RSDC
RUBBER SKILL DEVELOPMENT COUNCIL

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GOVERNMENT OF INDIA
MINISTRY OF SKILL DEVELOPMENT
& ENTREPRENEURSHIP

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National
Skill Development
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Transforming the skill landscape

QUALIFICATIONS PACK- OCCUPATIONAL STANDARDS FOR PLASTICS INDUSTRY

Contents

What are Occupational Standards(OS)?

- OS describe what individuals need to do, know and understand in order to carry out a particular job role or function
- OS are performance standards that individuals must achieve when carrying out functions in the workplace, together with specifications of the underpinning knowledge and understanding

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Introduction

Qualifications Pack- Machine Operator –Plastic Injection Molding

SECTOR: RUBBER

SUB SECTOR: PLASTICS PROCESSING

OCCUPATION: INJECTION MOULDING

REFERENCE ID: RSC/Q4502 **(**CPC/Q0204)

ALIGNED TO:

Brief Job Description:
The individual at work sets up and operates the Injection moulding machine to produce good quality products from Plastics materials.

Personal Attributes:
This job requires the basic communication, numerical & computational abilities for the individuals to be result oriented. At all times he should strive to achieve highest quality standards. The operator is expected to be able to work in a factory environment and have the ability to work in standing position for long hours.

Qualifications Pack for Machine operator– Plastic Injection Molding

Job Details

Qualifications Pack Code	**RSC/Q4502(CPC/Q0204)**		
Job Role	**Machine Operator – Plastic Injection Moulding**		
Credits (NSQF)	**48**	**Version number**	**1.0**
Sector	**Rubber**	**Drafted on**	**18/05/2016**
Sub Sector	**Plastics Processing**	**Last reviewed on**	**26/12/2016**
Occupation	**Injection molding**	**Next review date**	**31/12/2021**
NSQC Clearance on	**21/07/2016**		

Job Role	**Machine Operator –Plastic Injection Moulding**
Role Description	Set up machine controls and operate injection moulding Machine in order to produce good quality moulding as per approved specifications by Supervisor
NSQF level **Minimum Educational Qualifications*** **Maximum Educational Qualifications***	4 VIII Standard
Training (Suggested but not mandatory)	No previous training required
Minimum Job Entry Age	18
Experience	No previous experience required
Applicable National Occupational Standards (NOS)	**Compulsory:** 1. RSC/N4501 (CPC/N0214): Understand basic concepts, job requirements & basics know how related to process. 2. (RSC/N4505 (CPC/N 0221): Perform the Injection moulding related operations, monitor process parameters and troubleshoot the process/product if any. 3. RSC/N4506 (CPC/N 0222): To conduct quality check and inspection of the Finished products with reference to approved product. 4. RSC/N4101 (CPC/N0411): Maintain basic Healthy and safety practices at the Workplace. 5. (RSC/N4507 (CPC/N 0223): Entrepreneurship in Injection Moulding 6. (RSC/N4504 (CPC/N0219): Basics of MS OFFICE / OFFICE Opensourse suite **Optional:** Nil
Performance Criteria	As described in the relevant OS units

Definitions

Keywords /Terms	Description
Core Skills/Generic Skills	Core Skills or Generic Skills are a group of skills that are key to learning and working 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.
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.
Function	Function is an activity necessary for achieving the key purpose of the sector, occupation, or area of work, which can be carried out by a person or a group of persons. Functions are identified through functional analysis and form the basis of OS.
Job role	Job role defines a unique set of functions that together form a unique employment opportunity in an organization.
Knowledge and Understanding	Knowledge and Understanding are statements which together specify the technical, generic, professional and organizational specific knowledge that an individual needs in order to perform to the required standard.
Occupational Standards (OS)	OS are Occupational Standards which apply uniquely in the Indian context
Occupation	Occupation is a set of job roles, which perform similar/related set of functions in an industry.
Organizational Context	Organizational Context includes the way the organization is structured and how it operates, including the extent of operative knowledge managers have of their relevant areas of responsibility.
Performance Criteria	Performance Criteria are statements that together specify the standard of performance required when carrying out a task.
Qualifications Pack(QP)	Qualifications Pack comprises the set of NOS, together with the educational, training and other criteria required to perform a job role. A Qualifications Pack is assigned a unique qualification pack code.
Qualifications Pack Code	Qualifications Pack Code is a unique reference code that identifies a qualifications pack.
Scope	Scope is the 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 the quality of performance required.
Sector	Sector is a conglomeration of different business operations having similar businesses 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.
Sub-functions	Sub-functions are sub-activities essential to fulfil the achieving the objectives of the function.
Technical Knowledge	Technical Knowledge is the specific knowledge needed to accomplish specific designated responsibilities.

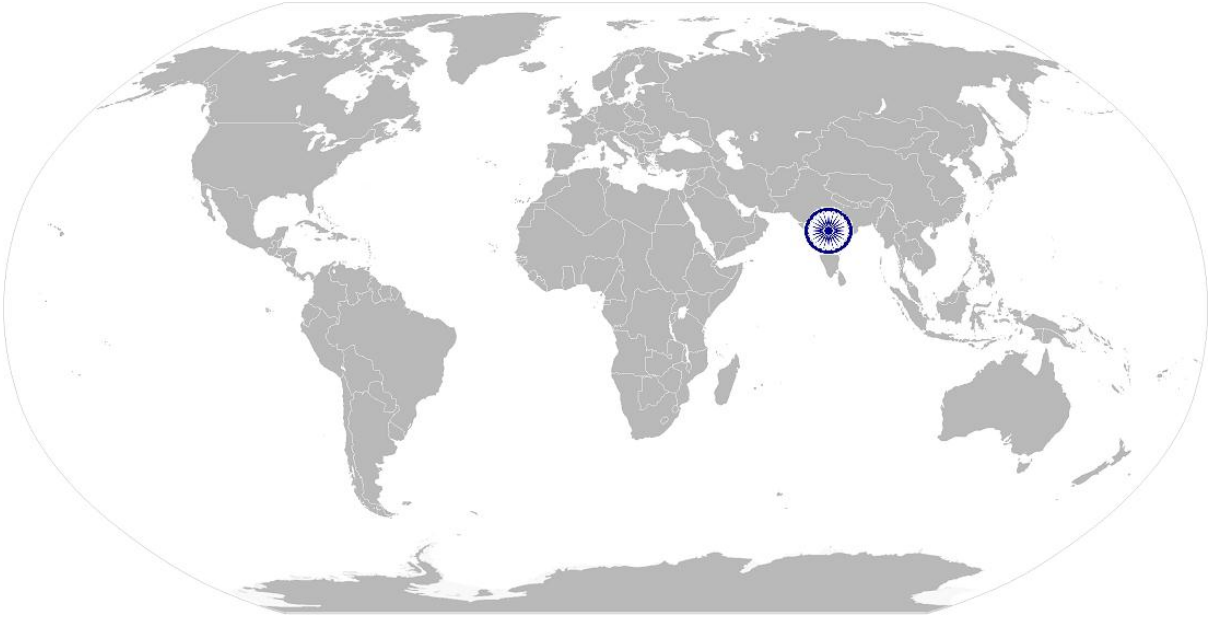
Qualifications Pack for Machine operator– Plastic Injection Molding

Acronyms

Unit Code	Unit Code is a unique identifier for a OS unit, which can be denoted with an '**N**'
Unit Title	Unit Title gives a clear overall statement about what the incumbent should be able to do.
Vertical	Vertical may exist within a sub-sector representing different domain areas or the client industries served by the industry.
Keywords /Terms	**Description**
OS	Occupational Standard(s)
NVEQF	National Vocational Education Qualifications Framework
NVQF	National Vocational Qualifications Framework
NSQF	National Skills Qualifications Framework
OEM	Original Equipment Manufacturer
OS	Occupational Standard(s)
QP	Qualifications Pack

RSC/N4501 (CPC/N0214) Understand basic concept, job requirements and basics knowhow related to the process

National Occupational Standards



Overview

This unit is about understanding the job requirement and the activities & equipment associated with the process to complete the job requirement

National Occupational Standards

Unit Code	**RSC/N4501 (CPC/N0214)**
Unit Title (Task)	**Understand basic concept, job requirements and basics know how related to the process**
Description	This OS unit is about understanding the job requirement, operating the injection moulding machine in order to produce good quality plastic parts using given material and mould.
Scope	This unit/ task covers the following: • Understanding the work order and the process requirement from the supervisor • Arranging the required raw material and Moulds for the process • Cleaning the equipment and the moulds
Performance criteria (PC) w.r.t. the Scope	
Element	**Performance criteria**
Understand the work and the process requirements	**The individual on the job should be able to** PC1. Interact with the operator in order to understand the production schedule PC2. Help in planning the day's production activities based on the operator's instructions PC3. Ensure availability of consumables and plastics materials for production in sufficient quantity as per production plan/operators instructions. PC4. Ensure that clearly understanding the does and don'ts of the manufacturing process as defined in sops/ Work Instructions or defined by operator. PC5. Check availability of the personal protective equipments (PPE) like Gloves, Goggles etc. PC6. Follow the molding procedure and process to be adopted for completing the work order from the operator by referring the Work Instruction document/ SOP manual.
Arrange for the material to be moulded and Mould required for the same	PC7. Ensure that the required material is procured from the store before starting the process PC8. Ensure that Mould required for execute the molding operation and ensure that the same is available for operation. PC9. Collect the mould from tool room If mould is not available PC10. Install and bolt the mould in place and slide the safety door shut. PC11. Add the raw material in the machine using material loader or by manual feeding.
Clean the apparatus and the components before executing the process	PC12. Ensure moulds are clean if not clean with soft cotton cloth. PC13. Ensure that cleaning of other auxiliaries tools, (if any) before the initiation of the moulding and trimming process PC14. Ensure that cleaning of the area around the apparatus for any oil, grease, combustible substances etc. So as to prevent any accident

RSC/N4501 (CPC/N0214) Understand basic concept, job requirements and basics knowhow related to the process

	PC15. Ensure availability of the coolant and working of valves to circulate the coolant to cool and solidify plastic
Check materials and apparatus for Operations	PC16. Identify the raw material like plastics granules, fillers, bonding additives etc. required for executing the activity
Escalations of queries on the given job	PC17. Refer the queries to supervisor if they cannot be resolved by the operator PC18. Confirm self - understanding to the operator once the query is resolved so that all doubts & queries can be resolved before the actual process execution
Knowledge and Understanding (K)	
A. Organizational Context (Knowledge of the company / organization and its processes)	The user/individual on the job needs to know and understand: KA1. Company's code of conduct KA2. Different types of products manufactured by the company KA3. Functional processes like Procurement, Store management, inventory management, quality management, incentives, personnel management KA4. Importance of individual's role in the work flow KA5. Organization culture KA6. Company's reporting structure KA7. Company's documentation policy
B. Technical Knowledge	The user/individual on the job needs to know and understand: KB1. General principles of moulding procedure and process knowledge mould loading and unloading procedure. KB2. Types of plastics like thermoplastics and the additives & grades to be used tonnage and capacity of the machine being operated. KB3. Different types of tools and machinery to process the plastic and trim the output KB4. Various types of cooling systems and their properties. KB5. Geometry and dimension measurement of the product output KB6. How to perform moulding machine safety check KB7. Measuring instruments like vernier callipers, micrometres, Thickness Guage KB8. Hazards and safety aspects involved in tape production and usage of relevant PPEs KB9. Safety procedures to be adopted to complete mould removal process
Skills (S) [Optional]	
A. Core Skills/ Generic Skills	**Reading and Writing Skills**
	The user/ individual on the job needs to know and understand how to: SA1. Read warnings, instructions and other text material on product labels, components etc SA2. Enter into the history card details of the fault identified in the plastic product manufactured read equipment manuals and process documents to understand the equipment and processes better ts SA3. Read instructions especially safety instructions especially symbols while using the equipment in the plant area logs.

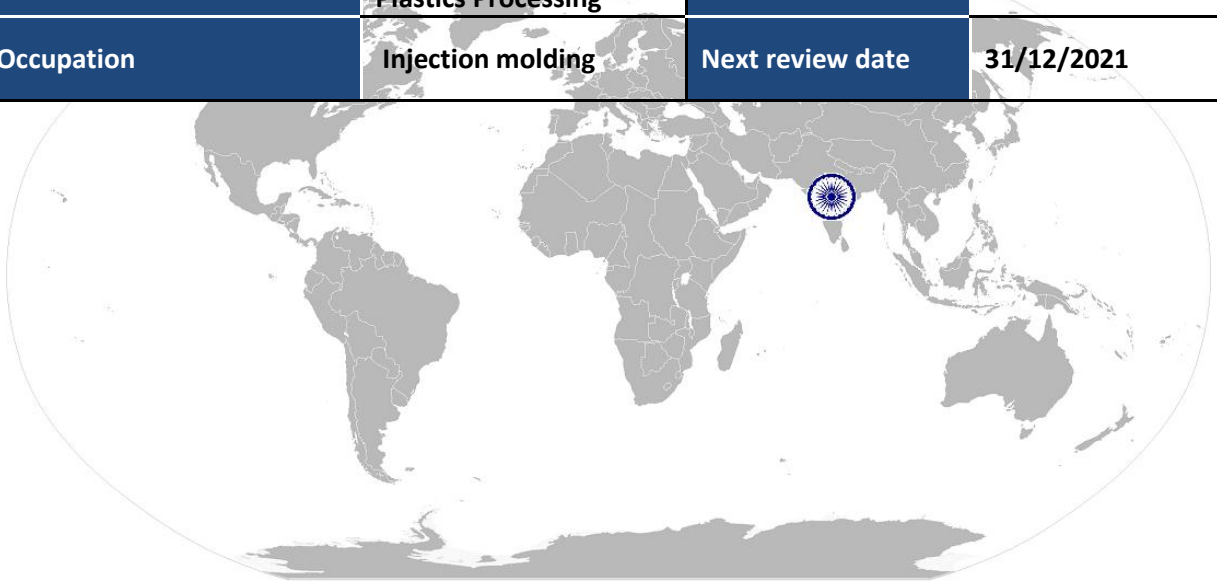
RSC/N4501 (CPC/N0214) Understand basic concept, job requirements and basics knowhow related to the process

	Oral Communication (Listening and Speaking skills)
	The user/individual on the job needs to know and understand how to: SA4. Discuss task lists, schedules, and work-loads with co-workers SA5. Question internal customers/ Shop floor supervisor appropriately in order to understand the nature of the problem and make a DiagLOis SA6. Avoid using jargon, slang or acronyms when communicating with a supervisor /fellow subordinates etc. Unless it is required.
B. Professional Skills	**Problem solving**
	Detect problems in day to day tasks: SB1. Support supervisor in using specific problem solving techniques and detailing out the problems SB2. Discuss possible solution with the supervisor for problem solving SB3. Make decisions in emergency conditions in case the supervisor is not available (as per the authority matrix defined by the Organization)
	Plan and Organize
	The user/individual on the job needs to know and understand how to: SB4. Plan and organize the work order and jobs received from the internal customers SB5. Plan and organize the design documents received from internal customers SB6. Organize all process/ equipment manuals so that sorting out
	Team Work
	The user/individual on the job needs to know and understand how to: SB7. Follow instructions and work on areas of improvement identified SB8. Complete the assigned tasks with minimum supervision SB9. Complete the job defined by the supervisor within the timelines and quality
	Critical Thinking
	The user/individual on the job needs to know and understand how to: SB10. Use common sense and make judgments during day to day basis SB11. Use reasoning skills to identify and resolve basic problems SB12. Use intuition to detect any potential problems which could arise during operations.

RSC/N4501 (CPC/N0214) Understand basic concept, job requirements and basics knowhow related to the process

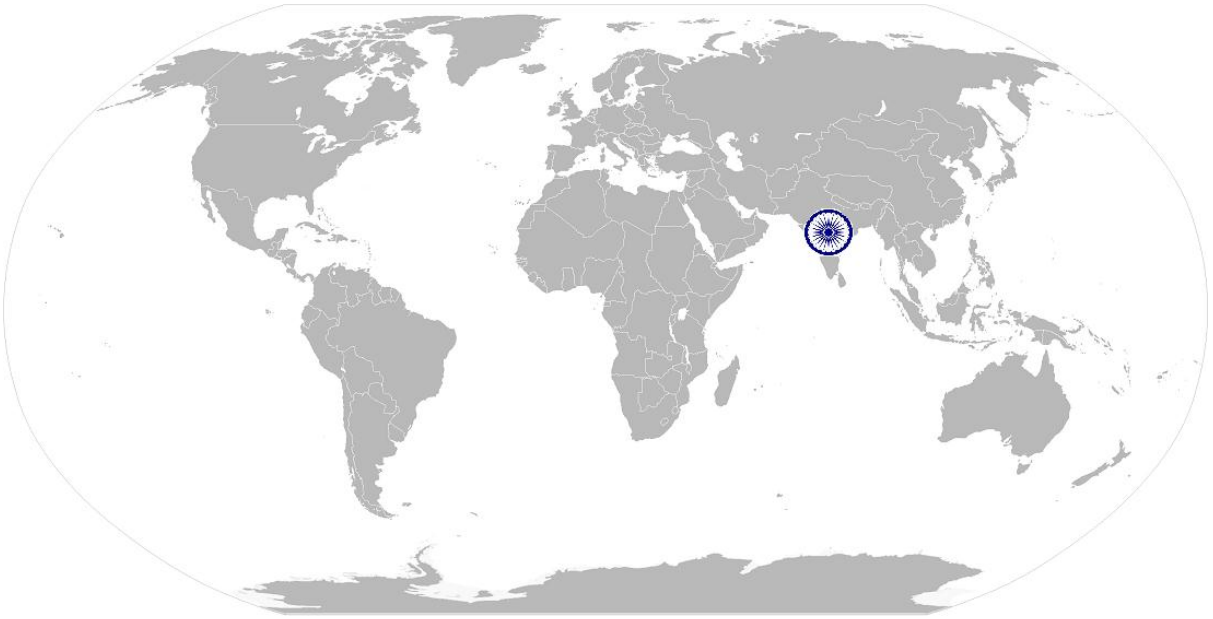
NOS Version Control

NOS Code	**RSC/N4501 (CPC/N0214)**		
Credits (NSQF)	**6.85**	**Version number**	**1.0**
Sector	**Rubber**	**Drafted on**	**18/05/2016**
Sub Sector	**Manufacturing / Plastics Processing**	**Last reviewed on**	**26/12/2016**
Occupation	**Injection molding**	**Next review date**	**31/12/2021**



RSC/N4505 (CPC/N 0221) Perform the Injection molding related operations, monitor process parameters and troubleshoot the process/product if any

National Occupational Standards



Overview

This unit is about molding the plastic in the desired moldings as per the final output specifications and the standards specified by the organization.

RSC/N4505 (CPC/N 0221) Perform the Injection molding related operations, monitor process parameters and troubleshoot the process/product if any

National Occupational Standard

Unit Code	RSC/N4505 (CPC/N 0221)
Unit Title (Task)	**Perform the Injection molding related operations, monitor process parameters and troubleshoot the process/product if any**
Description	This OS unit is about produce good quality moldings in line with the required specifications
Scope	The Injection Moulding machine operator will be responsible for • Checking the operations of the equipment • Feeding the granules as per requirement • Set up and operate the Injection moulding machine • Perform visual inspection of the output products • Achieve productivity, quality and safety standards as per company's norms • Report problems to supervisor

Performance criteria (PC) w.r.t. the Scope

Element	Performance criteria
Check the operations of the equipment used in the molding process	The individual on the job should be able to PC1. Check the operation of molding apparatus like hopper, heaters etc. as per the checklist provided PC2. Fix the desired Mould to the injection moulding machine in order to achieve the desired operation as per the Work Instructions/ SOPs PC3. Make modifications in the process parameters (by selecting the right program from the machine control system) if required and ensure alignment with the prescribed standards
Feed the plastic granules in the hopper and conduct a trial product with the setting	PC4. Perform preheating of plastic granules (In case of Engineering plastics) PC5. Ensure the plastic granules are mixed with additives (if any) before being fed into the hopper PC6. Conduct a test process and produce a sample output as per the required PC7. Ensure that the dimensions of the output product are measured as per the process given in the Work Instructions/ SOP PC8. Test product matches the dimensions and quality of the final output, start the production process
Conduct the actual process with final setting as per product approval	PC9. Feed the required operation code in the apparatus for heaters to melt the plastic granules at the predefined temperature PC10. Enter moulding temperature, volume of plastic and weight settings in the machine as per data sheet PC11. Enter machine and process parameters such as moulding pressure and time as per the data sheet PC12. Add master batch and regrind raw material as per standard composition and mix it well PC13. Check-list procedure to ensure quality of final product PC14. Enter machine and process parameters such as moulding pressure and time as per the data sheet

RSC/N4505 (CPC/N 0221) Perform the Injection molding related operations, monitor process parameters and troubleshoot the process/product if any

Knowledge and Understanding (K)	
A. Organizational Context (Knowledge of the company / organization and its processes)	The user/individual on the job needs to know and understand: KA1. Departments code of conduct KA2. Different types machines in the company, Its specifications etc. KA3. Department documentation policy
B. Technical Knowledge	The user/individual on the job needs to know and understand: KB1. General principles of moulding machine operations, Startup, Shutdown etc. KB2. Process parameters setting, producing good product etc.
Skills (S) [Optional]	
A. Core Skills/ Generic Skills	**Reading and Writing Skills**
	The user/ individual on the job needs to know and understand how to: SA1. Read and interpret engineering drawing and sketches SA2. Read equipment manuals and process documents to understand the equipment and processes better SA3. Read instructions especially safety instructions especially symbols while using the equipment in the plant area SA4. Read internal drawings send by internal customers (other functions within the organization) SA5. document information from the sketches and engineering drawings SA6. Write log book in terms of output quantity, set up parameters, machine setting parameters and loss details etc. SA7. Prepare draft drawings for the final output product SA8. Write drawings to internal customers on the requirement of moulding plastic, molding apparatus etc. SA9. Note measurements, equipment panel readings for various process parameters in the required reporting formats SA10. Visualize final product output and hence decide on the key steps to be followed SA11. Safety precautions to be taken for entire extrusion, post extrusion& loom machine setting activities. SA12. Avoid defects in machine operation and final product manufacture
	Oral Communication (Listening and Speaking skills)
	The user/individual on the job needs to know and understand how to: SA13. Discuss task lists, schedules, and work-loads with co-workers SA14. Question internal customers/ Moulding shop supervisor appropriately in order to understand the nature of the problem and make a DiagLOis

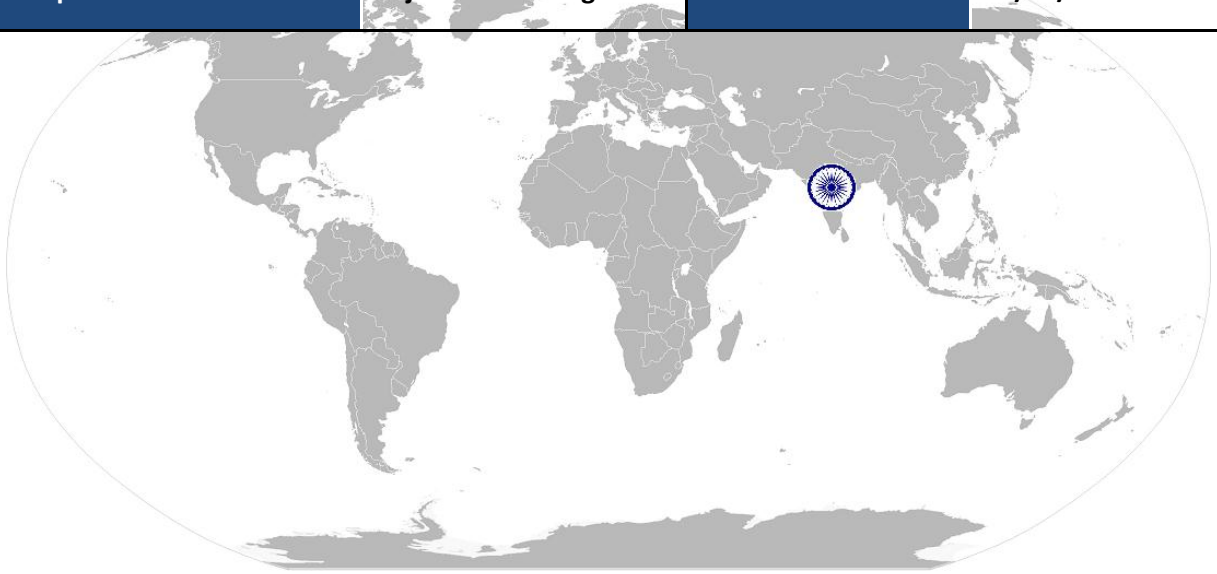
RSC/N4505 (CPC/N 0221) Perform the Injection molding related operations, monitor process parameters and troubleshoot the process/product if any

B. Professional Skills	**Problem solving**
	The user/individual on the job needs to know and understand how to: SB1. Detect problems in day to day tasks SB2. Support supervisor in using specific problem solving techniques and detailing out the problems SB3. Discuss possible solution with the supervisor for problem solving SB4. Make decisions in emergency conditions in case the supervisor is not available(as per the authority matrix defined by the organization)
	Plan and Organize
	The user/individual on the job needs to know and understand how to: SB5. Plan and organize the work order and jobs received from the internal customers SB6. Plan and organize the design documents received from internal Customers SB7. Organize all process/ equipment manuals so that sorting out information is Fast SB8. Organize apparatus etc. In an orderly manner at proper designated areas Analysis of defects that occur in the final products and Correlate them to Problems with the injection moulding machine SB9. Combine machine dependent and machine independent settings SB10. Visualize final product output and hence decide on the key steps to be followed
	Team Work
	The user/individual on the job needs to know and understand how to: SB11. Follow instructions and work on areas of improvement identified SB12. Complete the assigned tasks with minimum supervision SB13. Complete the job defined by the supervisor within the timelines and Quality
	Analytical Thinking
	The user/individual on the job needs to know and understand how to: SB14. Visualize the final job product after understanding the given drawing/ sketches SB15. Carefully measure the moulding so in terms of the geometrical dimensions so that the final output is as pre the given drawing SB16. Finalize the optimum levels of physical parameters so that the job output meets the prescribed job standards

RSC/N4505 (CPC/N 0221) Perform the Injection molding related operations, monitor process parameters and troubleshoot the process/product if any

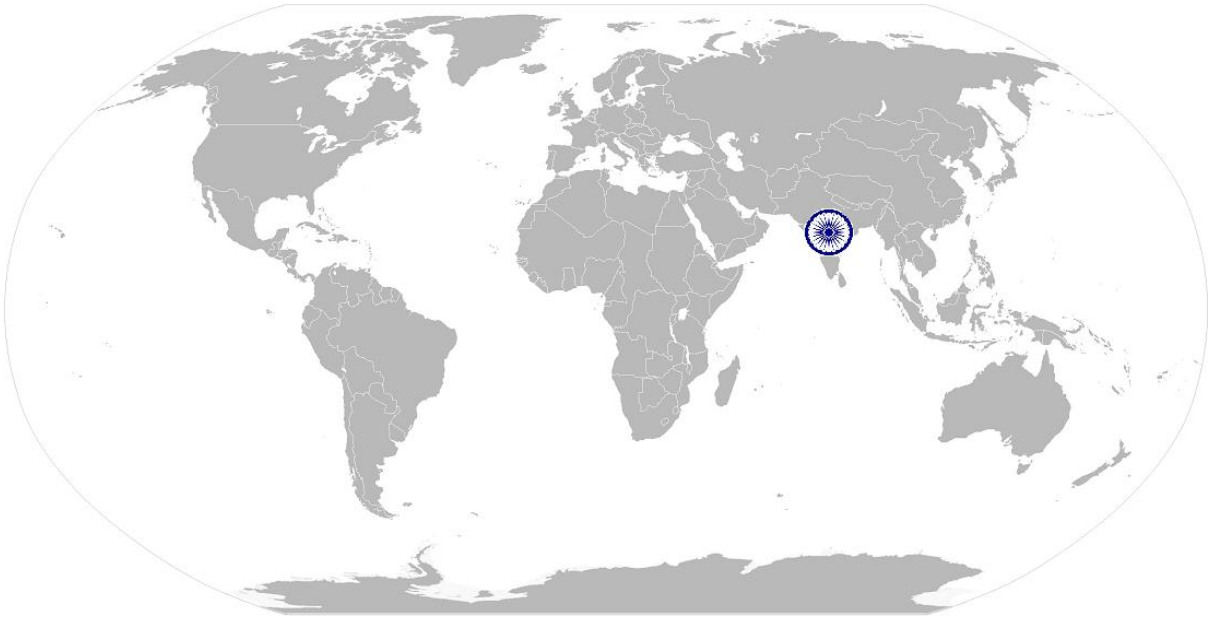
NOS Version Control

NOS Code	**RSC/N4505 (CPC/N 0221)**		
Credits (NSQF)	**20.4**	**Version number**	**1.0**
Sector	**Rubber**	**Drafted on**	**18/05/2016**
Sub Sector	**Plastics Processing**	**Last reviewed on**	**26/12/2016**
Occupation	**Injection molding**	**Next review date**	**31/12/2021**



RSC/N4506 (CPC/N 0222) Conduct quality checks and inspection of the finished products with reference to the approved product.

National Occupational Standards



Overview

This unit is about conducting Quality Checks and inspection of the finished products produced and repair the bad quality items produced in the manufacturing process

RSC/N4506 (CPC/N 0222) Conduct quality checks and inspection of the finished products with reference to the approved product.

National Occupational Standards

Unit Code	**RSC/N4506 (CPC/N 0222)**
Unit Title (Task)	**Conduct quality checks and inspection of the finished products with reference to the approved product.**
Description	This OS unit is about inspecting the finished goods produced for any damages, deformities and further repairing the parts produced so that the damaged/ defective pieces can be corrected and right quality components are supplied to 1. The customer/ end user 2. Internal manufacturing team
Scope	The Injection moulding operator will be responsible for • Inspecting the finished components • keeping records of production and defects • conducting minor repair/deflashing if any on output parts which can be reworked • The role holder will interact with maintenance team and material management team

Performance criteria(PC) w.r.t. the Scope

Element	Performance criteria
Inspection of finished goods to detect any deviations from the approved product	The individual on the job should be able to: PC1. Compare texture, colour, surface properties, hardness and strength etc. with the given approved product.
Record log of defective products and discard defective product	PC2. Note down the observations of the basic inspection process and Identify pieces which are OK and also not meeting the specified standards PC3. Discard the batch which are beyond repair and repair the ones which need minor modifications in settings. PC4. Maintain records of each category of work outputs as per the batch etc. so that correction can be organized. PC5. Establish linkage between rejection of output and the pertinent causes for the same (process/ material etc.); Recommend the means for rejection control.
Corrective batch process with minor defects	PC6. Rectify minor defects like dimension variation, thickness variation etc. by control process parameters etc. PC7. Escalate all issues related to change in surface properties, Tensile strength etc. so that the manufacturing equipment can be reset to achieve the specified output.
Perform Batch Quality Procedure	PC8. Provide first and last output from each batch to the lab for quality check on its composition, properties etc. PC9. Obtain clearance for the entire batch from the lab

RSC/N4506 (CPC/N 0222) Conduct quality checks and inspection of the finished products with reference to the approved product.

Knowledge and Understanding (K)	
A. Organizational Context (Knowledge of the company / organization and its processes)	The user/individual on the job needs to know and understand: KA1. Relevant standards specified for the manufacturing process KA2. Basic process followed for inspection of the lot. KA3. Quality Management policy of the organization.
B. Technical Knowledge	The user/individual on the job needs to know and understand: KB1. Processes and procedures followed for manufacturing the lot/ prices/ products. KB2. Techniques of using measurement instruments like rulers, Vernier calipers, micrometers, weighing scales etc. KB3. Methods to identify quality defects in the lot. KB4. Impact of defects on the overall working of the Injection Moulding machine. KB5. Methods used for cutting, finishing which can repair lot (Moulded products) with minor defects KB6. Various quality standards used by the organization
Skills (S) [Optional]	
A. Core Skills/ Generic Skills	**Writing Skills**
	The user/ individual on the job needs to know and understand how to: SA1. Note the number of lot with defects which can be repaired to number of lot which will be discarded.
	Reading Skills
	The user/individual on the job needs to know and understand how to: SA2. Read process and equipment manuals, material data sheets etc. to understand the working of the equipment & material properties.
	Oral Communication (Listening and Speaking skills)
	The user/individual on the job needs to know and understand how to: SA3. Inform supervisor of any quality related defects arising out of the manufacturing process. SA4. Question internal customers/ supervisor appropriately in order to understand the nature of the problem and make a Diagnosis.
B. Professional Skills	**Plan and Organize**

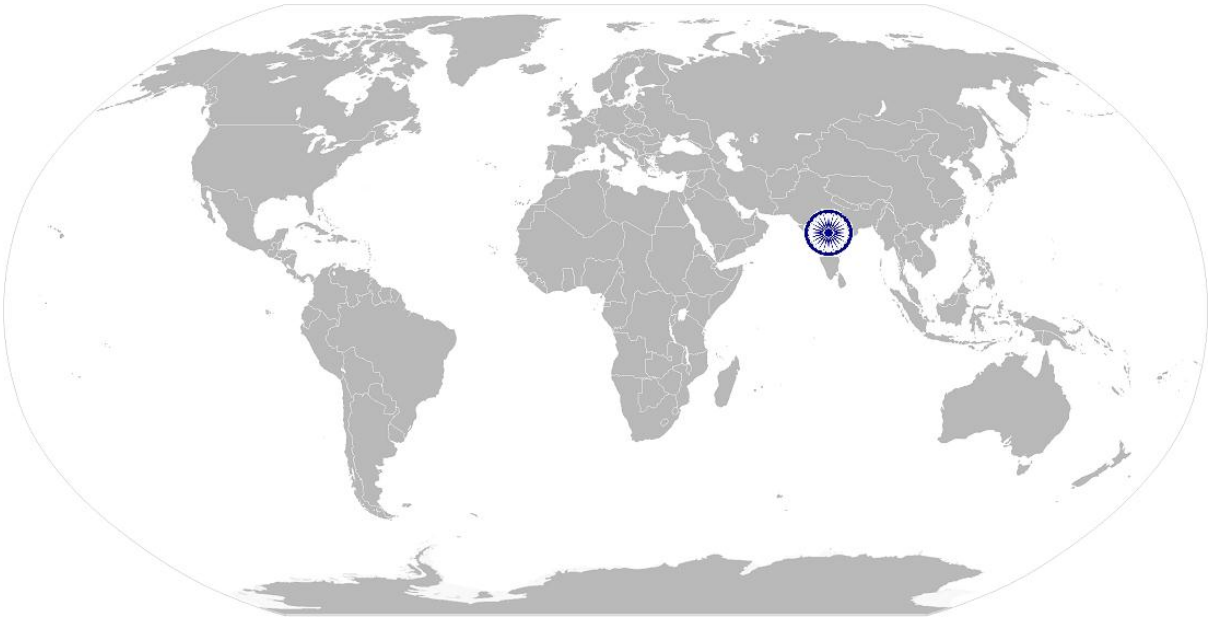
RSC/N4506 (CPC/N 0222) Conduct quality checks and inspection of the finished products with reference to the approved product.

	The user/individual on the job needs to know and understand how to: SB1. Plan and organize the work order and jobs received from the supervisor SB2. Organize all process/ equipment manuals so that sorting/ accessing information is easy SB3. Keep fixtures, tools, drawings, Work Instructions, SOP manuals as per the part number, colour codes etc. as defined under the 5S systems
	Critical Thinking
	The user/individual on the job needs to know and understand how to: SB4. Use common sense and make judgments during day to day basis use reasoning skills to identify and resolve basic problems SB5. Carefully analyze the body part for various assembling defects at every station SB6. Carefully analyze each defect observed during inspection and try to find solution for the defect along with the assembly line operator
	Quality Consciousness
	The user/individual on the job needs to know and understand how to: SB7. Identify defective parts in the manufacturing line by comparing manufactured (lot/extrudate) with the work standard SB8. Link the defect observed with the overall impact on the performance of the (lot/extrudate)

CPC/N 0220 *Understand basic concept, job requirements and basics knowhow related to the process*

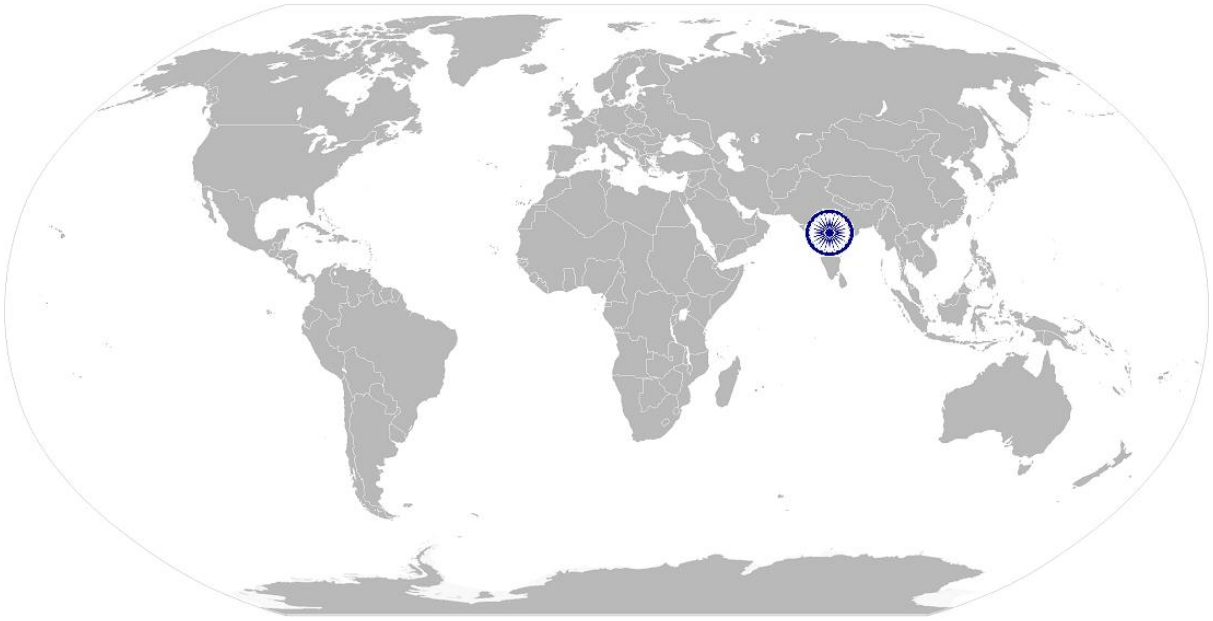
NOS Version Control

NOS Code	**RSC/N4506 (CPC/N 0222)**		
Credits (NSQF)	**2.6**	**Version number**	**1.0**
Sector	**Rubber**	**Drafted on**	**18/05/2016**
Sub Sector	**Plastics Processing**	**Last reviewed on**	**26/12/2016**
Occupation	**Injection molding**	**Next review date**	**31/12/2021**



RSC/N4101 (CPC/N0411) Maintain basic health and safety practices at the workplace, 5S.

National Occupational Standards



Overview

This unit is about establishing a Safe, Healthy and Environment friendly workplace

RSC/N4101 (CPC/N0411) Maintain basic health and safety practices at the workplace, 5S.

National Occupational Standards

Unit Code	**RSC/N4101 (CPC/N 0411)**
Unit Title (Task)	**Maintain basic health and safety practices at the workplace, 5S**
Description	This OS unit is about knowledge and practices relating to health, safety and security that candidates need to use in the workplace. It covers responsibilities towards self, others, assets and the environment. It includes understanding of risks & hazards in the workplace, along with common techniques to minimize risk, deal with accidents, emergencies etc. It covers knowledge of fire safety, common first aid applications and safe practice. This OS is about ensuring all 5S activities both at the shop floor and the office area to facilitate increase in work productivity.
Scope	The role holder will be responsible for • Health and safety procedure. • Fire safety procedure. • Emergencies, rescue and first aid procedures. • Ensure sorting, stream lining, storage and documentation, cleaning, standardization and sustenance across the plant premises of the organization.
Performance Criteria (PC) w.r.t. the Scope	
Element	**Performance Criteria**
Health and safety	The individual on the job should able to: PC1. Wear protective clothing/equipment for specific tasks and work conditions PC2. Carry out safe working practices while dealing with hazards to ensure the safety of Self and others. PC3. Keep good housekeeping practices at all times
Fire safety	The individual on the job should be able to: PC4. Use appropriate fire extinguishers on different types of fires correctly PC5. Demonstrate rescue techniques applied during fire hazard, demonstrate good housekeeping in order to prevent fire hazards, demonstrate the correct use of a fire extinguisher.
Emergencies, rescue and first aid procedures.	PC6. Identify activities which can cause potential injury through sharp objects, burns, fall, electricity, gas leakages, radiation, poisonous fumes, chemicals, loud noise, and Identify areas in the plant which are potentially hazardous / unhygienic in nature. Conduct regular checks with support of the maintenance team on machine health to identify potential hazards due to wear and tear of machine. PC7. Inform the concerned authorities on the potential risks identified in the processes, workplace area/ layout, materials used etc, Inform the concerned

	authorities about machine breakdowns, damages which can potentially harm man/ machine during operations. PC8. Create awareness amongst others by sharing information on the identified risks.
Ensure sorting, stream lining, storage and documentation, cleaning, standardization and sustenance across the plant premises of the organization.	PC9. Follow the sorting process and check that the tools, fixtures & jigs that are lying on workstations are the ones in use and un- necessary items are not cluttering the workbenches or work surfaces. PC10. Ensure segregation of waste in hazardous/ non Hazardous waste as per the sorting work instructions PC11. Follow the technique of waste disposal and waste storage in the proper bins as per SOP PC12. Segregate the items which are labeled as red tag items for the process area and keep them in the correct places PC13. Sort the tools/ equipment/ fasteners/ spare parts as per specifications/ utility into proper trays, cabinets, lockers as mentioned in the 5S guidelines/ work instructions PC14. Ensure that areas of material storage areas are not overflowing PC15. Ensure properly stack the various types of boxes and containers as per the size/ utility to avoid any fall of items/ breakage and also enable easy sorting when required PC16. Return of extra material and tools to the designated sections and make sure that no additional material/ tool is lying near the work area PC17. Follow the floor markings/ area markings used for demarcating the various sections in the plant as per the prescribed instructions and standards PC18. Follow the proper labelling mechanism of instruments/ boxes/ containers and maintaining reference files/ documents with the codes and the lists PC19. Ensure to check the items in the respective areas have been identified as broken or damaged PC20. Follow the given instructions and check for labelling of fluids, oils, lubricants, solvents, chemicals etc. and proper storage of the same to avoid spillage, leakage, fire etc. PC21. Make sure that all material and tools are stored in the designated places and in the manner indicated in the 5S instructions

RSC/N4101 (CPC/N0411) Maintain basic health and safety practices at the workplace, 5S.

Knowledge and Understanding (K)	
A. Organizational Context (Knowledge of the company / organization and its processes)	The user/individual on the job needs to know and understand: KA1. The relevant standards, procedures and policies related to Health, Safety and Environment followed in the company KA2. The emergency handling procedures & hierarchy for escalation
B. Technical Knowledge	**The user/individual on the job needs to know and understand:** KB1. The basic knowledge of Safety procedures (fire fighting, first aid) within the organization KB2. The basic knowledge of various types of PPEs and their usage KB3. The basic knowledge of risks/hazards associated with each occupation in the organization KB4. The knowledge of personal hygiene and how an individual contribute towards creating a highly safe and clean working environment the individual on the job needs to know and understand. KB5. The meaning of "hazards" and "risks" KB6 The health and safety hazards commonly present in the work environment and related precautions KB7. The possible causes of risk, hazard or accident in the workplace and why risk and/or accidents are possible KB8. The Possible causes of risk and accident (due to oil leakage) KB9. Methods of accident prevention KB9. Safe working practices when working with tools and machines KB10. Safe working practices while working at various hazardous sites KB11. The general health and safety equipment in the workplace KB12. Various dangers associated with the use of electrical equipment KB13. Preventative and remedial actions to be taken in the case of exposure to toxic materials KB14. The Importance of using protective clothing/equipment while working KB15. Precautionary activities to prevent the fire accident KB16. Various causes of fire KB17. The techniques of using the different fire extinguishers KB18. The different methods of extinguishing fire KB19. The different materials used for extinguishing fire KB20. Rescue techniques applied during a fire hazard KB21. Various types of safety signs and what they mean KB22. The appropriate basic first aid treatment relevant to the condition e.g. shock, electrical shock, bleeding, breaks to bones, minor burns, resuscitation, poisoning, eye injuries KB23. The content of written accident report

	KB24. Potential injuries and ill health associated with incorrect manual handing KB25. Safe lifting and carrying practices KB26. Personal safety, health and dignity issues relating to the movement of a person by others KB27. Potential impact to a person who is moved incorrectly KB28. 5S procedures KB29. 5S practices followed in various areas KB30. Understand to the 5S checklists provided in the department/ team KB31. The skills to identify useful & non useful items KB32. The knowledge of labels , signs & colours used as indicators KB33. The knowledge on how to sort and store various types of tools, equipment, material etc. KB34. Identification of various types of waste products KB35. The impact of waste/ dirt/ dust/unwanted substances on the process/ environment/ machinery/ human body. KB36. The knowledge of best ways of cleaning & waste disposal
Skills (S) [Optional]	
Element	**Skills**
C. Core Skills/ Generic Skills	**Writing Skills**
	The user/ individual on the job needs to know and understand how to: SA1. Understand basic level notes and observations.
	Reading Skills
	The user/individual on the job needs to know and understand how to: SA2. Put up safety instructions across the plant premises SA3. Put up safety precautions mentioned in equipment manuals and panels and understand the potential risks associated
	Oral Communication (Listening and Speaking skills)
	The user/individual on the job needs to know and understand how to: SA4. communicate information to team members effectively SA5. Inform employees in the plant and concerned functions about events, Incidents & potential risks observed related to Safety, Health and Environment. SA6. Question operator/ supervisor in order to understand the safety related issues SA7. Attentively listen with full attention and comprehend the information given by the speaker during safety drills and training programs
D. Professional Skills	**Plan and Organize**
	The user/individual on the job needs to know and understand how to: SB1. Process the work order and jobs received from the internal customers.

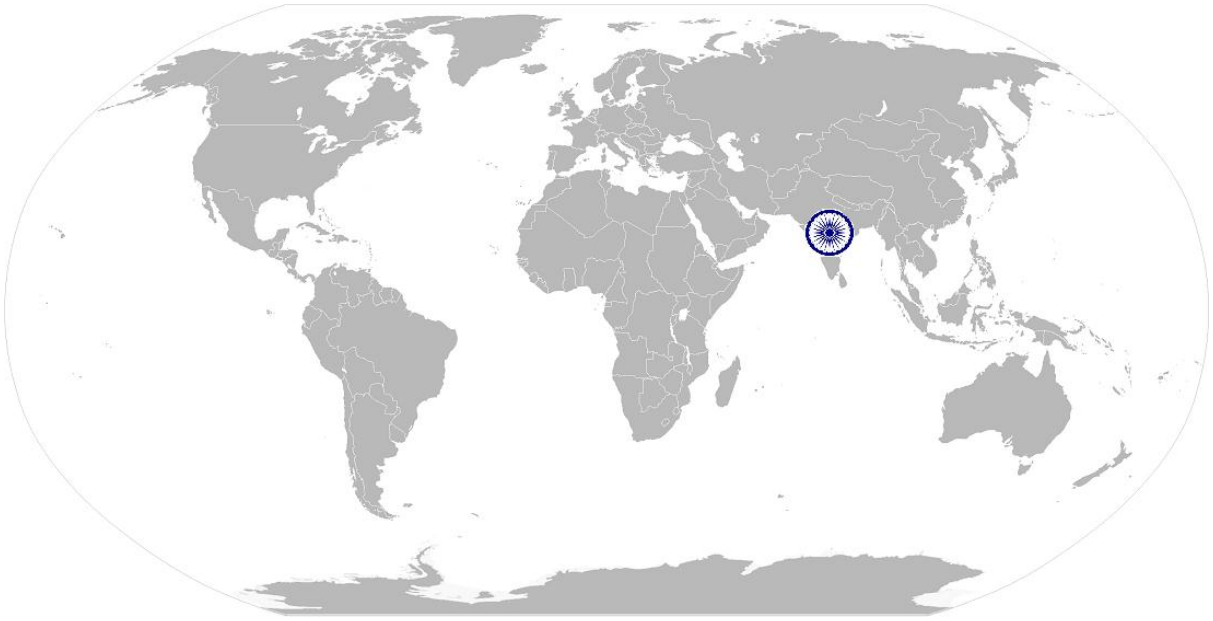
RSC/N4101 (CPC/N0411) Maintain basic health and safety practices at the workplace, 5S.

	SB2. Design documents received from internal customers SB3. Understand & organize all process/ equipment manuals so that sorting out information is fast.
	Critical Thinking
	The user/individual on the job needs to know and understand how to: SB4. Use common sense and make judgments during day to day basis SB5. Use intuition to detect any potential problems which could arise during operations
	Problem solving
	The user/individual on the job needs to know and understand how to: SB6. Follow instructions and work on areas of improvement identified SB7. Complete the assigned tasks with minimum supervision SB8. Complete the job defined by the supervisor within the timelines and quality norms

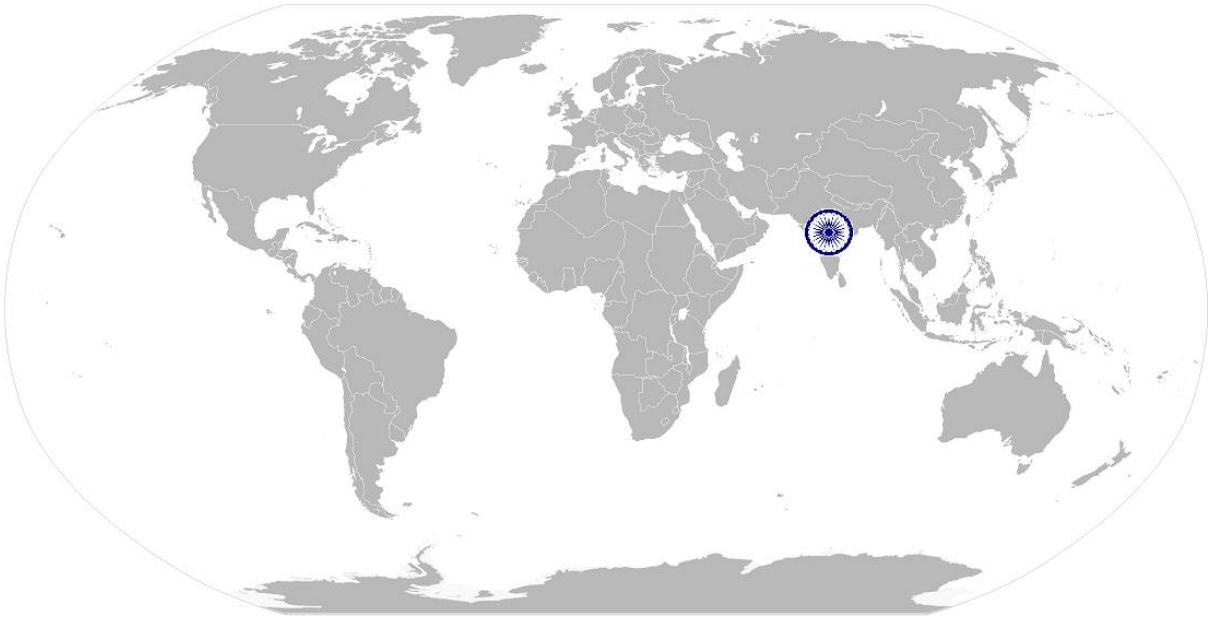
RSC/N4101 (CPC/N0411) Maintain basic health and safety practices at the workplace, 5S.

NOS Version Control

NOS Code	**RSC/N4101 (CPC/N0411)**		
Credits (NSQF)	**4.75**	**Version number**	**1.0**
Sector	**Rubber**	**Drafted on**	**18/05/2016**
Sub Sector	**Plastics Processing**	**Last reviewed on**	**26/12/2016**
Occupation	**Injection molding**	**Next review date**	**31/12/2021**



National Occupational Standards



Overview

This unit is about Entrepreneurship in injection moulding

RSC/N4507 (CPC/N 0223) Entrepreneurship in Injection moulding

National Occupational Standard

Unit Code	**RSC/N4507 (CPC/N 0223)**
Unit Title (Task)	**Entrepreneurship in Injection moulding**
Description	This OS unit is about entrepreneurship in Plastic Injection Moulding
Scope	This unit/task covers the following: • Market Information Management • Client Relation Management • Marketing
Performance criteria (PC) w.r.t. the Scope	
Element	**Performance criteria**
Injection moulding Economics and Finances	To be competent, the individual on the job must be able to: PC1. Plan and Budgeting with reference to various components of Injection Moulding PC2. Maintain books of accounts and various transactions PC3. Arrange for financial assistance from various quarters in the light of various schemes available in setup for Injection Moulding.
Market Information Management	PC4. Ascertain the prices of various inputs and products from the market PC5. Assess the influence of various quality parameters of products on the product pricing
Client Relation Management	PC6. Establish cordial relations with various clients for the benefit of industry PC7. Assess the needs and requirement of the clients and assess one's own unique selling proposition PC8. Extract critical market information that is otherwise not in the public domain
Marketing	PC9. Choose appropriate buyer in a given situation of market parameters PC10. Identify best ways of attracting market price for one's produce PC11. Ensure quality before & during the sale activity to ensure good returns.
Knowledge and Understanding (K)	
A. Organizational Context (Knowledge of the company / organization and it process)	**Injection Moulding Economics and Finances** The individual on the job needs to know and understand: KA1. Basic steps of Injection Moulding planning and budgeting KA2. Basic principles of keeping books of accounts KA3. Various Government and other schemes / products / offers available for startup and support of Injection Moulding.

RSC/N4507 (CPC/N 0223) Entrepreneurship in Injection moulding

B. Technology Knowledge	**Market Information Management**
	The user/individual on the job needs to know and understand: KB1. Different players selling various injection moulded products and their prices KB2. Different players buying injection moulded products & their prices KB3. Various methods of updating oneself with market information such as mobile, Internet etc. KB4. Usage, contact with key informants, tie up government agencies etc.
	Client Relation Management
	The user/individual on the job needs to know and understand: KB5 Needs and options available with various clients KB6. Advantages and disadvantages of doing business with each one of the clients
	Marketing
	The user/individual on the job needs to know and understand: KB7. The quality parameters of injection moulded products and their market prices KB8. Pricing mechanism of various buyers of injection moulded products KB9. Costing of various logistic arrangements towards the sale injection moulded products at different markets and consumer points.
Skills (S) [Optional]	
A. Core Skills/ Generic Skills	**Writing Skills**
	The user/ individual on the job needs to know and understand how to: SA1. Mention the data which are required for record keeping purpose SA2. Report problems to the appropriate personnel in a timely manner SA3. Write descriptions and details about incidents in reports
	Reading Skills
	The user/individual on the job needs to know and understand how to: SA4. Keep abreast with the latest knowledge by reading brochures, pamphlets and product information sheets SA5. Read instruction manuals for hand tool and equipments SA6. Read instructions on work orders and procedures
	Oral Communication (Listening and Speaking skills)

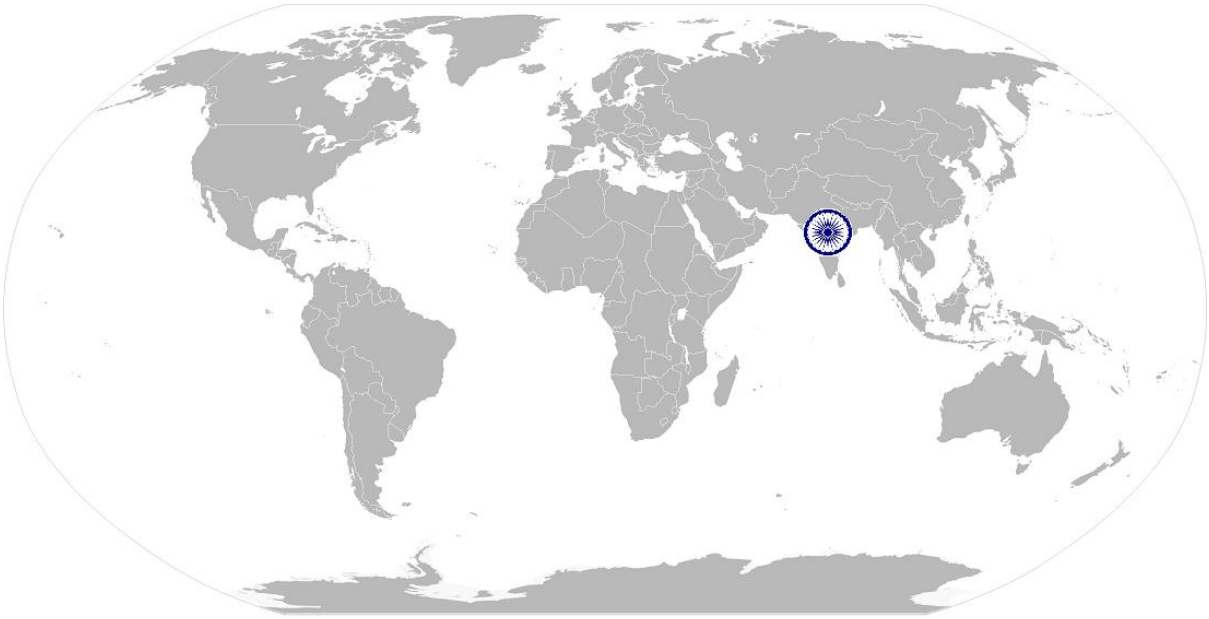
RSC/N4507 (CPC/N 0223) Entrepreneurship in Injection moulding

	The user/individual on the job needs to know and understand how to: SA7. Discuss task lists, schedules, and work-loads with co-workers SA8. Question customers appropriately in order to understand the nature of the problem and make a DiagLOis SA9. Give clear instructions to customers SA10. Keep customers informed about progress SA11. Avoid using jargon, slang or acronyms when communicating with a customer, unless it is required
B. Professional Skills	**Decision Making**
	The user/individual on the job needs to know and understand how to: SB1. Make decisions pertaining to the concerned area of work
	Plan and Organize
	The user/individual on the job needs to know and understand: SB2. Plan and organize service feedback files/documents
	Customer Centricity
	The user/individual on the job needs to know and understand how to: SB3. Manage relationships with customers who may be stressed, frustrated, confused, or angry SB4. Build customer relationships and use customer centric approach
	Problem Solving
	The user/individual on the job needs to know and understand how to: SB5. Think through the problem, evaluate the possible solution(s) and suggest an optimum /best possible solution(s) SB6. Deal with clients lacking the technical background to solve the problem on their own SB7. Identify immediate or temporary solutions to resolve delays
	Analytical Thinking
	The user/individual on the job needs to know and understand how to: SB8. Use the existing data to arrive at specific data points SB9. Use the existing data points for improving the defect resolution time SB10. Use the existing data points to generate required reports for business
	Critical Thinking
	The user/individual on the job needs to know and understand how to: SB11. Apply, analyze, and evaluate the information gathered from observation, experience, reasoning, or communication, as a guide to thought and action

NOS Version Control

NOS Code	**RSC/N4507 (CPC/N 0223)**		
Credits (NSQF)	**5.95**	**Version number**	**1.0**
Sector	**Rubber**	**Drafted on**	**18/05/2016**
Sub Sector	**Plastics Processing**	**Last reviewed on**	**26/12/2016**
Occupation	**Injection molding**	**Next review date**	**31/12/2021**

National Occupational Standards



Overview

This unit is about Basics of computer and data entry in MS OFFICE/office Open source suite Software.

RSC/N4504 (CPC/N0219) Basics of computer and data entry in MS OFFICE/office Open source suite Software

National Occupational Standard

Unit Code	**RSC/N4504 (CPC/N0219)**
Unit Title (Task)	**Basics of computer and data entry in MS OFFICE/office Open source suite Software**
Description	This OS unit is about the Data Entry Operation for Injection Moulding like entering, updating and maintain Job work related data the computer systems having MS Office software
Scope	This unit / task covers the following • Enter, update and maintain data in MS Office system

Performance criteria (PC) w.r.t. the Scope	
Element	**Performance criteria**
Enter, update and maintain data	To be competent, the user/individual on the job must be able to: PC1. Fill and process mandated forms for receiving, processing, or tracking data, enter data from source documents (such as trial report, process sheet etc.) in to Computer application having MS OFFICE software. PC2. Scan source documents in accordance with specific instructions. PC3. Verify data entered with source documents, checks for compliance and corrects all typographical errors and missing or repeated data. PC4. Maintain files of source documents or other information related to data entered. PC5. Investigate and confirm data that is unclear before entering, generate reports of data entry, store completed work in designated locations and perform backup operations. PC6. Update database information to reflect most current source information PC7. Assist in the filing and storage of security and back up data files PC8. Respond to requests for information and access relevant files

Knowledge and Understanding (K)	
A. Organizational Context (Knowledge of the company / organization and its processes)	The user/individual on the job needs to know and understand: KA1. The data management applications/tools used by the company KA2. Data entry protocol KA3. Data integrity and security policies of the company KA4. Approved methods for carrying document control and archiving
B. Technical Knowledge	The user/individual on the job needs to know and understand: KB1. Basic understanding computers and its terminology KB2. Work on different software needed for report writing including MS office suit or open source office

Skills (S) [Optional]	
A. Core Skills/	**Reading and Writing Skills**

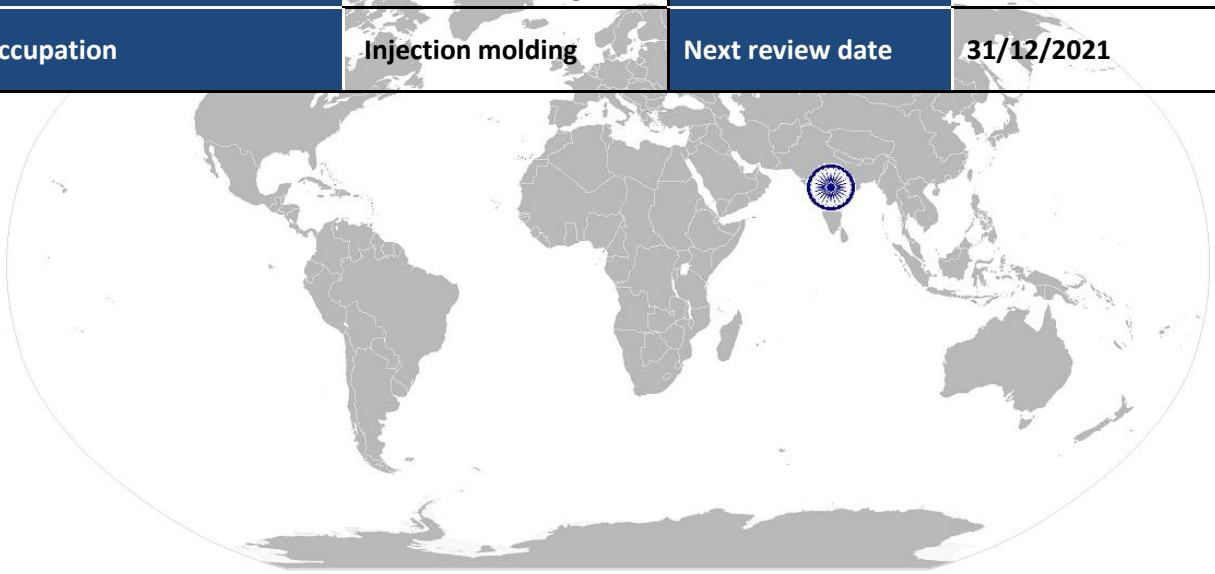
RSC/N4504 (CPC/N0219) Basics of computer and data entry in MS OFFICE/office Open source suite Software

Generic Skills	The user/ individual on the job needs to know and understand how to: SA1. Efficiently enter data into computer applications SA2. Prepare legible reports SA3. Read and understand manuals, SOPs, instructions, memos, reports, job cards etc.
	Oral Communication (Listening and Speaking skills)
	The user/individual on the job needs to know and understand how to: SA4. Communicate effectively with the team members and supervisors
B. Professional Skills	**Problem solving**
	Detect problems in day to day tasks: SB1 Apply basic logic to identify data errors SB2. Pay attention to details
	Plan and Organize
	The user/individual on the job needs to know and understand how to: SB3. Plan assigned tasks within timeline and as per priority order specified
	Critical Thinking
	The user/individual on the job needs to know and understand how to: SB4. Identify process improvements

RSC/N4504 (CPC/N0219) Basics of computer and data entry in MS OFFICE/office Open source suite Software

NOS Version Control

NOS Code	RSC/N4504 (CPC/N0219)		
Credits (NSQF)	4.7	Version number	1.0
Sector	Rubber	Drafted on	18/05/2016
Sub Sector	Plastics Processing	Last reviewed on	26/12/2016
Occupation	Injection molding	Next review date	31/12/2021



CRITERIA FOR ASSESSMENT OF TRAINEES				
Job Role: Machine Operator – Plastic Injection Moulding **Qualification Pack Code: RSC/Q 4502 (CPC/Q 0204)** **Sector Skill Council: Rubber Skill Development Council**				
Guidelines for Assessment: 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 laydown proportion of marks for Theory and Skills Practical for each PC. 2. The assessment for the theory part will be based on knowledge bank of questions created by the SSC. 3. Individual assessment agencies will create unique question papers for theory part for each candidate at each examination/training center (as per assessment criteria below) 4. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/training center based on this criteria. 5. To pass the Qualification Pack , every trainee should score a minimum of 70% in every NOS. 6. In case of successfully passing only certain number of NOS's, the trainee is eligible to take subsequent assessment on the balance NOS's to pass the Qualification Pack.				
Assessable outcome		**Marks Allocation**		
NOS	**Performance criteria**	**Total**	**Theory**	**Practical**
RSC/N4501 (CPC/N0214) Understand basic concepts, job requirements and basics know how related to the Injection moulding process	PC1. interact with the operator in order to understand the production schedule	6	4	2
	PC2. help in planning the day's production activities based on the operator's instructions	6	4	2
	PC3. ensure availability of consumables and plastics materials for production in sufficient quantity as per production plan/operators instructions.	6	4	2
	PC4. Ensure that Clearly understanding the does and don'ts of the manufacturing process as defined in SOPs/ Work Instructions or defined by operator.	4	3	1
	PC5. Check availability of the personal protective equipments (PPE) like Gloves, Goggles etc.	4	3	1
	PC6. Follow the molding procedure and process to be adopted for completing the work order from the operator by referring the Work Instruction document/ SOP manual.	4	3	1
	PC7. Ensure that the required material is procured from the store before starting the process	3.5	2.5	1
	PC8. Ensure the Mould required for executing the required operation and ensure that the same is available for operation.	3.5	2.5	1
	PC9. Collect the mould from tool room If mould is not available.	3.5	2.5	1
	PC10. Install and bolt the mould in place and slide the	3.5	2.5	1

	safety door shut.			
	PC11. Add the raw material in the machine using material loader or by manual feeding.	3.5	2.5	1
	PC12. Ensure moulds are clean if not clean with soft cotton cloth.	3.5	2.5	1
	PC13. Ensure cleaning of the other auxiliaries tools, (if any) before the initiation of the moulding and trimming process	3.5	2.5	1
	PC14. Ensure cleaning of the area around the apparatus for any oil, grease, combustible substances etc. so as to prevent any accident	3.5	2.5	1
	PC15. Ensure availability of the coolant and working of valves to circulate the coolant to cool and solidify plastic	3.5	2.5	1
	PC16. Identify the raw material like plastics granules, fillers, bonding additives etc. required for executing the activity	3.5	1.5	2
	PC17. Refer the queries to supervisor if they cannot be resolved by the operator	3.5	1.5	2
	PC18. Confirm self - understanding to the operator once the query is resolved so that all doubts & queries can be resolved before the actual process execution	3.5	1.5	2
	Sub total	**72**	**48**	**24**
2. RSC/N4505 (CPC/N 0221) Perform the Injection molding related operations, monitor process parameters and troubleshoot the process/product if any	PC1. Check for operation of molding apparatus like hopper, heaters etc. as per the checklist provided	20	10	10
	PC2. Fix the desired Mould to the injection moulding machine in order to achieve the desired operation as per the Work Instructions/ SOPs	20	10	10
	PC3. Make modifications in the process parameters (by selecting the right program from the machine control system) if required and ensure alignment with the prescribed standards	25	10	15
	PC4. Perform preheating of plastic granules (In case of Engineering plastics)	20	5	15
	PC5. Ensure that the plastic granules are mixed with additives (if any) before being fed into the hopper	20	5	15
	PC6. Conduct a test process and produce a sample output as per the required	20	10	10
	PC7. Ensure that the dimensions of the output product are measured as per the process given in the Work Instructions/ SOP under guidance of operator.	31	15	16

	PC8.In case the test product matches the dimensions and quality of the final output, start the production process	20	10	10
	PC9.Feed the required operation code in the apparatus for heaters to melt the plastic granules at the predefined temperature	35	15	20
	PC10. Enter moulding temperature, volume of plastic and weight settings in the machine as per data sheet	35	15	20
	PC11. Enter machine and process parameters such as moulding pressure and time as per the data sheet	25	15	10
	PC12. Add master batch and regrind raw material as per standard composition and mix it well	30	10	20
	PC13. Check-list procedure to ensure quality of final product	22	8	14
	PC14. Enter machine and process parameters such as moulding pressure and time as per the data sheet	22	8	14
	Sub total	**345**	**146**	**199**
3. **RSC/N4506 (CPC/N 0222) Conduct quality checks and inspection of the finished products with reference to the approved product.**	PC1. Compare texture, colour, surface properties, hardness and strength etc. with the given approved product.	12	4	8
	PC2. Note down the observations of the basic inspection process and Identify pieces which are OK and also not meeting the specified standards	11	3	8
	PC3. Discard the batch which are beyond repair and repair the ones which need minor modifications in settings.	11	3	8
	PC4. Maintain records of each category of work outputs as per the batch etc. so that correction can be organized.	11	3	8
	PC5.Establish linkage between rejection of output and the pertinent causes for the same (process/ material etc.); Recommend the means for rejection control.	11	3	8
	PC6.Rectify minor defects like dimension variation, thickness variation etc. by control process parameters etc.	11	3	8
	PC7.Escalate all issues related to change in surface properties, Tensile strength etc. so that the manufacturing equipment can be reset to achieve the specified output.	11	3	8
	PC8.Provide first and last output from each batch to the lab for quality check on its composition, properties etc.	7	2	5

	PC9. Obtain clearance for the entire batch from the lab	6	2	4
	Sub total	**91**	**26**	**65**
4. RSC/N4101 (CPC/N0411) Maintain basic health and safety practices at the workplace, 5S	PC1. Wear protective clothing/equipment for specific tasks and work conditions	2.5	0.5	2
	PC2. Carry out safe working practices while dealing with hazards to ensure the safety of self and others.	2.5	0.5	2
	PC3. Keep good housekeeping practices at all times	2.5	0.5	2
	PC4. Use the various appropriate fire extinguishers on different types of fires correctly	2.5	0.5	2
	PC5. Demonstrate rescue techniques applied during fire hazard, demonstrate good housekeeping in order to prevent fire hazards, demonstrate the correct use of a fire extinguisher.	2.5	0.5	2
	PC6. Identify activities which can cause potential injury through sharp objects, burns, fall, electricity, gas leakages, radiation, poisonous fumes, chemicals, loud noise, and Identify areas in the plant which are potentially hazardous/unhygienic in nature. Conduct regular checks with support of the maintenance team on machine health to identify potential hazards due to wear and tear of machine.	2.5	0.5	2
	PC7. Inform the concerned authorities on the potential risks identified in the processes, workplace area/ layout, materials used etc, Inform the concerned authorities about machine breakdowns, damages which can potentially harm man/ machine during operations.	2.5	0.5	2
	PC8. Create awareness amongst other by sharing information on the identified risks.	2.5	0.5	2
	PC9. Follow the sorting process and check that the tools, fixtures & jigs that are lying on workstations are the ones in use and un-necessary items are not cluttering the workbenches or work surfaces.	2.5	0.5	2
	PC10. Ensure segregation of waste in hazardous/ non Hazardous waste as per the sorting work instructions	2.5	0.5	2
	PC11. Follow the technique of waste disposal and waste storage in the proper bins as per SOP	1.5	0.5	1
	PC12. Segregate the items which are labeled as red tag items for the process area and keep them in the correct places	1.5	0.5	1

	PC13. Sort the tools/ equipment/ fasteners/ spare parts as per specifications/ utility into proper trays, cabinets, lockers as mentioned in the 5S guidelines/ work instructions	1.5	0.5	1
	PC14. Ensure that areas of material storage areas are not overflowing PC15. Properly stack the various types of boxes and containers as per the size/ utility to avoid any fall of items/ breakage and also enable easy sorting when required	1.5	0.5	1
	PC16. Return the extra material and tools to the designated sections and make sure that no additional material/ tool is lying near the work area	1.5	0.5	1
	PC17. Follow the floor markings/ area markings used for demarcating the various sections in the plant as per the prescribed instructions and standards.	1.5	0.5	1
	PC18. Follow the proper labelling mechanism of instruments/ boxes/ containers and maintaining reference files/ documents with the codes and the lists	1.5	0.5	1
	PC19. Check that the items in the respective areas have been identified as broken or damaged	1.5	0.5	1
	PC20. Follow the given instructions and check for levelling of fluids, oils, lubricants, solvents, chemicals etc. and proper storage of the same To avoid spillage, leakage, fire etc.	1.5	0.5	1
	PC21. Make sure that all material and tools are stored in the designated places and in the manner indicated in the 5S instructions.	1.5	0.5	1
	Sub total	**40**	**10**	**30**
5. RSC/N4507 (CPC/N 0223) Entrepreneurship in Injection moulding	PC1. Plan and Budgeting with reference to various components of Injection Moulding.	2.5	2	0.5
	PC2. Maintain books of accounts and various transactions.	2.5	2	0.5
	PC3. Arrange for financial assistance from various quarters in the light of various schemes available in setup for Injection Moulding.	2.5	2	0.5
	PC4. Ascertain the prices of various inputs and products from the market.	2.5	2	0.5
	PC5. Assess the influence of various quality parameters of products on the product pricing.	3	2	1
	PC6. Establish cordial relations with various clients for	2.5	2	0.5

	the benefit of industry.			
	PC7. Assess the needs and requirement of the clients and assess one's own unique selling proposition.	2.5	2	0.5
	PC8. Extract critical market information that is otherwise not in the public domain.	3	2	1
	PC9. Choose appropriate buyer in a given situation of market parameters	3	2	1
	PC10. Identify best ways of attracting market price for one's produce	3	2	1
	PC11. Ensure quality before and during the sale activity to ensure good returns.	3	2	**1**
	Sub total	**30**	**22**	**8**
6. RSC/N4504 (CPC/N0219) Basics of computer and data entry in MS OFFICE/office Open source suite Software	PC1. Fill and process mandated forms for receiving, processing, or tracking data enter data from source documents (such as trial report, process sheet etc.) into Computer application having MS OFFICE software.	3	2	1
	PC2. Scan source documents in accordance with specific instructions.	3	2	1
	PC3. Verify data entered with source documents, checks for compliance and corrects all typographical errors and missing or repeated data.	3	2	1
	PC4. Maintain files of source documents or other information related to data entered.	3	2	1
	PC5. Investigate and confirm data that is unclear before entering, generate reports of data entry, store completed work in designated locations and perform backup operations.	3	2	1
	PC6. Update database information to reflect most current source information	2	1	1
	PC7. Assist in the filing and storage of security and back up data files	3	2	1
	PC8. Respond to requests for information and access relevant files	2	1	1
	Sub total	**22**	**14**	**8**
	Total	**600**	**266**	**334**