

QUALIFICATIONS PACK - OCCUPATIONAL STANDARDS FOR RUBBER INDUSTRY

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

Contact Us:

PHD House (4th Floor),
Opp. Asian Games Village,
Siri Fort Institutional Area, New Delhi – 110016
Tel: 011 41009347/48
E-mail: info@rsdcindia.in



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Introduction

Qualifications Pack- Tyre Fitter-Servicing and Maintenance

SECTOR: RUBBER INDUSTRY

SUB-SECTOR: Tyre

OCCUPATION: Tyre Servicing / Maintenance

REFERENCE ID: RSC/Q3601

ALIGNED TO: NCO-2015/NIL

Brief Job Description: A Tyre Fitter-Servicing and Maintenance is responsible for fitting different types of tyres (new/used/replacement) to the rim. Tyre fitment can be made as a part of service sector (manufacturing of automobile /or in the market) or in-house in the tyre manufacturing plant for testing such as plunger and wheel testing. Also, he is responsible for carrying out proper tyre inflation and maintenance.

Personal Attributes: This job requires the individual to be a good observer and demonstrate spontaneity in resolving the different repairing issues. He should be careful and strict in adhering to the specified norms. He should be active and energetic. He should be able to work independently under the guidance of supervisor. As a good learner, he should be willing to learn efficient ways to perform his work. He should be disciplined, focused and comfortable in performing laborious work.

Job Details	Qualifications Pack Code	RSC/Q3601		
	Job Role	Tyre Fitter-Servicing and Maintenance		
	Credits(NSQF)	TBD	Version number	2.0
	Sector	Rubber Manufacturing	Drafted on	02/12/2014
	Sub-sector	Tyre	Last reviewed on	23/08/2017
	Occupation	Tyre Servicing / Maintenance	Next review date	23/08/2021
	NSQC Clearance on			

Job Role	Tyre Fitter-Servicing and Maintenance
Role Description	A Tyre Fitter-Servicing and Maintenance is responsible to fit different types of tyres (new/used/replacement) to the rim depending upon the requirement. Also, he is responsible for carrying out proper tyre inflation and maintenance.
NSQF level	4
Minimum Educational Qualifications*	Class VIII th Pass
Maximum Educational Qualifications*	
Prerequisite License or Training	NA
Minimum Job Entry Age	18 years
Experience	Worked as a semi-skilled helper for minimum 12 months in the same or similar process
Applicable National Occupational Standards (NOS)	Compulsory: <ol style="list-style-type: none"> RSC/N3601 - Prepare material, tools and machine for tyre fitter servicing/maintenance RSC/N3602 - Undertake tyre fitter servicing/maintenance RSC/N3603 - Perform post-tyre servicing/maintenance activities RSC/N5001 - Carry out housekeeping in rubber product manufacturing RSC/N5002 - Carry out reporting and documentation RSC/N5003 - Carry out quality checks RSC/N5004 - Carry out problem identification and escalation RSC/N5007 - Carry out health and safety RSC/N5013 - Develop entrepreneurship skills
Performance Criteria	As described in the relevant OS units

Keywords /Terms	Description
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Qualifications Pack For Tyre Fitter-Servicing and Maintenance

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.
Job Role	Job role defines a unique set of functions that together form a unique employment opportunity in an organization.
Occupational Standards (OS)	OS specify the standards of performance an individual must achieve when carrying out a function in the workplace, together with the knowledge and understanding 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.
National Occupational Standards (NOS)	NOS are Occupational Standards which apply uniquely in the Indian context.
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.
Electives	Electives are NOS/set of NOS that are identified by the sector as contributive to specialization in a job role. There may be multiple electives within a QP for each specialized job role. Trainees must select at least one elective for the successful completion of a QP with Electives.
Options	Options are NOS/set of NOS that are identified by the sector as additional skills. There may be multiple options within a QP. It is not mandatory to select any of the options to complete a QP with Options.
Unit Code	Unit Code is a unique identifier for an Occupational Standard, which is denoted by an 'N'.
Unit Title	Unit Title gives a clear overall statement about what the incumbent should be able to do.
Description	Description gives a short summary of the unit content. This would be helpful to anyone searching on a database to verify that this is the appropriate OS they are looking for.
Scope	Scope is a set of statements specifying the range of variables that an individual may have to deal with in carrying out the function which have a critical impact on quality of performance required.
Knowledge and Understanding	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 preparing material, tools and machine for tyre servicing/maintenance involving tyre/tube extraction from rim, tyre inflation and/tube fitting.

Unit Code	RSC/N3601
Unit Title	Prepare material, tools and machine for tyre fitter servicing/maintenance

Prepare material, tools and machine for tyre fitter servicing/maintenance

(Task)	
Description	This unit is about preparing material, tools and machine for tyre servicing/maintenance involving tyre tube extraction from rim, tyre inflation and tyre tube fitting.
Scope	This unit/task covers the following: <ul style="list-style-type: none"> • Prepare the tyre servicing/maintenance tools, equipments and machine • Selection of tools based on the type of tyre to be inflated/fitted and get the required material to carry out tyre inflation and fitting operations • Ensure housekeeping and safety in tyre fitting area
Performance Criteria (PC) w.r.t. the Scope	
Element	Performance Criteria
Tyre servicing/maintenance tools, equipments and machine readiness	To be competent, the user/individual on the job must be able to <p>PC1. Ensure the availability of all required tools and equipments (such as air compressor, electric motor, hand pump, knife, hand buffing machine, awl, hand stitchers, crowbars, hydraulic assembly for removing used tyre from rim etc) for tyre servicing/maintenance</p> <p>PC2. Ensure that the tools are clean and well maintained.</p> <p>PC3. Check the sharpness of the knife for the cutting purpose.</p> <p>PC4. Ensure that the pressure gauges (Mounted or hand carried) for checking inflation pressure is available</p> <p>PC5. Ensure safety shield/cage is in place while inflating the tyre</p> <p>PC6. Check the functioning of safety alarm which signals once the offset limit for inflation pressure is reached</p> <p>PC7. Place the tools on a safe location.</p>
Material and Accessories appropriateness	<p>PC8. Ensure that tube/flap/valve to be used is approved by the QA/QC.</p> <p>PC9. Perform visual inspection of the tyre for any defect</p> <p>PC10. Check the availability of tyre, tube, & rim with reference to the given job schedule</p> <p>PC11. Check the rim for cleanliness, corrosion or damage;</p> <p>PC12. Prepare soap solution to facilitate tyre mounting</p> <p>PC13. Ensure rubber gum sheet, adhesive cement and solvent are available</p> <p>PC14. Ensure the gum sheets are well protected with poly ethylene sheets to keep them tacky and non-bloomy</p> <p>PC15. Ensure the cement adhesive to be used is fresh out of stored drums and are of correct cod</p> <p>PC16. Ensure the supply of Air/Nitrogen for inflation</p>
Housekeeping & Safety	<p>PC17. Ensure the use of certified/tested fitting tools and equipment and check their functioning.</p> <p>PC18. Ensure safety shield/cage is in place while inflating the tyre (both tube and tubeless tyres)</p>

	<p>PC19. Adhere to all safety norms (such as wearing protective gloves, masks and shoes).</p> <p>PC20. Comply with health, safety, environment guidelines and regulations in accordance with international/national standards or the organizational standards.</p>
Knowledge and Understanding (K)	
<p>A. Organizational Context (Knowledge of the company / organization and its processes)</p>	<p>The user/individual on the job needs to know and understand:</p> <p>KA1. Implications of poorly prepared tools and machine.</p> <p>KA2. Importance of identifying non-conforming materials</p> <p>KA3. Risk and impact of not following defined procedures/work instructions.</p> <p>KA4. Escalation matrix for reporting identified problems</p> <p>KA5. Records to be maintained and the implications of their non-maintenance.</p> <p>KA6. Importance of housekeeping activities.</p> <p>KA7. Health, safety and environment guidelines, legislation and regulations as applicable.</p> <p>KA8. Personal protection (which protective equipment to be used and how).</p> <p>KA9. Importance of FIFO</p> <p>KA10. Impact of poor practices on health, safety and environment.</p> <p>KA11. Potential hazards and actions to minimize them.</p> <p>KA12. The escalation matrix and procedures for reporting hazard</p> <p>KA13. Impact of various practices on cost, quality, productivity, delivery and safety.</p> <p>KA14. Handover/Takeover of the equipment/work area as per the organizational SOP.</p>
<p>B. Technical Knowledge</p>	<p>The user/individual on the job needs to know and understand:</p> <p>KB1. Proper handling of tyres, tubes, rim, valve, valve cap, flap and other accessories</p> <p>KB2. Proper usage of fitting/inflation tools and equipments</p> <p>KB3. Requirement of fitted tyres for Plunger testing and Wheel testing</p> <p>KB4. Knowledge of measuring pressure inside tyre using pressure gauges</p> <p>KB5. Knowledge of high/low pressure on tyre performance</p> <p>KB6. Effect of improper fitting of tyre resulting in the loss of material and value loss</p> <p>KB7. Proper usage of lubricants</p> <p>KB8. Maintaining hand tools such as Knives, stitchers, buffers.</p> <p>KB9. Sharpening of knives</p> <p>KB10. Identification of inflation requirement of different types of tyres</p> <p>KB11. Knowledge of measuring pressure inside tyre using pressure gauges</p> <p>KB12. Knowledge of high/low inflation pressure on tyre performance</p> <p>KB13. Effect of improper inflation level on performance of tyre and possibility of any accident</p> <p>KB14. Importance of safety alarm w.r.t. crossing of optimal inflation level</p>

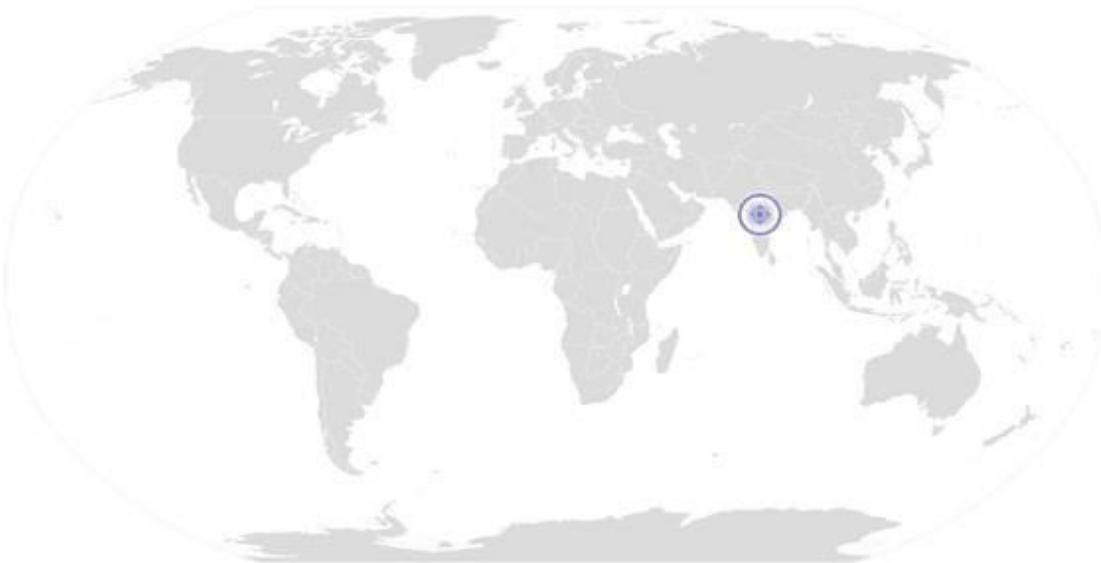
Prepare material, tools and machine for tyre fitter servicing/maintenance

	<p>KB15. Knowledge of impact on self or others on by passing the safety procedures</p> <p>KB16. Various abnormalities and suitable response for abnormalities in equipment performance.</p> <p>KB17. Implications of delays in the tyre fitting process.</p> <p>KB18. Types of defects leading to rejections and their reasons and possible solutions.</p> <p>KB19. Cleanliness and safety requirements for commencing tyre servicing/maintenance.</p> <p>KB20. Units of measurement.</p> <p>KB21. Response to injuries while handling tyres</p> <p>KB22. Knowledge of appropriate tools with respect to requirement.</p> <p>KB23. Knowledge of first aid treatment to address any cut/injury</p>
Skills (S)	
A. Core Skills/ Generic Skills	Writing Skills
	<p>The user/ individual on the job needs to know and understand how to:</p> <p>SA1. Construct simple sentences and express ideas clearly through written communication</p> <p>SA2. Fill up appropriate activity logs in required format of the company</p> <p>SA3. Write simple letters, mails, etc</p> <p>SA4. Perform functional mathematical operations, including apply basic mathematical principles, such as numbers and space, and techniques such as estimation and approximation, for practical purposes and prepare tags</p>
	Reading Skills
	<p>SA5. Read and understand manuals, health and safety instructions, memos, reports, job cards etc</p> <p>SA6. Read images, graphs, diagrams</p> <p>SA7. Understand the various coding systems as per company norms</p>
	Oral Communication
<p>SA8. Express statements, opinions or information clearly so that others can hear and understand</p> <p>SA9. Respond appropriately to any queries</p> <p>SA10. Communicate with teacher/trainer</p> <p>SA11. Communicate with people in a form and manner and using language that is open and respectful</p>	
B. Professional Skills	Decision Making
	<p>The user/individual on the job needs to know and understand how to:</p> <p>SB1. Take a decision for any change/issue based on earlier successes (documented previous history) on similar issues</p>

Prepare material, tools and machine for tyre fitter servicing/maintenance

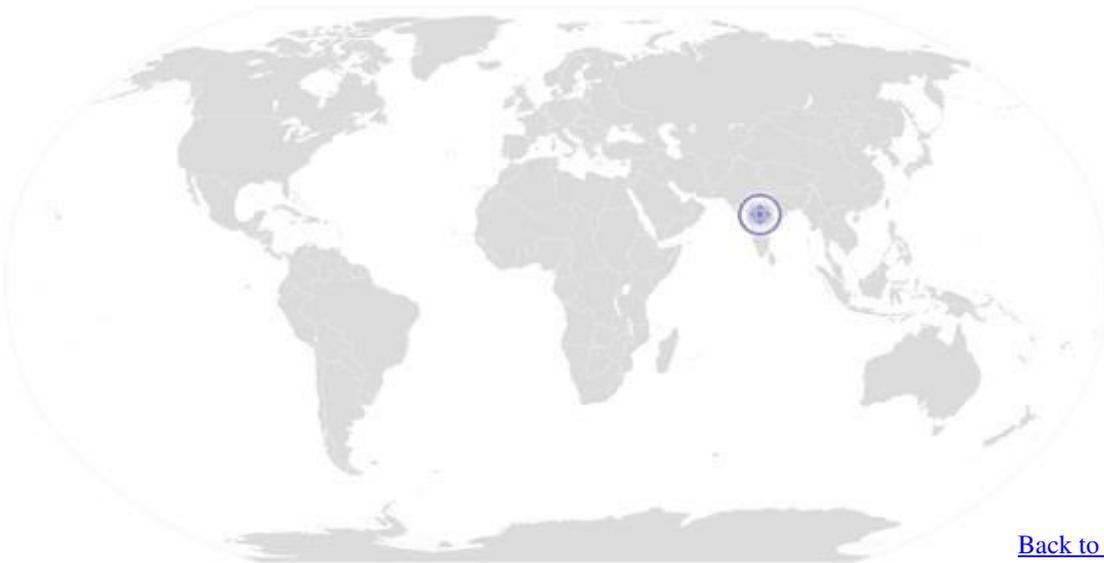
	<p>SB2. Work out changes in case a new improved machine/equipment is added in the process or any new material /chemical is developed replacing existing one.</p> <p>SB3. Make changes in cycle time due to improved process.</p> <p>SB4. Use the standard operating procedure or trouble shooting manuals for trouble shooting and other reference documents approved by plant management</p> <p>SB5. Consult the peer group and superiors to arrive at a favourable decision.</p> <p>SB6. Use of standard available problem solving techniques for decision making</p> <p>SB7. Review and analyze the process steps to check on system non adherence and non conformity</p> <p>SB8. Review the current SOP and other standards for continuous improvement to facilitate decision making</p> <p>SB9. Take a calculated risk with minimum losses</p>
	Plan and Organize
	<p>SB10. Suggest requirement for purchase of new machinery or updating of technology in processing operation</p> <p>SB11. Seek clarification on problems from teacher/trainer /other fellows</p>
	Customer Centricity
	<p>SB12. Match customer needs/specification by adjusting the processing conditions (interact with customer in case any clarification required)</p> <p>SB13. Ensure that performance of his action/operation/activity does not lead to any divergence from the specified quality of the final product as required by the customer.</p> <p>SB14. Complete the assigned task in timely manner so that the final product is delivered in the timeline given by the customer.</p> <p>SB15. Communicate effectively to the superior/customer for any delay in supplies to the clients.</p> <p>SB16. Work towards fulfilling the customers requirement as per their demand.</p> <p>SB17. In case of any complaint, ensure its timely resolution if the problem is emanating at his level</p> <p>SB18. Communicate effectively to the superior/customer for any delay in resolving the problem faced by the customer.</p> <p>SB19. Maintain good/cordial relation with customers.</p> <p>SB20. Work on the feedback received from customer regarding the product.</p>
	Problem Solving
	<p>SB21. Interpret quality for sheet</p> <p>SB22. Suggest improvements(if any) in process/product/materials based on results and experience</p>
	Analytical Thinking

	<p>SB23. Identify the problems pertaining to the tools based on visual inspection and work efficiency</p> <p>SB24. Diagnose common problems in the tyre and related accessories based on visual inspection, sound, etc</p> <p>SB25. Suggest improvements(if any) in process based on experience</p> <p>SB26. Minimal wastage while undertaking tyre fitting</p> <p>SB27. Suggest improvements(if any) in process based on experience</p> <p>SB28. Minimize wastage of fabric while cutting plies of different sizes and carrying out wire cutting and slitting operations</p>
	Critical Thinking
	<p>SB29. Seek clarification on problems from others</p> <p>SB30. Apply problem-solving approaches in different situations</p> <p>SB31. Refer anomalies to the line manager</p>



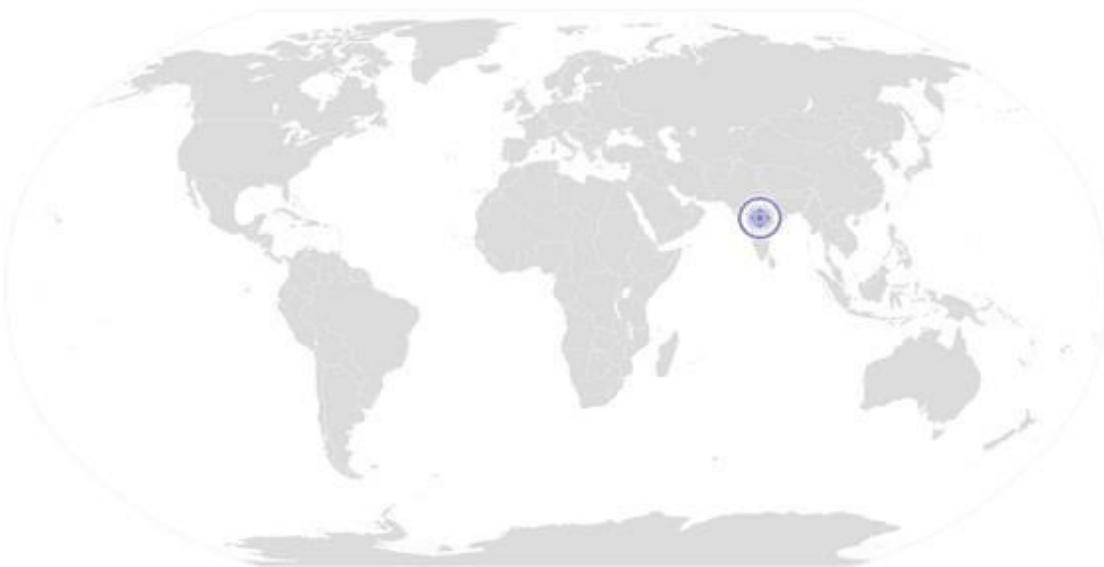
NOS Version Control

NOS Code	RSC/N3601		
Credits(NSQF)	TBD	Version number	2.0
Industry	Rubber Manufacturing	Drafted on	02/12/2014
Industry Sub-sector	Tyre	Last reviewed on	23/08/2017
Occupation	Tyre Servicing / Maintenance	Next review date	23/08/2021



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National Occupational Standard



Overview

This unit is about undertaking tyre fitting and inflation operation using appropriate tools, equipments and material.

Undertake Tyre Fitter Servicing/Maintenance

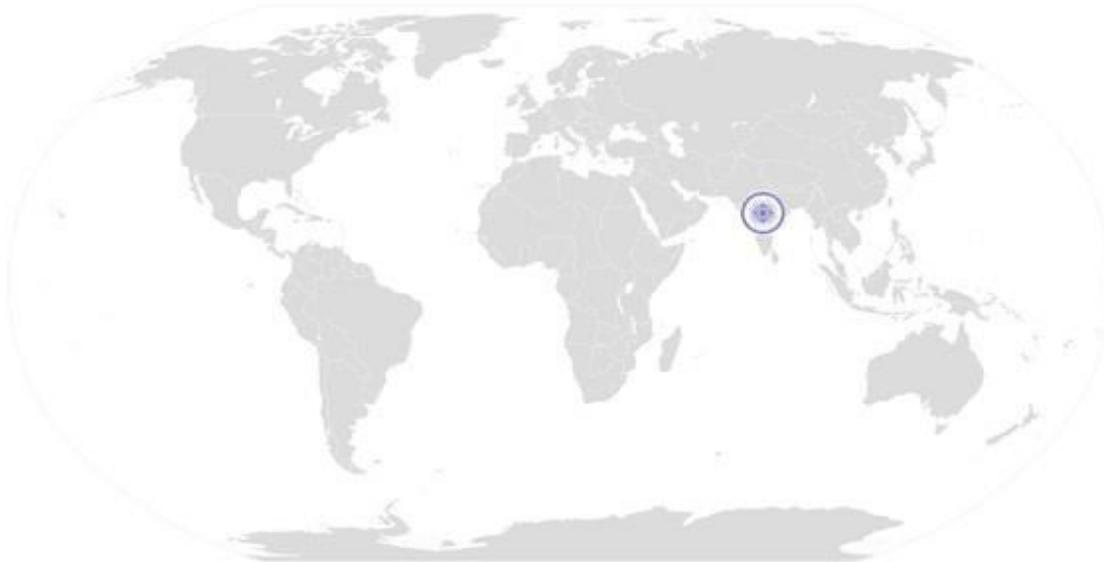
Unit Code	RSC/N3602
Unit Title (Task)	Undertake tyre fitter servicing /maintenance
Description	This unit is about undertaking tyre fitting and inflation operation using appropriate tools, equipments and material.
Scope	<p>This unit/task covers the following:</p> <ul style="list-style-type: none"> • Collect material, operate the curing presses and Locate positions for Tube valve and flap to match rim hole • Operate on the tools and equipments to fit the tyre. • Perform proper specified inflation for the tyre • Ensure housekeeping and safety in tyre fitting area.
Performance Criteria (PC) w.r.t. the Scope	
Element	Performance Criteria
Raw Material and Accessories appropriateness	<p>To be competent, the user/individual on the job must be able to :</p> <p>PC1. Ensure, through visual inspections, that all the accessories required are of the desired quality.</p> <p>PC2. Check the availability of required tyres, tubes, flaps, o rings rims</p> <p>PC3. Check the availability of tyre in case of replacement</p>
Fitting Operation	<p>PC4. Perform tyre fitment (for new /replacement/ for in-house indoor testing as per the SOP</p> <p>PC5. Carry out proper positioning of tyre, tube and flap to rim</p> <p>PC6. Match position for rim hole with tube valve and flap</p>
Tyre Inflation	<p>PC7. Check for calibration stickers on pressure gauge</p> <p>PC8. Ensure the use of certified hand pressure gauge</p> <p>PC9. Open the valve, set pressure and inflate tyre(for new /used/in-house) as per the SOP</p> <p>PC10. Remove and fit the valve cap</p> <p>PC11. Carry out proper inflation i.e.in the optimal range as per the regulation/or as specified by the technical w.r.t different types of tyres</p> <p>PC12. Check for leakage</p> <p>PC13. Get the tube repaired/replaced in case of defect</p> <p>PC14. Respond to safety alarm and deflate to achieve the specified inflation level</p>
Housekeeping & Safety	<p>PC15. Proper handling of machine and tools to avoid any injury/accident</p> <p>PC16. Usage of safety frame/metallic cage as in case of explosion tyre pieces does not come out</p> <p>PC17. Adhere to all safety norms (such as wearing protective gloves and shoes, safety mask etc)</p>

	<p>PC18. Comply with health, safety, environment guidelines and regulations in accordance with international/national standards or the organizational standards.</p>
Knowledge and Understanding (K)	
<p>A. Organizational Context (Knowledge of the company/ organization and its processes)</p>	<p>The user/individual on the job needs to know and understand:</p> <ul style="list-style-type: none"> KA1. Tyre fitting and inflation operation and its importance. KA2. Implications of using wrong size tube/flap in the fitment KA3. Implications of poorly prepared tools. KA4. The material disposal procedure, importance of appropriate disposal of material and implications of not following the material disposal procedure. KA5. How to conduct quality and damage checks and their importance. KA6. Importance of identifying non-conforming products and their storage. KA7. Risk and impact of not following defined procedures/work instructions. KA8. The escalation matrix for reporting identified issues. KA9. Types of documentation in the organization and their importance. KA10. Records to be maintained and the implications of their non-maintenance. KA11. Importance of housekeeping & good shop floor practices KA12. Health, safety and environment guidelines, legislations and regulations, as applicable. KA13. Personal protection (which protective equipment to be used and how). KA14. Impact of poor practices on health, safety and environment. KA15. Potential hazards and actions to minimize them. KA16. The escalation matrix and procedures for reporting hazards. KA17. Importance of FIFO KA18. Impact of various practices on cost, quality, productivity, delivery and safety. KA19. Handover/Takeover of the equipment/work area as per organizational SOP.
<p>B. Technical Knowledge</p>	<p>The user/individual on the job needs to know and understand:</p> <ul style="list-style-type: none"> KB1. Fitting and inflation operation using appropriate tools and machine. KB2. Cleanliness and safety requirements for commencing tyre service operation. KB3. Tyre fitting operation using appropriate tools and machine. KB4. Proper handling of new and used tyres KB5. Requirements for Plunger and Wheel testing KB6. Knowledge of high and low speed test as well as wheel endurance test KB7. Effects of improper fitting on the performance of final product. KB8. Knowledge of wrong usage of fitting tools and the possibility of it causing the damage to tyre /tube/ flap KB9. Importance of safety frame/metallic cage KB10. Inflation techniques and importance of keeping inflation in the optimal range KB11. The process and importance of quality checks. KB12. Knowledge of using air compressor

	<p>KB13. Effects of improper inflation on the performance of final product.</p> <p>KB14. Types of defects leading to rejections and their indicators, reasons and possible solutions.</p> <p>KB15. Potential problems in the fitting operation.</p> <p>KB16. Units of measurement.</p> <p>KB17. Knowledge of first aid treatment to respond to injuries.</p> <p>KB18. Optimal utilization of material and minimal wastage</p>
Skills (S)	
A. Core Skills/ Generic Skills	Writing Skills
	<p>The user/ individual on the job needs to know and understand how to:</p> <p>SA1. Construct simple sentences and express ideas clearly through written communication</p> <p>SA2. Write simple letters, email etc</p> <p>SA3. Fill up appropriate forms and activity logs in required format of the company</p> <p>SA4. Perform functional mathematical operations, including apply basic mathematical principles, such as numbers and space, and techniques such as estimation and approximation, for practical purposes</p>
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B. Professional Skills	Decision Making
	<p>The user/individual on the job needs to know and understand how to:</p> <p>SB1. Take a decision for any change/issue based on earlier successes (documented previous history) on similar issues</p> <p>SB2. Work out changes in case a new improved machine/equipment is added in the process or any new material/chemical is developed replacing existing one.</p> <p>SB3. Make changes in cycle time due to improved process.</p> <p>SB4. Use the standard operating procedure or trouble shooting manuals for trouble shooting and other reference documents approved by plant management</p>

	<p>SB5. Consult the peer group and superiors to arrive at a favourable decision.</p> <p>SB6. Use of standard available problem solving techniques for decision making</p> <p>SB7. Review and analyze the process steps to check on system non adherence and non conformity</p> <p>SB8. Review the current SOP and other standards for continuous improvement to facilitate decision making</p> <p>SB9. Take a calculated risk with minimum losses</p>
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	Problem Solving
	<p>SB21. Interpret quality for sheet</p> <p>SB22. Suggest improvements(if any) in process/product/materials based on results and experience</p>
	Analytical Thinking

	<p>SB23. Identify the problems pertaining to the tools based on visual inspection and work efficiency</p> <p>SB24. Diagnose common problems in the tyre and related accessories based on visual inspection, sound, etc</p> <p>SB25. Suggest improvements(if any) in process based on experience</p> <p>SB26. Minimal wastage while undertaking tyre fitting</p> <p>SB27. Suggest improvements(if any) in process based on experience</p> <p>SB28. Minimize wastage of fabric while cutting plies of different sizes and carrying out wire cutting and slitting operations</p>
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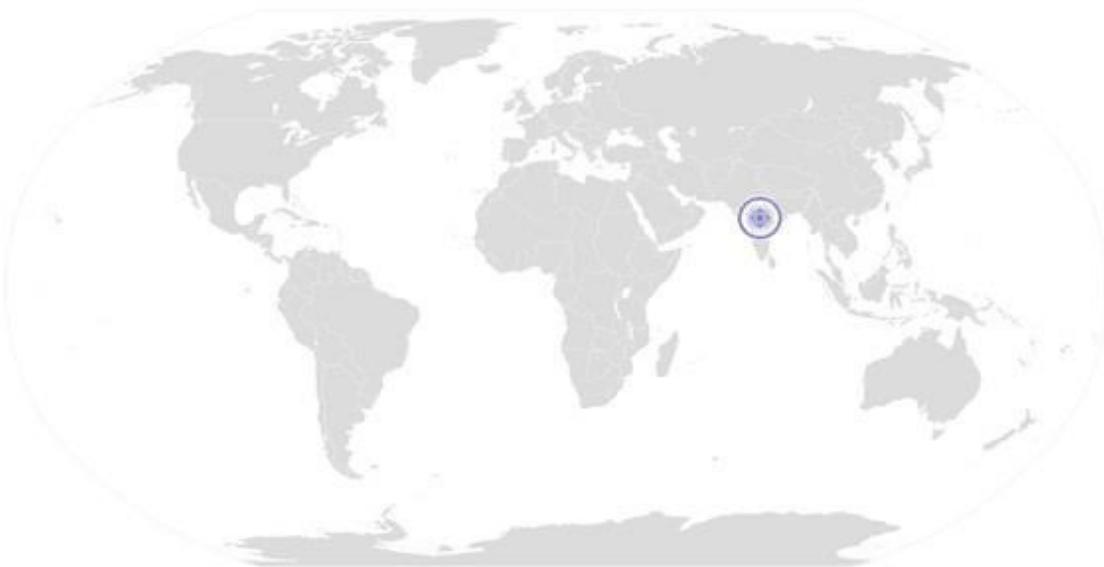
NOS Version Control

NOS Code	RSC/N3602		
Credits(NSQF)	TBD	Version number	2.0
Industry	Rubber Manufacturing	Drafted on	02/12/2014
Industry Sub-sector	Tyre	Last reviewed on	23/08/2017
Occupation	Tyre Servicing / Maintenance	Next review date	23/08/2021



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National Occupational Standard



Overview

This unit is about performing activities after the completion of tyre servicing/maintenance.

Perform Post-Tyre Fitter Servicing /Maintenance Activities

National Occupational Standard

Unit Code	RSC/N3603
Unit Title (Task)	Perform post-tyre fitter servicing/maintenance activities
Description	This unit is about performing activities after the completion of tyre servicing/maintenance.
Scope	<p>This unit/task covers the following:</p> <ul style="list-style-type: none"> • Operate and Visual inspection of mounted tyre for any surface blemish or uneven inflation or weak spot • Disposal of the unused material • Arrange for keeping/sending fitted tyres at designated/marked place • Ensuring housekeeping and safety in the tyre fitting area
Performance Criteria (PC) w.r.t. the Scope	
Element	Performance Criteria
Operate and Visual inspection of mounted tyre	<p>To be competent, the user/individual on the job must be able to</p> <p>PC1. Clean tools and keep the tools at designated place after the completion of fitting/inflation operation.</p> <p>PC2. Organize to keep the fitted and inflated tyres appropriately.</p> <p>PC3. Remove the replaced tyres from the fitting area; send the wastage to the appropriate place for re-use or disposal</p> <p>PC4. Report any problem related to tools, equipments, machine, tyres, material etc to the Supervisor</p>
Material disposal	<p>PC5. Dispose of waste material safely, as per organizational SOP.</p> <p>PC6. Store usable cut ends of rubber gum sheets for recalendering and usage</p>
Marking of tyres	<p>PC7. Marking tyres for any issues.</p> <p>PC8. Place ID tags to indicate tyre size, date and time of mounting/fitment</p>
Health & Safety	<p>PC9. Handle the material using hand gloves and other safety equipment.</p> <p>PC10. Adhere to all safety norms (such as wearing protective gloves, shoes, safety goggles etc).</p> <p>PC11. Comply with health, safety, environment guidelines and regulations in accordance with international/national standards or the organizational standards.</p>
Knowledge and Understanding (K)	

RSC/N3603
Perform Post-Tyre Fitter Servicing /Maintenance Activities

A. Organizational Context (Knowledge of the company / organization and its processes)	The user/individual on the job needs to know and understand: <ul style="list-style-type: none"> KA1. Implications of inappropriately fitted and inflated tyres. KA2. Significance of marking. KA3. Importance of identifying non-conforming products and their storage. KA4. Risk and impact of not following defined procedures/work instructions. KA5. The escalation matrix and procedures for reporting identified problems. KA6. Types of documentation in the organization and their importance. KA7. Records to be maintained and the implications of their non-maintenance. KA8. Importance of housekeeping & good shop floor practices KA9. Health, safety, and environment guidelines, legislations and regulations as applicable. KA10. Personal protection (which protective equipment to be used and how). KA11. Importance of FIFO KA12. Potential hazards and actions to minimize them. KA13. Impact of poor practices on health, safety and environment. KA14. The escalation matrix and procedures for reporting hazards. KA15. Handover/Takeover of the equipment/work area as per organizational SOP. 				
B. Technical Knowledge	The user/individual on the job needs to know and understand: <ul style="list-style-type: none"> KB1. Appropriate method for keeping the fitted tyres KB2. Low /high inflation and its effect on tyre performance KB3. Importance of dimensional checks KB4. Importance of visual /appearance quality checks. KB5. Implications of inappropriate waste disposal. (eg. leaky tubes) KB6. Process and importance of dimensional and appearance quality checks. KB7. Implications of incorrect ID marking. KB8. Methods for removing remaining portions rubber cut ends and their storage and reuse after rework KB9. Types of defects leading to rejections and their indicators, reasons and possible solutions. KB10. Units of measurement. KB11. Coding systems for identification and traceability. KB12. Knowledge of FIFO KB13. Knowledge of the storage and handover of prepared product KB14. The usage of placing different types of tags for not using defective tools 				
Skills (S)					
A. Core Skills/ Generic Skills	<table border="1" style="width: 100%;"> <tr> <td data-bbox="456 1751 779 1787" style="background-color: #d9e1f2;"> Writing Skills </td> <td data-bbox="784 1751 1524 1787"> The user/ individual on the job needs to know and understand how to: </td> </tr> <tr> <td data-bbox="456 1793 779 1906"> <ul style="list-style-type: none"> SA1. Construct simple sentences and express ideas through written communication SA2. Fill up appropriate forms and activity logs in required format of the company </td> <td data-bbox="784 1793 1524 1906"></td> </tr> </table>	Writing Skills	The user/ individual on the job needs to know and understand how to:	<ul style="list-style-type: none"> SA1. Construct simple sentences and express ideas through written communication SA2. Fill up appropriate forms and activity logs in required format of the company 	
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	SA3. Perform functional mathematical operations, including apply basic mathematical principles, such as numbers and space, and techniques such as estimation and approximation, for practical purposes
	Reading Skills
	SA4. Read and understand manuals, health and safety instructions, memos, reports, job cards etc SA5. Read images, graphs, diagrams SA6. Understand the various coding systems as per company norms
	Oral Communication
	SA6. Express statements, opinions or information clearly so that others can hear and understand SA7. Respond appropriately to any queries SA8. Communicate with teacher/trainer SA9. Communicate with people in a form and manner and using language that is open and respectful
B. Professional Skills	Decision Making
	The user/individual on the job needs to know and understand how to:
	SB1. Take a decision for any change/issue based on earlier successes (documented previous history)on similar issues SB2. Work out changes in case a new improved machine /equipment is added in the process or any new material/chemical is developed replacing existing one. SB3. Make changes in cycle time due to improved process. SB4. Use the standard operating procedure or trouble shooting manuals for trouble shooting and other reference documents approved by plant management SB5. Consult the peer group and superiors to arrive at a favourable decision. SB6. Use of standard available problem solving techniques for decision making SB7. Review and analyze the process steps to check on system non adherence and non conformity SB8. Review the current SOP and other standards for continuous improvement to facilitate decision making SB9. Take a calculated risk with minimum losses
	Plan and Organize
	SB10. Suggest requirement for purchase of new machinery or updating of technology in processing operation SB11. Seek clarification on problems from teacher/trainer /other fellows
	Customer Centricity

	<p>SB12. Match customer needs/specification by adjusting the processing conditions (interact with customer in case any clarification required)</p> <p>SB13. Ensure that performance of his action/operation/activity does not lead to any divergence from the specified quality of the final product as required by the customer.</p> <p>SB14. Complete the assigned task in timely manner so that the final product is delivered in the timeline given by the customer.</p> <p>SB15. Communicate effectively to the superior/customer for any delay in supplies to the clients.</p> <p>SB16. Work towards fulfilling the customers requirement as per their demand.</p> <p>SB17. In case of any complaint, ensure its timely resolution if the problem is emanating at his level</p> <p>SB18. Communicate effectively to the superior/customer for any delay in resolving the problem faced by the customer.</p> <p>SB19. Maintain good/cordial relation with customers.</p> <p>SB20. Work on the feedback received from customer regarding the product.</p>
	<p>Problem Solving</p>
	<p>SB21. Interpret quality for sheet</p> <p>SB22. Suggest improvements(if any) in process/product/materials based on results and experience</p>
	<p>Analytical Thinking</p>
	<p>SB23. Identify the problems pertaining to the fitted/mounted/inflated tyre based on visual inspection</p> <p>SB24. Identify any damage caused to tyre while mounting and check for reasons.</p> <p>SB25. Diagnose common problems in the tyres based on visual inspection, sound etc</p> <p>SB26. Suggest improvements(if any) in process based on experience</p> <p>SB27. Optimal use of accessories ensuring minimal wastage</p> <p>SB28. Identify any damage caused to tyre while inflating and check for reasons.</p> <p>SB29. Optimal response to safety alarm</p>
	<p>Critical Thinking</p>
	<p>SB30. Seek clarification on problems from others</p> <p>SB31. Apply problem-solving approaches in different situations</p> <p>SB32. Refer anomalies to the line manager</p>

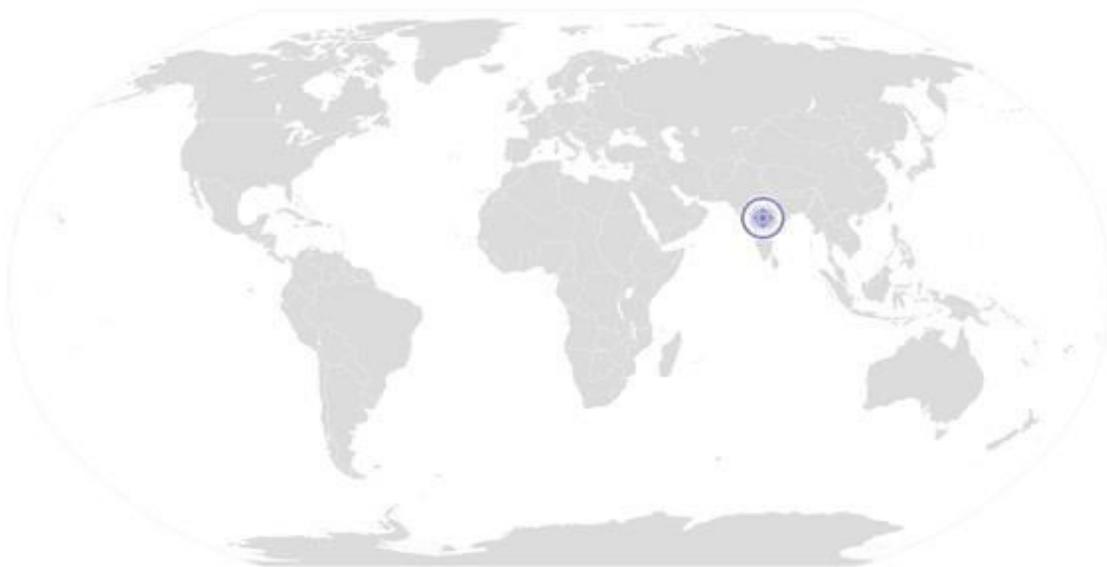
NOS Version Control

NOS Code	RSC/N3603		
Credits(NSQF)	TBD	Version number	2.0
Industry	Rubber Manufacturing	Drafted on	02/12/2014
Industry Sub-sector	Tyre	Last reviewed on	23/08/2017
Occupation	Tyre Servicing / Maintenance	Next review date	23/08/2021



[Back to QP](#)

National Occupational Standard



Overview

This unit is about carrying out housekeeping

Carry Out Housekeeping In Rubber Product Manufacturing

Unit Code	RSC/N5001
Unit Title (Task)	Carry out housekeeping in rubber product manufacturing
Description	This unit is about carrying out housekeeping activities
Scope	<p>This unit/task covers the following:</p> <ul style="list-style-type: none"> • Preparing for housekeeping activities • Carry out housekeeping operation • Post housekeeping activities
Performance Criteria (PC) w.r.t. the Scope	
Element	Performance Criteria
Pre housekeeping activities	<p>To be competent, the user/individual on the job must be able to:</p> <p>PC1. Inspect the area while taking into account various surfaces</p> <p>PC2. Identify the material requirements for cleaning the areas inspected, by considering risk, time, efficiency and type of stain</p> <p>PC3. Ensure that the cleaning equipment is in proper working condition</p> <p>PC4. Select the suitable alternatives for cleaning the areas in case the appropriate equipment and materials are not available and inform the appropriate person</p> <p>PC5. Plan the sequence for cleaning the area to avoid re-soiling clean areas and surfaces</p> <p>PC6. Inform the affected people about the cleaning activity</p> <p>PC7. Display the appropriate signage for the work being conducted</p> <p>PC8. Ensure that there is adequate ventilation for the work being carried out</p> <p>PC9. Wear the personal protective equipment required for the cleaning method and materials being used</p>
Housekeeping Operations	<p>PC10. Use the correct cleaning method for the work area, type of soiling and surface</p> <p>PC11. Carry out cleaning activity without disturbing others</p> <p>PC12. Deal with accidental damage, if any, caused while carrying out the work</p> <p>PC13. Report to the appropriate person any difficulties in carrying out your work</p> <p>PC14. Identify and report to the appropriate person any additional cleaning required that is outside one's responsibility or skill</p>

Post housekeeping activities	<p>PC15. Ensure that there is no oily substance on the floor to avoid slippage</p> <p>PC16. Ensure that no scrap material is lying around</p> <p>PC17. Maintain and store housekeeping equipment and supplies</p> <p>PC18. Follow workplace procedures to deal with any accidental damage caused during the cleaning process</p> <p>PC19. Ensure that, on completion of the work, the area is left clean and dry and meets requirements</p> <p>PC20. Return the equipment, materials and personal protective equipment that were used to the right places making sure they are clean, safe and securely stored</p> <p>PC21. Dispose the waste garnered from the activity in an appropriate manner</p> <p>PC22. Dispose of used and un-used solutions according to manufacturer's instructions, and clean the equipment thoroughly</p> <p>PC23. Maintain schedules and records for housekeeping duty</p> <p>PC24. Replenish any necessary supplies or consumables</p>
Knowledge and Understanding (K)	
A. Organizational Context (Knowledge of the company / organization and its processes)	<p>KA1. Importance of learning proper procedures and techniques</p> <p>KA2. Implications of not following the organizational requirement for approval for undertaking the specific task</p> <p>KA3. Importance of completing the activities as per the schedule</p> <p>KA4. Implications of not following the defined procedures/work instructions</p> <p>KA5. Importance of team work</p> <p>KA6. Health, Safety and Environment guidelines, legislation and regulations as applicable</p> <p>KA7. Actions to be taken in case of non-conformity to behavioral standards of the organization</p> <p>KA8. Impact of poor practices on the individual's and organization's performance</p> <p>KA9. Importance of optimal utilization of resources</p> <p>KA10. Importance of providing feedback for improvement</p> <p>KA11. Importance of indigenous knowledge for evolving/adopting operation specific practices</p> <p>KA12. Rectification/solution of problems/conflicts for the smooth functioning of the organization</p> <p>KA13. Importance of documentation/reporting as per guidelines and procedures</p> <p>KA14. Knowledge of do's and don'ts (company's HR instructions)</p> <p>KA15. Importance of attending trouble shooting</p> <p>KA16. Importance of subject learning/ training</p> <p>KA17. Importance of Product and its application</p>

RSC/N5001
Carry Out Housekeeping In Rubber Product Manufacturing

B. Technical Knowledge	<p>The user/individual on the job needs to know and understand:</p> <ul style="list-style-type: none"> KB1. The levels of hygiene required by workplace and why it is important to maintain them during your work KB2. How to inspect a work area to decide what cleaning it needs KB3. Methods and materials that used for cleaning variety of surfaces KB4. The types of cleansing agents that are not to be mixed together KB5. The correct method for cleaning equipment and/or machinery used during your work KB6. The importance of personal protective equipment KB7. Appropriate personal protective equipment for the work area, cleaning equipment, tools, materials and chemicals used KB8. The correct sequence for cleaning the work area KB9. The time taken by the treatment to work KB10. The importance of following manufacturer's instructions on cleaning agents KB11. The most appropriate place to carry out test cleans and why this should be done before applying treatments KB12. The importance of applying treatments evenly and the effect of not doing this KB13. Process of cleaning the surfaces without causing injury or damage KB14. The method to check the treated surface and equipment on completion of cleaning KB15. Procedures for reporting any unidentified soiling KB16. Procedures for disposing off waste KB17. Procedures for disposing off or storing personal protective equipment KB18. Escalation procedures for soils or stains that could not be removed 				
Skills (S)					
A. Core Skills/ Generic Skills	<table border="1"> <tr> <td data-bbox="443 1276 1529 1325"> Writing Skills </td> </tr> <tr> <td data-bbox="443 1325 1529 1753"> <p>The user/ individual on the job needs to know and understand how to:</p> <ul style="list-style-type: none"> SA1. Construct simple sentences and express ideas clearly through written communication SA2. Fill up appropriate technical forms, process charts, activity logs in required format of the company SA3. Write simple letters, mails, etc SA4. Perform functional mathematical operations, including apply basic mathematical principles, such as numbers and space, and techniques such as estimation and approximation, for practical purposes </td> </tr> <tr> <td data-bbox="443 1753 1529 1801"> Reading Skills </td> </tr> <tr> <td data-bbox="443 1801 1529 1927"> <ul style="list-style-type: none"> SA5. Read and understand manuals, health and safety instructions, memos, reports, job cards etc SA6. Read images, graphs, diagrams </td> </tr> </table>	Writing Skills	<p>The user/ individual on the job needs to know and understand how to:</p> <ul style="list-style-type: none"> SA1. Construct simple sentences and express ideas clearly through written communication SA2. Fill up appropriate technical forms, process charts, activity logs in required format of the company SA3. Write simple letters, mails, etc SA4. Perform functional mathematical operations, including apply basic mathematical principles, such as numbers and space, and techniques such as estimation and approximation, for practical purposes 	Reading Skills	<ul style="list-style-type: none"> SA5. Read and understand manuals, health and safety instructions, memos, reports, job cards etc SA6. Read images, graphs, diagrams
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	<p>SA7. Understand the various coding systems as per company norms</p> <p>Oral Communication</p> <p>SA8. Express statements, opinions or information clearly so that others can hear and understand</p> <p>SA9. Respond appropriately to any queries</p> <p>SA10. Communicate with teacher/trainer</p> <p>SA11. Communicate with people in a form and manner and using language that is open and respectful</p>
B. Professional Skills	<p>Decision Making</p>
	<p>The user/individual on the job needs to know and understand how to:</p> <p>SB1. Take a decision for any change/issue based on earlier successes (documented previous history)on similar issues</p> <p>SB2. Work out changes in case a new improved machine/equipment is added in the process or any new material/chemical is developed replacing existing one.</p> <p>SB3. Make changes in cycle time due to improved process.</p> <p>SB4. Use the standard operating procedure or trouble shooting manuals for trouble shooting and other reference documents approved by plant management</p> <p>SB5. Consult the peer group and superiors to arrive at a favourable decision.</p> <p>SB6. Use of standard available problem solving techniques for decision making</p> <p>SB7. Review and analyze the process steps to check on system non adherence and non conformity</p> <p>SB8. Review the current SOP and other standards for continuous improvement to facilitate decision making</p> <p>SB9. Take a calculated risk with minimum losses</p>
	<p>Plan and Organize</p>
	<p>SB10. Suggest requirement for purchase of new machinery or updating of technology in processing operation</p> <p>SB11. Seek clarification on problems from teacher/trainer /other fellows</p>
	<p>Customer Centricity</p>

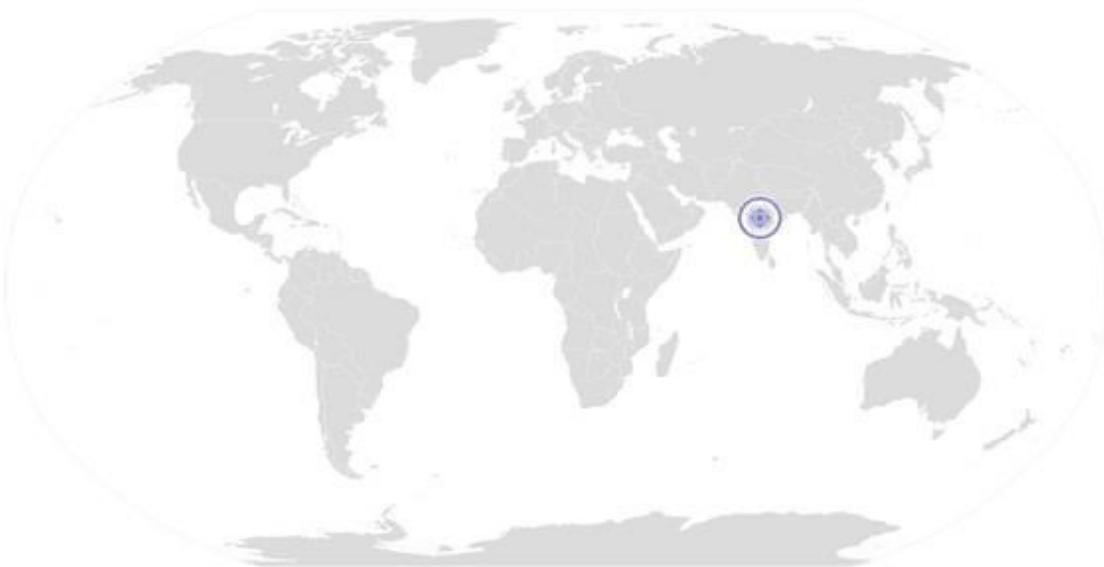
	<p>SB12. Match customer needs/specification by adjusting the processing conditions (interact with customer in case any clarification required)</p> <p>SB13. Ensure that performance of his action/operation/activity does not lead to any divergence from the specified quality of the final product as required by the customer.</p> <p>SB14. Complete the assigned task in timely manner so that the final product is delivered in the timeline given by the customer.</p> <p>SB15. Communicate effectively to the superior/customer for any delay in supplies to the clients.</p> <p>SB16. Work towards fulfilling the customers requirement as per their demand.</p> <p>SB17. In case of any complaint, ensure its timely resolution if the problem is emanating at his level</p> <p>SB18. Communicate effectively to the superior/customer for any delay in resolving the problem faced by the customer.</p> <p>SB19. Maintain good/cordial relation with customers.</p> <p>SB20. Work on the feedback received from customer regarding the product.</p>
	Problem Solving
	<p>SB21. Interpret quality for sheet</p> <p>SB22. Suggest improvements(if any) in process/product/materials based on results and experience</p>
	Analytical Thinking
	<p>SB23. Identify the problems pertaining to the tools based on visual inspection and work efficiency</p> <p>SB24. Diagnose common problems in the tyre and related accessories based on visual inspection, sound, etc</p> <p>SB25. Suggest improvements(if any) in process based on experience</p> <p>SB26. Minimal wastage while undertaking tyre fitting</p> <p>SB27. Suggest improvements(if any) in process based on experience</p> <p>SB28. Minimize wastage of fabric while cutting plies of different sizes and carrying out wire cutting and slitting operations</p>
	Critical Thinking
	<p>SB29. Seek clarification on problems from others</p> <p>SB30. Apply problem-solving approaches in different situations</p> <p>SB31. Refer anomalies to the line manager</p>

NOS Version Control

NOS Code	RSC/N5001		
Credits(NSQF)	TBD	Version number	2.0
Industry	Rubber Manufacturing	Drafted on	02/12/2014
Industry Sub-sector	Tyre	Last reviewed on	23/08/2017
Occupation	Tyre Servicing / Maintenance	Next review date	23/08/2021



National Occupational Standard



Overview

This unit is about reporting and documentation

Carry Out Reporting And Documentation

Unit Code	RSC/N5002
Unit Title (Task)	Carry out reporting and documentation
Description	This unit is about carrying out reporting and documentation
Scope	<p>This unit/task covers the following:</p> <ul style="list-style-type: none"> • Reporting of data/problem/incidents etc • Recording and Documentation • Information Security
Performance Criteria (PC) w.r.t. the Scope	
Element	Performance Criteria
Reporting of data/problem	<p>To be competent, the user/individual on the job must be able to:</p> <p>PC1. Report data/problems/incidents as applicable in a timely manner</p> <p>PC2. Report to the appropriate authority as laid down by the company</p> <p>PC3. Follow reporting procedures as prescribed by the company</p>
Recording and Documentation	<p>PC4. Identify documentation to be completed relating to one's role</p> <p>PC5. Record details accurately an appropriate format</p> <p>PC6. Complete all documentation within stipulated time according to company procedure</p> <p>PC7. Ensure that the final document meets with the requirements of the persons who requested it or make any amendments accordingly</p> <p>PC8. Make sure documents are available to all appropriate authorities to inspect</p>
Information Security	<p>PC9. Respond to requests for information in an appropriate manner whilst following organizational procedures</p> <p>PC10. Inform the appropriate authority of requests for information received</p>
Knowledge and Understanding (K)	
A. Organizational Context (Knowledge of the company / organization and its processes)	<p>The user/individual on the job needs to know and understand:</p> <p>KA1. Importance of learning proper procedures and techniques</p> <p>KA2. Implications of not following the organizational requirement for approval for undertaking the specific task</p> <p>KA3. Importance of completing the activities as per the schedule</p> <p>KA4. Implications of not following the defined procedures/work instructions</p> <p>KA5. Importance of team work</p> <p>KA6. Health, Safety and Environment guidelines, legislation and regulations as applicable</p> <p>KA7. Actions to be taken in case of non-conformity to behavioral standards of the</p>

	<p>organization</p> <p>KA8. Impact of poor practices on the individual's and organization's performance</p> <p>KA9. Importance of optimal utilization of resources</p> <p>KA10. Importance of providing feedback for improvement</p> <p>KA11. Importance of indigenous knowledge for evolving/adopting operation specific practices</p> <p>KA12. Rectification/solution of problems/conflicts for the smooth functioning of the organization</p> <p>KA13. Importance of documentation/reporting as per guidelines and procedures</p> <p>KA14. Knowledge of do's and don'ts (company's HR instructions)</p> <p>KA15. Importance of attending trouble shooting</p> <p>KA16. Importance of subject learning/ training</p> <p>KA17. Importance of Product and its application</p>
B. Technical Knowledge	<p>The user/individual on the job needs to know and understand:</p> <p>KB1. Different methods of recording information</p> <p>KB2. Various documents that need to be maintained</p> <p>KB3. Company procedure for filling/maintaining up the documents</p> <p>KB4. Procedures for reporting to the appropriate authority</p> <p>KB5. Procedures for recording damage, breakages etc</p> <p>KB6. Reporting incidents where standard operating procedures are not followed</p> <p>KB7. The importance of complete and accurate documentation</p> <p>KB8. How to maintain complete documentation accurately and within agreed timescales</p> <p>KB9. The importance of ensuring that the documents are correct</p> <p>KB10. The actions to be taken if the documents are not correct</p> <p>KB11. The importance of maintaining the security and confidentiality of recorded information</p> <p>KB12. Procedures to maintain confidentiality of information</p> <p>KB13. The appropriate method for responding to requests for information</p> <p>KB14. The reporting procedures to followed before disclosing information to any outside party</p>
Skills (S)	
A. Core Skills/ Generic Skills	<p>Writing Skills</p> <p>The user/ individual on the job needs to know and understand how to:</p> <p>SA1. Construct simple sentences and express ideas clearly through written communication</p> <p>SA2. Fill up appropriate technical forms, process charts, activity logs in required format of the company</p> <p>SA3. Write simple letters, mails, etc</p> <p>SA4. Perform functional mathematical operations, including apply basic</p>

	<p>mathematical principles, such as numbers and space, and techniques such as estimation and approximation, for practical purposes</p> <p>Reading Skills</p> <p>SA5. Read and understand manuals, health and safety instructions, memos, reports, job cards etc</p> <p>SA6. Read images, graphs, diagrams</p> <p>SA7. Understand the various coding systems as per company norms</p> <p>Oral Communication</p> <p>SA8. Express statements, opinions or information clearly so that others can hear and understand</p> <p>SA9. Respond appropriately to any queries</p> <p>SA10. Communicate with teacher/trainer</p> <p>SA11. Communicate with people in a form and manner and using language that is open and respectful</p>
B. Professional Skills	<p>Decision Making</p> <p>The user/individual on the job needs to know and understand how to:</p> <p>SB1. Take a decision for any change/issue based on earlier successes (documented previous history) on similar issues</p> <p>SB2. Work out changes in case a new improved machine/equipment is added in the process or any new material/chemical is developed replacing existing one.</p> <p>SB3. Make changes in cycle time due to improved process.</p> <p>SB4. Use the standard operating procedure or trouble shooting manuals for trouble shooting and other reference documents approved by plant management</p> <p>SB5. Consult the peer group and superiors to arrive at a favourable decision.</p> <p>SB6. Use of standard available problem solving techniques for decision making</p> <p>SB7. Review and analyze the process steps to check on system non adherence and non conformity</p> <p>SB8. Review the current SOP and other standards for continuous improvement to facilitate decision making</p> <p>SB9. Take a calculated risk with minimum losses</p> <p>Plan and Organize</p> <p>SB10. Suggest requirement for purchase of new machinery or updating of technology in processing operation</p> <p>SB11. Seek clarification on problems from teacher/trainer /other fellows</p> <p>Customer Centricity</p>

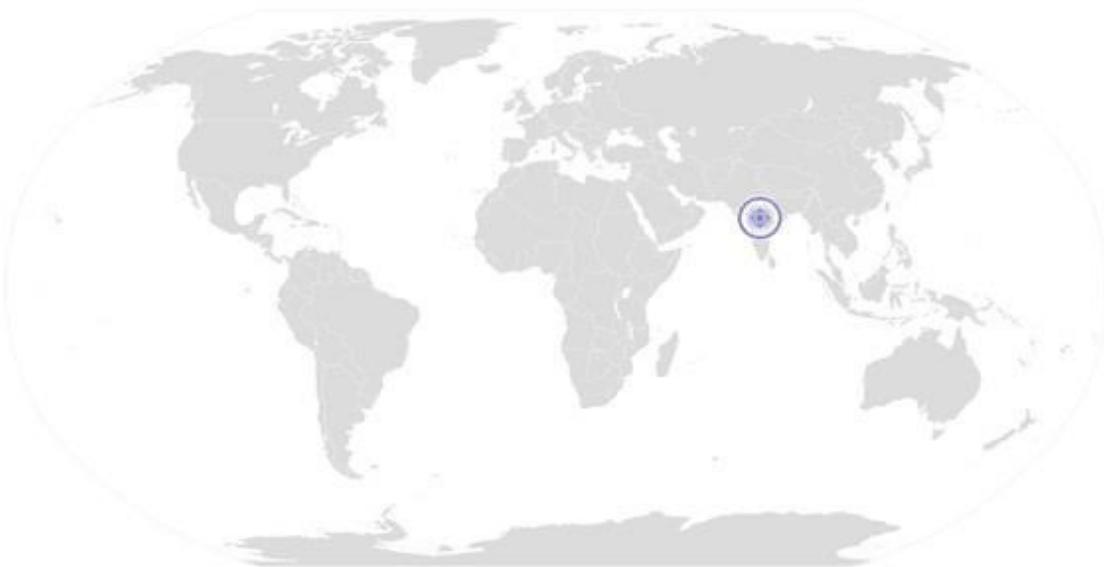
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	Problem Solving
	<p>SB21. Interpret quality for sheet</p> <p>SB22. Suggest improvements(if any) in process/product/materials based on results and experience</p>
	Analytical Thinking
	<p>SB23. Identify the problems pertaining to the tools based on visual inspection and work efficiency</p> <p>SB24. Diagnose common problems in the tyre and related accessories based on visual inspection, sound, etc</p> <p>SB25. Suggest improvements(if any) in process based on experience</p> <p>SB26. Minimal wastage while undertaking tyre fitting</p> <p>SB27. Suggest improvements(if any) in process based on experience</p> <p>SB28. Minimize wastage of fabric while cutting plies of different sizes and carrying out wire cutting and slitting operations</p>
	Critical Thinking
	<p>SB29. Seek clarification on problems from others</p> <p>SB30. Apply problem-solving approaches in different situations</p> <p>SB31. Refer anomalies to the line manager</p>

NOS Version Control

NOS Code	RSC/N5002		
Credits(NSQF)	TBD	Version number	2.0
Industry	Rubber Manufacturing	Drafted on	02/12/2014
Industry Sub-sector	Tyre	Last reviewed on	23/08/2017
Occupation	Tyre Servicing / Maintenance	Next review date	23/08/2021



National Occupational Standard



Overview

This unit is about carrying out quality checks

Unit Code	RSC/N5003
Unit Title (Task)	Carry out quality checks
Description	This unit is about carrying out quality control activities
Scope	<p>This unit/task covers the following:</p> <ul style="list-style-type: none"> • Carrying out quality checks and inspection to identify problems • Analysis and take corrective actions • Reporting the results
Performance Criteria (PC) w.r.t. the Scope	
Element	Performance Criteria
Quality checks and inspection	<p>To be competent, the user/individual on the job must be able to:</p> <p>PC1. Ensure that total range of checks are regularly and consistently performed</p> <p>PC2. Use appropriate measuring instruments, equipment, tools, accessories etc ,as required</p>
Analysis and take corrective actions	<p>PC3. Identify non-conformities to quality assurance standards</p> <p>PC4. Identify potential causes of non-conformities to quality assurance standards</p> <p>PC5. Identify impact on final product due to non-conformance to company standards</p> <p>PC6. Evaluating the need for action to ensure that problems do not recur</p> <p>PC7. Suggest corrective action to address problem</p> <p>PC8. Review effectiveness of corrective action</p>
Reporting of results	<p>PC9. Interpret the results of the quality check correctly</p> <p>PC10. Take up results of the findings with QC in charge/appropriate authority.</p> <p>PC11. Take up the results of the findings within stipulated time</p> <p>PC12. Record of results of action taken</p> <p>PC13. Record adjustments, not covered by established procedures, for future reference</p> <p>PC14. Review effectiveness of action taken</p> <p>PC15. Follow reporting procedures where the cause of defect cannot be identified</p>
Knowledge and Understanding (K)	
A. Organizational Context (Knowledge of the company / organization and its processes)	<p>KA1. Importance of learning proper procedures and techniques</p> <p>KA2. Implications of not following the organizational requirement for approval for undertaking the specific task</p> <p>KA3. Importance of completing the activities as per the schedule</p> <p>KA4. Implications of not following the defined procedures/work instructions</p> <p>KA5. Importance of team work</p> <p>KA6. Health, Safety and Environment guidelines, legislation and regulations as applicable</p> <p>KA7. Actions to be taken in case of non-conformity to behavioral standards of the</p>

Carry Out Quality Checks

	<p>organization</p> <p>KA8. Impact of poor practices on the individual's and organization's performance</p> <p>KA9. Importance of optimal utilization of resources</p> <p>KA10. Importance of providing feedback for improvement</p> <p>KA11. Importance of indigenous knowledge for evolving/adopting operation specific practices</p> <p>KA12. Rectification/solution of problems/conflicts for the smooth functioning of the organization</p> <p>KA13. Importance of documentation/reporting as per guidelines and procedures</p> <p>KA14. Knowledge of do's and don'ts (company's HR instructions)</p> <p>KA15. Importance of attending trouble shooting</p> <p>KA16. Importance of subject learning/ training</p> <p>KA17. Importance of product and its application</p>
<p>B. Technical Knowledge</p>	<p>The user/individual on the job needs to know and understand:</p> <p>KB1. The importance of quality control procedures</p> <p>KB2. Relevance and importance of activities and how they contribute to the achievement of the quality objectives,</p> <p>KB3. Proper procedure for selecting the material/product and performing quality checks without affecting the material</p> <p>KB4. Availability of work instructions, as necessary,</p> <p>KB5. Characteristics of the product/material</p> <p>KB6. Use of suitable equipment</p> <p>KB7. Availability and use of monitoring and measuring devices,</p> <p>KB8. Requirements of records</p> <p>KB9. Importance of maintaining accurate up-to-date records</p> <p>KB10. The need to report within the stipulated time</p> <p>KB11. Implications of inaccurate measuring and testing instruments and equipment</p> <p>KB12. The cost of non-conformance to quality standards</p> <p>KB13. Implications (impact on internal/external customers) of defective products, materials or components</p>
<p>Skills (S)</p>	
<p>A. Core Skills/ Generic Skills</p>	<p>Writing Skills</p> <p>The user/ individual on the job needs to know and understand how to:</p> <p>SA1. Construct simple sentences and express ideas clearly through written communication</p> <p>SA2. Fill up appropriate technical forms, process charts, activity logs in required format of the company</p> <p>SA3. Write simple letters, mails, etc</p> <p>SA4. Perform functional mathematical operations, including apply basic mathematical principles, such as numbers and space, and techniques such as estimation and approximation, for practical purposes</p> <p>Reading Skills</p>

	<p>SA5. Read and understand manuals, health and safety instructions, memos, reports, job cards etc</p> <p>SA6. Read images, graphs, diagrams</p> <p>SA7. Understand the various coding systems as per company norms</p>
	<p>Oral Communication</p>
	<p>SA8. Express statements, opinions or information clearly so that others can hear and understand</p> <p>SA9. Respond appropriately to any queries</p> <p>SA10. Communicate with teacher/trainer</p> <p>SA11. Communicate with people in a form and manner and using language that is open and respectful</p>
<p>B. Professional Skills</p>	<p>Decision Making</p>
	<p>The user/individual on the job needs to know and understand how to:</p> <p>SB1. Take a decision for any change/issue based on earlier successes (documented previous history) on similar issues</p> <p>SB2. Work out changes in case a new improved machine / equipment is added in the process or any new material / chemical is developed replacing existing one.</p> <p>SB3. Make changes in cycle time due to improved process.</p> <p>SB4. Use the standard operating procedure or trouble shooting manuals for trouble shooting and other reference documents approved by plant management</p> <p>SB5. Consult the peer group and superiors to arrive at a favourable decision.</p> <p>SB6. Use of standard available problem solving techniques for decision making</p> <p>SB7. Review and analyze the process steps to check on system non adherence and non conformity</p> <p>SB8. Review the current SOP and other standards for continuous improvement to facilitate decision making</p> <p>SB9. Take a calculated risk with minimum losses</p>
	<p>Plan and Organize</p>
	<p>SB10. Suggest requirement for purchase of new machinery or updating of technology in processing operation</p> <p>SB11. Seek clarification on problems from teacher/trainer /other</p>
	<p>Customer Centricity</p>

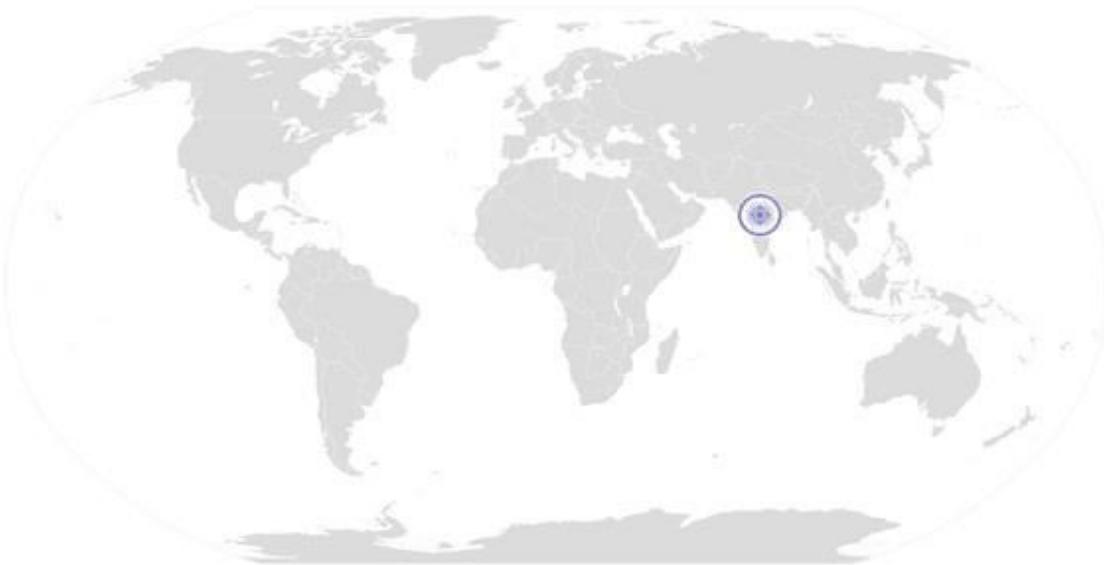
	<p>SB12. Match customer needs/specification by adjusting the processing conditions (interact with customer in case any clarification required)</p> <p>SB13. Ensure that performance of his action/operation/activity does not lead to any divergence from the specified quality of the final product as required by the customer.</p> <p>SB14. Complete the assigned task in timely manner so that the final product is delivered in the timeline given by the customer.</p> <p>SB15. Communicate effectively to the superior/customer for any delay in supplies to the clients.</p> <p>SB16. Work towards fulfilling the customers requirement as per their demand.</p> <p>SB17. In case of any complaint, ensure its timely resolution if the problem is emanating at his level</p> <p>SB18. Communicate effectively to the superior/customer for any delay in resolving the problem faced by the customer.</p> <p>SB19. Maintain good/cordial relation with customers.</p> <p>SB20. Work on the feedback received from customer regarding the product.</p>
	Problem Solving
	<p>SB21. Interpret quality for sheet</p> <p>SB22. Suggest improvements(if any) in process/product/materials based on results and experience</p>
	Analytical Thinking
	<p>SB23. Identify the problems pertaining to the tools based on visual inspection and work efficiency</p> <p>SB24. Diagnose common problems in the tyre and related accessories based on visual inspection, sound, etc</p> <p>SB25. Suggest improvements(if any) in process based on experience</p> <p>SB26. Minimal wastage while undertaking tyre fitting</p> <p>SB27. Suggest improvements(if any) in process based on experience</p> <p>SB28. Minimize wastage of fabric while cutting plies of different sizes and carrying out wire cutting and slitting operations</p>
	Critical Thinking
	<p>SB29. Seek clarification on problems from others</p> <p>SB30. Apply problem-solving approaches in different situations</p> <p>SB31. Refer anomalies to the line manager</p>

NOS Version Control

NOS Code	RSC/N5003		
Credits(NSQF)	TBD	Version number	2.0
Industry	Rubber Manufacturing	Drafted on	02/12/2014
Industry Sub-sector	Tyre	Last reviewed on	23/08/2017
Occupation	Tyre Servicing / Maintenance	Next review date	23/08/2021



National Occupational Standard



Overview

This unit is about problem identification and escalation

Carry out problem identification and escalation

National Occupational Standard

Unit Code	RSC/N5004
Unit Title (Task)	Carry out problem identification and escalation
Description	This unit is about problem identification and escalation
Scope	<p>This unit/task covers the following:</p> <ul style="list-style-type: none"> • Identify problems across: <ul style="list-style-type: none"> ○ Raw materials ○ Compounds ○ Product ○ Equipment ○ Others • Identify solutions to problems and take corrective action • Escalation of unresolved identified problems
Performance Criteria (PC) w.r.t. the Scope	
Element	Performance Criteria
Problem Identification	<p>To be competent, the user/individual on the job must be able to:</p> <p>PC1. Identify defects/indicators of problems PC2. Identify any wrong practices that may lead to problems PC3. Identify practices that may impact the final product quality PC4. Identify if the problem has occurred before PC5. Identify other operations that might be impacted by the problem PC6. Ensure that no delays are caused as a result of failure to escalate problems</p>
Necessary Action	<p>PC7. Take appropriate materials and sample, conduct tests and evaluate results to establish reasons to confirm suspected reasons for non-conformance (where required) PC8. Consider possible reasons for identification of problems PC9. Consider applicable corrections and formulate corrective action PC10. Formulate action in a timely manner PC11. Communicate problem/remedial action to appropriate parties PC12. Take corrective action in a timely manner PC13. Take corrective action for problems identified according to the company procedures PC14. Report/document problem and corrective action in an appropriate manner PC15. Monitor corrective action PC16. Evaluate implementation of corrective action taken to determine if the problem has been resolved PC17. Ensure that corrective action selected is viable and practical</p>

Carry out problem identification and escalation

	<p>PC18. Ensure that correct solution is identified to an identified problem</p> <p>PC19. Take corrective action for problems identified according to the company procedures</p> <p>PC20. Ensure that no delays are caused as a result of failure to take necessary action</p>
Problem Escalation	<p>PC21. Escalate problem as per laid down escalation matrix</p> <p>PC22. Escalate the problem within stipulated time</p> <p>PC23. Escalate the problem in an appropriate manner</p> <p>PC24. Ensure that no delays are caused as a result of failure to escalate problems</p>
Knowledge and Understanding (K)	
A. Organizational Context (Knowledge of the company / organization and its processes)	<p>KA1. Importance of learning proper procedures and techniques</p> <p>KA2. Implications of not following the organizational requirement for approval for undertaking the specific task</p> <p>KA3. Importance of completing the activities as per the schedule</p> <p>KA4. Implications of not following the defined procedures/work instructions</p> <p>KA5. Importance of team work</p> <p>KA6. Health, Safety and Environment guidelines, legislation and regulations as applicable</p> <p>KA7. Actions to be taken in case of non-conformity to behavioral standards of the organization</p> <p>KA8. Impact of poor practices on the individual's and organization's performance</p> <p>KA9. Importance of optimal utilization of resources</p> <p>KA10. Importance of providing feedback for improvement</p> <p>KA11. Importance of indigenous knowledge for evolving/adopting operation specific practices</p> <p>KA12. Rectification/solution of problems/conflicts for the smooth functioning of the organization</p> <p>KA13. Importance of documentation/reporting as per guidelines and procedures</p> <p>KA14. Knowledge of do's and don'ts (company's HR instructions)</p> <p>KA15. Importance of attending trouble shooting</p> <p>KA16. Importance of subject learning/ training</p> <p>KA17. Importance of Product and its application</p>
B. Technical Knowledge	<p>The user/individual on the job needs to know and understand:</p> <p>KB1. Indicators of problems</p> <p>KB2. The working of the equipment and accessories(if applicable)</p> <p>KB3. The impact of operations on the user and equipment(if applicable)</p> <p>KB4. The impact of operations on the final product (if applicable)</p> <p>KB5. The effect of not rectifying the problems identified</p> <p>KB6. The reason for the occurrence of previous problems</p> <p>KB7. Measures and steps that have been taken to address the previous problems</p> <p>KB8. Possible solutions for various problems</p>

Carry out problem identification and escalation

	<p>KB9. The correct method for carrying out corrective actions outlined for each problem</p> <p>KB10. The impact of not carrying out the corrective actions</p> <p>KB11. The documentation procedure for recording such problems, as per company norms</p> <p>KB12. The escalation matrix for reporting problems</p> <p>KB13. Escalation matrix for reporting unresolved problems</p> <p>KB14. The time frame within which in which each problem needs to be escalated</p> <p>KB15. Manner in which each problem needs to be escalated</p>
Skills (S)	
A. Core Skills/ Generic Skills	Writing Skills
	<p>The user/ individual on the job needs to know and understand how to:</p> <p>SA1. Construct simple sentences and express ideas clearly through written communication</p> <p>SA2. Fill up appropriate technical forms, process charts, activity logs in required format of the company</p> <p>SA3. Write simple letters, mails, etc</p> <p>SA4. Perform functional mathematical operations, including apply basic mathematical principles, such as numbers and space, and techniques such as estimation and approximation, for practical purposes</p>
	Reading Skills
	<p>SA5. Read and understand the course content</p> <p>SA6. Read images, graphs, diagrams</p> <p>SA7. Follow the notices and instructions.</p> <p>SA8. Read and understand machinery/equipment manuals</p> <p>SA9. Read and understand the contents published in scientific journals, newspapers and other publications</p> <p>SA10. Read and understand scientific terminologies, codes, abbreviations etc</p>
	Oral Communication
	<p>SA11. Express statements, opinions or information clearly so that others can hear and understand</p> <p>SA12. Respond appropriately to any queries</p> <p>SA13. Communicate with teacher/trainer</p> <p>SA14. Communicate with people in a form and manner and using language that is open and respectful</p>
B. Professional Skills	Decision Making
	<p>The user/individual on the job needs to know and understand how to:</p> <p>SB1. Take a decision for any change/issue based on earlier successes (documented previous history)on similar issues</p>

Carry out problem identification and escalation

	<p>SB2. Work out changes in case a new improved machine / equipment is added in the process or any new material / chemical is developed replacing existing one.</p> <p>SB3. Make changes in cycle time due to improved process.</p> <p>SB4. Use the standard operating procedure or trouble shooting manuals for trouble shooting and other reference documents approved by plant management</p> <p>SB5. Consult the peer group and superiors to arrive at a favourable decision.</p> <p>SB6. Use of standard available problem solving techniques for decision making</p> <p>SB7. Review and analyze the process steps to check on system non adherence and non conformity</p> <p>SB8. Review the current SOP and other standards for continuous improvement to facilitate decision making</p> <p>SB9. Take a calculated risk with minimum losses</p>
	Plan and Organize
	<p>SB10. Suggest requirement for purchase of new machinery or updating of technology in processing operation</p> <p>SB11. Seek clarification on problems from teacher/trainer /other</p>
	Customer Centricity
	<p>SB12. Match customer needs/specification by adjusting the processing conditions (interact with customer in case any clarification required)</p> <p>SB13. Ensure that performance of his action/operation/activity does not lead to any divergence from the specified quality of the final product as required by the customer.</p> <p>SB14. Complete the assigned task in timely manner so that the final product is delivered in the timeline given by the customer.</p> <p>SB15. Communicate effectively to the superior/customer for any delay in supplies to the clients.</p> <p>SB16. Work towards fulfilling the customers requirement as per their demand.</p> <p>SB17. In case of any complaint, ensure its timely resolution if the problem is emanating at his level</p> <p>SB18. Communicate effectively to the superior/customer for any delay in resolving the problem faced by the customer.</p> <p>SB19. Maintain good/cordial relation with customers.</p> <p>SB20. Work on the feedback received from customer regarding the product.</p>
	Problem Solving
	<p>SB21. Interpret quality for sheet</p> <p>SB22. Suggest improvements(if any) in process/product/materials based on results and experience</p>
	Analytical Thinking

Carry out problem identification and escalation

	<p>SB23. Identify the problems pertaining to the tools based on visual inspection and work efficiency</p> <p>SB24. Diagnose common problems in the tyre and related accessories based on visual inspection, sound, etc</p> <p>SB25. Suggest improvements(if any) in process based on experience</p> <p>SB26. Minimal wastage while undertaking tyre fitting</p> <p>SB27. Suggest improvements(if any) in process based on experience</p> <p>SB28. Minimize wastage of fabric while cutting plies of different sizes and carrying out wire cutting and slitting operations</p>
	Critical Thinking
	<p>SB29. Seek clarification on problems from others</p> <p>SB30. Apply problem-solving approaches in different situations</p> <p>SB31. Refer anomalies to the line manager</p>



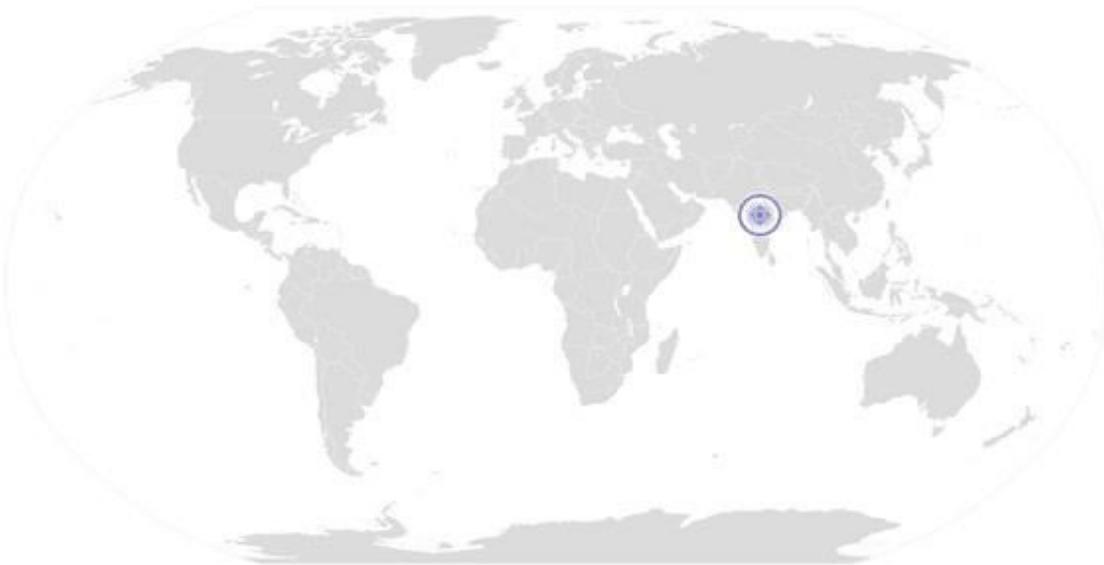
NOS Version Control

NOS Code	RSC/N5004		
Credits(NSQF)	TBD	Version number	2.0
Industry	Rubber Manufacturing	Drafted on	02/12/2014
Industry Sub-sector	Tyre	Last reviewed on	23/08/2017
Occupation	Tyre Servicing / Maintenance	Next review date	23/08/2021



[Back to QP](#)

National Occupational Standard



Overview

This unit is about maintaining health and safety of self and others at workplace.

Unit Code	RSC/N5007
Unit Title (Task)	Carry out health and safety
Description	This unit is about maintaining health and safety of self and others at workplace.
Scope	<p>This unit/task covers the following:</p> <ul style="list-style-type: none"> • Maintain a clean and efficient workplace • Render appropriate emergency procedures • Maintain standard safety procedures at the workplace • Participate in safety awareness campaigns • Understand potential sources of accidents • Use safety gears to avoid accidents
Performance Criteria (PC)	
Maintain a clean and efficient workplace	<p>To be competent, the individual on the job must be able to:</p> <p>PC1. Undertake basic safety checks before operation of all machinery and equipment and report hazards to the appropriate supervisor</p> <p>PC2. Identify the work for which protective clothing or equipment is required and the appropriate protective clothing or equipment is used in performing these duties in accordance with workplace policy.</p> <p>PC3. Read and understand the hazards of use and contamination mentioned on the labels of chemicals, utilities etc</p> <p>PC4. Assess the risk prior to performing manual handling jobs and work is carried out according to currently recommended safe practices.</p> <p>PC5. Use equipment and materials safely and correctly and return the same to designated storage when not in use</p> <p>PC6. Dispose off waste safely and correctly in a designated area</p> <p>PC7. Recognize the risk to bystanders and take action to reduce risk associated with jobs in the workplace</p> <p>PC8. Perform work in a manner which minimizes environmental damage</p> <p>PC9. Monitor closely all procedures and work instructions for controlling risk</p> <p>PC10. Report any accidents, incidents or problems without delay to an appropriate person and take immediate necessary action to reduce further danger.</p>
Render appropriate emergency procedures	<p>PC11. Follow procedures for dealing with accidents, fires and emergencies, including communicating location and directions to emergency.</p> <p>PC12. Follow emergency procedures as per company standards and workplace requirements.</p> <p>PC13. Use Emergency equipment in accordance with manufacturers' specifications and workplace requirements.</p> <p>PC14. Provide treatment appropriate to the patient's injuries in accordance with recognized first aid techniques.</p> <p>PC15. Recover (if practical), clean, inspect/test, refurbish, replace and store the first</p>

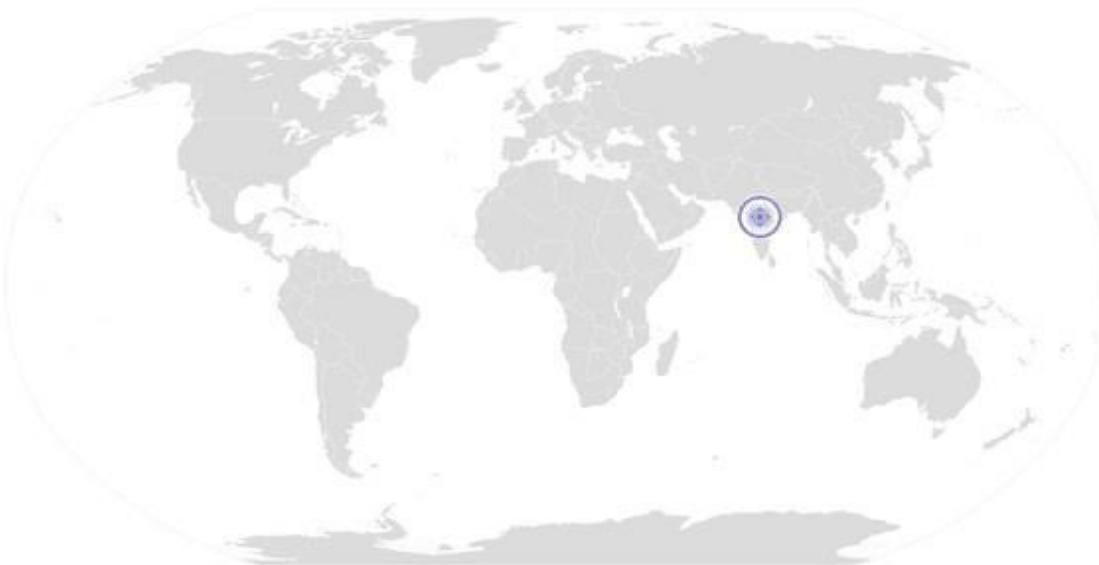
	aid equipment as appropriate PC16. Dispose off medical waste in accordance with workplace requirements PC17. Report details of first aid administered in accordance with work place procedures.
Maintain standard safety procedures at the workplace	PC18. Comply with general safety procedures PC19. Follow standard safety procedures while handling equipment, hazardous material or tool PC20. Check parts of the workplace and take preventive actions like spraying and other steps to protect from leakages, water logging, pests, fire, pollution, etc. PC21. Ensure no accidents and damages at the workplace, reporting of any breach of company safety procedure PC22. Keep the workplace organized, swept, clean and hazard free
Participate in safety awareness campaigns	PC23. Attend fire drills and other safety related workshops organized at the workplace PC24. Awareness about first aid, evacuation and emergency procedures PC25. Ensuring all safety procedures are followed without neglecting any event
Understand potential sources of accidents	PC26. Avoid accidents while using hazardous chemicals, machines, sharp tools and equipment
Use safety gears to avoid accidents	PC27. Use safety materials such as protective gear, goggles, caps, shoes, etc. (as applicable with workplace) PC28. Handle heavy and hazardous materials with care and using appropriate tools and handling equipment such as trolleys, ladders
Knowledge and Understanding (K)	
A. Organizational context	The individual on the job needs to know and understand: KA1. Policies on incentives, delivery standards, and personnel management KA2. Occupational safety and health policy followed KA3. Emergency evacuation procedure KA4. Medical policy KA5. Company laws and acts
B. Technical knowledge	KB1. The risks to health and safety and the measures to be taken to control those risks in the area of work KB2. Workplace procedures and requirements for the handling of workplace injuries/illnesses. KB3. Basic emergency first aid procedure KB4. Local emergency services KB5. Reporting on accidents, incidents and problems to appropriate authorities. KB6. How to use machines as per standard operating procedure KB7. How to maintain work area safe and secure KB8. Use of hazardous materials, tools and equipments KB9. Emergency evacuation and first aid procedures to be followed

	<p>KB10. Personal hygiene and fitness requirements</p> <p>KB11. General duties under the relevant health and safety legislation</p> <p>KB12. What personal protective equipment and clothing should be worn and how it is cared for</p> <p>KB13. The correct and safe way to use materials and equipment required for work</p> <p>KB14. The importance of good housekeeping in the workplace</p> <p>KB15. Safe disposal methods for waste</p> <p>KB16. Methods for minimizing environmental damage during work</p>
Skills (S)	
A. Core Skills/ Generic Skills	Writing Skills
	<p>The individual on the job needs to know and understand how to:</p> <p>SA1. Record data which are required for record keeping purpose</p> <p>SA2. Report problems to the appropriate person in a timely manner</p> <p>SA3. Write descriptions and details about incidents in reports</p>
	Reading Skills
	<p>SA4. Read instruction manuals for hand tools and equipment</p> <p>SA5. Read instructions on work orders and procedures</p>
	Oral Communication
<p>SA6. Receive instructions and seek advice from superiors</p> <p>SA7. Communicate clearly and effectively with others</p>	
B. Professional Skills	Decision Making
	<p>The individual on the job needs to know and understand how to:</p> <p>SB1. Take a decision for any change/issue based on earlier successes (documented previous history) on similar issues</p> <p>SB2. Work out changes in case a new improved machine / equipment is added in the process or any new material / chemical is developed replacing existing one.</p> <p>SB3. Make changes in cycle time due to improved process.</p> <p>SB4. Use the standard operating procedure or trouble shooting manuals for trouble shooting and other reference documents approved by plant management</p> <p>SB5. Consult the peer group and superiors to arrive at a favourable decision.</p> <p>SB6. Use of standard available problem solving techniques for decision making</p> <p>SB7. Review and analyze the process steps to check on system non adherence and non conformity</p> <p>SB8. Review the current SOP and other standards for continuous improvement to facilitate decision making</p> <p>SB9. Take a calculated risk with minimum losses</p>

	Plan and Organize
	SB10. Schedule daily activities and drawing up priorities; allocate start times, estimation of completion times and materials, equipment and assistance required for completion.
	Customer Centricity
	SB11. Match customer needs/specification by adjusting the processing conditions (interact with customer in case any clarification required)
	SB12. Ensure that performance of his action/operation/activity does not lead to any divergence from the specified quality of the final product as required by the customer.
	SB13. Complete the assigned task in timely manner so that the final product is delivered in the timeline given by the customer.
	SB14. Communicate effectively to the superior/customer for any delay in supplies to the clients.
	SB15. Work towards fulfilling the customers requirement as per their demand.
	SB16. In case of any complaint, ensure its timely resolution if the problem is emanating at his level
	SB17. Communicate effectively to the superior/customer for any delay in resolving the problem faced by the customer.
	SB18. Maintain good/cordial relation with customers.
	SB19. Work on the feedback received from customer regarding the product.
	Problem Solving
SB20. Use first aid treatment in case of any injury/accident.	
Analytical Thinking	
SB21. Monitor and maintain the condition of tools and equipment	
SB22. Assess situation & identify appropriate control measures	
Critical Thinking	
SB23. Act, communicate and report in emergency situation	

NOS Version Control

NOS Code	RSC/N5007		
Credits(NSQF)	TBD	Version number	2.0
Industry	Rubber Manufacturing	Drafted on	02/12/2014
Industry Sub-sector	Tyre & Non Tyre	Last reviewed on	23/08/2017
Occupation	Tyre Servicing / Maintenance	Next review date	23/08/2021



National Occupational Standard



Overview

This unit is about skill of entrepreneurship.

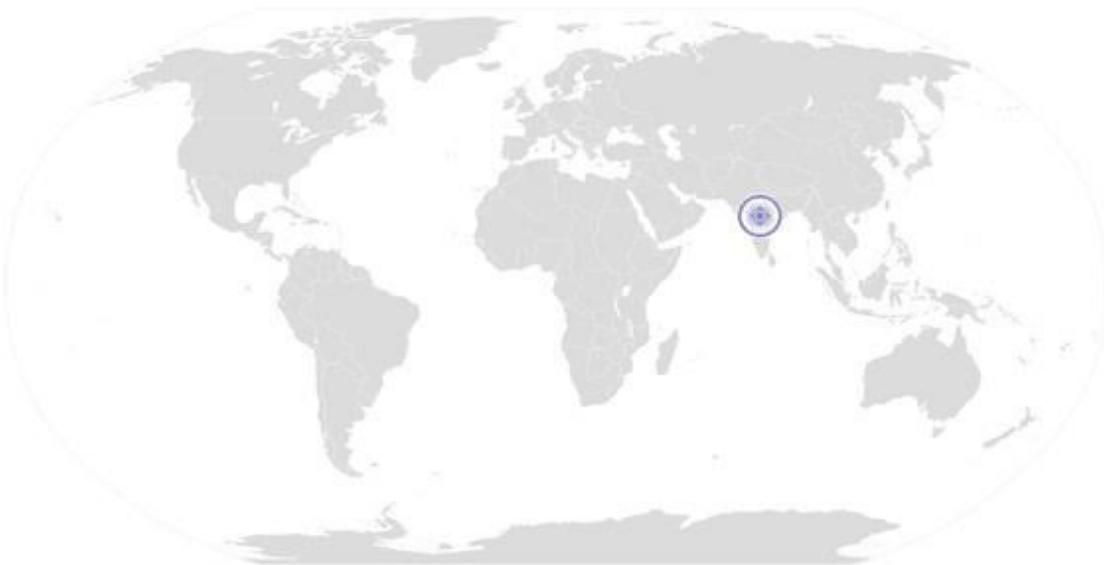
Unit Code	RSC/N5013
Unit Title (Task)	Develop Entrepreneurship Skills
Description	This unit is about entrepreneurship.
Scope	This unit/task covers the following tasks: <ul style="list-style-type: none"> • Identification of business opportunity • Sustain existing business and make continual improvement • Organizing/Directing the factors of production (productivity) • Undertaking risk and initiative • Innovation and be a role model • Keep watch and improve on quality, cost, safety, delivery and moral • Documentation
Performance Criteria(PC) w.r.t. the scope	
Element	Performance Criteria
Business opportunity	To be competent, the individual on the job must be able to know and understand : <ul style="list-style-type: none"> PC1. Awareness to identify profitable business opportunity (Opportunity can be in the form of new material in use, new process, new technology, new market etc) PC2. Maintain the confidentiality till the completion of working on the idea PC3. Discuss the opportunity (with trusted ones) to evaluate its feasibility PC4. Arrange/organize related documents/information
Sustain existing business	<ul style="list-style-type: none"> PC5. Monitor the development at competitors' end PC6. Sustain existing business and make continual improvements PC7. Evaluate possibilities of process simplification , combining process steps(wherever applicable), reducing manpower dependency PC8. Acquire new information for optimal allocation of resources before others to gain profit
Factors of Production	<ul style="list-style-type: none"> PC9. Understanding the requirement of different factors of production: land, labour and capital PC10. Acquire and deploy necessary resources for exploitation of identified business opportunity PC11. Develop a business plan PC12. Acquire financial and material resources PC13. Organize to hire experienced and efficient human resource PC14. Arrange for best factory set up PC15. Raise capital from different sources keeping the interest cost at minimum PC16. Arrange for purchase, effective utilization and management of the resources

Risk and initiative	PC17. Assume risk and deal with uncertainty PC18. Take initiative to start something new (process, product etc.)
Innovation	PC19. Convert new idea into successful innovation PC20. Replace in whole or in part inferior offerings creating new products/business model PC21. Develop new combinations of existing inputs
Bring in Improvement	PC22. Work competitively towards reduction of cost through efficiency, improvement in quality, bring in new product/features of product Acquire semi or fully automatic units for improved productivity
Documentation	PC23. Collection and recording of all information PC24. Compilation, analysis and documentation PC25. Correspondence with vendors, clients, govt. agencies and public PC26. Document notifications/letters from Government agencies and management
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. Efficient organization and management of factors of production KA2. Planning and organizing activities through administrative and financial management KA3. Analyzing shortfall/achievement for further improvement KA4. Importance of maintaining confidentiality of new business plan KA5. Documentation for self-awareness and publication KA6. Procedures for presenting/discussing new business opportunity KA7. Procedures for approval of new plan
B. Technical Knowledge	The user/individual on the job needs to know and understand: KB1. Cost-benefit analysis of the business opportunity KB2. Finance management procedures KB3. Environmental issues and quality standards KB4. Taking advantage of market opportunities by planning, organizing and deploying resources KB5. Human resource management KB6. Data collection, analysis and documentation KB7. Computer application- data processing, report typing etc. KB8. Importance of patent and copyright KB9. Latest technology in use to gather information KB10. Implications of delay in working on identified business opportunity KB11. Effect of disclosing innovations without following set procedures
Skills (S)	

A. Core Skills/ Generic Skills	Writing Skills
	The user/ individual on the job needs to know and understand how to: SA1. Express ideas clearly through written document SA2. Prepare letters, mails and other documents for communication SA3. Prepare proposals and feedback to higher authorities SA4. Correspond with other institutions/department SA5. Report writing, organizing data and information using computer applications
	Reading Skills
	SA6. Read and understand the contents published in scientific journals, manuals, newspaper and other publications SA7. Read, understand and interpret various rules, schemes etc. SA8. Read and understand images, graphs, charts, diagrams etc. SA9. Read and understand articles and interpret
	Oral Communication
	SA10. Gather information using contacts SA11. Express statements, opinions or information clearly so that the receiver can hear and understand SA12. Respond appropriately to queries SA13. Communicate effectively to team members and people contacted
B. Professional Skills	Decision Making
	The user/individual on the job needs to know and understand how to: SB1. Arrive at proper decisions according to different situations SB2. Take forward selected ideas and reject others SB3. Optimally allocate resources SB4. Chart out the process flow to take the identified ideas forward
	Plan and Organize
	SB5. Plan and organize the factors of production to execute the business plan SB6. Fix up tasks and allotment of the same SB7. Assign tasks to suitable persons SB8. Motivate them for better output and time bound completion of tasks
	Customer Centricity
	SB9. Correspond effectively with clients relating to product feedback and for communicating/collecting any other information.
	Problem Solving

Develop Entrepreneurship Skills

	SB10. Solve problems related to equipment and supply of inputs SB11. Solve problems among colleagues SB12. Diagnose problems and resolve at initial stage itself
	Analytical Thinking
	SB13. Suggest improvement over the existing systems SB14. Analyze the feasibility of opportunities SB15. Perform cost-benefit analysis
	Critical Thinking
	SB16. Take appropriate action/seek expert opinion to overcome critical situations



NOS Version Control

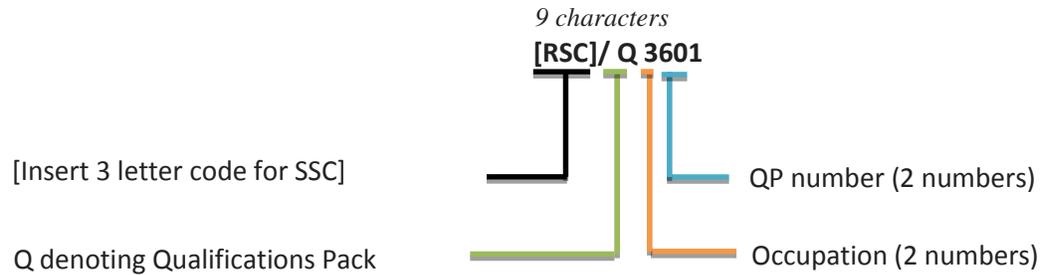
NOS Code	RSC/N5013		
Credits(NSQF)	TBD	Version number	2.0
Industry	Rubber Manufacturing	Drafted on	02/12/2014
Industry Sub-sector	Tyre & Non Tyre	Last reviewed on	23/08/2017
Occupation	Tyre Servicing / Maintenance	Next review date	23/08/2021



Annexure

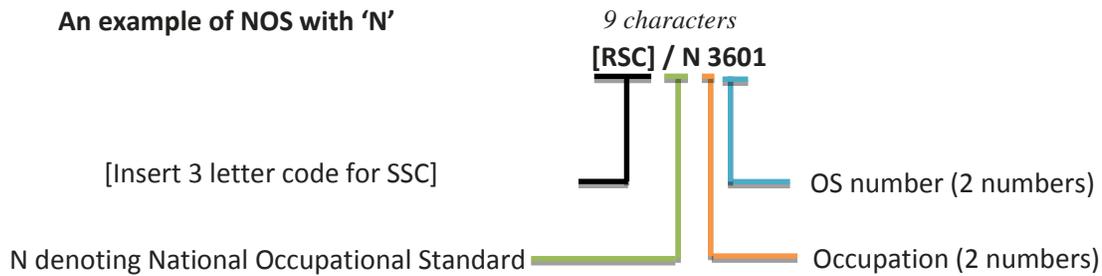
Nomenclature for QP and NOS

Qualifications Pack



Occupational Standard

An example of NOS with 'N'



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The following acronyms/codes have been used in the nomenclature above:

Sub-sector	Range of Occupation numbers
Latex	02-34
Non-tyre	12-12
Rubber Manufacturing	28-28
Tyre	02-36
Tyre & Non -Tyre	01-37

Sequence	Description	Example
Three letters	Industry name	[RSC]
Slash	/	/
Next letter	Whether QP or NOS	N
Next two numbers	Occupation code	36
Next two numbers	OS number	01

Criteria For Assessment Of Trainees

Job Role: Tyre Fitter-Servicing and Maintenance

Qualification Pack Code: RSC/Q3601

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. Assessment will be conducted for all compulsory NOS, and where applicable, on the selected elective/option NOS/set of NOS.
4. Individual assessment agencies will create unique question papers for theory part for each candidate at each examination/training center (as per assessment criteria below).
5. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/training center based on this criterion.
6. To pass the Qualification Pack, every trainee should score a minimum of 70% of aggregate marks to successfully clear the assessment.
7. In case of unsuccessful completion, the trainee may seek reassessment on the Qualification Pack.

Compulsory NOS				Marks Allocation	
Total Marks: 700					
Assessment outcomes	Assessment Criteria for outcomes	Total Marks	Out Of	Theory	Skills Practical
RSC/N3601 Prepare material, tools and machine for tyre fitter servicing/maintenance	PC1. Ensure the availability of all required tools and equipments (such as air compressor, electric motor, hand pump, knife, hand buffing machine, awl, hand stitchers, crowbars, hydraulic assembly for removing used tyre from rim etc) for tyre servicing/maintenance	100	4	2	2
	PC2. Ensure that the tools are clean and well maintained.		6	3	3
	PC3. Check the sharpness of the knife for the cutting purpose.		6	4	2
	PC4. Ensure that the pressure gauges (Mounted or hand carried)for checking inflation pressure is available		5	2	3
	PC5. Ensure safety shield /cage is in place while inflating the tyre		5	2	3
	PC6. Check the functioning of safety alarm which signals once the offset limit for inflation pressure is reached		6	4	2
	PC7. Place the tools on a safe location.		5	3	2
	PC8. Ensure that tube/flap/valve to be used is approved by the QA/QC.		2	0	2
	PC9. Perform visual inspection of the tyre for any defect		7	5	2
	PC10. Check the availability of tyre, tube, & rim with reference to the given job schedule		7	5	2

	PC11. Check the rim for cleanliness, corrosion or damage;		7	5	2
	PC12. Prepare soap solution to facilitate tyre mounting		7	5	2
	PC13. Ensure rubber gum sheet, adhesive cement and solvent are available		3	1	2
	PC14. Ensure the gum sheets are well protected with poly ethylene sheets to keep them tacky and non- bloomy		3	1	2
	PC15. Ensure the cement adhesive to be used is fresh out of stored drums and are of correct cod		3	1	2
	PC16. Ensure the supply of Air/Nitrogen for inflation		4	1	3
	PC17. Ensure the use of certified/tested fitting tools and equipment and check their functioning.		3	1	2
	PC18. Ensure safety shield/cage is in place while inflating the tyre(both tube and tubeless tyres)		7	5	2
	PC19. Adhere to all safety norms (such as wearing protective gloves, masks and shoes).		5	5	0
	PC20. Comply with health, safety, environment guidelines and regulations in accordance with international/national standards or the organizational standards.		5	5	0
	Total		100	60	40
RSC/N3602 Undertake tyre fitter servicing/maintenance	PC1. Ensure, through visual inspections, that all the accessories required are of the desired quality.	100	5	3	2
	PC2. Check the availability of required tyres, tubes, flaps, o rings rims		5	3	2
	PC3. Check the availability of tyre in case of replacement		5	3	2
	PC4. Perform tyre fitment (for new /replacement/ for in-house indoor testing as per the SOP		8	3	5
	PC5. Carry out proper positioning of tyre, tube and flap to rim		8	3	5
	PC6. Match position for rim hole with tube valve and flap		8	3	5
	PC7. Check for calibration stickers on pressure gauge		5	2	3
	PC8. Ensure the use of certified hand pressure gauge		4	0	4
	PC9. Open the valve, set pressure and inflate tyre(for new /used/in-house) as per the SOP		6	2	4
	PC10. Remove and fit the valve cap		6	2	4
	PC11. Carry out proper inflation i.e.in the optimal range as per the regulation/or as specified by the technical w.r.t different types of tyres		6	2	4
	PC12. Check for leakage		6	2	4
	PC13. Get the tube repaired/replaced in case of defect		6	2	4
	PC14. Respond to safety alarm and deflate to achieve the specified inflation level		6	2	4
	PC15. Proper handling of machine and tools to avoid any injury/accident		6	2	4
	PC16. Usage of safety frame/metallic cage as in case of explosion tyre pieces does not come out		6	2	4
	PC17. Adhere to all safety norms (such as wearing protective gloves and shoes, safety mask etc)		2	2	0
	PC18. Comply with health, safety, environment guidelines and regulations in accordance with international/national standards or the organizational standards.		2	2	0
Total		100	40	60	
	PC1. Clean tools and keep the tools at designated place after the		11	6	5

RSC/N3603 Perform post-tyre fitter servicing/maintenance activities	completion of fitting/inflation operation.	100			
	PC2. Organize to keep the fitted and inflated tyres appropriately.		11	6	5
	PC3. Remove the replaced tyres from the fitting area; send the wastage to the appropriate place for re-use or disposal		11	6	5
	PC4. Report any problem related to tools, equipments, machine, tyres, material etc to the Supervisor		11	6	5
	PC5. Dispose of waste material safely, as per organizational SOP.		9	5	4
	PC6. Store usable cut ends of rubber gum sheets for recalendering and usage		9	5	4
	PC7. Marking tyres for any issues.		9	5	4
	PC8. Place ID tags to indicate tyre size , date and time of mounting/fitment		9	5	4
	PC9. Handle the material using hand gloves and other safety equipment.		8	4	4
	PC10. Adhere to all safety norms (such as wearing protective gloves, shoes, safety goggles etc).		6	6	0
	PC11. Comply with health, safety, environment guidelines and regulations in accordance with international/national standards or the organizational standards.		6	6	0
Total	100	60	40		
RSC/N5001 Carry out housekeeping in rubber product manufacturing	PC1. Inspect the area while taking into account various surfaces	100	3	3	0
	PC2. Identify the material requirements for cleaning the areas inspected, by considering risk, time, efficiency and type of stain		3	3	0
	PC3. Ensure that the cleaning equipment is in proper working condition		3	3	0
	PC4. Select the suitable alternatives for cleaning the areas in case the appropriate equipment and materials are not available and inform the appropriate person		3	3	0
	PC5. Plan the sequence for cleaning the area to avoid re-soiling clean areas and surfaces		3	3	0
	PC6. Inform the affected people about the cleaning activity		2	2	0
	PC7. Display the appropriate signage for the work being conducted		3	3	0
	PC8. Ensure that there is adequate ventilation for the work being carried out		3	3	0
	PC9. Wear the personal protective equipment required for the cleaning method and materials being used		3	3	0
	PC10. Use the correct cleaning method for the work area, type of soiling and surface		3	3	0
	PC11. Carry out cleaning activity without disturbing others		3	3	0
	PC12. Deal with accidental damage, if any, caused while carrying out the work		3	3	0
	PC13. Report to the appropriate person any difficulties in carrying out your work		3	3	0
	PC14. Identify and report to the appropriate person any additional cleaning required that is outside one's responsibility or skill		3	3	0
	PC15. Ensure that there is no oily substance on the floor to avoid slippage		9	3	6
	PC16. Ensure that no scrap material is lying around		9	3	6
	PC17. Maintain and store housekeeping equipment and supplies		3	3	0
	PC18. Follow workplace procedures to deal with any accidental damage caused during the cleaning process		3	3	0

	PC19. Ensure that, on completion of the work, the area is left clean and dry and meets requirements		8	2	6
	PC20. Return the equipment, materials and personal protective equipment that were used to the right places making sure they are clean, safe and securely stored		3	3	0
	PC21. Dispose the waste garnered from the activity in an appropriate manner		9	3	6
	PC22. Dispose of used and un-used solutions according to manufacturer's instructions, and clean the equipment thoroughly		9	3	6
	PC23. Maintain schedules and records for housekeeping duty		3	3	0
	PC24. Replenish any necessary supplies or consumables		3	3	0
	Total		100	70	30
RSC/N5002 Carry Out Reporting And Documentation	PC1. Report data/problems/incidents as applicable in a timely manner	100	12	8	4
	PC2. Report to the appropriate authority as laid down by the company		12	8	4
	PC3. Follow reporting procedures as prescribed by the company		12	8	4
	PC4. Identify documentation to be completed relating to one's role		10	6	4
	PC5. Record details accurately an appropriate format		16	6	10
	PC6. Complete all documentation within stipulated time according to company procedure		14	4	10
	PC7. Ensure that the final document meets with the requirements of the persons who requested it or make any amendments accordingly		6	4	2
	PC8. Make sure documents are available to all appropriate authorities to inspect		6	4	2
	PC9. Respond to requests for information in an appropriate manner whilst following organizational procedures		6	6	0
	PC10. Inform the appropriate authority of requests for information received		6	6	0
	Total		100	60	40
RSC/N5003 Carry Out Quality Checks	PC1. Ensure that total range of checks are regularly and consistently performed	100	24	10	14
	PC2. Use appropriate measuring instruments, equipment, tools, accessories etc ,as required		24	10	14
	PC3. Identify non-conformities to quality assurance standards		6	4	2
	PC4. Identify potential causes of non-conformities to quality assurance standards		5	3	2
	PC5. Identify impact on final product due to non-conformance to company standards		5	3	2
	PC6. Evaluating the need for action to ensure that problems do not recur		6	4	2
	PC7. Suggest corrective action to address problem		5	3	2
	PC8. Review effectiveness of corrective action		5	3	2
	PC9. Interpret the results of the quality check correctly		4	4	0
	PC10. Take up results of the findings with QC in charge/appropriate authority.		3	3	0
	PC11. Take up the results of the findings within stipulated time		3	3	0
	PC12. Record of results of action taken		3	3	0
	PC13. Record adjustments not covered by established procedures for future reference		3	3	0
	PC14. Review effectiveness of action taken		2	2	0
	PC15. Follow reporting procedures where the cause of defect cannot		2	2	0

	be identified				
	Total		100	60	40
RSC/N5004 Carry Out Problem Identification And Escalation	PC1. Identify defects/indicators of problems	100	7	4	3
	PC2. Identify any wrong practices that may lead to problems		6	3	3
	PC3. Identify practices that may impact the final product quality		6	3	3
	PC4. Identify if the problem has occurred before		5	3	2
	PC5. Identify other operations that might be impacted by the problem		6	4	2
	PC6. Ensure that no delays are caused as a result of failure to escalate problems		5	3	2
	PC7. Take appropriate materials and sample, conduct tests and evaluate results to establish reasons to confirm suspected reasons for non-conformance (where required)		8	5	3
	PC8. Consider possible reasons for identification of problems		8	5	3
	PC9. Consider applicable corrections and formulate corrective action		3	3	0
	PC10. Formulate action in a timely manner		3	3	0
	PC11. Communicate problem/remedial action to appropriate parties		7	5	2
	PC12. Take corrective action in a timely manner		2	2	0
	PC13. Take corrective action for problems identified according to the company procedures		2	2	0
	PC14. Report/document problem and corrective action in an appropriate manner		8	5	3
	PC15. Monitor corrective action		2	2	0
	PC16. Evaluate implementation of corrective action taken to determine if the problem has been resolved		2	2	0
	PC17. Ensure that corrective action selected is viable and practical		2	2	0
	PC18. Ensure that correct solution is identified to an identified problem		2	2	0
	PC19. Take corrective action for problems identified according to the company procedures		1	1	0
	PC20. Ensure that no delays are caused as a result of failure to take necessary action		1	1	0
	PC21. Escalate problem as per laid down escalation matrix		4	3	1
	PC22. Escalate the problem within stipulated time		4	3	1
	PC23. Escalate the problem in an appropriate manner		3	2	1
PC24. Ensure that no delays are caused as a result of failure to escalate problems	3	2	1		
	Total		100	70	30
RSC/N5007 - Carry Out Health and Safety	PC1. Undertake basic safety checks before operation of all machinery and equipment and report hazards to the appropriate supervisor	100	6	4	2
	PC2. Work for 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.		6	4	2
	PC3. Read and understand the hazards of use and contamination mentioned on the labels of chemicals, utilities etc		0	0	0
	PC4. Prior to performing manual handling jobs, risk is assessed and work is carried out according to currently recommended safe practices.		6	4	2
	PC5. Use equipment and materials safely and correctly and return the same to designated storage when not in use		0	0	0

PC6.Dispose off waste safely and correctly in a designated area	6	4	2
PC7. Risks to bystanders are recognized and action taken to reduce risk associated with jobs in the workplace	0	0	0
PC8. Perform work in a manner which minimizes environmental damage	0	0	0
PC9. All procedures and work instructions for controlling risk are followed closely.	0	0	0
PC10. Report any accidents, incidents or problems without delay to an appropriate person and take immediate necessary action to reduce further danger.	0	0	0
PC11.Follow procedures for dealing with accidents, fires and emergencies, including communicating location and directions to emergency.	6	4	2
PC12.Follow emergency procedures as per company standards and workplace requirements.	8	5	3
PC13.Use Emergency equipment in accordance with manufacturers' specifications and workplace requirements.	8	5	3
PC14. Provide treatment appropriate to the patient's injuries in accordance with recognized first aid techniques.	0	0	0
PC15. Recover (if practical), clean, inspect/test, refurbish, replace and store the first aid equipment as appropriate	0	0	0
PC16. Dispose off medical waste in accordance with workplace requirements	0	0	0
PC17.Report details of first aid administered in accordance with work place procedures.	7	4	3
PC18. Comply with general safety procedures	8	4	4
PC19. Check parts of the workplace and take preventive actions like spraying and other steps to protect from leakages, water logging, pests, fire, pollution, etc.	8	5	3
PC20. Ensure no accidents and damages at the workplace, reporting of any breach of company safety procedure	0	0	0
PC21. Keep the workplace organized, swept, clean and hazard free	8	5	3
PC22. Attend fire drills and other safety related workshops organized at the workplace	4	2	2
PC23. Be aware of first aid, evacuation and emergency procedures	4	2	2
PC24. Be alert of any events and do not be negligent to any safety procedures to be followed	0	0	0
PC25. Avoid accidents while using hazardous chemicals, machines, sharp tools and equipment	4	2	2
PC26.Use safety materials such as protective gear, goggles, caps, shoes, etc. (as applicable with workplace)	4	2	2
PC27. Handle heavy and hazardous materials with care and using appropriate tools and handling equipment such as trolleys, ladders	0	0	0
Total	100	60	40
PC1.Importance of being aware to identify profitable business opportunity (Opportunity can be in the form of new material in use, new process, new technology, new market etc)	2	2	0
PC2.Maintain the confidentiality till the completion of working on the idea	3	2	1
PC3.Discuss the opportunity (with trusted ones) to evaluate its feasibility	5	3	2
PC4.Arrange/organize related documents/information	4	3	1

RSC/N5013 Develop Entrepreneurship Skills	PC5. Monitor the development at competitors' end	100	2	2	0	
	PC6. Sustain existing business and make continual improvements		4	2	2	
	PC7. Evaluate possibilities of process simplification, combining process steps (wherever applicable), reducing manpower dependency		4	2	2	
	PC8. Acquire new information for optimal allocation of resources before others to gain profit		4	2	2	
	PC9. Understanding the requirement of different factors of production: land, labour and capital		5	3	2	
	PC10. Acquire and deploy necessary resources for exploitation of identified business opportunity		5	3	2	
	PC11. Develop a business plan		5	3	2	
	PC12. Acquire financial and material resources		5	3	2	
	PC13. Organize to hire experienced and efficient human resource		4	2	2	
	PC14. Arrange for best factory set up		4	2	2	
	PC15. Raise capital from different sources keeping the interest cost at minimum		4	2	2	
	PC16. Arrange for purchase, effective utilization and management of the resources		4	2	2	
	PC17. Assume risk and deal with uncertainty		2	0	2	
	PC18. Take initiative to start something new (process, product etc.)		2	0	2	
	PC19. Convert new idea into successful innovation		2	0	2	
	PC20. Replace in whole or in part inferior offerings creating new products/business model		4	2	2	
	PC21. Develop new combinations of existing inputs		4	2	2	
	PC22. To be more competitive work towards cost reduction through efficiency, improvement in quality, bring in new product/features of product		5	3	2	
	PC23. Acquire semi or fully automatic units for improved productivity		5	3	2	
	PC24. Collection and recording of all information		3	3	0	
	PC25. Compilation, analysis and documentation		3	3	0	
	PC26. Correspondence with vendors, clients, govt. agencies and public		3	3	0	
	PC27. Document notifications/letters from Government agencies and management		3	3	0	
	Total			100	60	40