b><br>The evidence must be authentic, valid, sufficient, reliable, consistent, recent and meet all requirements of current version of the Unit of Competency. |                                                                                                                                                                                                                                                                                                                                                |
| 1. Critical aspects of competency                                                                                                                                                | Assessment required evidence that the candidate:<br>1.1 sorted and removes unnecessary items<br>1.2 arranged items<br>1.3 maintained work area, tools and equipment<br>1.4 followed standardized work process and procedures<br>1.5 performed work spontaneously.                                                                              |
| 2. Underpinning knowledge                                                                                                                                                        | 2.1 Environmental requirements relative to work safety<br>2.2 Principles of 5S<br>2.3 Reading skills required to interpret instructions<br>2.4 Work process and procedures<br>2.5 Work-related documentation requirements.                                                                                                                     |
| 3. Underpinning skills                                                                                                                                                           | 3.1 Arranging items<br>3.2 Maintaining work area, tools and equipment<br>3.3 Following standardizing work process                                                                                                                                                                                                                              |
| 4. Underpinning attitude                                                                                                                                                         | 1.1 Commitment to occupational health and safety<br>1.2 Promptness in carrying out activities<br>1.3 Sincere and honest to duties<br>1.4 Environmental concerns<br>1.5 Eagerness to learn<br>1.6 Tidiness and timeliness<br>1.7 Respect for rights of peers and seniors in workplace<br>1.8 Communication with peers and seniors in workplace. |

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| 2. Resource implications                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <p>The following resources must be provided:</p> <p>5.1 work place procedure</p> <p>5.2 materials relevant to the proposed activity</p> <p>5.3 all tools, equipment, material and documentation required.</p> <p>5.4 relevant specifications or work instructions.</p> |
| 6. Methods of assessment                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <p>Methods of assessment may include but not limited to:</p> <p>3.1 written test</p> <p>3.2 demonstration</p> <p>3.3 oral questioning</p> <p>3.4 portfolio</p>                                                                                                         |
| 4. Context of assessment                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <p>7.1 Competency assessment must be done in a training center or in an actual or simulated work place after Completion of the training module</p> <p>7.2 Assessment should be done by NSDA certified assessor.</p>                                                    |
| <p><b>Accreditation Requirements</b></p> <p>Training Providers must be accredited by National Skills Development Authority (NSDA), the National Quality Assurance Body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of qualification under BNQF. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by NSDA.</p> |                                                                                                                                                                                                                                                                        |

## **Sector Specific Unit of Competencies**

| Unit Code and Title                                                                                                                                           | <b>SU-CER-01-L1-V1: Interpret Fundamental Issues to Work in the Ceramic Sector</b>                                                                                                                                                                                                                                                           |
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| <b>Unit Descriptor</b>                                                                                                                                        | <p>This unit covers the knowledge, skills and attitudes required to interpret fundamentals to work in the ceramic sector</p> <p>It specifically includes the tasks of interpreting job roles and responsibilities, identifying and observing OSH in the manufacturing industries, planning work activities and working with others.</p>      |
| <b>Nominal Hours</b>                                                                                                                                          | <b>15 Hours</b>                                                                                                                                                                                                                                                                                                                              |
| <b>Elements of Competency</b>                                                                                                                                 | <p><b>Performance Criteria</b></p> <p><b><u>Bold and Underlined</u></b> terms are elaborated in the Range of Variables</p>                                                                                                                                                                                                                   |
| 1. Interpret job roles and responsibilities                                                                                                                   | <p>1.1 Job roles and responsibilities in the manufacturing industry are interpreted;</p> <p>1.2 Relationship within the manufacturing industry employees is identified.</p>                                                                                                                                                                  |
| 2. Identify and observe OSH in the manufacturing industries                                                                                                   | <p>2.1. OSH in the manufacturing industries is identified and observed;</p> <p>2.2. Safe work practices are followed when using equipment in the work environment.</p>                                                                                                                                                                       |
| 3. Plan work activities                                                                                                                                       | <p>3.1 Common goals, objectives and tasks are interpreted and clarified with appropriate persons;</p> <p>3.2 Individual tasks are determined and agreed on according to workplace environment.</p>                                                                                                                                           |
| 4. Work with others                                                                                                                                           | <p>4.1 <b><u>Effective interpersonal skills</u></b> are applied to interact with others and to contribute to activities and objectives;</p> <p>4.2 Assigned tasks are performed in accordance with job requirements, specifications and workplace environment;</p> <p>4.3 <b><u>Work requirements</u></b> are confirmed with colleagues.</p> |
| <b>Range of Variables</b>                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                              |
| <b>Variable</b>                                                                                                                                               | <b>Range (may include but not limited to):</b>                                                                                                                                                                                                                                                                                               |
| 1. Effective interpersonal skills                                                                                                                             | <p>1.1 Basic listening and speaking skills, use terminology and jargon</p> <p>1.2 Communication and receiving feedback</p> <p>1.3 Interpretation of instructions</p> <p>1.4 Basic principles of effective communication</p>                                                                                                                  |
| 2. Work requirements                                                                                                                                          | 2.1 Work requirements as directed in verbal or written in specifications or procedures                                                                                                                                                                                                                                                       |
| <b>Evidence Guide</b>                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                              |
| The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency |                                                                                                                                                                                                                                                                                                                                              |
| 1. Critical Aspects of Competency                                                                                                                             | <p>Assessment required evidence that the candidate:</p> <p>1. 1 followed job role accordance with industries requirement</p> <p>1. 2 developed relationship with industries fellow</p> <p>1. 3 identified different types of hazards</p> <p>1. 4 used PPE</p>                                                                                |

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|                                                                                                                                                                                                                              | 1.5 applied effective interpersonal skills to achieve the goals of industry.                                                                                                                                                                                                                                                                                                             |
| 2. Underpinning Knowledge                                                                                                                                                                                                    | 2.1 Key duties/responsibilities of Manufacturing technician<br>2.2 Responsibilities of Supervisors<br>2.3 Responsibilities of Employers<br>2.4 Responsibilities of Workers<br>2.5 Common Hazards<br>2.6 Ways to reduce the risk<br>2.7 Common goals of the manufacturing Industry.                                                                                                       |
| 3. Underpinning Skills                                                                                                                                                                                                       | 3.1 Improving Employee Employer Relationships<br>3.2 Creating a Positive Relationship with Employees<br>3.3 Observing OHS in manufacturing industry<br>3.4 Identifying OHS policies and procedures<br>3.5 Following personal work safety practices<br>3.6 Reporting hazards and risks<br>3.7 Responding to emergency procedures<br>3.8 Maintaining physical well-being in the workplace. |
| 4. Required Attitudes                                                                                                                                                                                                        | 4.1 Commitment to occupational health and safety<br>4.2 Promptness in carrying out activities<br>4.3 Sincere and honest to duties<br>4.4 Environmental concerns<br>4.5 Eagerness to learn<br>4.6 Tidiness and timeliness<br>4.7 Respect for rights of peers and seniors in workplace<br>4.8 Communication with peers and seniors in workplace.                                           |
| 5. Resource Implications                                                                                                                                                                                                     | The following resources must be provided:<br>5.1 workplace<br>5.2 tools and equipment appropriate to workplace<br>5.3 materials relevant to the proposed activity<br>5.4 equipment and outfits appropriate in applying safety measures<br>5.5 OHS Policies and Procedures.                                                                                                               |
| 6. Methods of Assessment                                                                                                                                                                                                     | Methods of assessment may include but not limited to:<br>6.1 written test<br>6.2 demonstration<br>6.3 oral questioning<br>6.4 portfolio                                                                                                                                                                                                                                                  |
| 7. Context of Assessment                                                                                                                                                                                                     | 7.1 Competency assessment must be done in a training center or in an actual or simulated workplace after completion of the training module<br>7.2 Assessment should be done by an NSDA certified/nominated assessor.                                                                                                                                                                     |
| <b>Accreditation Requirements</b><br>Training Providers must be accredited by National Skills Development Authority (NSDA), the National Quality Assurance Body, or a body with delegated authority for quality assurance to |                                                                                                                                                                                                                                                                                                                                                                                          |

conduct training and assessment against this unit of competency for credit towards the award of qualification under BNQF. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by NSDA.

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| <b>Unit Code and Title</b>                             | <b>SU-CER-02-L1-V1: Use Measuring and Checking Tools and Instruments</b>                                                                                                                                                                                                                                                                                                    |
| <b>Unit Descriptor</b>                                 | <p>This unit covers the knowledge, skills and attitudes required to use measuring and checking tools and instruments.</p> <p>It includes the tasks of preparing for work, selecting the job, selecting measuring and checking tools and instruments, taking and checking measurements, recording measurements, cleaning and storing measuring and checking instruments.</p> |
| <b>Nominal Hours</b>                                   | <b>15 Hours</b>                                                                                                                                                                                                                                                                                                                                                             |
| <b>Elements of Competency</b>                          | <b>Performance Criteria</b><br><b><u>Bold &amp; Underlined</u></b> terms are elaborated in the range of variables                                                                                                                                                                                                                                                           |
| 1. Prepare for work                                    | <p>1.1 <b><u>Safe work practices</u></b> are observed and <b><u>Personal Protective Equipment (PPE)</u></b> worn as required for the work performed</p> <p>1.2 <b><u>Hazards</u></b> are identified and risks are minimized and controlled</p> <p>1.3 <b><u>Measuring and checking tools and instruments</u></b> are selected and collected for use.</p>                    |
| 2. Select the job to be measured and checked           | <p>2.1 Jobs to be measured are identified;</p> <p>2.2 Jobs to be checked are identified;</p> <p>2.3 <b><u>Documents</u></b> and specifications are interpreted.</p>                                                                                                                                                                                                         |
| 3. Select measuring and checking tools and instruments | <p>3.1 Measuring and checking instrument are selected according to job requirements;</p> <p>3.2 Tolerance and/or clearance, limits are interpreted from the drawing.</p>                                                                                                                                                                                                    |
| 4. Take and check measurements                         | <p>4.1 Measuring and checking instruments are calibrated to ensure accurate reading/measurement;</p> <p>4.2 <b><u>Routine adjustments</u></b> are done as required;</p> <p>4.3 <b><u>Measurements</u></b> are taken precisely/accurately as per supplied drawing or manual;</p> <p>4.4 Measurements are checked against job requirement.</p>                                |
| 5. Record and communicate measurement                  | <p>5.1 Measurements are recorded on form/drawings/sketches as per standard procedures;</p> <p>5.2 Recorded measurements are interpreted and communicated to supervisor.</p>                                                                                                                                                                                                 |
| 6. Clean and store measuring and checking instruments  | <p>6.1 Measuring and checking instruments are cleaned;</p> <p>6.2 Measuring instruments are stored as per industry procedure.</p>                                                                                                                                                                                                                                           |
| <b>Range of Variables</b>                              |                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Variable</b>                                        | <b>Range</b> (May include but not limited to)                                                                                                                                                                                                                                                                                                                               |
| 1. Safe work practices                                 | <p>1.1 Identify hazards</p> <p>1.2 Control hazards</p> <p>1.3 Use PPE</p> <p>1.4 Response to emergency situation</p> <p>1.5 Use First Aid</p> <p>1.6 Measure risks</p>                                                                                                                                                                                                      |

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|                                                 | 1.7 Report uncontrolled hazards and risks                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 2. Personal Protective Equipment (PPE)          | 2.1 Safety shoes<br>2.2 Safety belt<br>2.3 Goggles<br>2.4 Hand gloves<br>2.5 Safety helmet<br>2.6 Overall apron<br>2.7 Safety Mask<br>2.8 Ear plug                                                                                                                                                                                                                                                                                                                                                                                |
| 3. Hazards                                      | 3.1 Physical hazard<br>3.2 Chemical hazard<br>3.3 Electrical and mechanical hazard<br>3.4 Biological hazard<br>3.5 Ergonomic hazard<br>3.6 Mental hazard                                                                                                                                                                                                                                                                                                                                                                          |
| 4. Measuring and checking tools and instruments | 4.1 <b>Measuring tools</b> <ul style="list-style-type: none"> <li>▪ Measuring tape</li> <li>▪ Slide/Vernier Calipers</li> <li>▪ Steel Rules</li> <li>▪ Micrometer</li> <li>▪ Stop watch</li> </ul> 4.2 <b>Checking tools</b> <ul style="list-style-type: none"> <li>▪ Inside calipers</li> <li>▪ Outside calipers</li> <li>▪ Filler gauge</li> <li>▪ Taper gauge</li> </ul> 4.3 <b>Measuring instruments</b> <ul style="list-style-type: none"> <li>▪ Pressure gauge</li> <li>▪ Spirit level</li> <li>▪ Weighing scale</li> </ul> |
| 5. Documents                                    | 5.1 Drawing<br>5.2 Technical manuals<br>5.3 Specifications<br>5.4 Written instructions                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 6. Routine adjustment                           | 6.1 Calibration<br>6.2 Simple zeroing<br>6.3 Scale adjustment<br>6.4 Reference adjustment                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 7. Measurements                                 | 7.1 Measuring length<br>7.2 Angle<br>7.3 Clearances<br>7.4 Time                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |



| <b>Evidence Guide</b>                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                     |
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| The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency. |                                                                                                                                                                                                                                                                                                                                                     |
| 1. Critical aspects of competency                                                                                                                              | 1.1 Followed OSH practices<br>1.2 Identified the proper measuring instrument<br>1.3 Took measurement<br>1.4 Recorded measurement<br>1.5 Interpreted written inspection.                                                                                                                                                                             |
| 2. Underpinning knowledge                                                                                                                                      | 2.1 Relevant OSH.<br>2.2 Safe work practices<br>2.3 Principles of using different measuring instruments.<br>2.4 Workplace standard.<br>2.5 List and use of measuring and checking tools and instruments<br>2.6 Sequence of using the instruments.<br>2.7 Methods of using instruments<br>2.8 Calibration of instrument.                             |
| 3. Underpinning skill                                                                                                                                          | 3.1 Practicing workplace safety<br>3.2 Taking instruments<br>3.3 Interpreting and following data sheet, instruction and manuals, technical drawing<br>3.4 Performing measurement<br>3.5 Keeping record and report<br>3.6 Calibrating of instrument.                                                                                                 |
| 4. Underpinning attitudes                                                                                                                                      | 4.1 Commitment to occupational safety and health.<br>4.2 Promptness in carrying out activities.<br>4.3 Sincere and honest to duties.<br>4.4 Eagerness to learn.<br>4.5 Tidiness and timeliness.<br>4.6 Environmental concerns.<br>4.7 Respect for rights of peers and seniors at workplace.<br>4.8 Communicate with peers and seniors at workplace. |
| 5. Resource implications                                                                                                                                       | 5.1 Adequate workplace<br>5.2 Materials for proposed activities<br>5.3 Measuring and checking tools and instruments appropriate to propose activities<br>5.4 Information and documentation<br>5.5 Drawings, Manual, Codes, Standards and reference materials.                                                                                       |
| 6. Methods of assessment                                                                                                                                       | Assessment methods may include but not limited to:<br>6.1 Demonstration<br>6.2 Oral questioning<br>6.3 Written test<br>6.4 Portfolio                                                                                                                                                                                                                |

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| 7. Context of assessment                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <p>7.1 Competency assessment must be done in a training center or in an actual or simulated work place after Completion of the training module</p> <p>7.2 Assessment should be done by NSDA certified assessor.</p> |
| <p><b>Accreditation Requirements</b></p> <p>Training Providers must be accredited by National Skills Development Authority (NSDA), the National Quality Assurance Body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of qualification under BNQF. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by NSDA.</p> |                                                                                                                                                                                                                     |

## Occupation Specific Unit of Competencies

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| <b>Unit Code &amp; Title</b>               | <b>OU-CER-FORM-01-L2-V1: Make Product by Solid and Drain Casting Process for Tableware and Sanitaryware</b>                                                                                                                                                                                                                                                                                                                        |
| <b>Unit Descriptor</b>                     | <p>This unit covers the knowledge, skills and attitudes required to make product by solid and drain casting process for tableware and sanitary ware.</p> <p>It includes preparing for work, preparing mould for casting process filling the mould, maintaining the casting thickness and time, removing green product from mould, achieving the desired green product, cleaning and maintaining work area, tools and equipment</p> |
| <b>Nominal Hours</b>                       | <b>90 Hours</b>                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Elements of Competency</b>              | <p><b>Performance Criteria</b></p> <p><b><u>Bold &amp; Underlined</u></b> terms are elaborated in the Range of Variables</p>                                                                                                                                                                                                                                                                                                       |
| 1. Prepare for work                        | <p>1.1 All safety requirements/regulations are adhered to before, during and after use;</p> <p>1.2 Necessary <b><u>tools and materials</u></b> are identified as per job requirement;</p> <p>1.3 <b><u>Personal Protective Equipment (PPE)</u></b> is worn;</p> <p>1.4 OSH (Occupational Safety and Health) instructions are followed according to job specification.</p>                                                          |
| 2. Prepare mould for casting process       | <p>2.1 All parts of the <b><u>casting</u></b> mould are cleaned;</p> <p>2.2 Talc powder is applied to the parts of the casting mould as required;</p> <p>2.3 Seamless joints are made of the mould;</p> <p>2.4 Different parts of the moulds are combined/fixed with clamps</p> <p>2.5 Moulds are levelled before filling;</p> <p>2.6 The mould is placed on the casting bench.</p>                                                |
| 3. Fill the mould                          | <p>3.1 Slip is collected from body preparation section;</p> <p>3.2 Slip is poured in casting holes as required.</p>                                                                                                                                                                                                                                                                                                                |
| 4. Maintain the casting thickness and time | <p>4.1 Excess slip is added in solid casting mould, if required;</p> <p>4.2 Thickness of the drain casted product is checked by casting rate per hour as per standard;</p> <p>4.3 Excess slip is drained from the mould.</p>                                                                                                                                                                                                       |
| 5. Remove green product from mould         | <p>5.1 Green product is removed from mould when it has reached the <u>required</u> condition as per instruction;</p> <p>5.2 Problems of green products are identified and solved as per requirement;</p> <p>5.3 After forming and removal green product is checked against to meet company standards.</p>                                                                                                                          |

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| 6. Achieve the desired green product                 | 6.1 Green product is trimmed and smoothed to achieve the <b><u>desired finishing</u></b> ;<br>6.2 Green product is verified in the required condition for the task;<br>6.3 <b><u>Problems of green product</u></b> are identified of green product and take corrective action where possible;<br>6.4 Risk of damaged by person(s) and environment are minimized. |
| 7. Clean and maintain work area, tools and equipment | 7.1 Tools and equipment are cleaned, maintained and stored as per workplace procedures;<br>7.2 Faulty and defective equipment is tagged and reported in accordance with workplace procedures;<br>7.3 Work area is cleared and waste removed following workplace procedures.                                                                                      |
| <b>Range of Variables</b>                            |                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Variable</b>                                      | <b>Range</b> (may include but not limited to:)                                                                                                                                                                                                                                                                                                                   |
| 1. Tools                                             | 1.1 Knife<br>1.2 Wooden stick<br>1.3 Sponze<br>1.4 Scotch bright<br>1.5 Assorted Screwdriver<br>1.6 Clamp<br>1.7 Belt<br>1.8 Assorted Wrench<br>1.9 Brush<br>1.10 Bucket<br>1.11 Mug                                                                                                                                                                             |
| 2. Material                                          | 2.1 Casting slip<br>2.2 Talc powder<br>2.3 Working mould<br>2.4 Marking cloth                                                                                                                                                                                                                                                                                    |
| 3. Personal Protective Equipment (PPE)               | 3.1 Safety glasses / goggles<br>3.2 Hair nets<br>3.3 Ear muffs / plugs<br>3.4 Hand Gloves<br>3.5 Safety Shoes<br>3.6 Protective clothing/Apron                                                                                                                                                                                                                   |
| 4. Casting                                           | 4.1 Drain casting<br>4.2 Solid Casting                                                                                                                                                                                                                                                                                                                           |

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| 5. Desired finish                                                                                                                                                                | 5.1 Level (stand firm)<br>5.2 Free from warp<br>5.3 Smooth seam line<br>5.4 No bumps and indents<br>5.5 Excess clay removed from pour gate                                                                                                                                                                                                                    |
| 6. Problems of green product                                                                                                                                                     | 6.1 Pin hole<br>6.2 Warping<br>6.3 Cracking<br>6.4 Uneven<br>6.5 Blister                                                                                                                                                                                                                                                                                      |
| <b>Evidence Guide</b><br>The evidence must be authentic, valid, sufficient, reliable, consistent, recent and meet all requirements of current version of the Unit of Competency. |                                                                                                                                                                                                                                                                                                                                                               |
| 1. Critical aspects of competency                                                                                                                                                | Assessment required evidences that the candidate:<br>1.1 applied dry lubricants to the parts of the casting mould<br>1.2 combined/fixed different parts of the moulds<br>1.3 prepared and mixed slip in proper consistency to form green product of the desired thickness<br>1.4 removed green product from mould when it has reached the required condition. |
| 2. Underpinning knowledge                                                                                                                                                        | 2.1 Casting techniques.<br>2.2 Density, viscosity and fluidity of slip.<br>2.3 Absorption capacity.<br>2.4 Casting time.<br>2.5 Thickness of the product.<br>2.6 Desired finish<br>2.7 Problems of green product.                                                                                                                                             |
| 3. Underpinning skills                                                                                                                                                           | 3.1 Preparing working mould<br>3.2 Filling the mould<br>3.3 Maintaining casting time and product thickness<br>3.4 Removing green product from mould<br>3.5 Identifying problems of green product<br>3.6 Repairing green products<br>3.7 Finishing green products.                                                                                             |
| 4. Required attitudes                                                                                                                                                            | 4.1 Commitment to occupational safety and health<br>4.2 Promptness in carrying out activities<br>4.3 Sincere and honest to duties<br>4.4 Eagerness to learn<br>4.5 Tidiness and timeliness<br>4.6 Environmental concerns<br>4.7 Respect for rights of peers and seniors at workplace<br>4.8 Communication with peers and seniors at workplace.                |

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| 5. Resource implication                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <p>The following resources must be provided:</p> <p>5.1 Workplace (actual or simulated)</p> <p>5.2 Tools, equipment and physical facilities appropriate to perform activities</p> <p>5.3 Materials, consumables to perform activities</p> <p>5.4 Drawing, specificatins and manuals.</p> |
| 6. Methods of assessment                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <p>Methods of assessment may include but not limited to:</p> <p>6.1 Written test</p> <p>6.2 Demonstration</p> <p>6.3 Oral questioning</p> <p>6.4 Portfolio.</p>                                                                                                                          |
| 7. Context of assessment                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <p>7.1 Competency assessment must be done in a training center or in an actual or simulated workplace after completion of the training module.</p> <p>7.2 Assessment should be done by NSDA certified/ nominated assessor.</p>                                                           |
| <p><b>Accreditation Requirements</b></p> <p>Training Providers must be accredited by National Skills Development Authority (NSDA), the National Quality Assurance Body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of qualification under BNQF. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by NSDA.</p> |                                                                                                                                                                                                                                                                                          |

| Unit Code & Title             | OU-CER- FORM-02-L2-V1: Make Tableware Products by Jiggering and Jollying Process                                                                                                                                                                                                                                                                                                                                                                      |
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| Unit Descriptor               | <p>This unit covers the knowledge, skills and attitudes required to make tableware product by jiggering and jollying process.</p> <p>It includes following OSH practices, cutting the clay roll, preparing machine, starting the machine, , operating jigger machine and cleaning and maintaining work area, tools and equipment.</p>                                                                                                                 |
| Nominal Hours                 | 100 Hours                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Elements of Competency        | <b>Performance Criteria</b><br><u><b>Bold &amp; Italicized</b></u> terms are elaborated in the Range of Variables                                                                                                                                                                                                                                                                                                                                     |
| 1. Follow OSH practices       | 1.1 All safety requirements/ regulations are adhered to before, during and after use;<br>1.2 <u><b>Personal Protective Equipment (PPE)</b></u> is worn<br>1.3 OSH (Occupational Safety and Health) instructions are followed according to job specification;<br>1.4 Necessary <u><b>materials</b></u> are identified as per job requirement.                                                                                                          |
| 2. Cut the clay roll          | 2.1 Clay cutter is set as per required shape, dimensions and consistency;<br>2.2 Clay hardness is checked according to product requirement;<br>2.3 Roll body is cut as per requirement;<br>2.4 Equipment conditions are monitored and adjusted to ensure correct product quality.                                                                                                                                                                     |
| 3. Prepare machine            | 3.1 Product is selected as per specification;<br>3.2 <u><b>Tools and equipment</b></u> are collected as per job requirement.<br>3.3 Rolled body is collected;<br>3.4 Profile is adjusted as per product requirement;<br>3.5 Roller is set and adjusted as per product requirement;<br>3.6 Dabu is set along with rubber as per product requirement;<br>3.7 <u><b>Mould condition</b></u> is checked as per specification.                             |
| 4. Start the machine          | 4.1 Power source is identified and power switches are turned on for Jigger machine and dabu;<br>4.2 RPM of Jigger machine and spindle are checked.                                                                                                                                                                                                                                                                                                    |
| 5. Operate the Jigger machine | 5.1 Mould is fixed on the spindle as per procedure;<br>5.2 Clay slice is put on the mould according to instruction;<br>5.3 Clay slice is pressed and formed a product;<br>5.4 <u><b>Defects</b></u> of the product are identified;<br>5.5 Product with mould is removed from dabu;<br>5.6 Product is put to the dryer as per standard procedure;<br>5.7 Causes of fault are determined and rectified in accordance with procedures/work instructions. |

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| 6. Clean and maintain work area, tools and equipment                                                                                                                             | 6.1 Ensured that line is clear for all product and left in a safe manner for shutdown;<br>6.2 Machine is shutdown as per instruction manual;<br>6.3 Work area is cleaned;<br>6.4 Tools and equipment are cleaned, maintained and stored as per workplace procedures;<br>6.5 Work area is cleared and waste removed following workplace procedures;<br>6.6 Appropriate records and logs are maintained. |
| <b>Range of Variables</b>                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Variable</b>                                                                                                                                                                  | <b>Range</b> (may include but not limited to:)                                                                                                                                                                                                                                                                                                                                                         |
| 1. Personal Protective Equipment (PPE)                                                                                                                                           | 1.1 Safety glasses / goggles<br>1.2 Hair nets<br>1.3 Ear muffs / plugs<br>1.4 Gloves<br>1.5 Footwear and<br>1.6 Protective clothing                                                                                                                                                                                                                                                                    |
| 2. Materials                                                                                                                                                                     | 2.1 Body<br>2.2 Working mould                                                                                                                                                                                                                                                                                                                                                                          |
| 3. Tools                                                                                                                                                                         | 3.1 Clay hardness tester (Penetrometer)<br>3.2 Tacho meter<br>3.3 Knife<br>3.4 Allen Key set<br>3.5 Spanner<br>3.6 Dabu<br>3.7 Profile                                                                                                                                                                                                                                                                 |
| 4. Equipment                                                                                                                                                                     | 4.1 Clay cutter<br>4.2 Jigger machine<br>4.3 dryer                                                                                                                                                                                                                                                                                                                                                     |
| 5. Mould condition                                                                                                                                                               | 5.1 Moisture condition<br>5.2 Mould defects                                                                                                                                                                                                                                                                                                                                                            |
| 6. Defects                                                                                                                                                                       | 6.1 Warpage<br>6.2 Wobbling<br>6.3 Edge cracking<br>6.4 Overheated effect<br>6.5 Bending<br>6.6 Crack                                                                                                                                                                                                                                                                                                  |
| <b>Evidence Guide</b><br>The evidence must be authentic, valid, sufficient, reliable, consistent, recent and meet all requirements of current version of the Unit of Competency. |                                                                                                                                                                                                                                                                                                                                                                                                        |



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| 1. Critical aspects of competency | <p>Assessment required evidences that the candidate:</p> <ol style="list-style-type: none"> <li>1.1 checked RPM of roller head and spindle</li> <li>1.2 checked temperature of roller head and spindle</li> <li>1.3 adjusted roller head up and down level</li> <li>1.4 checked clay hardness</li> <li>1.5 fixed mould on the spindle</li> <li>1.6 removed product with mould and put to the dryer</li> <li>1.7 checked machine vibration or abnormal sound.</li> </ol> |
| 2. Underpinning knowledge         | <ol style="list-style-type: none"> <li>2.1 Mould condition</li> <li>2.2 Moisture contents</li> <li>2.3 Body plasticity</li> <li>2.4 Body hardness</li> <li>2.5 RPM of jigger machine</li> <li>2.6 Clay roll storage environment</li> <li>2.7 Defects of the product</li> <li>2.8 Drying process of green body.</li> </ol>                                                                                                                                               |
| 3. Underpinning skills            | <ol style="list-style-type: none"> <li>3.1 Identifying defects of the product</li> <li>3.2 Identifying the lubricants of the machine parts</li> <li>3.3 Using tachometer</li> <li>3.4 Using hardness tester</li> <li>3.5 Operating jiggering and jollying process</li> <li>3.6 Adjusting dabu.</li> </ol>                                                                                                                                                               |
| 4. Required attitudes             | <ol style="list-style-type: none"> <li>4.1 Commitment to occupational safety and health</li> <li>4.2 Promptness in carrying out activities</li> <li>4.3 Sincere and honest to duties</li> <li>4.4 Eagerness to learn</li> <li>4.5 Tidiness and timeliness</li> <li>4.6 Environmental concerns</li> <li>4.7 Respect for rights of peers and seniors at workplace</li> <li>4.8 Communication with peers and seniors at workplace.</li> </ol>                              |
| 5. Resource implication           | <p>The following resources must be provided:</p> <ol style="list-style-type: none"> <li>5.1 workplace (actual or simulated)</li> <li>5.2 tools, equipment and physical facilities appropriate to perform activities</li> <li>5.3 materials, consumables to perform activities</li> <li>5.4 drawing, specification and manuals.</li> </ol>                                                                                                                               |
| 6. Methods of assessment          | <p>Methods of assessment may include but not limited to:</p> <ol style="list-style-type: none"> <li>6.1 written test</li> <li>6.2 demonstration</li> <li>6.3 oral questioning</li> <li>6.4 portfolio.</li> </ol>                                                                                                                                                                                                                                                        |

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| 7. Context of assessment                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <p>7.1 Competency assessment must be done in a training center or in an actual or simulated workplace after completion of the training module</p> <p>7.2 Assessment should be done by NSDA certified/ nominated assessor</p> |
| <p><b>Accreditation Requirements</b></p> <p>Training Providers must be accredited by National Skills Development Authority (NSDA), the National Quality Assurance Body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of qualification under BNQF. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by NSDA.</p> |                                                                                                                                                                                                                              |

| Unit Code & Title                                | OU-CER- FORM-03-L2-V1: Make Tiles by Pressing Process                                                                                                                                                                                                                                                                                                                              |
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| Unit Descriptor                                  | <p>This unit covers the knowledge, skills and attitudes required to form product by pressing process.</p> <p>It includes following OSH practices, checking condition and preparing the press machine, forming product by pressing process, removing green product from mould, achieving the desired green product and cleaning and maintaining work area, tools and equipment.</p> |
| Nominal Hours                                    | 80 Hours                                                                                                                                                                                                                                                                                                                                                                           |
| Elements of Competency                           | <b>Performance Criteria</b><br><b><u>Bold &amp; Undersigned</u></b> terms are elaborated in the Range of Variables                                                                                                                                                                                                                                                                 |
| 1. Follow OSH practices                          | 1.1 All safety requirements/regulations are adhered to before, during and after use;<br>1.2 <b><u>Personal Protective Equipment (PPE)</u></b> is worn;<br>1.3 OSH (Occupational Safety and Health) instructions are followed according to job specification;<br>1.4 Necessary <b><u>Tools, equipment and materials</u></b> are identified as per job requirement.                  |
| 2. Check condition and prepare the press machine | 2.1 All <b><u>parts</u></b> of the press mould are cleaned;<br>2.2 <b><u>Press</u></b> is checked and adjusted if required;<br>2.3 Upper and lower part of the mould is placed to the machine;<br>2.4 Lubricants are applied to the parts of the machine as per requirement.                                                                                                       |
| 3. Form product by pressing process              | 3.1 Moisture content of granular is checked;<br>3.2 Moulds are levelled before filling;<br>3.3 Mould filling is checked according to procedure;<br>3.4 Filled powder in the mould is pressed;<br>3.5 Thickness of the product is checked as per specification.                                                                                                                     |
| 4. Remove green product from mould               | 4.1 Green product is removed from mould;<br>4.2 Problems with green product are identified and corrected where required;<br>4.3 Risk of damage to person, green product and environment are minimized;<br>4.4 Green product is checked according to company standards after forming;<br>4.5 Green products are removed to get <b><u>desired finish</u></b> .                       |

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| 5. Achieve the desired green product                 | 5.1 Verified that green product is in the required condition;<br>5.2 Task is carried out within specified work schedule;<br>5.3 Boarder excess is finished if required.                                                                                                                                                                                |
| 6. Clean and maintain work area, tools and equipment | 6.1 Tools and equipment are cleaned, maintained and stored as per workplace procedures;<br>6.2 Faulty and defective equipment is tagged and reported in accordance with workplace procedures;<br>6.3 Work area is cleared and waste removed following workplace procedures;<br>6.4 Waste materials are removed in accordance with workplace standards. |
| <b>Range of Variables</b>                            |                                                                                                                                                                                                                                                                                                                                                        |
| <b>Variable</b>                                      | <b>Range (may include but not limited to:)</b>                                                                                                                                                                                                                                                                                                         |
| 1. Personal Protective Equipment (PPE)               | 1.1 Safety glasses / goggles<br>1.2 Hair nets<br>1.3 Ear muffs / plugs<br>1.4 Hand Gloves<br>1.5 Footwear and<br>1.6 Protective clothing<br>1.7 Mask                                                                                                                                                                                                   |
| 2. Tools                                             | 2.1 Assorted wrench<br>2.2 Assorte screwdrivers<br>2.3 Allen key set<br>2.4 Spanner set<br>2.5 Combination pliers<br>2.6 Circlip pliers<br>2.7 Hamer<br>2.8 Hand Grinder<br>2.9 Socket wrench with socket                                                                                                                                              |
| 3. Equipment                                         | 3.1 Screw press<br>3.2 Friction press<br>3.3 Ball press<br>3.4 Filler box<br>3.5 Metalic Moulds                                                                                                                                                                                                                                                        |
| 4. Materials                                         | 4.1 Granular<br>4.2 Clay<br>4.3 Wooden mould<br>4.4 Plaster mould                                                                                                                                                                                                                                                                                      |

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| 5. Parts                                                                                                                                                                         | 5.1 Mould<br>5.2 Upper plungers<br>5.3 Lower plunger                                                                                                                                                                                                                                                                                               |
| 6. Desired finish                                                                                                                                                                | 6.1 Level (stand firm)<br>6.2 Free from corner broken<br>6.3 No bumps and indents<br>6.4 Excess clay removed from pour gate                                                                                                                                                                                                                        |
| <b>Evidence Guide</b><br>The evidence must be authentic, valid, sufficient, reliable, consistent, recent and meet all requirements of current version of the Unit of Competency. |                                                                                                                                                                                                                                                                                                                                                    |
| 1. Critical aspects of competency                                                                                                                                                | Assessment required evidences that the candidate:<br>1.1 followed OSH practices<br>1.2 checked condition and prepared the press machine<br>1.3 prepared product by pressing process<br>1.4 removed green product from mould<br>1.5 achieved the desired green product<br>1.6 cleaned and maintained work area, tools and equipment.                |
| 2. Underpinning knowledge                                                                                                                                                        | 2.1 pressure and strength<br>2.2 Moisture content<br>2.3 Pressing cycle<br>2.4 Grain size<br>2.5 Tools and Equipment used for production<br>2.6 Desired finish.                                                                                                                                                                                    |
| 3. Underpinning skills                                                                                                                                                           | 3.1 Checking condition and preparing the press machine<br>3.2 Preparing product by pressing process<br>3.3 Removing green product from mould<br>3.4 Achieving the desired green product.                                                                                                                                                           |
| 4. Required attitudes                                                                                                                                                            | 4.1 Commitment to occupational safety and health<br>4.2 Promptness in carrying out activities<br>4.3 Sincere and honest to duties<br>4.4 Eagerness to learn<br>4.5 Tidiness and timeliness<br>4.6 Environmental concerns<br>4.7 Respect for rights of peers and seniors at workplace<br>4.8 4.8 Communication with peers and seniors at workplace. |
| 5. Resource implication                                                                                                                                                          | The following resources must be provided:<br>5.1 workplace (actual or simulated)<br>5.2 tools, equipment and physical facilities appropriate to perform activities;<br>5.3 materials, consumables to perform activities<br>5.4 drawing, specification and manuals.                                                                                 |

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| 6. Methods of assessment                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <p>Methods of assessment may include but not limited to:</p> <p>6.1 written test</p> <p>6.2 demonstration</p> <p>6.3 oral questioning</p> <p>6.4 portfolio.</p>                                                              |
| 7. Context of assessment                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <p>7.1 Competency assessment must be done in a training center or in an actual or simulated workplace after completion of the training module</p> <p>7.2 Assessment should be done by NSDA certified/ nominated assessor</p> |
| <p><b>Accreditation Requirements</b></p> <p>Training Providers must be accredited by National Skills Development Authority (NSDA), the National Quality Assurance Body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of qualification under BNQF. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by NSDA.</p> |                                                                                                                                                                                                                              |

**References:**

1. Competency Standard on Forming, Bangladesh Technical Education Board (BTEB)

## Development of Competency Standard

The Competency Standards for National Skills Certificate Level-2 in Forming is developed by NSDA on 09 January, 2025.

### List of resources persons

| Sl No | Name and Designation                                   | Institution Address                                  | Mobile and E-mail                                                                         | Signature |
|-------|--------------------------------------------------------|------------------------------------------------------|-------------------------------------------------------------------------------------------|-----------|
| 1.    | <b>Md. Asaduzzaman Kazal<br/>Assistant Manager</b>     | RAK Ceramic Ltd. Dhaka.                              | Mobile: 01715626950<br>Email: asaduzzaman.kazal@rakceramics.com                           |           |
| 2.    | <b>Md. Jahangir Alam<br/>Assistant Manager</b>         | Great Wall Ceramic Ins. Ltd. Gazipur                 | Mobile: 01689660279<br>Email: jahangirnirob84@gmail.com                                   |           |
| 3.    | <b>Md. Zahangir Alam<br/>Jr. Assistant Manager</b>     | Mir Ceramic Ltd. Dhaka.                              | Mobile: 01625690919<br>Email: zahangiralam1027@gmail.com                                  |           |
| 4.    | <b>Md. Razibul Haque Mannan<br/>Senior Manager</b>     | Monno Ceramic Ltd. Dhaka.                            | Mobile: 01710569608<br>Email: jalil.ahmed@monno.com                                       |           |
| 5.    | <b>Md. Zulfikar Ali<br/>Coordinator</b>                | Ceramic Industry Skills Council, New Iskaton, Dhaka. | Mobile:01680038771<br>Email: <a href="mailto:bcmea.hr@gmail.com">bcmea.hr@gmail.com</a>   |           |
| 6.    | <b>Md. Ashraful Haque<br/>Senior Executive</b>         | Ceramic Industry Skills Council, New Iskaton, Dhaka. | Mobile:01717444446<br>Email: training.bcmea@gmail.com                                     |           |
| 7.    | <b>Md. Nazrul Islam<br/>Competency Standard Expert</b> | National Skills Development Authority (NSDA)         | Mobile: +880 1711 273708<br>Email: <a href="mailto:ndewli@yahoo.com">ndewli@yahoo.com</a> |           |



## Validation of Competency Standard

The Competency Standards for National Skills Certificate Level-2 in Forming is Validated by NSDA on 26 February, 2025.

### List of the members

| Sl. No. | Name and Address                                                                                                                                                                                    | Position in the committee | Signature |
|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|-----------|
| 1       | <b>Mr. Md. Sirajul Islam Mollah</b><br>Chairman, Ceramic ISC<br>Mobile: 01913535149<br>Email: <a href="mailto:ceramiciscbd@gmail.com">ceramiciscbd@gmail.com</a>                                    | Chairman                  |           |
| 2       | <b>Mrs. Taslima Ferdousie</b><br>Deputy General Manager<br>BISF, Dhaka<br>Mobile: 01745667809<br>Email: <a href="mailto:bisf.bcic@gmail.com">bisf.bcic@gmail.com</a>                                | Member                    |           |
| 3       | <b>Mr. Md. Mehedi Hasan Riaz</b><br>Assistant Manager<br>Akij Ceramic Ind. Ltd.<br>Mobile: 01739008366<br>Email: <a href="mailto:riaz.acrl@akijbashir.com">riaz.acrl@akijbashir.com</a>             | Member                    |           |
| 4       | <b>Mr. Md. Razibul Haque Mannan</b><br>Sr. Manager<br>Monno Ceramics Ind Ltd.<br>Mobile: 01755559053<br>Email: <a href="mailto:jalil.ahmed@monno.com">jalil.ahmed@monno.com</a>                     | Member                    |           |
| 5       | <b>Mr. Md. Rafiqul Isalm Bhuiyan</b><br>Consultant, Ceramic ISC<br>Mobile:01951880210<br>Email: <a href="mailto:consultantrafique@gmail.com">consultantrafique@gmail.com</a>                        | Member                    |           |
| 6       | <b>Mr. Md. Zulfiker Ali</b><br>Consultant, Ceramic ISC<br>Mobile:01680038771<br>Email: <a href="mailto:bcmea.hr@gmail.com">bcmea.hr@gmail.com</a>                                                   | Member                    |           |
| 7       | <b>Mr. Md. Ashraful Hoque</b><br>Sr. Executive, Farr Ceramics Ltd.<br>Mobile: 01717444446<br>Email: <a href="mailto:training.bcmea@gmail.com">training.bcmea@gmail.com</a>                          | Member                    |           |
| 8       | <b>Mr. Md. Nazrul Islam</b><br>Competency Standard Expert<br>National Skills Development Authority (NSDA)<br>Mobile: 0 1711 273708<br>Email: <a href="mailto:ndewli@yahoo.com">ndewli@yahoo.com</a> | Member                    |           |