

# **Assessment Evidence Guide**

## **For**

### **“Assistant Molder”**

**Level-2**

**Module name**  
**(Formative Assessment)**

*8<sup>th</sup> -12<sup>th</sup> March 2021*



**National Vocational & Technical**  
**Training Commission**

<b>Title of Qualification:</b> Assistant molder	CS Code:	Level: 2	Version: 01
<b>Competency Standard Title:</b> Prepare sand mold for casting	<b>Assessment Date (DD/MM/YY):</b>  <b>Assessment Time: 2 hours</b>		

Candidate Details	Name: .....  Registration/Roll Number:.....
Guidance for Candidate	<p><b>To meet this standard, you are required to complete the following within the given time frame (for practical demonstration &amp; assessment):</b></p> <p><b>Assessment Task 1:</b> Candidate is required to: Prepare sand for molding</p> <p><b>Assessment Task 2:</b> Candidate is required to: Produce mold by hand using two piece/split pattern</p> <p><b>And complete:</b></p> <ol style="list-style-type: none"> <li><b>1. Knowledge assessment test (Written or Oral)</b></li> <li><b>2. Portfolios at the time of assessment (if any)</b></li> </ol>
Minimum Evidence Required	<p><b>During a practical assessment, under observation by an assessor, you will complete:</b></p> <p><b>Assessment Task 1</b></p> <p><b>P1.</b> Prepare green sand by using sieve sand with riddle</p> <p><b>P2.</b> Add additives as per requirements(Binders, Bentonite, Coal dust)</p> <p><b>P3.</b> Sprinkle Water as required</p> <p><b>P4.</b> Perform mixing of sand with hand tools or in Muller mixer machine.</p> <p><b>Assessment Task 2</b></p> <p><b>P1.</b> Place pattern on molding platform</p> <p><b>P2.</b> Place drag part of the mold and ram molding sand by rammer.</p> <p><b>P3.</b> Roll over the drag part and strike off extra green sand.</p> <p><b>P4.</b> Place other half of the pattern (with dowel) and match it</p> <p><b>P5.</b> Place pouring basin at appropriate place</p> <p><b>P6.</b> Place runner at appropriate place.</p> <p><b>P7.</b> Place gate at appropriate place</p> <p><b>P8.</b> Create a parting line by pouring parting sand on drag part.</p> <p><b>P9.</b> Place cope part and sprue pin on runner.</p> <p><b>P10.</b> Add riddled molding sand and ram using rammer.</p> <p><b>P11.</b> Remove extra sand using strike off bar</p>

	<p><b>P12.</b> Make vents for gas escaping with vent wire at appropriate place.</p> <p><b>P13.</b> Remove cope part and make pouring gate with gate cutter.</p> <p><b>P14.</b> Make cavity by drawing out pattern halves politely.</p> <p><b>P15.</b> Repair mold as required</p>
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**Assessors Judgment Guide** (to be completed by the Assessor and signed both by the assessor and the candidate after the assessment)

Candidate Details	Name: ..... Registration/Roll Number: ..... Candidate Signature: .....
Assessment Outcome	COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/> Name of the Assessor: ..... Assessor's code: ..... Signature of the Assessor: .....

Assessment Summary (to be filled by the assessor)							
Activity	Method					Result	
Nature of Activity	Written	Oral	Observation	Portfolio	Role Play	Competent	Not Yet Competent
Practical Skill Demonstration			✓				
Knowledge Assessment	✓	✓					
Other Requirement							

Each Assessment Task (with performance criteria)				
<b>Assessment Task 1</b>		<b>Description of assessment task 1</b>		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
	<b>P1.</b> Prepare green sand by using sieve sand with riddle			
	<b>P2.</b> Add additives as per requirements(Binders, Bentonite, Coal dust)			
	<b>P3.</b> Sprinkle Water as required			
	Perform mixing of sand with hand tools or in Muller mixer machine			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Assessment Task 2		Description of assessment task 2		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1.	Place pattern on molding platform			
2.	Place drag part of the mold and ram molding sand by rammer.			
3.	Roll over the drag part and strike off extra green sand.			
4.	Place other half of the pattern (with dowel) and match it			
5.	Place pouring basin at appropriate place			
6.	Place runner at appropriate place.			
7.	Place gate at appropriate place			
8.	Create a parting line by pouring parting sand on drag part.			
9.	Place cope part and sprue pin on runner			
10.	Add riddled molding sand and ram using rammer			
11.	Remove extra sand using strike off bar			
12.	Make vents for gas escaping with vent wire at appropriate place.			
13.	Remove cope part and make pouring gate with gate cutter.			
14.	Make cavity by drawing out pattern halves politely.			
15.	Repair mold as required			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

<b>Title of Qualification:</b> Assisstant molder	CS Code:	Level:	Version: 01
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<b>Competency Standard Title:</b> Prepare sand mold for casting	<b>Assessment Date (DD/MM/YY):</b>  <b>Assessment Time:</b> 30 min
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Guidance for Candidate	<b>To complete your assessment for this Competency Standard, you need to answer the questions on the following pages successfully.</b>
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**Assessors Guide** (to be completed by the Assessor and signed both by the assessor and the candidate after the assessment)

Candidate Details	Name:.....Registration/Roll Number:  Candidate Signature: .....
Written Assessment Outcome	COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/>  Name of the Assessor: .....Assessor's code:  Signature of the Assessor: .....

<b>Title of Qualification:</b> Assisstant molder	CS Code:	Level:	Version: 01
<b>Competency Standard Title:</b> Prepare sand mold for casting	<b>Assessment Date (DD/MM/YY):</b>  <b>Assessment Time:</b> 30 min		

### WRITTEN ASSESSMENT

Question	Candidate's answer
Define types of molding	<ul style="list-style-type: none"> <li>Machine molding</li> <li>Hand molding</li> </ul>
1. Define Cope, Drag and Cheek	<ul style="list-style-type: none"> <li><b>Cope:</b> the upper part of the mold.</li> <li><b>Drag :</b> the lower part of the mold</li> <li><b>Cheek:</b> the middle part of the mold can more than one</li> </ul>
2. Name any two type of casting process.	<ul style="list-style-type: none"> <li>Sand casting</li> <li>Die casting</li> </ul>
3. What are 3 disadvantages of hand molding	<ul style="list-style-type: none"> <li>Time taking</li> <li>Low accuracy</li> <li>Dissimilarity</li> </ul>