

# Model Curriculum

## Tool Room – Helper (Plastic)

**SECTOR:** RUBBER

**SUB-SECTOR:** PLASTICS PROCESSING

**OCCUPATION:** TOOL ROOM

**REF ID:** RSC/Q4304 (CPC/Q5101), V 1.0

**NSQF LEVEL:** 1



**CURRICULUM COMPLIANCE TO  
QUALIFICATION PACK – NATIONAL OCCUPATIONAL STANDARDS**

is hereby issued by the

**RUBBER SKILL DEVELOPMENT COUNCIL**

for the

**MODEL CURRICULUM**

Complying to National Occupational Standards of  
Job Role/ Qualification Pack: **'Tool Room – Helper (Plastic)'**  
QP No. **'RSC/Q4304 (CPC/Q5101), V1.0, NSQF Level 1'**

Date of Issuance: **December 26<sup>th</sup>, 2016**

Valid up to: **December 25<sup>th</sup>, 2021**

\* Valid up to the next review date of the Qualification Pack



Authorised Signatory  
(Rubber Skill Development Council)

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# Tool Room – Helper (Plastic)

## CURRICULUM / SYLLABUS

This program is aimed at training candidates for the job of a “Tool Room – Helper (Plastic)”, in the “Rubber Skill Development Council” Sector/Industry and aims at building the following key competencies amongst the learners.

<b>Program Name</b>	<b>Tool Room – Helper (Plastic)</b>		
<b>Qualification Pack Name and Reference ID</b>	RSC/Q4304 (CPC/Q5101), V 1.0		
<b>Version No.</b>	1.0	<b>Version Update Date</b>	29/05/2019
<b>Pre-requisites to Training</b>	Able to read and write		
<b>Training Outcomes</b>	<p><b>After completing this programme, participants will be able to:</b></p> <ul style="list-style-type: none"> <li>• Identify the basic tools, equipment, materials, and their usage</li> <li>• Demonstrate the receipt of tools and equipment from stores</li> <li>• Illustrate the procedure of cleaning the machine and equipment</li> <li>• Demonstrate the procedure of cleaning the worksite</li> <li>• Practice basic health and safety practices at the workplace</li> <li>• Demonstrate effective working with others.</li> </ul>		

This course encompasses 5 out of 5 National Occupational Standards (NOS) of “Tool Room – Helper (Plastic)” Qualification Pack issued by “Rubber Skill Development Council”.

Sr. No.	Module	Key Learning Outcomes	Equipment Required
1.	<p><b>Introduction to the job role</b></p> <p><b>Theory Duration</b> (hh:mm) 05:00</p> <p><b>Practical Duration</b> (hh:mm) 10:00</p> <p><b>Corresponding NOS Code</b> Bridge Module</p>	<ul style="list-style-type: none"> <li>List the major milestones in the developmental history of plastic</li> <li>State the basic industrial scenario of plastics</li> <li>Identify types of plastic</li> <li>List major industrial associations linked to tool room - helper</li> <li>Identify equipment used by a tool room - helper</li> <li>Describe the roles and responsibilities of a tool room - helper.</li> </ul>	<p><b>Classroom equipment:</b> pen drives, computers, charts, black / white board, markers and duster.</p>
2.	<p><b>Identify and use basic tools, equipment and materials</b></p> <p><b>Theory Duration</b> (hh:mm) 05:00</p> <p><b>Practical Duration</b> (hh:mm) 20:00</p> <p><b>Corresponding NOS Code</b> RSC/N4312 (CPC/N5101)</p>	<ul style="list-style-type: none"> <li>List the basic tools, equipment and materials for the job</li> <li>Discuss the usage of different manufacturing equipment relevant for the job</li> <li>Identify various working tools such as various types of pliers, screw drivers, hammers, files, chisels etc.</li> <li>Choose correct working tools as per requirement</li> <li>Identify different marking and measuring tools</li> <li>Choose the correct marking and measuring tool as per the job description</li> <li>Identify the appropriate use of manufacturing equipment relevant to task.</li> </ul>	<p><b>Measuring equipment:</b> Steel ruler, micrometer, Vernier caliper, radius gauge, feeler gauge, height gauge, thread gauge, steel measuring tape, weighing balance (1 no.)</p> <p><b>Hand tools:</b> Hammer, screw driver set with multiple heads, allen key hexagonal, twist drills bit, file triangular, hacksaw adjustable, spanner set double side, adjustable spanner, crimping tools, calculator, wrenches, pliers, cutters, striking tools, struck or hammered tools, vises, clamps, snips, saws, drills and knives</p> <p><b>Other equipment:</b> Trolley manual and hydraulic, battery operated trucks, nylon belts, etc.</p> <p><b>Personal protective equipment:</b> Safety goggles, rubber gloves, hand gloves, fire extinguisher, earplugs, apron, helmet, first aid box with medicines.</p>

<p>3.</p>	<p><b>Receive tools and equipment from stores/department</b></p> <p><b>Theory Duration</b> (hh:mm) 10:00</p> <p><b>Practical Duration</b> (hh:mm) 20:00</p> <p><b>Corresponding NOS Code</b> RSC/N4313 (CPC/N5102)</p>	<ul style="list-style-type: none"> <li>List the tools, cutters, measuring equipment and necessary hardware for the job</li> <li>Describe the process of inspecting the work site</li> <li>Comply with the time limits given by the supervisor</li> <li>Identify the required tools, cutters, measuring equipment and necessary hardware for the job</li> <li>Check if the required tools, cutters, measuring equipment and necessary hardware are in proper working condition</li> <li>Check if the tools and equipment match specification as per the job requirement</li> <li>Identify the tools and equipment to be carried to the job site</li> <li>Carry tools, cutters, measuring equipment and hardware to the job site</li> <li>Check the work site</li> <li>Assist employees with necessary help to execute the job.</li> </ul>	<p><b>Measuring equipment:</b> Steel ruler, micrometer, vernier caliper, radius gauge, feeler gauge, height gauge, thread gauge, steel measuring tape, weighing balance (1 no.)</p> <p><b>Hand tools:</b> Hammer, screw driver set with multiple heads, allen key hexagonal, twist drills bit, file triangular, hacksaw adjustable, spanner set double side, adjustable spanner, crimping tools, calculator, wrenches, pliers, cutters, striking tools, struck or hammered tools, vises, clamps, snips, saws, drills and knives</p> <p><b>Other equipment:</b> Trolley manual and hydraulic, battery operated trucks, nylon belts, etc.</p> <p><b>Personal protective equipment:</b> Safety goggles, rubber gloves, asbestos gloves, fire extinguisher, apron, helmet, first aid box with medicines.</p>
<p>4.</p>	<p><b>Clean the machine, and equipment</b></p> <p><b>Theory Duration</b> (hh:mm) 10:00</p> <p><b>Practical Duration</b> (hh:mm) 30:00</p> <p><b>Corresponding NOS Code</b> RSC/N4314 (CPC/N5103)</p>	<ul style="list-style-type: none"> <li>Describe the process of cleaning the tools and equipment</li> <li>Explain the significance of the machines after completion of the job</li> <li>Clean the tools and equipment before starting the job</li> <li>Clean the equipment before assembling</li> <li>Clean the machines (removing oil, dust, grease etc.) after completion of the job</li> <li>Remove all the tools, equipment, scraps and hardware from the work site and return them to the department/stores.</li> </ul>	<p><b>Personal protective equipment:</b> Safety goggles, rubber gloves, asbestos gloves, fire extinguisher, apron, helmet, first aid box with medicines</p> <p><b>Hand tools:</b> Hammer, screw driver set with multiple heads, allen key hexagonal, twist drills bit, file triangular, hacksaw adjustable, spanner set double side, adjustable spanner, crimping tools, calculator, wrenches, pliers, cutters, striking tools, struck or hammered tools, vises, clamps, snips, saws, drills and knives</p>

			<b>Cleaning equipment:</b> Different cleaning materials such as air blower, vacuum cleaner, soaps, cotton waste cloth, brooms, etc.
5.	<b>Clean the worksite</b>  <b>Theory Duration</b> (hh.mm) 10:00  <b>Practical Duration</b> (hh.mm) 30:00  <b>Corresponding NOS Code</b> RSC/N4314 (CPC/N5103)	<ul style="list-style-type: none"> <li>Discuss the process of cleaning the shop floor post completion of the job</li> <li>Explain the significance of keeping the shop floor free from obstacles</li> <li>Explain the significance of keeping the work place free from dust, oil, grease, scraps etc. before starting the job</li> <li>Keep the work place free from dust, oil, grease, scraps etc. before starting the job</li> <li>Keep the shop floor free from all obstacles</li> <li>Demonstrate how to clean the shop floor post job completion.</li> </ul>	<b>Personal protective equipment:</b> Safety goggles, rubber gloves, asbestos gloves, fire extinguisher, apron, helmet, first aid box with medicines  <b>Hand tools:</b> Hammer, screw driver set with multiple heads, allen key hexagonal, twist drills bit, file triangular, hacksaw adjustable, spanner set double side, adjustable spanner, crimping tools, calculator, wrenches, pliers, cutters, striking tools, struck or hammered tools, vises, clamps, snips, saws, drills and knives  <b>Cleaning equipment:</b> Different cleaning materials such as air blower, vacuum cleaner, soaps, cotton waste cloth, brooms, etc.
6.	<b>Maintain basic health and safety practices at the workplace, 5S</b>  <b>Theory Duration</b> (hh:mm) 05:00  <b>Practical Duration</b> (hh:mm) 30:00  <b>Corresponding NOS Code</b> RSC/N4101 (CPC/N0411)	<ul style="list-style-type: none"> <li>Discuss the environmental and safety policies of the organization</li> <li>List the different types of hazards in a work place</li> <li>Discuss the significance of safe working practices</li> <li>Comply with environmental and safety policies of organisation</li> <li>Identify personal safety , job safety and machine safety procedures</li> <li>Coordinate resources at the workplace to achieve a healthy, safe and secure environment</li> <li>Identify and correct any hazards like illness, accidents, fires or any other natural calamity safely</li> <li>Demonstrate safe working practices while dealing with hazards</li> <li>Comply with good housekeeping</li> </ul>	<b>Classroom equipment: ,</b> pen drives, computers, charts, black / white board, markers and duster  <b>Personal protective equipment:</b> Safety goggles, rubber gloves, asbestos gloves, fire extinguisher, apron, helmet, first aid box with medicines  <b>Measuring equipment:</b> Steel ruler – 15cm (with metric graduations), micrometer 0 – 25mm, Vernier caliper, outside – inside spring caliper, radius gauge, feeler gauge, height gauge, thread gauge, thickness gauge, steel measuring tape, weighing

		<p>standards at all times</p> <ul style="list-style-type: none"> <li>• Demonstrate the correct use of a fire extinguisher</li> <li>• Demonstrate rescue techniques applied during fire hazard</li> <li>• Identify potential injury through sharp objects, burns, fall, electricity, gas leakages, radiation, poisonous fumes, chemicals, loud noise</li> <li>• Conduct regular checks with support of the maintenance team on machine health</li> <li>• Practise creating awareness amongst others by sharing information on the identified risks</li> <li>• Demonstrate the sorting process for equipment</li> <li>• Check that the tools, fixtures and jigs that are lying on workstations are the ones in use and unnecessary items are not cluttering the workbenches</li> <li>• Categorize the types of wastes and their disposal</li> <li>• Segregate the items which are labelled as red tag items for the process area and keep them in the correct places</li> <li>• Categorize the tools/ equipment/ fasteners/ spare parts as per specifications/ utility into proper trays, cabinets, lockers</li> <li>• Practise proper stacking of various types of boxes and containers as per the size/ utility</li> <li>• Identify the floor markings/ area markings used for demarcating the various sections in the plant</li> <li>• Comply with the given instructions for labelling of fluids, oils, lubricants, solvents, chemicals etc. and proper storage of the same to avoid spillage, leakage, fire, etc.</li> <li>• Organize all material and tools in the designated places as indicated in the 5S instructions.</li> </ul>	<p>balance (1 no.)</p> <p><b>Hand tools:</b> Hammer, spanners, screw driver set with multiple heads, allen key hexagonal set (inches and millimetre), twist drills bit, file triangular, hand hacksaw with adjustable frame, spanner set double side, adjustable spanner, crimping tools, calculator, wrenches, pliers, cutters, striking tools, struck or hammered tools, vises, clamps, snips, saws, drills and knives.</p>
7.	<p><b>Effective working with others</b></p> <p><b>Theory Duration</b> (hh:mm)</p>	<ul style="list-style-type: none"> <li>• Practise appropriate communication etiquette while working</li> <li>• Demonstrate active listening skills while interacting with others</li> </ul>	<p><b>Classroom equipment:</b> Projector/screen, pen drives, computers, charts, black / white board, markers and duster.</p>



	05:00 <b>Practical Duration</b> (hh:mm) 10:00 <b>Corresponding NOS Code</b> RSC/N4203 (CPC/N7014)	<ul style="list-style-type: none"> <li>• Demonstrate responsible and disciplined behaviour at workplace</li> <li>• Practise accurate receipt of information and instructions from the supervisor and fellow workers</li> <li>• Demonstrate ways to accurately pass on information to authorized persons</li> <li>• Assist others in performing tasks in a positive manner</li> <li>• Assist others to maximize effectiveness and efficiency in carrying out tasks</li> <li>• Escalate grievances and problems to appropriate authority.</li> </ul>	
	<b>Total Duration</b>  <b>Theory Duration</b> <b>50:00</b>  <b>Practical Duration</b> <b>150:00</b>	<b>Unique Equipment Required:</b> <ol style="list-style-type: none"> <li><b>1. Classroom equipment:</b>, pen drives, computers, charts, black / white board, markers and duster.</li> <li><b>2. Measuring equipment:</b> Steel ruler, micrometer, Vernier caliper, radius gauge, feeler gauge, height gauge, thread gauge, steel measuring tape, weighing balance (1 no.)</li> <li><b>3. Hand tools:</b> Hammer, screw driver set with multiple heads, allen key hexagonal, twist drills bit, file triangular, hacksaw adjustable, spanner set double side, adjustable spanner, crimping tools, calculator, wrenches, pliers, cutters, striking tools, struck or hammered tools, vises, clamps, snips, saws, drills and knives</li> <li><b>4. Other equipment:</b> Trolley manual and hydraulic, battery operated trucks, nylon belts, etc.</li> <li><b>5. Personal Protective equipment:</b> Safety goggles, rubber gloves, hand gloves, fire extinguisher, earplugs, apron, helmet, first aid box with medicines.</li> <li><b>6. Cleaning equipment:</b> Different cleaning materials such as air blower, vacuum cleaner, soaps, cotton waste cloth, brooms, etc.</li> </ol>	

Grand Total Course Duration: **200 Hours 0 Minutes**

(This syllabus/ curriculum has been approved by [Rubber Skill Development Council](#))

## Trainer Prerequisites for Job role: “Tool Room – Helper (Plastic)” mapped to Qualification Pack: “RSC/Q4304 (CPC/Q5101)”, Version 1.0

Sr. No.	Area	Details
1	<b>Description</b>	To deliver accredited training service, mapping to the curriculum detailed above, in accordance with the Qualification Pack “ <u>RSC/Q4304 (CPC/Q5101), V 1.0</u> ”.
2	<b>Personal Attributes</b>	A Trainer should be free from socio-economic preferences and prejudice. He/ she should be safety conscious and proficient in handling and use security/ safety equipment. Besides being knowledgeable, he/ she should be energetic, motivating, innovative and good at communication. The trainer should be able to establish rapport with the trainees and employ innovative methods to impart instructions.
3	<b>Minimum Educational Qualification</b>	<ul style="list-style-type: none"> <li>• Knowledge of various tools</li> <li>• Reading and writing</li> <li>• Safety practices</li> </ul>
4a	<b>Domain Certification</b>	Certified for Job Role “ <u>Tool Room – Helper (Plastic)</u> ” mapped to the Qualification Pack “ <u>RSC/Q4304 (CPC/Q5101), V 1.0</u> ” issued by RSDC. Minimum accepted score as per SSC guidelines is 80%.
4b	<b>Platform Certification</b>	Recommended that the Trainer is certified for the Job Role: “ <u>Trainer</u> ”, mapped to the Qualification Pack: “ <u>MEP/Q2601</u> ” with scoring of minimum 80%.
5	<b>Experience</b>	As per the standards set by relevant SSC to practice in different industry sectors.

## Annexure: Assessment Criteria

### CRITERIA FOR ASSESSMENT OF TRAINEES

**Job Role: Tool Room – Helper (Plastic)**

**Qualification Pack Code: RSC/Q4304 (CPC/Q5101), V 1.0**

**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 centre (as per assessment criteria below).
4. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/training centre based on these 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.

Performance Criteria		Assessment Criteria for the outcome		
NOS	Performance Criteria Description	Total	Theory	Practical
<b>RSC/N4312 (CPC/N5101): Identification and use of basic tools, equipment and materials</b>	PC1. identify, select and use working tools such as various types of pliers, screw, drivers, hammers, files, chisels etc.	5	1	4
	PC2. identify, select and use marking and measuring tools as per instructions	5	1	4
	PC3. identify and use manufacturing equipment relevant to task under supervision.	5	1	4
	<b>Subtotal</b>	<b>15</b>	<b>3</b>	<b>12</b>
<b>RSC/N4313 (CPC/N5102) : Receive tools and cutters from stores / department</b>	PC1. adhere to time limits given by supervisor	2.5	0.5	2
	PC2. identify in consultation with supervisor the required tools, cutters, measuring equipment and necessary hardware for the job	2.5	0.5	2
	PC3. ensure the required tools, cutters, measuring equipment and necessary hardware are in proper working condition and match specification as per the job requirement and the list being provided by the supervisor	2.5	0.5	2
	PC4. coordinate within department/ store to obtain the identified tools and cutters to be carried to the job site	2.5	0.5	2
	PC5. carry the tools, cutters, measuring equipment and hardware to the job site without damage	1.25	0.25	1
	PC6. inspect work site and extend necessary help for executing the job as per suggestion of the supervisor.	1.25	0.25	1
	<b>Subtotal</b>	<b>12.5</b>	<b>2.5</b>	<b>10</b>
<b>RSC/N4314 (CPC/N5103) : Clean the machine and equipment and work site</b>	PC1. ensure the tools and equipment are cleaned before starting the job	2.5	0.5	2
	PC2. clean the equipment before assembling	2.5	0.5	2
	PC3. ensure the machines are cleaned (removing oil, dust, grease etc.) after completion of the job	2.5	0.5	2
	PC4. ensure the work place is free from dust, oil, grease, scraps etc. before starting the job	2.5	0.5	2
	PC5. ensure the shop floor is free from all obstacles	2.5	0.5	2
	PC6. clean the shop floor post job completion	2.5	0.5	2
	PC7. ensure all tools, equipment, scraps and hardware are removed from the work site and returned to the department/stores as per	4	1	3

	company procedure.			
	<b>Subtotal</b>	<b>19</b>	<b>4</b>	<b>15</b>
<b>RSC/N4101 (CPC/N0411) Maintain basic health and safety practices at the workplace,5S</b>	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. ensure well 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 and jigs that are lying on workstations are the ones in use and unnecessary 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	1.5	0.5	1
	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	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. ensure to check 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
	<b>Subtotal</b>	<b>40</b>	<b>10</b>	<b>30</b>
<b>(RSC/N4203) (CPC/N7014) Effective working with others</b>	PC1. display appropriate communication etiquette while working	2	1	1
	PC2. display active listening skills while interacting with others at work	2	1	1
	PC3. demonstrate responsible and disciplined behaviours at the workplace	2	1	1
	PC4. accurately receive information and instructions from the supervisor and fellow workers, getting clarification where required	1.5	0.5	1
	PC5. accurately pass on information to authorized persons who require it and within agreed timescale and confirm its receipt	1.5	0.5	1
	PC6. display helpful behaviour by assisting others in performing tasks in a positive	1.5	0.5	1

	manner, where required and possible			
	PC7. consult with and assist others to maximize effectiveness and efficiency in carrying out tasks	1.5	0.5	1
	PC8. escalate grievances and problems to appropriate authority as per procedure to resolve them and avoid conflict.	1.5	0.5	1
	<b>Subtotal</b>	<b>13.5</b>	<b>5.5</b>	<b>8</b>
	<b>Total</b>	<b>100</b>	<b>25</b>	<b>75</b>