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PLASTIC PROCESSOR



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ASSESSMENT PACKAGE
National Vocational Certificate Level 3

Version 1 - September, 2018



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ASSESSMENT PACKAGE
National Vocational Certificate Level 3

Version 1 - September, 2018

Title of Qualification: National Vocational Certificate In Plastic Processor	CS Code:	Level: 3	Version:
Competency Standard Title: Operate Injection Moulding Machine	Assessment Date (DD/MM/YY):		

Guidance for Candidate	To complete your assessment for this Competency Standard, you need to answer the questions on the following pages successfully.
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Assessors Guide (to be completed by the Assessor and signed both by the assessor and the candidate after the assessment)

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

Title of Qualification: National Vocational Certificate In Plastic Processor	CS Code:	Level: 3	Version:
Competency Standard Title: Operate Injection Moulding Machine	Assessment Date (DD/MM/YY):		

WRITTEN ASSESSMENT

Question	Candidate's answer
1. What is injection capacity or shot capacity?	Maximum volume of material injected by the screw during one cycle of operation
2. What is plasticizing capacity?	It is the amount of material that can be processed by the machine per hour. It is expressed in kg/h
3. What is injection pressure?	It is the maximum pressure by which the material is injected through the nozzle. It is given in kg/cm ²
4. What is injection rate or injection velocity?	It is the maximum rate at which the screw can inject or shoot materials from the barrel during one shot.
5. What do you mean by clamping force?	It is the maximum force that the clamping system can exert on the mold or it is the maximum force by which the mold halves can be closed together. It is given in ton or kilo Newton.
6. What is max. daylight?	It is the maximum distance that the machine platen can be separated from each other and it can be obtained by adding the maximum mold thickness to the maximum opening stroke.
7. What are the main elements of mould?	The main parts of molds are core and cavity.
8. What are the types of injection mould?	Two plate, Three plate, Hot runner, Insulated runner, gas assisted, Stacked Manifold, heat and cool, etc.

Title of Qualification: National Vocational Certificate In Plastic Processor	CS Code:	Level: 3	Version:
Competency Standard Title: Operate Injection Moulding Machine	Assessment Date (DD/MM/YY):		

Guidance for Candidate	To complete your assessment for this Competency Standard, you need to answer the questions on the following pages successfully.
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Assessors Guide (to be completed by the Assessor and signed both by the assessor and the candidate after the assessment)

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

Title of Qualification: National Vocational Certificate In Plastic Processor	CS Code:	Level: 3	Version:
Competency Standard Title: Operate Injection Moulding Machine	Assessment Date (DD/MM/YY):		

WRITTEN ASSESSMENT

Question	Candidate's answer
9. What is injection capacity or shot capacity?	Maximum volume of material injected by the screw during one cycle of operation
10. What is plasticizing capacity?	It is the amount of material that can be processed by the machine per hour. It is expressed in kg/h
11. What is injection pressure?	It is the maximum pressure by which the material is injected through the nozzle. It is given in kg/cm ²
12. What is injection rate or injection velocity?	It is the maximum rate at which the screw can inject or shoot materials from the barrel during one shot.
13. What do you mean by clamping force?	It is the maximum force that the clamping system can exert on the mold or it is the maximum force by which the mold halves can be closed together. It is given in ton or kilo Newton.
14. What is max. daylight?	It is the maximum distance that the machine platen can be separated from each other and it can be obtained by adding the maximum mold thickness to the maximum opening stroke.
15. What are the main elements of mould?	The main parts of molds are core and cavity.
16. What are the types of injection mould?	Two plate, Three plate, Hot runner, Insulated runner, gas assisted, Stacked Manifold, heat and cool, etc.



**National Vocational & Technical
Training Commission**

Title of Qualification: National Vocational Certificate In Plastic Processor	CS Code:	Level: 3	Version:
Competency Standard Title: Operate Compression Moulding Machine	Assessment Date (DD/MM/YY):		

Guidance for Candidate	To complete your assessment for this Competency Standard, you need to answer the questions on the following pages successfully.
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Assessors Guide (to be completed by the Assessor and signed both by the assessor and the candidate after the assessment)

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

Title of Qualification: National Vocational Certificate In Plastic Processor	CS Code:	Level: 3	Version:
Competency Standard Title: Operate Compression Moulding Machine	Assessment Date (DD/MM/YY):		

WRITTEN ASSESSMENT

Question	Candidate's answer
17. What are typical products made by compression moulding?	Hair clips, shoe soles, rubber tires, etc.
18. What kind of materials are typically used in compression moulding?	Thermosets
19. In compression molding, the curing time does not depend on which of the following factors? a) Material b) Curing temperature c) Geometry d) Thickness	b) Curing temperature
20. What is the minimum temperature required in a compression molding process? a) 120°C b) 125°C c) 130°C d) 135°C	b) 125°C
21. Which are the benefits of compression Moulding over injection moulding?	Low cost, short cycle, low wastage, etc.
22. What are the two commonly occurring problems in compression moulded parts?	Flashing and pinholes
23. What is the minimum pressure required in a compression molding process? a) 0.5 MPa b) 1 MPa c) 1.5 MPa d) 2 MPa	a) 0.5MPa

Title of Qualification: National Vocational Certificate In Plastic Processor	CS Code:	Level: 3	Version:
Competency Standard Title: Operate Blow Moulding Machine	Assessment Date (DD/MM/YY):		

Guidance for Candidate	To complete your assessment for this Competency Standard, you need to answer the questions on the following pages successfully.
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Assessors Guide (to be completed by the Assessor and signed both by the assessor and the candidate after the assessment)

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

Title of Qualification: National Vocational Certificate In Plastic Processor	CS Code:	Level: 3	Version:
Competency Standard Title: Operate Blow Moulding Machine	Assessment Date (DD/MM/YY):		

WRITTEN ASSESSMENT

Question	Candidate's answer
24. Which of the following plastics is not used in blow molding? a) Terephthalate b) Polypropylene c) Polythene d) PVC	a) Terephthalate
25. What is the minimum air pressure required in blow molding process?	400KPa
26. What can be the maximum pressure to be given to a plastic for blow molding process?	800KPa
27. Which of the following is not an application of blow molding process? a) Toy bodies b) Door liners c) Bottles d) Pipes	d) Pipes
28. The initial cost in blow molding is low. a) True b) False	True
29. Single stage stretch blow moulding process is mostly used for small level production. a) True b) False	True
30. In extrusion blow moulding process, it is very difficult to trim away excess of plastics. a) True b) False	True

Title of Qualification: National Vocational Certificate In Plastic Processor	CS Code:	Level: 3	Version:
Competency Standard Title: Integrated Assessment Lev-3	Assessment Date (DD/MM/YY):		

Guidance for Candidate	To complete your assessment for this Competency Standard, you need to answer the questions on the following pages successfully.
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Assessors Guide (to be completed by the Assessor and signed both by the assessor and the candidate after the assessment)

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

Title of Qualification: National Vocational Certificate In Plastic Processor	CS Code:	Level: 3	Version:
Competency Standard Title: Integrated Assessment Lev-3	Assessment Date (DD/MM/YY):		

WRITTEN ASSESSMENT

Question	Candidate's answer
31. What is injection capacity or shot capacity?	Maximum volume of material injected by the screw during one cycle of operation
32. What is plasticizing capacity?	It is the amount of material that can be processed by the machine per hour. It is expressed in kg/h
33. What is injection pressure?	It is the maximum pressure by which the material is injected through the nozzle. It is given in kg/cm ²
34. Unit of injection speed is?	Cm ³ /s
5. What is injection rate or injection velocity?	It is the maximum rate at which the screw can inject or shoot materials from the barrel during one shot.
6. What is the normal rotation speed of extrusion screw?	120rpm
7. If we increase the haul off speed, what impact would it have on the pipe?	Thickness will decrease.
8. Thickness of parison is controlled by what parameters?	Extrusion speed

Question	Candidate's answer
9. What are the zones in extrusion screws?	Feed zone, melting zone, metering zone
10. What kind of materials are typically used in compression moulding?	Thermosets
11. What is the minimum air pressure required in blow molding process?	400KPa

Title of Qualification: National Vocational Certificate in Plastic Processor	CS Code:	Level: 3	Version:
Competency Standard Title: Module 6: Operate Injection Moulding Machine	Assessment Date (DD/MM/YY):		

Candidate Details	Name: Registration/Roll Number:
Guidance for Candidate	<p>To meet this standard, you are required to complete the following within 2 hour time frame (for practical demonstration & assessment):</p> <ol style="list-style-type: none"> Assessment Task 1: Adjust moulding machine parameters Assessment Task 2: Perform Dry Run Assessment Task 3: Perform Semi-auto operation Assessment Task 4: Perform Production Assessment Task 5: Perform follow up procedure for machine production Assessment Task 6: Submit production report Assessment Task 7: Transport finished product to concerned department <p>And complete:</p> <ol style="list-style-type: none"> Knowledge assessment test (Written or Oral) Portfolios at the time of assessment (if any)
Minimum Evidence Required	<p>During a practical assessment, under observation by an assessor, you will complete:</p> <p>Assessment Task 1</p> <p>Performance Criteria 1: Turn on machine as operation manual.</p> <p>Performance Criteria 2: Feed parameters as per PPS and job.</p> <p>Performance Criteria 3: Verify all parameters as per job/ data sheet</p>
	<p>During a practical assessment, under observation by an assessor, you will complete:</p> <p>Assessment Task 2</p> <p>Performance Criteria 1: Ensure Mould opening & closing position as per tool</p> <p>Performance Criteria 2: Ensure mechanism of Ejector of the tool</p> <p>Performance Criteria 3: Verify protection of tool as per operation manual and procedure.</p>
	<p>During a practical assessment, under observation by an assessor, you will complete:</p> <p>Assessment Task 3</p> <p>Performance Criteria 1: Ensure barrel temperatures has achieved according to data sheet</p> <p>Performance Criteria 2: Perform purging till required material ready for sample shot.</p> <p>Performance Criteria 3: Start moulding cycle as per SOP.</p>
	<p>During a practical assessment, under observation by an assessor, you will complete:</p> <p>Assessment Task 4</p> <p>Performance Criteria 1: Start machine on auto cycle mode as per operation manual.</p> <p>Performance Criteria 2: Perform periodic quality checks as per requirement.</p>

	<p>During a practical assessment, under observation by an assessor, you will complete:</p> <p>Assessment Task 5</p> <p>Performance Criteria 1: Ensure product packed in assigned packaging.</p> <p>Performance Criteria 2: Check feed level in hopper /bin, etc.</p> <p>Performance Criteria 3: Ensure machine lubrication as per requirement.</p>
	<p>During a practical assessment, under observation by an assessor, you will complete:</p> <p>Assessment Task 6</p> <p>Performance Criteria 1: Record production report as per given format (kg/units per hour).</p> <p>Performance Criteria 2: Submit report to concerned department.</p>
	<p>During a practical assessment, under observation by an assessor, you will complete:</p> <p>Assessment Task 7</p> <p>Performance Criteria 1: Place finished product in designated area</p> <p>Performance Criteria 2: Take approval of finished product from Quality control</p> <p>Performance Criteria 3: Deliver relevant packaging documents to store personnel.</p>

Continued on following page

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

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

Assessment Summary (to be filled by the assessor)							
Activity	Method					Result	
Nature of Activity	Written	Oral	Observation	Portfolio	Role Play	Competent	Not Yet Competent
Practical Skill Demonstration			✓		✓		
Knowledge Assessment	✓	✓					
Other Requirement							
Each Assessment Task (with performance criteria)							
Assessment Task 1			Description of assessment task 1: Adjust moulding machine parameters				
During the practical assessment, candidate demonstrated the following:					Yes	No	Remarks
1	Performance criteria 1: Turn on machine as operation manual.						
2	Performance criteria 2: Feed parameters as per PPS and job.						
3	Performance criteria 3: Verify all parameters as per job/ data sheet						
Competent <input type="checkbox"/>			Not Yet Competent <input type="checkbox"/>				

Each Assessment Task (with performance criteria)				
Assessment Task 2		Description of assessment task 2: Perform Dry Run		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1	Performance criteria 1: Ensure Mould opening & closing position as per tool			
2	Performance criteria 2: Ensure mechanism of Ejector of the tool			
3	Performance criteria 3: Verify protection of tool as per operation manual and procedure.			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Each Assessment Task (with performance criteria)				
Assessment Task 3		Description of assessment task 3: Perform Semi-auto operation		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1	Performance criteria 1: Ensure barrel temperatures has achieved according to data sheet			
2	Performance criteria 2: Perform purging till required material ready for sample shot.			
3	Performance Criteria 3: Start moulding cycle as per SOP.			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Each Assessment Task (with performance criteria)				
Assessment Task 4		Description of assessment task 4: Perform Production		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1	Performance criteria 1: Start machine on auto cycle mode as per operation manual.			
2	Performance criteria 2: Perform periodic quality checks as per requirement.			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Each Assessment Task (with performance criteria)				
Assessment Task 5		Description of assessment task 5: Perform follow up procedure for machine production		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1	Performance criteria 1: Ensure product packed in assigned packaging.			
2	Performance criteria 2: Check feed level in hopper /bin, etc.			
3	Performance Criteria 3: Ensure machine lubrication as per requirement.			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Each Assessment Task (with performance criteria)				
Assessment Task 6		Description of assessment task 6: Submit production report		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1	Performance criteria 1: Record production report as per given format (kg/units per hour).			
2	Performance criteria 2: Submit report to concerned department.			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Each Assessment Task (with performance criteria)				
Assessment Task 7		Description of assessment task 7: Transport finished product to concerned department		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1	Performance criteria 1: Place finished product in designated area			
2	Performance criteria 2: Take approval of finished product from Quality control			
3	Performance Criteria 3: Deliver relevant packaging documents to store personnel.			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Title of Qualification: National Vocational Certificate in Plastic Processor	CS Code:	Level: 3	Version:
Competency Standard Title: Module 7: Operate Pipe Extrusion Machine	Assessment Date (DD/MM/YY):		

Candidate Details	Name: Registration/Roll Number:
Guidance for Candidate	<p>To meet this standard, you are required to complete the following within 3 hour time frame (for practical demonstration & assessment):</p> <p> 10. Assessment Task 1: Inspect extrusion machine pre-start parameters 11. Assessment Task 2: Carry out operation 12. Assessment Task 3: Start production as per requirement 13. Assessment Task 4: Perform follow up procedure 14. Assessment Task 5: Submit production report 15. Assessment Task 6: Transport finished product </p> <p>And complete:</p> <p> 16. Knowledge assessment test (Written or Oral) 17. Portfolios at the time of assessment (if any) </p>
Minimum Evidence Required	<p>During a practical assessment, under observation by an assessor, you will complete:</p> <p>Assessment Task 1</p> <p>Performance Criteria 1: Check control variables as per process</p> <p>Performance Criteria 2: Check extruder parameters as per standard</p> <p>Performance Criteria 3: Check downstream parameters as per standard</p>
	<p>During a practical assessment, under observation by an assessor, you will complete:</p> <p>Assessment Task 2</p> <p>Performance Criteria 1: Perform purging.</p> <p>Performance Criteria 2: Ensure extrude flow as per requirement</p> <p>Performance Criteria 3: Guide the extrudate to haul-off unit.</p>
	<p>During a practical assessment, under observation by an assessor, you will complete:</p> <p>Assessment Task 3</p> <p>Performance Criteria 1: Adjust pipe sizing as per job card.</p> <p>Performance Criteria 2: Fix printer as per job card.</p> <p>Performance Criteria 3: Manage production rate as per machine capacity to achieve standard component</p>
	<p>During a practical assessment, under observation by an assessor, you will complete:</p> <p>Assessment Task 4</p> <p>Performance Criteria 1: Verify pipe length as per order</p> <p>Performance Criteria 2: Verify pipe standard dimensions and visual inspection</p> <p>Performance Criteria 3: Generate parameters report according to set format.</p>

	<p>During a practical assessment, under observation by an assessor, you will complete:</p> <p>Assessment Task 5</p> <p>Performance Criteria 1: Note machine hours as per format.</p> <p>Performance Criteria 2: Record production (kg/hr) as per format.</p> <p>Performance Criteria 3: Record rejection (kg/no.) as per procedure and format.</p>
	<p>During a practical assessment, under observation by an assessor, you will complete:</p> <p>Assessment Task 6</p> <p>Performance Criteria 1: Ensure finished goods are counted according to organization procedure.</p> <p>Performance Criteria 2: Deliver relevant packaging documents to store personnel</p>

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

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

Assessment Summary (to be filled by the assessor)							
Activity	Method					Result	
Nature of Activity	Written	Oral	Observation	Portfolio	Role Play	Competent	Not Yet Competent
Practical Skill Demonstration			✓		✓		
Knowledge Assessment	✓	✓					
Other Requirement							
Each Assessment Task (with performance criteria)							
Assessment Task 1			Description of assessment task 1: Inspect extrusion machine pre-start parameters				
During the practical assessment, candidate demonstrated the following:					Yes	No	Remarks
1	Performance criteria 1: Check control variables as per process						
2	Performance criteria 2: Check extruder parameters as per standard						
3	Performance criteria 3: Check downstream parameters as per standard						
Competent <input type="checkbox"/>			Not Yet Competent <input type="checkbox"/>				

Each Assessment Task (with performance criteria)				
Assessment Task 2		Description of assessment task 2: Carry out operation		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1	Performance criteria 1: Perform purging.			
2	Performance criteria 2: Ensure extrude flow as per requirement			
3	Performance criteria 3: Guide the extrudate to haul-off unit.			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Each Assessment Task (with performance criteria)				
Assessment Task 3		Description of assessment task 3: Start production as per requirement		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1	Performance criteria 1: Adjust pipe sizing as per job card.			
2	Performance criteria 2: Fix printer as per job card.			
3	Performance criteria 3: Manage production rate as per machine capacity to achieve standard component			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Each Assessment Task (with performance criteria)				
Assessment Task 4		Description of assessment task 4: Perform follow up procedure		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1	Performance criteria 1: Verify pipe length as per order			
2	Performance criteria 2: Verify pipe standard dimensions and visual inspection			
3	Performance criteria 3: Generate parameters report according to set format.			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Each Assessment Task (with performance criteria)				
Assessment Task 5		Description of assessment task 5: Submit production report		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1	Performance criteria 1: Note machine hours as per format.			
2	Performance criteria 2: Record production (kg/hr) as per format.			
3	Performance criteria 3: Record rejection (kg/no.) as per procedure and format.			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Each Assessment Task (with performance criteria)				
Assessment Task 6		Description of assessment task 6: Transport finished product		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1	Performance criteria 1: Ensure finished goods are counted according to organization procedure.			
2	Performance criteria 2: Deliver relevant packaging documents to store personnel			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Title of Qualification: National Vocational Certificate in Plastic Processor	CS Code:	Level: 3	Version:
Competency Standard Title: Module 8: Operate Compression Moulding Machine	Assessment Date (DD/MM/YY):		

Candidate Details	Name: Registration/Roll Number:
Guidance for Candidate	<p>To meet this standard, you are required to complete the following within 3 hour time frame (for practical demonstration & assessment):</p> <p> 18. Assessment Task 1: Adjust parameters of machine 19. Assessment Task 2: Perform dry run 20. Assessment Task 3: Perform semi-auto operation 21. Assessment Task 4: Perform production 22. Assessment Task 5: Perform follow-up procedure for machine production 23. Assessment Task 6: Submit production report 24. Assessment Task 7: Transport finish product to concerned department </p> <p>And complete:</p> <p> 25. Knowledge assessment test (Written or Oral) 26. Portfolios at the time of assessment (if any) </p>
Minimum Evidence Required	<p>During a practical assessment, under observation by an assessor, you will complete:</p> <p>Assessment Task 1</p> <p>Performance Criteria 1: Check raw material to set machine operation</p> <p>Performance Criteria 2: Turn on machine as per instruction manual and procedure set by organization</p> <p>Performance Criteria 3: Feed parameters as per job/ data sheet.</p>
	<p>During a practical assessment, under observation by an assessor, you will complete:</p> <p>Assessment Task 2</p> <p>Performance Criteria 1: Ensure Mould opening & closing position</p> <p>Performance Criteria 2: Ensure proper functioning of ejector mechanism of the Mould</p> <p>Performance Criteria 3: Verify safety of Mould as per SOP.</p>
	<p>During a practical assessment, under observation by an assessor, you will complete:</p> <p>Assessment Task 3</p> <p>Performance Criteria 1: Lubricate the Mould and feed plastic as per standard volume and component</p> <p>Performance Criteria 2: Start heating of Mould as per data sheet</p> <p>Performance Criteria 3: Feed material dose as per data sheet</p>
	<p>During a practical assessment, under observation by an assessor, you will complete:</p> <p>Assessment Task 4</p> <p>Performance Criteria 1: Start machine on auto cycle mode as per operation manual.</p> <p>Performance Criteria 2: Perform periodic quality checks as per requirement.</p>

	<p>During a practical assessment, under observation by an assessor, you will complete:</p> <p>Assessment Task 5</p> <p>Performance Criteria 1: Ensure product packed in assigned packaging.</p> <p>Performance Criteria 2: Check feed level in hopper /bin as per requirement.</p> <p>Performance Criteria 3: Ensure machine lubrication as per requirement.</p>
	<p>During a practical assessment, under observation by an assessor, you will complete:</p> <p>Assessment Task 6</p> <p>Performance Criteria 1: Record production report as per given format (kg or unit/ hour).</p> <p>Performance Criteria 2: Submit report to concerned department</p>
	<p>During a practical assessment, under observation by an assessor, you will complete:</p> <p>Assessment Task 7</p> <p>Performance Criteria 1: Place finished product in designated area.</p> <p>Performance Criteria 2: Take approval of finished product from Quality control</p> <p>Performance Criteria 3: Deliver relevant packaging documents to store personnel.</p>

Continued on following page

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

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

Assessment Summary (to be filled by the assessor)							
Activity	Method					Result	
Nature of Activity	Written	Oral	Observation	Portfolio	Role Play	Competent	Not Yet Competent
Practical Skill Demonstration			✓		✓		
Knowledge Assessment	✓	✓					
Other Requirement							
Each Assessment Task (with performance criteria)							
Assessment Task 1			Description of assessment task 1: Adjust parameters of machine				
During the practical assessment, candidate demonstrated the following:					Yes	No	Remarks
1	Performance criteria 1: Check raw material to set machine operation						
2	Performance criteria 2: Turn on machine as per instruction manual and procedure set by organization						
3	Performance criteria 3: Feed parameters as per job/ data sheet.						
Competent <input type="checkbox"/>			Not Yet Competent <input type="checkbox"/>				

Each Assessment Task (with performance criteria)				
Assessment Task 2		Description of assessment task 2: Perform dry run		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1	Performance criteria 1: Ensure Mould opening & closing position			
2	Performance criteria 2: Ensure proper functioning of ejector mechanism of the Mould			
3	Performance criteria 3: Verify safety of Mould as per SOP.			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Each Assessment Task (with performance criteria)				
Assessment Task 3		Description of assessment task 3: Perform semi-auto operation		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1	Performance criteria 1: Lubricate the Mould and feed plastic as per standard volume and component			
2	Performance criteria 2: Start heating of Mould as per data sheet			
3	Performance criteria 3: Feed material dose as per data sheet			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Each Assessment Task (with performance criteria)				
Assessment Task 4		Description of assessment task 4: Perform production		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1	Performance criteria 1: Start machine on auto cycle mode as per operation manual.			
2	Performance criteria 2: Perform periodic quality checks as per requirement.			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Each Assessment Task (with performance criteria)				
Assessment Task 5		Description of assessment task 5: Perform follow-up procedure for machine production		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1	Performance criteria 1: Ensure product packed in assigned packaging.			
2	Performance criteria 2: Check feed level in hopper /bin as per requirement.			
3	Performance criteria 3: Ensure machine lubrication as per requirement.			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Each Assessment Task (with performance criteria)				
Assessment Task 6		Description of assessment task 6: Submit production report		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1	Performance criteria 1: Record production report as per given format (kg or unit/ hour).			
2	Performance criteria 2: Submit report to concerned department			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Each Assessment Task (with performance criteria)				
Assessment Task 7		Description of assessment task 7: Transport finish product to concerned department		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1	Performance criteria 1: Place finished product in designated area.			
2	Performance criteria 2: Take approval of finished product from Quality control			
3	Performance criteria 3: Deliver relevant packaging documents to store personnel.			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		



**National Vocational & Technical
Training Commission**

Title of Qualification: National Vocational Certificate in Plastic Processor	CS Code:	Level: 3	Version:
Competency Standard Title: Module 9: Operate Blow Moulding Machine	Assessment Date (DD/MM/YY):		

Candidate Details	Name: Registration/Roll Number:
Guidance for Candidate	<p>To meet this standard, you are required to complete the following within 3 hour time frame (for practical demonstration & assessment):</p> <p> 27. Assessment Task 1: Adjust moulding machine parameters 28. Assessment Task 2: Perform dry run 29. Assessment Task 3: Perform semi-auto operation 30. Assessment Task 4: Perform production 31. Assessment Task 5: Perform follow up procedure for machine production 32. Assessment Task 6: Submit production report 33. Assessment Task 7: Transport finished product to concerned department </p> <p>And complete:</p> <p> 34. Knowledge assessment test (Written or Oral) 35. Portfolios at the time of assessment (if any) </p>
Minimum Evidence Required	<p>During a practical assessment, under observation by an assessor, you will complete:</p> <p>Assessment Task 1</p> <p>Performance Criteria 1: Turn on machine as operation manual. Performance Criteria 2: Feed parameters as per PPS and job. Performance Criteria 3: Verify all parameters as per job/ data sheet</p>
	<p>During a practical assessment, under observation by an assessor, you will complete:</p> <p>Assessment Task 2</p> <p>Performance Criteria 1: Ensure Mould opening & closing position as per tool Performance Criteria 2: Ensure Mould mechanism and Ejection system Performance Criteria 3: Verify protection of tool as per operation manual and procedure.</p>
	<p>During a practical assessment, under observation by an assessor, you will complete:</p> <p>Assessment Task 3</p> <p>Performance Criteria 1: Ensure molding temperatures has achieved according to data sheet Performance Criteria 2: Start heating till required material ready for sampling. Performance Criteria 3: Inspect the samples as per data sheet.</p>
	<p>During a practical assessment, under observation by an assessor, you will complete:</p> <p>Assessment Task 4</p> <p>Performance Criteria 1: Start machine on auto cycle mode as per SOP Performance Criteria 2: Perform periodic quality checks as per requirement</p>

	<p>During a practical assessment, under observation by an assessor, you will complete:</p> <p>Assessment Task 5</p> <p>Performance Criteria 1: Ensure product packed in assigned packaging.</p> <p>Performance Criteria 2: Check feed level in hopper/bin, etc.</p> <p>Performance Criteria 3: Ensure machine lubrication as per requirement</p>
	<p>During a practical assessment, under observation by an assessor, you will complete:</p> <p>Assessment Task 6</p> <p>Performance Criteria 1: Record production report as per given format (kg or units / hour).</p> <p>Performance Criteria 2: Submit report to concerned department.</p>
	<p>During a practical assessment, under observation by an assessor, you will complete:</p> <p>Assessment Task 7</p> <p>Performance Criteria 1: Place finished product in designated area</p> <p>Performance Criteria 2: Take approval of finished product from Quality control</p> <p>Performance Criteria 3: Deliver relevant packaging documents to store personnel.</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)							
Assessment Task 1			Description of assessment task 1: Adjust moulding machine parameters				
During the practical assessment, candidate demonstrated the following:					Yes	No	Remarks
1	Performance criteria 1: Turn on machine as operation manual.						
2	Performance criteria 2: Feed parameters as per PPS and job.						
3	Performance criteria 3: Verify all parameters as per job/ data sheet						
Competent <input type="checkbox"/>			Not Yet Competent <input type="checkbox"/>				

Each Assessment Task (with performance criteria)				
Assessment Task 2		Description of assessment task 2: Perform dry run		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1	Performance criteria 1: Ensure Mould opening & closing position as per tool			
2	Performance criteria 2: Ensure Mould mechanism and Ejection system			
3	Performance criteria 3: Verify protection of tool as per operation manual and procedure.			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Each Assessment Task (with performance criteria)				
Assessment Task 3		Description of assessment task 3: Perform semi-auto operation		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1	Performance criteria 1: Ensure molding temperatures has achieved according to data sheet			
2	Performance criteria 2: Start heating till required material ready for sampling.			
3	Performance criteria 3: Inspect the samples as per data sheet.			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Each Assessment Task (with performance criteria)				
Assessment Task 4		Description of assessment task 4: Perform production		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1	Performance criteria 1: Start machine on auto cycle mode as per SOP			
2	Performance criteria 2: Perform periodic quality checks as per requirement			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Each Assessment Task (with performance criteria)				
Assessment Task 5		Description of assessment task 5: Perform follow up procedure for machine production		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1	Performance criteria 1: Ensure product packed in assigned packaging.			
2	Performance criteria 2: Check feed level in hopper/bin, etc.			
3	Performance criteria 3: Ensure machine lubrication as per requirement			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Each Assessment Task (with performance criteria)				
Assessment Task 6		Description of assessment task 6: Submit production report		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1	Performance criteria 1: Record production report as per given format (kg or units / hour).			
2	Performance criteria 2: Submit report to concerned department.			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Each Assessment Task (with performance criteria)				
Assessment Task 7		Description of assessment task 7: Transport finished product to concerned department		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1	Performance criteria 1: Place finished product in designated area			
2	Performance criteria 2: Take approval of finished product from Quality control			
3	Performance criteria 3: Deliver relevant packaging documents to store personnel.			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Title of Qualification: National Vocational Certificate In Plastic Processor	CS Code:	Level: 3	Version:
Competency Standard Title: Integrated Assessment Lev-3	Assessment Date (DD/MM/YY):		

Candidate Details	Name: Registration/Roll Number:
Guidance for Candidate	<p>To meet this standard, you are required to complete the following within the given time frame (04 hours) (for practical and & assessment):</p> <p>1. Assessment Task 1: Operate Injection Moulding Machine. OR Assessment Task 2: Operate Pipe Extrusion Machine. OR Assessment Task 3: Operate Compression Moulding Machine. OR Assessment Task 4: Operate Blow Moulding Machine.</p> <p>And complete:</p> <p>2. Knowledge assessment test (Written or Oral) 3. Portfolios at the time of assessment (if any)</p>

Minimum Evidence Required	<p>During a practical assessment, under observation by an assessor, you will complete:</p> <p>Assessment Task 1</p> <p>Performance Criteria 1: Ensure health and safety.</p> <p>Performance Criteria 2: Ensure desired temperatures are achieved</p> <p>Performance Criteria 3: Ensure raw material is ready for processing.</p> <p>Performance Criteria 4: Feed parameters as per job card</p> <p>Performance Criteria 5: Ensure mould daylight opening</p> <p>Performance Criteria 6: Ensure proper function of ejector mechanism and auxiliary equipment</p> <p>Performance Criteria 7: Perform Moulding cycle on semi-auto mode</p> <p>Performance Criteria 8: Maintain housekeeping after completion of task</p> <p>Assessment Task 2</p> <p>Performance Criteria 1: Ensure health and safety</p> <p>Performance Criteria 2: Select tool, machine, material as per job card</p> <p>Performance Criteria 3: Carry out operation</p> <p>Performance Criteria 4: Perform production</p> <p>Performance Criteria 5: Maintain housekeeping after completion of task</p> <p>Assessment Task 3</p> <p>Performance Criteria 1: Ensure health and safety.</p> <p>Performance Criteria 2: Select tool, machine, material as per job card.</p> <p>Performance Criteria 3: Turn on machine as per instruction manual</p> <p>Performance Criteria 4: Ensure correct daylight opening</p> <p>Performance Criteria 5: Produce desired sample</p> <p>Performance Criteria 6: Maintain housekeeping after completion of task</p> <p>Assessment Task 4</p> <p>Performance Criteria 1: Ensure health and safety.</p> <p>Performance Criteria 2: Select tool, machine, material as per job card.</p> <p>Performance Criteria 3: Turn on machine as per instruction manual</p> <p>Performance Criteria 4: Ensure correct daylight opening</p> <p>Performance Criteria 5: Produce desired sample</p> <p>Performance Criteria 6: Maintain housekeeping after completion of task.</p> <p>Portfolios required at the time of assessment (if any) for</p> <p>Performance criteria 1 for the evaluation of portfolio: Submit record of all completed formative assessments. S/he must be competent in all formative assessments</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)				
Assessment Task 1		Operate Injection Moulding Machine.		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1	Performance Criteria 1: Ensured health and safety.			
2	Performance Criteria 2: Ensure desired temperatures are achieved			
3	Performance Criteria 3: Ensure raw material is ready for processing.			
4	Performance Criteria 4: Feed parameters as per job card			
5	Performance Criteria 5: Ensure mould daylight opening			
6	Performance Criteria 6: Ensure proper function of ejector mechanism and auxiliary equipment			
7	Performance Criteria 7: Perform Moulding cycle on semi-auto mode			
8	Performance Criteria 8: Maintained housekeeping after completion of task			

Each Assessment Task (with performance criteria)				
Assessment Task 2		Operate Pipe Extrusion Machine		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1	Performance Criteria 1: Ensured health and safety			
2	Performance Criteria 2: Select tool, machine, material as per job card			
3	Performance Criteria 3: Carry out operation			
4	Performance Criteria 4: Perform production			
5	Performance Criteria 5: Maintained housekeeping after completion of task			

Each Assessment Task (with performance criteria)				
Assessment Task 3		Operate Compression Moulding Machine		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1	Performance Criteria 1: Ensured health and safety.			
2	Performance Criteria 2: Select tool, machine, material as per job card.			
3	Performance Criteria 3: Turn on machine as per instruction manual			
4	Performance Criteria 4: Ensure correct daylight opening			
5	Performance Criteria 5: Produce desired sample			
6	Performance Criteria 6: Maintained housekeeping after completion of task			

Each Assessment Task (with performance criteria)				
Assessment Task 4		Operate Blow Moulding Machine		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1	Performance Criteria 1: Ensured health and safety.			
2	Performance Criteria 2: Select tool, machine, material as per job card.			
3	Performance Criteria 3: Turn on machine as per instruction manual			
4	Performance Criteria 4: Ensure correct daylight opening			
5	Performance Criteria 5: Produce desired sample			
6	Performance Criteria 6: Maintained housekeeping after completion of task			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		
Portfolio(if any)		Description of portfolio		
Current <input type="checkbox"/> Sufficient <input type="checkbox"/> Authentic <input type="checkbox"/> Valid <input type="checkbox"/> Reliable <input type="checkbox"/>				
Portfolio meet the following performance standards:		Yes	No	Remarks
1	Performance criteria 1 for the evaluation of portfolio: Submitted record of all completed formative assessments. S/he must be competent in all formative assessments.			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

