Automotive Plastic Moulding Technician

QP Code: ASC/Q4401

Version: 2.0

NSQF Level: 4

Automotive Skills Development Council || 153, Gr Floor, Okhla Industrial Area, Phase - III, Leela Building
New Delhi - 110020

Contents

ASC/Q4401: Automotive Plastic Moulding Technician

Brief Job Description

The individual is involved in operating the moulding process apparatus and performing various moulding and post-moulding activities.

Personal Attributes

The person should be patient, organised, team-oriented and have the ability to work for long hours in adverse conditions. They should be keen observers and have an eye for detail and quality.

Applicable National Occupational Standards (NOS)

Compulsory NOS:

1. ASC/N9803: Organize work and resources (Manufacturing)
2. ASC/N9802: Interact effectively with colleagues, customers and others
3. ASC/N4401: Prepare for plastic moulding process
4. ASC/N4402: Perform plastic moulding and post-moulding operations

Qualification Pack (QP) Parameters

Sector	Automotive
Sub-Sector	Manufacturing
Occupation	Plastic Moulding Operation
Country	India
NSQF Level	4
Aligned to NCO/ISCO/ISIC Code	NCO-2015/8142.1301
Minimum Educational Qualification & Experience	8th Class + 2 years ITI with 2 years of relevant experience OR 10th Class pass with 2 years of relevant experience OR 10th Class + 2 years ITI OR 12th Class with 1 Year of experience

Minimum Level of Education for Training in School	
Pre-Requisite License or Training	NA
Minimum Job Entry Age	18 Years
Last Reviewed On	29/07/2021
Next Review Date	29/07/2026
NSQC Approval Date	29/07/2021
Version	2.0

ASC/N9803: Organize work and resources (Manufacturing)

Description

This NOS unit is about implementing safety, planning work, adopting sustainable practices for optimising use of resources

Scope

The scope covers the following :

- Maintain safe and secure working environment
- Health and hygiene
- Perform work as per quality standards
- Effective waste management practices
- Material/energy conservation practices

Elements and Performance Criteria

Maintain safe and secure working environment

To be competent, the user/individual on the job must be able to:

PC1. identify hazardous activities and the possible causes of risks or accidents in the workplace

PC2. follow safe working practices while dealing with hazards to ensure safety of self and others

PC3. carry out routine check of the machine for identifying potential hazards

PC4. use appropriate protective clothing/equipment for specific tasks and work

PC5. follow safety hazards and preventive techniques during fire drill

PC6. report any identified breaches in health, safety and security policies and procedures to the designated person

Health and hygiene

To be competent, the user/individual on the job must be able to:

PC7. ensure workstation and equipment are regularly clean and sanitized

PC8. clean hands with soap, alcohol-based sanitizer regularly

PC9. avoid contact with ill people and self-isolate in a similar situation

PC10. wear and dispose PPEs regularly and appropriately

PC11. report advanced hygiene and sanitation issues to appropriate authority

PC12. follow stress and anxiety management techniques

Perform work as per quality standards

To be competent, the user/individual on the job must be able to:

PC13. ensure that work is accomplished as per the requirements within the specified timeline

PC14. ensure team goals are given preference over individual goals

Effective waste management practices

To be competent, the user/individual on the job must be able to:

PC15. follow the fundamentals of 5S for waste management

PC16. segregate waste into different categories

PC17. follow processes specified for disposal of hazardous waste

PC18. identify recyclable, non-recyclable and hazardous waste

PC19. dispose non-recyclable, recyclable and reusable waste appropriately at identified location

Material/energy conservation practices

To be competent, the user/individual on the job must be able to:

PC20. identify ways to optimize usage of material in various tasks/activities/processes

PC21. check for spills/leakages in various tasks/activities/processes

PC22. plug spills/leakages and escalate to appropriate authority if unable to rectify

PC23. check if the equipment/machine is functioning normally before commencing work and rectify wherever required

PC24. report malfunctioning (fumes/ sparks/emission/vibration/noise) and lapse in maintenance of equipment

PC25. ensure electrical equipment and appliances are properly connected and turned off when not in use

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

KU1. organisation procedures for health, safety and security, individual role and responsibilities in this context

KU2. the organisation's emergency procedures for different emergency situations and the importance of following the same

KU3. evacuation procedures for workers and visitors

KU4. how and when to report hazards as well as the limits of responsibility for dealing with hazards

KU5. potential hazards, risks and threats based on the nature of work

KU6. preventative and remedial actions to be taken in case of exposure to toxic material

KU7. various types of fire extinguisher

KU8. various types of safety signs and their meaning

KU9. appropriate first aid treatment relevant to different condition e.g. bleeding, minor burns, eye injuries etc.

KU10. relevant standards, procedures and policies related to 5S followed in the company

KU11. the various materials used and their storage norms

KU12. efficient utilisation of material and water

KU13. basics of electricity and prevalent energy efficient devices

KU14. common practices of conserving electricity

KU15. common sources and ways to minimize pollution

KU16. categorisation of waste into dry, wet, recyclable, non-recyclable and items of single-use plastics

KU17. usage of different colors of dustbins

KU18. waste management techniques

KU19. significance of greening

Generic Skills (GS)

User/individual on the job needs to know how to:

GS1. read safety instructions/guidelines
GS2. modify work practices to improve them
GS3. ask for clarifications from superior about the job requirement
GS4. work with supervisors/team members to carry out work related tasks
GS5. complete tasks efficiently and accurately within stipulated time
GS6. inform/report to concerned person in case of any problem
GS7. make timely decisions for efficient utilization of resources
GS8. write reports such as accident report, in at least English/regional language
GS9. be punctual and utilize time efficiently

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Maintain safe and secure working environment	11	5	-	7
PC1. identify hazardous activities and the possible causes of risks or accidents in the workplace	2	1	-	2
PC2. follow safe working practices while dealing with hazards to ensure safety of self and others	2	-	-	1
PC3. carry out routine check of the machine for identifying potential hazards	2	1	-	1
PC4. use appropriate protective clothing/equipment for specific tasks and work	2	1	-	1
PC5. follow safety hazards and preventive techniques during fire drill	2	1	-	1
PC6. report any identified breaches in health, safety and security policies and procedures to the designated person	1	1	-	1
Health and hygiene	7	5	-	2
PC7. ensure workstation and equipment are regularly clean and sanitized	2	2	-	1
PC8. clean hands with soap, alcohol-based sanitizer regularly	1	1	-	1
PC9. avoid contact with ill people and self-isolate in a similar situation	1	-	-	-
PC10. wear and dispose PPEs regularly and appropriately	1	-	-	-
PC11. report advanced hygiene and sanitation issues to appropriate authority	1	1	-	-
PC12. follow stress and anxiety management techniques	1	1	-	-
Perform work as per quality standards	5	3	-	2
PC13. ensure that work is accomplished as per the requirements within the specified timeline	2	2	-	1

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC14. ensure team goals are given preference over individual goals	3	1	-	1
Effective waste management practices	15	10	-	4
PC15. follow the fundamentals of 5S for waste management	3	2	-	1
PC16. segregate waste into different categories	2	1	-	-
PC17. follow processes specified for disposal of hazardous waste	2	2	-	1
PC18. identify recyclable, non-recyclable and hazardous waste	4	2	-	1
PC19. dispose non-recyclable, recyclable and reusable waste appropriately at identified location	4	3	-	1
Material/energy conservation practices	12	7	-	5
PC20. identify ways to optimize usage of material in various tasks/activities/processes	2	1	-	1
PC21. check for spills/leakages in various tasks/activities/processes	2	1	-	1
PC22. plug spills/leakages and escalate to appropriate authority if unable to rectify	2	1	-	-
PC23. check if the equipment/machine is functioning normally before commencing work and rectify wherever required	2	2	-	1
PC24. report malfunctioning (fumes/ sparks/emission/vibration/noise) and lapse in maintenance of equipment	2	1	-	1
PC25. ensure electrical equipment and appliances are properly connected and turned off when not in use	2	1	-	1
NOS Total	**50**	**30**	**-**	**20**

National Occupational Standards (NOS) Parameters

NOS Code	ASC/N9803
NOS Name	Organize work and resources (Manufacturing)
Sector	Automotive
Sub-Sector	Generic
Occupation	Generic
NSQF Level	4
Credits	TBD
Version	1.0
Last Reviewed Date	29/07/2021
Next Review Date	29/07/2026
NSQC Clearance Date	29/07/2021

ASC/N9802: Interact effectively with colleagues, customers and others

Description

This NOS unit is about communicating with customers and colleagues/superiors, either in own work group or in other work groups within organisation.

Scope

The scope covers the following :

- Communicate effectively with colleagues, customers and others
- Interact with supervisor or superior

Elements and Performance Criteria

Communicate effectively with colleagues, customers and others

To be competent, the user/individual on the job must be able to:

PC1. maintain clear communication with colleagues, customers and others, wherever needed, through all means i.e. face-to-face, telephonic or written

PC2. adjust communication styles to reflect gender and persons with disability (PwD) sensitivity

PC3. work in a way that shows respect for colleagues and others

PC4. follow the organisation's policies and procedures while working in a team

PC5. respect personal space of colleagues and customers

Interact with supervisor or superior

To be competent, the user/individual on the job must be able to:

PC6. identify work requirements by receiving instructions from reporting supervisor

PC7. escalate problems to supervisors that cannot be handled including repairs and maintenance of machine

PC8. report the completed work

PC9. rectify errors as per feedback

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

KU1. the importance of effective communication and establishing good working relationships with colleagues and supervisor

KU2. different methods of communication as per the circumstances

KU3. gender based concepts, issues and legislation

Generic Skills (GS)

User/individual on the job needs to know how to:

GS1. read instructions/guidelines/procedures

GS2. listen effectively and orally communicate information
GS3. ask for clarification and advice from the concerned person
GS4. maintain positive and effective relationships with colleagues and customers
GS5. evaluate the possible solution(s) to the problem
GS6. deliver consistent and reliable service to customers
GS7. complete written work with attention to detail
GS8. check that the work meets customer requirements

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Communicate effectively with colleagues, customers and others	36	11	-	14
PC1. maintain clear communication with colleagues, customers and others, wherever needed, through all means i.e. face-to-face, telephonic or written	8	-	-	4
PC2. adjust communication styles to reflect gender and persons with disability (PwD) sensitivity	8	-	-	-
PC3. work in a way that shows respect for colleagues and others	7	4	-	3
PC4. follow the organisation's policies and procedures while working in a team	7	4	-	3
PC5. respect personal space of colleagues and customers	6	3	-	4
Interact with supervisor or superior	14	19	-	6
PC6. identify work requirements by receiving instructions from reporting supervisor	7	4	-	-
PC7. escalate problems to supervisors that cannot be handled including repairs and maintenance of machine	-	5	-	3
PC8. report the completed work	7	5	-	-
PC9. rectify errors as per feedback	-	5	-	3
NOS Total	**50**	**30**	**-**	**20**

National Occupational Standards (NOS) Parameters

NOS Code	ASC/N9802
NOS Name	Interact effectively with colleagues, customers and others
Sector	Automotive
Sub-Sector	Generic
Occupation	Generic
NSQF Level	4
Credits	TBD
Version	1.0
Last Reviewed Date	29/07/2021
Next Review Date	29/07/2026
NSQC Clearance Date	29/07/2021

ASC/N4401: Prepare for plastic moulding process

Description

This NOS is about preparing for moulding operations as per the given work order and the standards specified by the organization.

Scope

The scope covers the following :

- Identify work requirements
- Prepare for moulding operations

Elements and Performance Criteria

Identify work requirements

To be competent, the user/individual on the job must be able to:

PC1. identify the work to be done by interpreting the engineering drawings/work order/SOPs and instructions from supervisor

PC2. identify the tools, equipment, additives, dies, coolant and input materials required for the job

PC3. select and arrange the right material, additives, dies, coolant, tools, equipment and consumables as per the SOP and job requirements

Prepare for plastic moulding work

To be competent, the user/individual on the job must be able to:

PC4. use appropriate Personal Protective Equipment (PPE) for safe working in plastin moulding shop

PC5. check the input material, tools and moulding apparatus for any defects and that they are as per the required quality standards

PC6. check the operation of molding apparatus like hopper, pouring nozzles, heaters, reciprocating screws, plungers etc. as per the checklist provided

PC7. fix the die/mold to the extrusion/injection molding apparatus as per the WI/SOPs

PC8. use weighing machines to measure the quantity of granular input material and additives and ensure that the correct ratio of granules and additives are put in the hopper

PC9. perform pre-heating of hygroscopic plastic granules to remove the moisture content

PC10. ensure that dies and moulding apparatus are cleaned properly and free from oil, grease and dust particles

PC11. set the moulding machine and its parameters as per the job requirements and SOP

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

KU1. relevant standards and procedures followed in the company

KU2. basic process followed for moulding of the pieces

KU3. different types of moulding processes, associated equipment like dies moulds, screw/reciprocating screw/ plunger, heaters, auxiliary equipment like pick up robo, mould temperature controller , etc. and their working

KU4. number of heaters required to generate the given temperature/ current requirements

KU5. different types of dies to be used for moulding operations and their setting up mechanism

KU6. impact of various moulding parameters like heater temperature, hydraulic pressure/air pressure/vacuum pressure, rotating speed of the screw, operating current and voltage, injection time, refilling time etc. on the final output

KU7. various types of plastics like thermoplastics/ thermosetting plastics and their properties

KU8. various types of coolants and their properties

KU9. Standard Operating Procedures (SOP) recommended by OEM for using tools and moulding apparatus

KU10. how to collect and store consumables, tools etc. as per organisational procedures

KU11. use of appropriate PPE, material handling equipment and tools for completing the tasks

KU12. how to check defects in the moulding apparatus and tools

KU13. safety requirements during the moulding work

Generic Skills (GS)

User/individual on the job needs to know how to:

GS1. read and interpret drawings, work instructions, equipment manuals and process documents

GS2. communicate the process requirements to the supervisor and co-workers

GS3. attentively listen and comprehend the information given by the supervisor/team members

GS4. write work related information in English/regional language

GS5. recognise a workplace problem and take suitable action

GS6. analyse and apply the information gathered from observation, experience, reasoning or communication to act efficiently

GS7. plan and organise work according to the work requirements

GS8. complete the assigned tasks with minimum supervision

GS9. report to the supervisor or deal with a colleague individually, depending on the type of concern

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Identify work requirements	12	15	-	7
PC1. identify the work to be done by interpreting the engineering drawings/work order/SOPs and instructions from supervisor	2	3	-	1
PC2. identify the tools, equipment, additives, dies, coolant and input materials required for the job	5	5	-	3
PC3. select and arrange the right material, additives, dies, coolant, tools, equipment and consumables as per the SOP and job requirements	5	7	-	3
Prepare for plastic moulding work	18	35	-	13
PC4. use appropriate Personal Protective Equipment (PPE) for safe working in plastin moulding shop	2	3	-	1
PC5. check the input material, tools and moulding apparatus for any defects and that they are as per the required quality standards	3	7	-	2
PC6. check the operation of molding apparatus like hopper, pouring nozzles, heaters, reciprocating screws, plungers etc. as per the checklist provided	2	5	-	2
PC7. fix the die/mold to the extrusion/injection molding apparatus as per the WI/SOPs	1	3	-	1
PC8. use weighing machines to measure the quantity of granular input material and additives and ensure that the correct ratio of granules and additives are put in the hopper	2	4	-	2
PC9. perform pre-heating of hygroscopic plastic granules to remove the moisture content	2	4	-	2
PC10. ensure that dies and moulding apparatus are cleaned properly and free from oil, grease and dust particles	2	2	-	1
PC11. set the moulding machine and its parameters as per the job requirements and SOP	4	7	-	2
NOS Total	30	50	-	20

National Occupational Standards (NOS) Parameters

NOS Code	ASC/N4401
NOS Name	Prepare for plastic moulding process
Sector	Automotive
Sub-Sector	Manufacturing
Occupation	Plastic Moulding Operation
NSQF Level	4
Credits	TBD
Version	2.0
Last Reviewed Date	29/07/2021
Next Review Date	29/07/2026
NSQC Clearance Date	29/07/2021

ASC/N4402: Perform plastic moulding and post-moulding operations

Description

This NOS unit is about moulding the plastic into the desired shape and performing post-moulding activities like inspection, repairing, cleaning etc.

Scope

The scope covers the following :

- Perform plastic moulding operations
- Perform post-moulding process activities
- Perform batch quality approval procedure

Elements and Performance Criteria

Perform plastic moulding operations

To be competent, the user/individual on the job must be able to:

PC1. select the right program in the moulding machine and make changes/ modifications in the program as per the work instructions and production requirements

PC2. turn valves of machines to regulate speed and quantity of the plastic coming out of the hopper through feeder

PC3. feed the plastic granules in the machine and observe the feeding operation for parting leakage, interrupted pouring or any other abnormality

PC4. start the machine, produce a sample piece and measure it for conformance to required specifications as per the master sample/reference, sketches/ engineering drawing shared

PC5. adjust the parameters of the machine if required to get the desired specifications

PC6. run the machine for mass production of workpieces, when first-piece meets the specified requirements

PC7. monitor the process parameters by reading the various gauges and correct them if not within standards

PC8. monitor the moulding operations and record the operational data as per the frequency in the control plan

PC9. remove the moulded pieces from the machine once the cycle is completeby using proper clamps and other handling tools

PC10. report any emergencies/deviations from the Work Instructions/Control Panel/SOP to the supervisor immediately

Perform post-moulding process activities

To be competent, the user/individual on the job must be able to:

PC11. clean the plastic molding parts by removing runners/gates or extra materials through de-gating and de-flashing processes

PC12. carry out labeling on the workpieces specifying the information related to moulding process and standards followed in organisation

PC13. check the work pieces as per the work instructions for product quality

PC14. compare the texture, color, surface properties, hardness and strength with the given product specifications

PC15. note down the observations of the basic inspection process and identify pieces that are as per the specified standards

PC16. rectify minor defects like flash in hole, non-filling, etc. by cutting, finishing etc.

PC17. segregate the completed pieces into Ok pieces, defective pieces which can be repaired/reworked and pieces that are beyond repair and maintain records of each category

PC18. tag and store the right quality pieces by following organisational policies and procedures

PC19. check the machine operations for any malfunctions/defects in the component and inform the supervisor/maintenance team for correction

PC20. dispose scrap or waste material into the disposal area in accordance with the company's policies and environmental regulations

Perform batch quality approval procedure

To be competent, the user/individual on the job must be able to:

PC21. provide first and last work piece from each batch to the lab for quality check on its composition, soundness, metallography/grain structure etc.

PC22. obtain batch clearance from the lab

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

KU1. relevant standards and procedures followed in the company

KU2. basic process followed for moulding of the pieces

KU3. how to use measurement instruments like rulers, Vernier calipers, micrometer, weighing scale, gauges and other inspection equipment

KU4. different types of moulding processes, associated equipment like dies moulds, screw/ reciprocating screw/ plunger, heaters, auxiliary equipment like pick up robo, mould temperature controller , etc. and their working

KU5. number of heaters required to generate the given temperature/ current requirements

KU6. different types of dies to be used for moulding operations and their setting up mechanism

KU7. impact of various moulding parameters like heater temperature, hydraulic pressure/ air pressure/vacuum pressure, rotating speed of the screw, operating current and voltage, injection time, refilling time etc. on the final output

KU8. various types of plastics like thermoplastics/thermosetting plastics and their properties

KU9. various types of coolants and their properties

KU10. Standard Operating Procedures (SOP) recommended by OEM for using tools and moulding apparatus

KU11. safety requirements during the moulding work

KU12. post-moulding processes like inspection, cleaning, maintenance etc.

KU13. various type of defects in moulded products

KU14. how to check defects in the completed workpiece

KU15. methods for repairing pieces with minor defects

KU16. methods of storage and tagging of final product

Generic Skills (GS)

User/individual on the job needs to know how to:

GS1. read and interpret drawings, work instructions, equipment manuals and process documents
GS2. communicate the process requirements to the supervisor and co-workers
GS3. attentively listen and comprehend the information given by the supervisor/team members
GS4. write work related information in English/regional language
GS5. recognise a workplace problem and take suitable action
GS6. analyse and apply the information gathered from observation, experience, reasoning or communication to act efficiently
GS7. plan and organise work according to the work requirements
GS8. complete the assigned tasks with minimum supervision
GS9. report to the supervisor or deal with a colleague individually, depending on the type of concern

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Perform plastic moulding operations	14	23	-	11
PC1. select the right program in the moulding machine and make changes/ modifications in the program as per the work instructions and production requirements	1	2	-	1
PC2. turn valves of machines to regulate speed and quantity of the plastic coming out of the hopper through feeder	1	2	-	-
PC3. feed the plastic granules in the machine and observe the feeding operation for parting leakage, interrupted pouring or any other abnormality	2	2	-	2
PC4. start the machine, produce a sample piece and measure it for conformance to required specifications as per the master sample/reference, sketches/ engineering drawing shared	4	6	-	3
PC5. adjust the parameters of the machine if required to get the desired specifications	1	2	-	1
PC6. run the machine for mass production of workpieces, when first-piece meets the specified requirements	1	2	-	-
PC7. monitor the process parameters by reading the various gauges and correct them if not within standards	1	2	-	1
PC8. monitor the moulding operations and record the operational data as per the frequency in the control plan	1	2	-	1
PC9. remove the moulded pieces from the machine once the cycle is completeby using proper clamps and other handling tools	1	2	-	1
PC10. report any emergencies/deviations from the Work Instructions/Control Panel/SOP to the supervisor immediately	1	1	-	1
Perform post-moulding process activities	14	24	-	9

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC11. clean the plastic molding parts by removing runners/gates or extra materials through de-gating and de-flashing processes	2	2	-	1
PC12. carry out labeling on the workpieces specifying the information related to moulding process and standards followed in organisation	1	2	-	1
PC13. check the work pieces as per the work instructions for product quality	2	4	-	2
PC14. compare the texture, color, surface properties, hardness and strength with the given product specifications	2	2	-	1
PC15. note down the observations of the basic inspection process and identify pieces that are as per the specified standards	1	2	-	-
PC16. rectify minor defects like flash in hole, non-filling, etc. by cutting, finishing etc.	2	4	-	1
PC17. segregate the completed pieces into Ok pieces, defective pieces which can be repaired/reworked and pieces that are beyond repair and maintain records of each category	1	2	-	1
PC18. tag and store the right quality pieces by following organisational policies and procedures	1	2	-	1
PC19. check the machine operations for any malfunctions/defects in the component and inform the supervisor/maintenance team for correction	1	2	-	1
PC20. dispose scrap or waste material into the disposal area in accordance with the company's policies and environmental regulations	1	2	-	-
Perform batch quality approval procedure	**2**	**3**	**-**	**-**
PC21. provide first and last work piece from each batch to the lab for quality check on its composition, soundness, metallography/grain structure etc.	1	2	-	-
PC22. obtain batch clearance from the lab	1	1	-	-
NOS Total	**30**	**50**	**-**	**20**

National Occupational Standards (NOS) Parameters

NOS Code	ASC/N4402
NOS Name	Perform plastic moulding and post-moulding operations
Sector	Automotive
Sub-Sector	Manufacturing
Occupation	Plastic Moulding Operation
NSQF Level	4
Credits	TBD
Version	2.0
Last Reviewed Date	29/07/2021
Next Review Date	29/07/2026
NSQC Clearance Date	29/07/2021

Assessment Guidelines and Assessment Weightage

Assessment Guidelines

1. Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Performance Criteria (PC) will be assigned marks proportional to its importance in NOS. SSC will also lay down the proportion of marks for Theory and Skills Practical for each PC.

2. The assessment for the theory part will be based on the knowledge bank of questions created by the SSC.

3. Assessment will be conducted for all compulsory NOS, and where applicable, on the selected elective/option NOS/set of NOS.

4. Individual assessment agencies will create unique question papers for the theory part for each candidate at each examination/training center (as per assessment criteria below).

5. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/ training center based on these criteria.

6. In case of unsuccessful completion, the trainee may seek reassessment on the Qualification Pack.

Minimum Aggregate Passing % at QP Level : 70

(**Please note:** Every Trainee should score a minimum aggregate passing percentage as specified above, to successfully clear the Qualification Pack assessment.)

Assessment Weightage

Compulsory NOS

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
ASC/N9803.Organize work and resources (Manufacturing)	50	30	-	20	100	15
ASC/N9802.Interact effectively with colleagues, customers and others	50	30	-	20	100	10
ASC/N4401.Prepare for plastic moulding process	30	50	-	20	100	40
ASC/N4402.Perform plastic moulding and post-moulding operations	30	50	-	20	100	35
Total	**160**	**160**	**-**	**80**	**400**	**100**

Acronyms

NOS	National Occupational Standard(s)
NSQF	National Skills Qualifications Framework
QP	Qualifications Pack
TVET	Technical and Vocational Education and Training
PPE	Personal Protective Equipment
PwD	Person with Disability
SOP	Standard Operating Practices

Glossary

Sector	Sector is a conglomeration of different business operations having similar business and interests. It may also be defined as a distinct subset of the economy whose components share similar characteristics and interests.
Sub-sector	Sub-sector is derived from a further breakdown based on the characteristics and interests of its components.
Occupation	Occupation is a set of job roles, which perform similar/ related set of functions in an industry.
Job role	Job role defines a unique set of functions that together form a unique employment opportunity in an organisation.
Occupational Standards (OS)	OS specify the standards of performance an individual must achieve when carrying out a function in the workplace, together with the Knowledge and Understanding (KU) they need to meet that standard consistently. Occupational Standards are applicable both in the Indian and global contexts.
Performance Criteria (PC)	Performance Criteria (PC) are statements that together specify the standard of performance required when carrying out a task.
National Occupational Standards (NOS)	NOS are occupational standards which apply uniquely in the Indian context.
Qualifications Pack (QP)	QP comprises the set of OS, together with the educational, training and other criteria required to perform a job role. A QP is assigned a unique qualifications pack code.
Unit Code	Unit code is a unique identifier for an Occupational Standard, which is denoted by an 'N'
Unit Title	Unit title gives a clear overall statement about what the incumbent should be able to do.
Description	Description gives a short summary of the unit content. This would be helpful to anyone searching on a database to verify that this is the appropriate OS they are looking for.
Scope	Scope is a set of statements specifying the range of variables that an individual may have to deal with in carrying out the function which have a critical impact on quality of performance required.
Knowledge and Understanding (KU)	Knowledge and Understanding (KU) are statements which together specify the technical, generic, professional and organisational specific knowledge that an individual needs in order to perform to the required standard.

Organisational Context	Organisational context includes the way the organisation is structured and how it operates, including the extent of operative knowledge managers have of their relevant areas of responsibility.
Technical Knowledge	Technical knowledge is the specific knowledge needed to accomplish specific designated responsibilities.
Core Skills/ Generic Skills (GS)	Core skills or Generic Skills (GS) are a group of skills that are the key to learning and working in today's world. These skills are typically needed in any work environment in today's world. These skills are typically needed in any work environment. In the context of the OS, these include communication related skills that are applicable to most job roles.
Electives	Electives are NOS/set of NOS that are identified by the sector as contributive to specialization in a job role. There may be multiple electives within a QP for each specialized job role. Trainees must select at least one elective for the successful completion of a QP with Electives.
Options	Options are NOS/set of NOS that are identified by the sector as additional skills. There may be multiple options within a QP. It is not mandatory to select any of the options to complete a QP with Options.