







# **APPRENTICESHIP CURRICULUM (OPTIONAL TRADE)**

## Rubber

**Processing Technician RSS\_Rubber** 

**Course Code: C0092200010** 

**⊠NAPS** □Non-NAPS

NSQF Level: 4



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# **Course Details**

1.	Course Name	Processing Technician RSS_Rubber				
2.	Course Code	CO09220	00010			
3.	Apprenticeship Training Duration:	Months:	12 months			
	(2 to 4 weeks of BT is embedded in this duration as per the requirement					
	of the establishment)					
	Remarks					
4.	Credit	TBD				
5.	NSQF Level (Mandatory for NAPS)	4	NSQC	Approval Date: 31s	t March 2022	
6.	Related NSQF aligned qualification details					
		S. No.	QP/ Qualification/ NOS	QP/ NOS Code &	NQR Code	
			Name (As applicable)	Version		
		1.	Processing Technician-	RSC/Q6602 _V1	2022/RUB/RSDC/05752	
			RSS Rubber			
			<u> </u>			
7.	Brief Job Role Description	The indiv	ridual in this job is respons	sible for processing	of fresh latex into RSS. The	
		individua	al is also responsible for ke	eeping the records o	of the work done and for	
		necessar	y housekeeping work.			
8.	NCO-2015 Code & Occupation (Access the NCO 2015 volumes from:	NCO-201	5/NIL			
	https://labour.gov.in/organizationsofmole/directorate-general-employment-training-					
	dget)					
9.	Minimum Eligibility Criteria	8th Class (with ITI (2 years in relevant filed) with 2 years of relevant experience)				
	(Educational and/ or Technical Qualification)	OR				
			10th Class (2 ye	ears of relevant exp	erience)	
			4011 01 171 1/2	OR		
			10th Class + I.T.I ((2 yea	irs after Class 10th i	n relevant filed))	

10.	Entry Age for Apprenticeship	18 years				
11.	Any Licensing Requirements (wherever applicable)	NA				
12.	Is the Job Role amenable to Persons with Disability	☐ Yes	o			
		If yes, check the	applicable type	of Disability		
		☐ Locomotor Disability	☐ Leprosy Cured Person	☐ Cerebral Palsy	☐ Dwarfism	□ Muscular Dystrophy
		☐ Acid Attack Victims	☐ Blindness	☐ Low Vision	□ Deaf	☐ Hard of Hearing
		☐ Speech and Language Disability	□ Intellectual Disability	☐ Specific Learning Disabilities	☐ Autism Spectrum Disorder	☐ Mental Illness
		☐ Multiple Sclerosis	☐ Parkinson's Disease	☐ Haemophilia	□ Thalassemia	☐ Sickle Cell Disease
		☐ Multiple Disabilities				
		Remarks:				
13.	Submitting Body Details			ochemical Skill De	evelopment Cour	ncil
		E-mail ID: ceo@rcpsdc.in Contact Number: 011-41009347- 48				
14.	Certifying Body				nent Council	
	Employment Avenues/Opportunities	Rubber, Chemical & Petrochemical Skill development Council  Self-Employment:				

		Trainees can also start their own business and also provide jobs to other people.
		Processing Technician RSS_Rubber
		Jobs Opportunities in private companies:
		The trainees can get a job in a corporate as Processing Technician RSS_Rubber.
16.	Career Progression	Processing Technician-RSS Rubber will leads to Supervisor level under
		Production-TSR Occupation in the rubber plantation sector
17.	Trainer's Qualification & Experience:	
18.	Curriculum Creation Date	01/09/2022
19.	Curriculum Valid up to Date	31/03/2025

# **Module Details**

S. No	Module/NOS Name, Code, Version	Outcomes	Assess		Passing Percen	
	Version		Th.	Pr.	Th.	Pr.
1.	Introduction	<ul> <li>Discuss the scopes and prospects in the Rubber Industry in India</li> <li>Evaluate the job role and responsibility of a Processing Technician— RSS Rubber</li> <li>Estimate the scope of work of a Processing Technician— RSS Rubber</li> <li>Illustrate the career progression of a Processing Technician— RSS Rubber</li> </ul>	0	0	0	0
2.	Perform processing of sheet rubber RSC/N6602_V1.0	<ul> <li>Explain how to ensure appropriate use and minimum wastage of materials and utilities</li> <li>Demonstrate how to assess the quality of field latex including rough estimation of DRC</li> <li>Perform sieving, weighing, sampling, bulking, dilution and coagulation</li> <li>Show how to handle chemicals like formic acid and sodium bi sulphite properly</li> <li>Discuss how to take action for trouble shooting and rectification during production process</li> <li>Illustrate the technical support in sorting, grading and bailing</li> <li>Explain how to handle effluent management and hygiene</li> <li>Discuss how to assist Biogas plant operation</li> <li>Explain the process to ensure cleanliness in the workplace</li> <li>Demonstrate how to set the parameters of machinery as per the SO</li> <li>Demonstrate different processing operations either alone or with minimum assistance</li> <li>Perform operation of sheeting roller/ battery</li> <li>Demonstrate proper washing, dripping and smokehouse loading</li> <li>Illustrate how to provide technical support for smoke house operations including firewood loading, temperature control and fire prevention</li> <li>Practice monitoring of the functioning of machines</li> <li>Show how to carry out maintenance of machines</li> <li>Explain how to achieve the targeted volume as per the schedule</li> <li>Discuss about safety rules for handling electrical equipment</li> </ul>	40	60	70%	70%

S. No	Module/NOS Name, Code,	Outcomes	Assess	ment	Passing	
	Version		Ma	rks	Percent	tage
			Th.	Pr.	Th.	Pr.
		Perform operations using personal safety measures (gloves, masks etc.) and other safety				
		devices				
		Show how to communicate precautions to avoid damage to equipment				
3.	Carry out health and safety RSC/N5007_V1	<ul> <li>Illustrate which protective clothing or equipment is required is identified and the appropriate protective clothing or equipment is used in performing these duties in accordance with workplace policy</li> <li>Interpret the hazards of use and contamination mentioned on the labels of chemicals, utilities etc.</li> <li>Assess risk prior to performing manual handling jobs and work is carried out according to currently recommended safe practices</li> <li>Recognize risks to bystanders and take action to reduce risk associated with jobs in the workplace • Discuss how to follow procedures and work instructions for controlling risk</li> <li>Demonstrate basic safety checks before operation of all machinery and equipment and report hazards to the appropriate supervisor</li> <li>Use equipment and materials safely and correctly and return the same to designated storage when not in use</li> <li>Demonstrate the process to dispose off waste safely and correctly in a designated area</li> <li>Perform work in a manner which minimizes environmental damage</li> <li>Show how to report any accidents, incidents or problems without delay to an appropriate person and take immediate necessary action to reduce further danger</li> <li>Discuss about the emergency procedures as per company standards and workplace requirements • Explain how to recover (if practical), clean, inspect/test, refurbish, replace and store the first aid equipment as appropriate</li> <li>Demonstrate the procedures for dealing with accidents, fires and emergencies, including</li> </ul>	30	70	70%	70%
		communicating location and directions to emergency				
		Use emergency equipment in accordance with manufacturers' specifications and				
		workplace requirements				
		• Illustrate how to provide treatment appropriate to the patient's injuries in accordance with				

S. No	Module/NOS Name, Code,		Assess		Passing	
	Version		Mai	Pr.	Percent Th.	Pr.
		recognized first aid techniques  • Demonstrate the process to dispose off medical waste in accordance with workplace requirements  • Illustrate the process to report details of first aid administered in accordance with work place procedures  • Discuss how to comply with general safety procedures of the company  • Explain how to ensure no accidents and damages at the workplace, reporting of any breach of company safety procedure  • Demonstrate standard safety procedures while handling equipment, hazardous material or tool  • Show how to check parts of the workplace and take preventive actions like spraying and other steps to protect from leakages, water logging, pests, fire, pollution, etc.  • Illustrate the process to keep the workplace organized, swept, clean and hazard free  • Discuss about fire drills and other safety related workshops organized at the workplace  • Interpret events and do not neglect any safety procedures to be followed  • Explain how to avoid accidents while using hazardous chemicals, machines, sharp tools and equipment  • Use safety materials such as protective gear, goggles, caps, shoes, etc. (as applicable with workplace)  • Demonstrate the first aid, evacuation and emergency procedures  • Demonstrate how to handle heavy and hazardous materials with care and using appropriate tools and handling equipment such as trolleys, ladders  • Discuss how to report data/problems/incidents as applicable in a timely manner  • Illustrate the reporting procedures as prescribed by the company  • Demonstrate the process to report to the appropriate authority as laid down by the company				
4.	Carry out reporting and documentation RSC/N5002_V1.0	<ul> <li>Identify documentation to be completed relating to one's role</li> <li>Discuss the process to complete all documentation within stipulated time according to company procedure</li> </ul>	40	60	70%	70%

S. No	Module/NOS Name, Code, Version	Outcomes	Assess		Passing Percentage	
			Th.	Pr.	Th.	Pr.
		<ul> <li>Explain how to ensure that the final document meets with the requirements of the persons who requested it or make any amendments accordingly</li> <li>Discuss how to ensure documents are available to all appropriate authorities to inspect</li> <li>Demonstrate how to record details accurately in an appropriate format</li> </ul>				
5.	Carry out quality checks RSC/N5003 V_1.0	<ul> <li>Discuss how to ensure that total range of checks are regularly and consistently performed</li> <li>Identify non-conformities to quality assurance standards</li> <li>Identify potential causes of non-conformities to quality assurance standards</li> <li>Identify impact on final product due to non-conformance to company standards</li> <li>Evaluate the need for action to ensure that problems do not recur</li> <li>Discuss corrective action to address problems</li> <li>Review effectiveness of corrective actions</li> <li>Use appropriate measuring instruments, equipment, tools, accessories etc. as required</li> <li>Interpret the results of the quality check correctly</li> <li>Discuss how to take up results of the findings with QC in charge/appropriate authority</li> <li>Discuss how take up the results of the findings within stipulated time</li> <li>Discuss about the record of results of action taken</li> <li>Review effectiveness of action taken</li> <li>Illustrate the reporting procedures where the cause of defect cannot be identified</li> <li>Show how to record adjustments not covered by established procedures for future</li> </ul>	35	65	70%	70%
6.	Carry out problem identification and escalation RSC/N5004_V 1.0	<ul> <li>reference</li> <li>Identify any wrong practices that may lead to problems</li> <li>Identify practices that may impact the final product quality</li> <li>Identify if the problem has occurred before</li> <li>Identify other operations that might be impacted by the problem</li> <li>Discuss how to ensure that no delays are caused as a result of failure to escalate problems</li> <li>Demonstrate how to identify defects/indicators of problems</li> <li>Discuss possible reasons for identification of problems</li> <li>Explain how to formulate action in a timely manner</li> <li>Discuss how to communicate problem/remedial action to appropriate parties</li> </ul>	45	55	70%	70%

S. No	Module/NOS Name, Code, Version Outcomes	Assess		Passing Percentage		
			Th.	Pr.	Th.	Pr.
7.	Follow ethical and sustainable practices at the workplace RSC/N5603_V1.0	<ul> <li>Explain how to monitor corrective action</li> <li>Evaluate implementation of corrective action taken to determine if the problem has been resolved</li> <li>Ensure that corrective action selected is viable and practical</li> <li>Discuss how to take corrective action for problems identified according to the company procedure</li> <li>Demonstrate how to take appropriate materials and sample, conduct tests and evaluate results to establish reasons to confirm suspected reasons for non - conformance (where required)</li> <li>Demonstrate the process to report/document problem and corrective action in an appropriate manner</li> <li>Describe the organizational policies for usage of alternate energy source, such as solar energy, at workplace.</li> <li>List alternate energy sources (such as solar and wind energy) and fuels (such as bio-fuel), their production/consumption and advantages of using at workplace for effective resource conservation.</li> <li>Explain the importance of working with zero wastage of water and following water conservation practices.</li> <li>Differentiate between the types of waste (such as recyclable, non-recyclable, and hazardous) generated at workplace and their segregation processes.</li> <li>Outline the procedure for proper and timely disposal of hazardous waste.</li> <li>List the appropriate non-verbal communications means while taking gender and disability of the person into consideration.</li> <li>Emphasize on the importance of providing assistance/support to PwD team members at work and if requested.</li> <li>Employ various techniques for ensuring proper usage of fuels at workplace to minimise pollution and conserve energy</li> <li>Demonstrate how to work in a responsible manner to ensure optimal use of resources.</li> <li>Perform necessary steps to carry out processes while preventing soil erosion during plantation and other related activities.</li> </ul>	40	60	70%	70%

S. No	Module/NOS Name, Code, Version	Outcomes	Assessment Marks		Passing	
	version		Th.	Pr.	Percent	Pr.
			1111.			' ' '
		Implement prescribed methods for storing different types of waste into appropriate				
		bins/containers or areas.				
		• Demonstrate how to safely dispose non - recyclable waste as per the prescribed procedure.				
		• Employ necessary ways for organising the storage of recyclable and reusable material at an identified location.				
		Implement prescribed etiquette and emotional behaviour at workplace while working in a				
		team. • Demonstrate how to communicate in a polite and appropriate manner irrespective				
		of the ability and gender of the person.				
	Total Practical Marking		230	370		

# Glossary

Term	Description
Sector	Sector is a conglomeration of different business operations
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 organization.
National Occupational NOS are occupational standards which apply uniquely in the Indian context.	
Standards (NOS)	

# Acronyms

Acronym	Description
NOS	National Occupational Standard(s)
NSQF	National Skills Qualifications Framework
QP	Qualifications Pack
TVET	Technical and Vocational Education and Training

# Annexure 1: Tools and Equipment

## List of Tools and Equipment

The tools and equipment required are:

Sno	Tool / Equipment Name	Specification (as per batch of 30 trainees)
1	Sieve, Mug, Acid 1ltr.	2
2	Bulking Tank, Bucket, Dish, Forth remover	5
3	Golden Touch, Sodium bisulphate, Sodium sulphate	200

### **Classroom Aids**

The aids required to conduct sessions in the classroom are:

- 1 Projector
- 2 Computer/laptops
- 3 Internet connectivity
- 4 Whiteboard

### Annexure 2: Assessment Strategy

This section includes the processes involved in identifying, gathering and interpreting information to evaluate the learner on the required competencies of the program.

### Assessment System Overview:

- Batches assigned to the assessment agencies for conducting the assessment on SDSM/SIP or email
- Assessment agencies send the assessment confirmation to VTP/TC looping SSC
- Assessment agency deploys the ToA certified Assessor for executing the assessment
- SSC monitors the assessment process & records
- If the batch size is more than 30, then there should be 2 Assessors.

### Testing Environment: Assessor must:

- Confirm that the centre is available at the same address as mentioned on SDMS or SIP
- Check the duration of the training.
- Check the Assessment Start and End time to be as 10 a.m. and 5 p.m.
- Check that the allotted time to the candidates to complete Theory & Practical Assessment is correct.
- Check the mode of assessment—Online (TAB/Computer) or Offline (OMR/PP).

- Confirm the number of TABs on the ground are correct to execute the Assessment smoothly.
- Check the availability of the Lab Equipment for the particular Job Role.

### Assessment Quality Assurance levels / Framework:

- Question papers created by the Subject Matter Experts (SME)
- Question papers created by the SME should be verified by the other subject Matter Experts along with the approval required from SSC
- Questions are mapped with NOS and PC
- Question papers are prepared considering that level 1 to 3 is for the unskilled & semi-skilled individuals, and level 4 and above are for the skilled, supervisor higher management Apprenticeship Curriculum: NAPS Jr. Machine Operator CNC Milling of Plastic Page 20 of 14
- Assessor must be ToA certified
- Assessment agency must follow the assessment guidelines to conduct the assessment

### Types of evidence or evidence-gathering protocol:

- Time-stamped & geotagged reporting of the assessor from assessment location
- Centre photographs with signboards and scheme specific branding
- Biometric or manual attendance sheet (stamped by TP) of the trainees during the training period
- Time-stamped & geotagged assessment (Theory + Viva + Practical) photographs & videos.

### Method of verification or validation:

- Surprise visit to the assessment location
- Random audit of the batch
- Random audit of any candidate

### Method for assessment documentation, archiving, and access

- Hard copies of the documents are stored
- Soft copies of the documents & photographs of the assessment are uploaded / accessed from Cloud Storage and are stored in the Hard Drive

### On the Job:

- 1. Assessment for on the job training to be conducted by the industry partner on the practical competency output defined in the NOS/QP and the assessment criteria.
- 2. The candidate must score 70% in each module to complete the OJT.
- 3. Tools of Assessment that can be used are:
  - a. Videos of Trainees during OJT should be shared by employer to RCPSDC.
- 4. Assessment will ensure that the apprentice will be able to:
  - a. Work effectively and efficiently as per schedules and timelines while complying with the health and hygiene norms.
  - b. Implement safety practices.
  - c. Optimize the use of resources to ensure less wastage and maximum conservation.
  - d. Communicate effectively and develop interpersonal skills.