

## Instruction Sheet for the Candidate

<b>Qualification</b>	<b>National Vocational Certificate in Metal Forming &amp; Processing Level 5</b>
<b>Competency Standard</b>	<b>Perform Pre-Rolling Operation</b>
<b>Purpose of Assessment</b>	<b>Formative Assessment</b>
<b>Candidate Details</b>	Name _____ Registration/Roll Number _____
<b>Guidance for Candidate</b>	<p><b>To meet this standard, you are required to complete the following within 04 Hrs. time frame (for practical demonstration &amp; assessment):</b></p> <ul style="list-style-type: none"> <li>• Select the suitable types of rollers</li> <li>• Adjust the Sequence of rolling stages to obtain the desired shape</li> </ul>
<b>Time: 04 Hrs.</b>	During a practical assessment, under observation by an assessor, you are required to
<b>Minimum Evidence Required</b>	<p><b>Select the suitable types of rollers</b></p> <ul style="list-style-type: none"> <li>• Check the property of rolling Materials as per requirement</li> <li>• Arrange the required Materials for rolling</li> <li>• Measure the work piece dimensions as per standard</li> <li>• Select the types of roller as per the shape, size and gap between the rollers and their contour</li> <li>• Set parameters (Pressure, Current, Speed, Time Temperature cycle, concentration, Tension) according to work piece specifications</li> <li>• Set the rollers according to required rolling process</li> <li>• Set the number of passes through the rollers required to get the finished product</li> </ul> <p><b>Adjust the sequence of rolling stages to obtain the desired shape</b></p> <ul style="list-style-type: none"> <li>• Check points in different mills during roller assembly.</li> <li>• Check the functions of guide and stripper guards</li> <li>• Perform the Cleaning / Lubrication of different parts of rolling mill.</li> <li>• Maintain the specified tolerance for straightness</li> <li>• Align the Rollers after changing the section</li> <li>• Adjust straightening rollers as per job requirement</li> <li>• Use hammer for tightening / opening lock nut and Ring nut.</li> <li>• Use Sample piece for fixing liners in between Roll pairs for Out of Square adjustment.</li> </ul>

## Self-Assessment Checklist

<b>Candidate Name</b>	
<b>Registration No.</b>	
<b>Qualification</b>	<b>National Vocational Certificate in Metal Forming &amp; Processing Level 5</b>
<b>Competency Standard</b>	Perform Pre-Rolling Operation
<b>Purpose of Assessment</b>	<b>Formative Assessment</b>
<b>Assessment Task</b>	<ul style="list-style-type: none"> <li>• Select the suitable types of rollers</li> <li>• Adjust the Sequence of rolling stages to obtain the desired shape</li> </ul>

I can.....

<b>Performance Criteria</b>	<b>Yes</b>	<b>No</b>
1. Check the property of rolling Materials as per requirement	<input type="checkbox"/>	<input type="checkbox"/>
2. Arrange the required Materials for rolling	<input type="checkbox"/>	<input type="checkbox"/>
3. Measure the work piece dimensions as per standard	<input type="checkbox"/>	<input type="checkbox"/>
4. Select the types of roller as per the shape, size and gap between the rollers and their contour	<input type="checkbox"/>	<input type="checkbox"/>
5. Set parameters (Pressure, Current, Speed, Time Temperature cycle, concentration, Tension) according to work piece specifications	<input type="checkbox"/>	<input type="checkbox"/>
6. Set the rollers according to required rolling process	<input type="checkbox"/>	<input type="checkbox"/>
7. Set the number of passes through the rollers required to get the finished product	<input type="checkbox"/>	<input type="checkbox"/>
8. Check points in different mills during roller assembly.	<input type="checkbox"/>	<input type="checkbox"/>
9. Check the functions of guide and stripper guards	<input type="checkbox"/>	<input type="checkbox"/>
10. Perform the Cleaning / Lubrication of different parts of rolling mill.	<input type="checkbox"/>	<input type="checkbox"/>
11. Maintain the specified tolerance for straightness	<input type="checkbox"/>	<input type="checkbox"/>
12. Align the Rollers after changing the section	<input type="checkbox"/>	<input type="checkbox"/>
13. Adjust straightening rollers as per job requirement	<input type="checkbox"/>	<input type="checkbox"/>
14. Use hammer for tightening / opening lock nut and Ring nut.	<input type="checkbox"/>	<input type="checkbox"/>
15. Use Sample piece for fixing liners in between Roll pairs for Out of Square adjustment.	<input type="checkbox"/>	<input type="checkbox"/>

Candidate's Signature\_\_\_\_\_ Assessor's Signature\_\_\_\_\_

Date: \_\_\_\_\_

## Assessors Judgment Guide

<b>Qualification</b>	<b>National Vocational Certificate in Metal Forming &amp; Processing Level 5</b>
<b>Competency Standard</b>	Perform Pre-Rolling Operation
<b>Purpose of Assessment</b>	<b>Formative Assessment</b>
<b>Candidate Details</b>	Name: _____ Registration/Roll Number: _____ Signature: _____
<b>Assessment Outcome</b>	COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/> Name of the Assessor _____ Assessor's code: _____ Signature: _____

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							

## Observation Checklist

<b>Assessment Task</b>	<ul style="list-style-type: none"> <li>Select the suitable types of rollers</li> <li>Adjust the Sequence of rolling stages to obtain the desired shape</li> </ul>			
<b>During the practical assessment, candidate demonstrated the following:</b>		<b>Yes</b>	<b>No</b>	<b>Remarks</b>
1.	Check the property of rolling Materials as per requirement			
2.	Arrange the required Materials for rolling			
3.	Measure the work piece dimensions as per standard			
4.	Select the types of roller as per the shape, size and gap between the rollers and their contour			
5.	Set parameters (Pressure, Current, Speed, Time Temperature cycle, concentration, Tension) according to work piece specifications			
6.	Set the rollers according to required rolling process			
7.	Set the number of passes through the rollers required to get the finished product			
8.	Check points in different mills during roller assembly.			
9.	Check the functions of guide and stripper guards			
10.	Perform the Cleaning / Lubrication of different parts of rolling mill.			
11.	Maintain the specified tolerance for straightness			
12.	Align the Rollers after changing the section			
13.	Adjust straightening rollers as per job requirement			
14.	Use hammer for tightening / opening lock nut and Ring nut.			
15.	Use Sample piece for fixing liners in between Roll pairs for Out of Square adjustment.			
<b>Competent</b> <input type="checkbox"/>		<b>Not Yet Competent</b> <input type="checkbox"/>		

## Knowledge Assessment

<b>Qualification</b>	<b>National Vocational Certificate in Metal Forming &amp; Processing Level 5</b>
<b>Competency Standard</b>	Perform Pre-Rolling Operation
<b>Purpose of Assessment</b>	<b>Formative Assessment</b>
<b>Candidate Details</b>	Name: _____ Registration/Roll Number: _____ Candidate Signature: _____
<b>Assessment Outcome</b>	<div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div> <b>COMPETENT</b> <input type="checkbox"/> </div> <div> <b>NOT YET COMPETENT</b> <input type="checkbox"/> </div> </div> Name of the Assessor: _____ Assessor's code: _____ Signature of the Assessor: _____

Candidate's response is not required to be identical, but similar concepts and/or keywords must be used. Oral questioning may be used to clarify candidate understanding of topic and its application.

Questions (Candidate confidently answered questions correctly and demonstrated understanding of the topics and their application)		Satisfactory	Not Satisfactory
1.	What is pure rolling condition?		
2.	Describe different types of rolling mills.		
3.	What is forward slip?		

4.	What is spring back force?		
5.	Describe different applications of rolling process.		

Feedback to the Candidate	
Candidate's Signature_____	Assessor's Signature _____