QUALIFICATIONS PACK - OCCUPATIONAL STANDARDS FOR RUBBER 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- Senior Rubber Technician

SECTOR: RUBBER INDUSTRY

SUB-SECTOR: Rubber Manufacturing

OCCUPATION: Production

REFERENCE ID: RSC/ Q 0832

ALIGNED TO: NCO – 2004/Nil

Brief Job Description: SeniorTechnician is required to guide the team members and the operators / supervisors to carry out activities as per the production processes of the company. He/she should understand the importance of the activity / task undertaken by him/her in the manufacturing processes and support the operators / supervisors to ensure set standards are achieved and maintained within the work area. He/she is required to take decisions or trouble shoot and avoid delays in the manufacturing.

Personal Attributes: This job requires the individual to work independently and be comfortable in performing technical work. He should be result oriented and positive in attitude. The individual must be willing to work in the factory environment and coordinate well with the team members helping them to achieve the specified product composition and quality.He is also expected to trouble shoot plant process/quality issues by involving Junior Technicians.

Job Details

Qualifications Pack Code	**RSC/ Q 0832**		
Job Role	**Senior Rubber Technician**		
Credits(NSQF)	**TBD**	**Version number**	**1.0**
Sector	**Rubber Industry**	**Drafted on**	**14/05/2015**
Sub-sector	**Rubber Manufacturing**	**Last reviewed on**	**14/05/2015**
Occupation	**Production**	**Next review date**	**14/05/2016**
NSQC Clearnace on	**20/07/2015**		

Job Role	**Senior Rubber Technician**
Role Description	SeniorTechnician is required to guide the team members and the operators / supervisors to carry out activities as per the production processes of the company. He/she should understand the importance of the activity / task undertaken by him/her in the manufacturing processes and support the operators / supervisors to ensure set standards are achieved and maintained within the work area. He/she is required to take decisions /or trouble shoot and avoid delays in the manufacturing.
NSQF level **Minimum Educational Qualifications*** **Maximum Educational Qualifications***	6 Diploma / Graduation – Desirable Post Graduate
Training (Suggested but not mandatory)	Training on the shopfloor of production department
Minimum Job Entry Age	18 years
Experience	Minimum six months experience as a Supervisor
Applicable National Occupational Standards (NOS)	**Compulsory:** 1. RSC/N 0804 (Technical guidance to supervisor/operator in various processes) 2. RSC/N 0805 (Instructing supervisor/ operator in machine handling) 3. RSC/N 0806 (Technical supervision/support in testing and maintaining quality standards) **Optional:** NA
Performance Criteria	As described in the relevant OS units

Definitions

Keywords /Terms	Description
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.
Occupation	Occupation is a set of job roles, which perform similar/related set of functions in an industry.
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.
OS	OS specify the standards of performance an individual must achieve when carrying out a function in the workplace, together with the knowledge and understanding they need to meet that standard consistently. Occupational Standards are applicable both in the Indian and global contexts.
Performance Criteria	Performance Criteria are statements that together specify the standard of performance required when carrying out a task.
NOS	NOS are Occupational Standards which apply uniquely in the Indian context.
Qualifications Pack Code	Qualifications Pack Code is a unique reference code that identifies a qualifications pack.
Qualifications Pack	Qualifications Pack comprises the set of OS, together with the educational, training and other criteria required to perform a job role. A Qualifications Pack is assigned a unique qualification pack code.
Unit Code	Unit Code is a unique identifier for an Occupational Standard , which is denoted by an 'N'.
Unit Title	Unit Title gives a clear overall statement about what the incumbent should be able to do.
Description	Description gives a short summary of the unit content. This would be helpful to anyone searching on a database to verify that this is the appropriate OS they are looking for.
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.
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.
Technical Knowledge	Technical Knowledge is the specific knowledge needed to accomplish specific designated responsibilities.
Core Skills or 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.

National Occupational Standard

Overview:

This unit is about providing technical guidance to supervisor/operator to make them understand completely different terminology, their importance and application in rubber industry with reference to rubber materials to work with different operators and assist junior technicians engaged in rubber processing & rubber product manufacturing operation. Empasising the need to strictly follow the SOP .

National Occupational Standard

Unit Code	RSDC / N 0804
Unit Title (Task)	**Technical guidance to supervisor/operator in various processes**
Description	This unit is about dealing with with different terminology, their importance and application in rubber industry with reference to rubber materials.
Scope	This unit/task cover the following : • Technical Guidance • Health and Safety • Material disposal
Performance Criteria (PC) w.r.t. the Scope	
Technical Guidance	PC1. Provide guidance in identification of various raw materials used in the rubber industry PC2. Instruct Lab Technician for sampling of at different levels of operation as per SOP. PC3. Ensure that technical requirements for various processes and material are met as per the SOP. PC4. Inform the team members about the latest technical developments in production process PC5. Keep a track of technical faults at each stage and ensure to take corrective action PC6. Provide technical assistance in reduction of process and finished good scrap
Health and Safety	PC6. Awareness on different safety devices (safety bar, safety guard etc) attached with different Rubber Processing Machineries and ensuring that the operators adhere safety reuirements . PC 7. Awareness on Material Safety Data Sheet (MSDS)
Material disposal	PC8. Ensure that departments follow disposal of waste and left over tested material safely as per SOP
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. Types and grades of natural & synthetic rubbers, rubber materials, components and their applications in the rubber industry & Testing KA2. Organisational Coding system of raw material/compounds and components. KA3. Chemicals used in the rubber industry and their function KA4. Awareness on different quality management systems (ISO-9000, TS-16949, ISO-14001, OHSAS-18001) KA5. Knowledge of good working practices applicable in the workplace

	KA6. Fully knowledgeable on SOP's KA7. Material disposal procedure, importance of appropriate disposal of material and the implications of not following the material disposal procedure KA8. Importance of identifying non-conforming products and storage of the same KA9. Risk and impact of not following defined procedures/work instructions KA10. Escalation matrix for reporting identified issues KA11. Types of documentation in organization and importance of the same KA12. Records to be maintained and implications of non-maintenance of the same KA13. Company manuals(Technical/operational) and from where to attain it KA14. Importance of housekeeping & good shop floor practices (e.g.3S/5S) KA15. Health, Safety and Environment guidelines, legislation and regulations as applicable KA16. Personal protection (Which protective equipment to be used and how) KA17. Impact of poor practices on health, safety and environment KA18. Potential hazards and actions to minimize the same KA19. Escalation matrix and escalation procedure for reporting hazards. KA20. The usage of different fire extinguisher KA21. Impact of various practices on cost, quality, productivity, delivery and safety KA22. Basic knowledge on TPM, CLIT Operation (Clean, Lubrication, Inspection and Tightening)
B. Technical Knowledge	The user/individual on the job needs to know and understand: KB1. Knowledge of basic chemistry, organic chemistry, environmental chemistry, Intrinsic & extrinsic properties and simple chemical calculation KB2. Knowledge on basic polymer science – Monomers, polymers, classification of Polymers (rubber, plastics, fibres and resins), its characteristic features, functionality, degree of polymerization, molecular weight & molecular weight distribution, melting temperature, glass transition temperature, crystallinity, cis-trans configuration, tacticity, thermoplastic and thermosets etc. KB3. Structure and properties relationship of material and compounds KB4. Knowledge on different rubber production grades : Natural Rubber – Method of tapping NR latex, Production of Natural Rubber and types of different NR grades and their applications. Synthetic Rubber – Grades and application in rubber industry. Reclaimed Rubber : Production, types and applications. KB5. Knowledge on different Rubber compounding ingredients (Fillers, Processing Aids, Vulcanising System and protective agents and special additives etc.) and reinforcing material (Cotton, Rayon, Nylon, Polyester, Aramid, Steel, Hybrid and their application in rubber industry KB6. Knowledge of rubber processing and trouble shooting the process /quality related issues

Skills (S)	
A. Core Skills/ Generic Skills	**Writing Skills**
	The user/ individual on the job needs to know and understand how to: SA1. Construct simple sentences, prepare tags and express ideas through written communication SA2. Fill up appropriate forms and activity logs in required format of the company SA3.Perform basic mathematical operations and maintain records in given format
	Reading Skills
	The user/individual on the job needs to know and understand how to: SB1. Read and understand manuals, health and safety instructions, memos, reports, job cards etc SB2. Read images, graphs, diagrams SB3. Understand the various coding systems as per company norms
	Oral Communication (Listening and Speaking skills)
	The user/individual on the job needs to know and understand how to: SA1. Express statements, opinions or information clearly so that others can hear and understand SA2. Understand instructional language of the organization SA3. Respond appropriately to any queries SA4. Communicate with supervisor SA5. Communicate with upstream and downstream teams SA6. Work in a team and other behavioral skills required to support the small group activities
B. Professional Skills	**Decision Making**
	The user/individual on the job needs to know and understand how to: SB1. Take appropriate decisions regarding processing steps in view of changing quality and availability of raw materials and finished goods.
	Plan and Organize
	The user/individual on the job needs to know and understand how to: SB2. seek clarification on problems from others SB3. apply problem-solving approaches in different situations SB4. refer anomalies to the line manager
	Customer Centricity
	NA
	Problem Solving
	The user/individual on the job needs to know and understand how to: SB 5. Interpret quality for sheet

	SB 6 . Suggest improvements(if any) in process/product/materials based on results and experience
	Analytical Thinking
	The user/individual on the job needs to know and understand how to: SB7. Proper collection of waste material SB8. Identify defects in the material and communicate it at the earliest and suggest improvements(if any) in process/material based on experience
	Critical Thinking
	The user/individual on the job needs to know and understand how to: SB9. Handle equipment/rubber sheet SB6. seek clarification on problems from others SB10. apply problem-solving approaches in different situations SB11. refer anomalies to the line manager

NOS Version Control

NOS Code	RSDC / N 0804		
Credits(NSQF)	TBD	Version number	1.0
Industry	Rubber Manufacturing	Drafted on	14/05/2015
Industry Sub-sector	Tyre and Non - Tyre	Last reviewed on	14/05/2015
Occupation	Production	Next review date	14/05/2016

National Occupational Standard

Overview:

This unit is about understanding in detail different terminology, their importance and application in rubber industry with reference to Rubber Processing Equipment and machinery to assist different operators and guide junior technicians.

National Occupational Standard

Unit Code	**RSDC / N 0805**
Unit Title (Task)	**Instructing supervisor/ operator in machine handling**
Description	This unit is about understanding in detail different terminology, their importance and application in rubber industry with reference to Rubber Processing Equipment and machinery.
Scope	This unit/task cover the following to work with: • Equipment and machinery handling • Health and Safety • Material disposal
Performance Criteria (PC) w.r.t. the Scope	
Equipment and machinery handling	• Ensure proper functioning of machines and equipment for different rubber processes (mixing, dipping, extrusion, calendaring, component preparation, building, moulding/curing etc.). • Assisting operators/supervisor in resolving technical issues with respect to machinery operations • Ensure compliance of process spec/SOP in all the operations at different stages of production • Ensure to handle trouble shooting related issues and avoid delays in operations • Work towards bringing in latest machinery to enhance productivity
Health and Safety	• Awareness on different safety devices (safety bar, safety guard etc) attached with different Rubber Processing Machineries.
Material disposal	• Carry out disposal of waste and left over tested material safely as per SOP
Knowledge and Understanding (K)	
B. Organizational Context (Knowledge of the company / organization and its processes)	The user/individual on the job needs to know and understand: KA1. Organisational Coding system of compounds and different components KA2. Modern methods of quality management systems (ISO-9000, TS-16949, ISO-14001, OHSAS-18001) KA3. Compound and component disposal procedure, importance of appropriate disposal and implications of not following disposal procedure KA4. Importance of identifying non-conforming compounds & components and storage of the same KA5. Risk and impact of not following defined procedures/work instructions

	KA6. Escalation matrix for reporting identified issues KA7. Types of documentation in organization and importance of the same KA8. Records to be maintained and implications of non-maintenance of the same KA9. Company manual and from where to attain it KA10. Importance of housekeeping & good shop floor practices (e.g.3S/5S) KA11. Health, Safety and Environment guidelines, legislation and regulations as applicable KA12. Personal protection (Which protective equipment to be used and how) KA13. Impact of poor practices on health, safety and environment KA14. Potential hazards and actions to minimize the same KA15. Escalation matrix and escalation procedure for reporting hazards. KA16. The usage of different fire extinguisher KA17. Impact of various practices on cost, quality, productivity, delivery and safety KA18. Basic knowledge on TPM, CLIT Operation (Clean Lubrication, Inspection and Tightening) KA19. Awareness on different safety devices (safety bar, safety guards) attached with different rubber processing machineries. KA20 Awareness on different goals in the plant operations in terms of safety , quality , production ,efficiency and waste
B. Technical Knowledge	The user/individual on the job needs to know and understand: KB1. Knowledge of different engineering terminology, their importance and application in rubber industries. KB2. Knowledge on Units of measurement (SI system) KB3. Knowledge on calculation of batch weight, specific gravity and cost of compounds. KB4. Knowledge of different rubber processing machineries (mixing mill, kneader, intermix, banbury, duplex/triplex/quadruplex extruders, hot/cold feed /pin barrel extruders, 2 Roll/3Roll/4 Roll calenders, Dip Unit, Stock preparation and curing/moulding – hydraulic press, single day light/multi day light press, toggle lever press, C Frame press, boot and shoe press, conveyor and V belt press, tyre/tube/flap curing press, autoclave, continuous curing, rotocure etc.). KB4A Knowledge of key components of equipments – Key components such as Mixer rotor /body clearances, extruder screw clearances, calendar roll profile,bead setter rings ,correct building drums and their dsettings , bladders , moulds . KB 5 Knowledge of generation of process specification /SOP KB 6- Knowledge of process equipments in terms of getting the OK component in minimum time with low waste KB7 Knowledge of in process quality checks for maintaining good efficient output KB8. Knowledge on equipment used in latex goods manufacturing (ball mill, colloid mill, pearl mill, attrition mill, planetary mixer, forming machine, dip unit) KB9. Knowledge on different rubber processing operation (Pre,during and

	Post) KB10. Knowledge on different moulding operations (compression, transfer, injection and blow moulding), continuous curing . KB11. Knowledge on the operation of different measuring equipment (weighing scale, thermometer, pyrometer, measuring tape, vernier scale, screw gauge, tachometer, pressure gauge, timer, measurement of volume) KB12. Stages in Processing – Rubber Goods Manufacture - Profiles; Hose; Sheet, Shoes, Wire and Cable - Roll Covering, Gaskets, Conveyor Belts, Transmission Belts, Balls, Seals and O-Rings, Noise/Vibration and Shock Absorbers, Hot Water Bottles, Marine Fenders, Expansion Joints, Tracks and Membranes etc. KB13. Knowledge of latest equipments and technology in processing of rubber goods KB14. Practical knowledge of machinery operations and Trouble shooting for immediate correction KB15. Entry of data management and understand soft language of computer PLC
Skills (S)	
A. Core Skills/ Generic Skills	**Writing Skills**
	The user/ individual on the job needs to know and understand how to: SA1. Construct simple sentences, prepare tags and express ideas through written communication SA2. Fill up appropriate forms and activity logs in required format of the company SA3.Perform basic mathematical operations and maintain records in given format
	Reading Skills
	The user/individual on the job needs to know and understand how to: SB4. Read and understand manuals, health and safety instructions, memos, reports, job cards etc SB5. Read images, graphs, diagrams SB6. Understand the various coding systems as per company norms
	Oral Communication (Listening and Speaking skills)
	The user/individual on the job needs to know and understand how to: SA7. Express statements, opinions or information clearly so that others can hear and understand SA8. Understand instructional language of the organization SA9. Respond appropriately to any queries SA10. Communicate with supervisor SA11. Communicate with upstream and downstream teams SA12. Work in a team and other behavioral skills required to support the small group activities

B. Professional Skills	**Decision Making**
	The user/individual on the job needs to know and understand how to: SB1. Take appropriate decisions regarding processing steps in view of changing quality and availability of raw materials and finished goods.
	Plan and Organize
	The user/individual on the job needs to know and understand how to: SB2. seek clarification on problems from others SB3. apply problem-solving approaches in different situations SB4. refer anomalies to the line manager
	Customer Centricity
	NA
	Problem Solving
	The user/individual on the job needs to know and understand how to: SB 5. Interpret quality for sheet SB 6 . Suggest improvements(if any) in process/product/materials based on results and experience
	Analytical Thinking
	The user/individual on the job needs to know and understand how to: SB7. Proper collection of waste material SB8. Identify defects in the material and communicate it at the earliest and suggest improvements(if any) in process/material based on experience
	Critical Thinking
	The user/individual on the job needs to know and understand how to: SB9. Handle equipment/rubber sheet SB6. seek clarification on problems from others SB10. apply problem-solving approaches in different situations SB11. refer anomalies to the line manager

NOS Version Control

NOS Code	RSDC / N 0805		
Credits(NSQF)	TBD	Version number	1.0
Industry	Rubber Manufacturing	Drafted on	14/05/2015
Industry Sub-sector	Tyre and Non - Tyre	Last reviewed on	14/05/2015
Occupation	Production	Next review date	14/05/2016

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National Occupational Standard

Overview:

This unit is about getting a detail understanding of different terminologies and methods used in rubber products manufacturing testing and to maintain quality standards in order to assist different operators/Technicians engaged in rubber products manufacturing & testing.

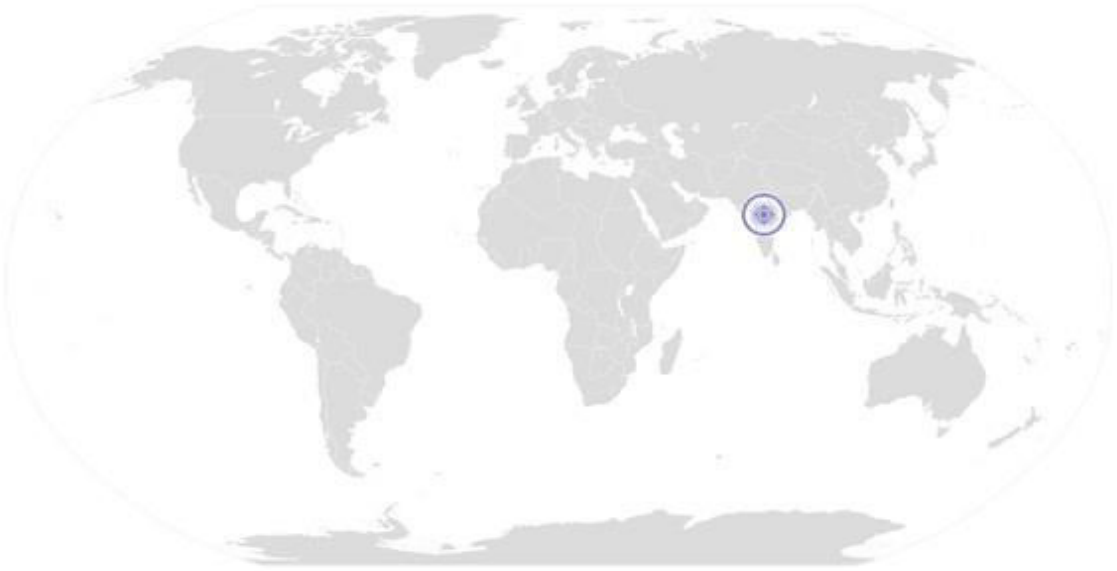
National Occupational Standard

Unit Code	RSDC / N 0806
Unit Title (Task)	**Technical supervision/support in testing and maintaining quality standards**
Description	This unit is about Rubber Products manufacturing testing and quality standards
Scope	This unit/task cover the following to provide technical support to different operators : • Testing & Quality check • Health and Safety • Material disposal
Performance Criteria (PC) w.r.t. the Scope	
Testing & Quality check	PC1. Technical supervision in testing of material, compounds, processed product, semi finished and finished products PC2. Technical support in maintaining quality standards PC3.Updating the team members about new and revised quality standards PC4. Work for new product development
Health and Safety	PC 5. Awareness on different safety devices (safety bar, safety guard etc) attached with different Rubber Processing Machineries.
Material disposal	PC6. Carry out disposal of waste and left over tested material safely as per SOP
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. Testing of raw materials, In process materials and cured products KA2. Organisational Coding system KA3. Modern methods of quality management systems (ISO-9000, TS-16949, ISO-14001, OHSAS-18001) KA4. Principles of good laboratory practices applicable in the workplace KA5. Material disposal procedure, importance of appropriate disposal of material and implications of not following the material disposal procedure KA6. Importance of identifying non-conforming products and storage of the same KA7. Risk and impact of not following defined procedures/work instructions KA8. Escalation matrix for reporting identified issues KA9. Types of documentation in organization and importance of the same KA10. Records to be maintained and implications of non-maintenance of the same KA11. Company manual and from where to attain it KA12. Importance of housekeeping & good shop floor practices (e.g.3S/5S) KA13. Health, Safety and Environment guidelines, legislation and regulations as applicable KA14. Personal protection (Which protective equipment to be used and how) KA15. Impact of poor practices on health, safety and environment KA16. Potential hazards and actions to minimize the same KA17. Escalation matrix and escalation procedure for reporting hazards. KA18. The usage of different fire extinguisher

	KA19. Impact of various practices on cost, quality, productivity, delivery and safety KA20. Basic knowledge on TPM, CLIT Operation (Clean Lubrication, Inspection and Tightening)
B. Technical Knowledge	The user/individual on the job needs to know and understand: KB1. Cycle/rickshaw tyres, 2/3 wheeler tyres, auto tyres, tubes and flaps KB2. Bias and Radial tyres, tube type and tubeless tyres, Different tyre components, Tyre Building, Tyre curing, finishing and Final inspection. KB3. Hot and cold retreading KB4. Components and functions of components of Conveyor and V Belt, hoses, cables, rubber rollers, coated fabric, calendered sheets, cellular products, rubber to metal bonded products, seals/diaphragm/gaskets, moulded & extruded goods, sports goods, footwear, adhesives, aero space and bio medical application, rubber products for railways and defence. KB5. Latex products (NR and synthetic rubber latex, compounding, stabilization and different latex products) KB6. Sampling, sample preparation, specimen preparation, Testing and significance of testing KB7. Testing standards KB8. Manufacturing practice - SPC tools in rubber industry KB9. New Product Development – Reverse Engineering, Bench marking,Brainstorming, Design of Experiments KB10. Process parameters and compounding ingredients - Rapid Prototyping - Cost Reduction – Filler, Fiber, rubber content variation, Reclaimed Rubber in rubber compounding KB11. Collection of data and Report Writing
Skills (S)	
A.Core Skills/ Generic Skills	**Writing Skills**
	The user/ individual on the job needs to know and understand how to: SA1. Construct simple sentences, prepare tags and express ideas through written communication SA2. Fill up appropriate forms and activity logs in required format of the company SA3.Perform basic mathematical operations and maintain records in given format
	Reading Skills
	The user/individual on the job needs to know and understand how to: SB7. Read and understand manuals, health and safety instructions, memos, reports, job cards etc SB8. Read images, graphs, diagrams SB9. Understand the various coding systems as per company norms
	Oral Communication (Listening and Speaking skills)

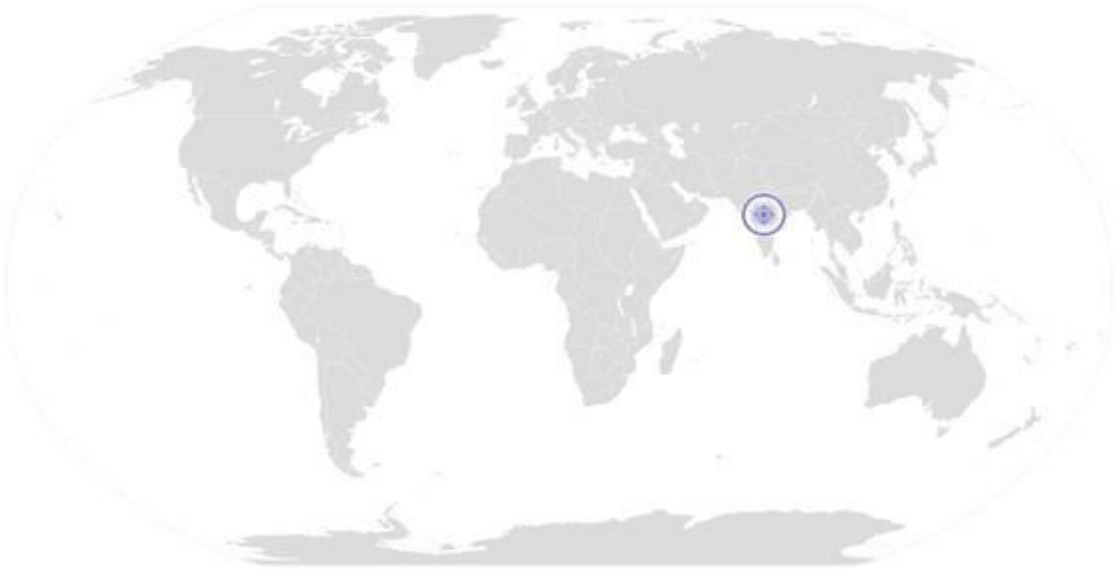
	The user/individual on the job needs to know and understand how to: SA13. Express statements, opinions or information clearly so that others can hear and understand SA14. Understand instructional language of the organization SA15. Respond appropriately to any queries SA16. Communicate with supervisor SA17. Communicate with upstream and downstream teams SA18. Work in a team and other behavioral skills required to support the small group activities
B.Professional Skills	**Decision Making**
	The user/individual on the job needs to know and understand how to: SB1. Take appropriate decisions regarding processing steps in view of changing quality and availability of raw materials and finished goods.
	Plan and Organize
	The user/individual on the job needs to know and understand how to: SB2. seek clarification on problems from others SB3. apply problem-solving approaches in different situations SB4. refer anomalies to the line manager
	Customer Centricity
	NA
	Problem Solving
	The user/individual on the job needs to know and understand how to: SB 5. Interpret quality for sheet SB 6 . Suggest improvements(if any) in process/product/materials based on results and experience
	Analytical Thinking
	The user/individual on the job needs to know and understand how to: SB7. Proper collection of waste material SB8. Identify defects in the material and communicate it at the earliest and suggest improvements(if any) in process/material based on experience
	Critical Thinking
	The user/individual on the job needs to know and understand how to: SB9. Handle equipment/rubber sheet SB6. seek clarification on problems from others SB10. apply problem-solving approaches in different situations

	SB11. refer anomalies to the line manager



NOS Version Control

NOS Code	RSDC / N 0806		
Credits(NSQF)	TBD	Version number	1.0
Industry	Rubber Manufacturing	Drafted on	14/05/2015
Industry Sub-sector	Tyre and Non - Tyre	Last reviewed on	14/05/2015
Occupation	Production	Next review date	14/05/2016



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CRITERIA FOR ASSESSMENT OF TRAINEES

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Job Role Senior Rubber Technician
Qualification Pack RSC/ Q 0832
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 lay down 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 evaulations 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

Assessment Strategy			Marks Allocation		
NOS	**Elements**	**Performance Criteria**	**Total**	**Theory**	**Practical**
RSC/N 0804 Technical guidance to supervisor/ operator in various processes	Technical Guidance	PC1. Provide technical assistance in identification of various raw materials used in the rubber industry	5	5	0
		PC2. Instruct Lab Technician for sampling of at different levels of operation as per SOP.	12	7	5
		PC3. Ensure that technical requirements for various processes and material are met as per the SOP.	16	5	11
		PC4. Inform the team members about the latest technical developments in production process	5	5	0
		PC5. Keep a track of technical faults at each stage and ensure to take corrective action	18	10	8
		PC6. Provide technical assistance in reduction of process and finished good scrap	9	9	0
	Health and Safety	PC7. Awareness on different safety devices (safety bar, safety guard etc) attached with different Rubber Processing Machineries and ensuring that the operators adhere safety reuirements .	14	6	8
		PC8. Awareness on Material Safety Data Sheet (MSDS)	18	10	8
	Material disposal	PC9. Ensure operators and JRT follow disposal of waste and left over tested material safely as per SOP	3	3	0
			100	60	40
RSC/N 0805 Instructing supervisor/ operator in	Equipment and machinery handling	PC1. Ensure proper functioning of machines and equipment for different rubber processes (mixing, dipping, extrusion, calendaring, component preparation, building, moulding/curing etc.).	19	7	12

machine handling		PC2. Ensure JRT are assisting operators in resolving technical issues with respect to machinery operations	18	10	8
		PC3. Ensure compliance of process spec/SOP in all the operations at different stages of production	20	4	16
		PC4. Ensure to handle trouble shooting related issues and avoid delays in operations	13	7	6
		PC5. Work towards bringing in latest machinery to enhance productivity	6	6	0
	Health and Safety	PC6. Awareness on different safety devices (safety bar, safety guard etc) attached with different Rubber Processing Machineries.	20	6	14
	Material disposal	PC7. Carry out disposal of waste and left over tested material safely as per SOP	4	0	4
			100	40	60
RSC/N 0806 Technical supervision/ support in testing and maintaining quality standards	Testing & Quality check	PC1. Technical supervision in testing of material, compounds, processed product, semi finished and finished products	26	10	16
		PC2. Technical support in maintaining quality standards	26	16	10
		PC3.Updating the team members about new and revised quality standards	14	14	0
		PC4. Work for new product development	14	14	0
	Health and Safety	PC5. Dispose of waste material safely, as per organizational SOP.	7	0	7
	Material disposal	PC6. Carry out disposal of waste and left over tested material safely as per SOP	13	6	7
			100	60	40