QUALIFICATIONS PACK - OCCUPATIONAL STANDARDS FOR RUBBER INDUSTRY

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What are Occupational Standards(OS)?

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

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Introduction

Qualifications Pack- Rubber Internal Mixer Operator

SECTOR: RUBBER INDUSTRY

SUB-SECTOR: 1. Tyre 2. Non- Tyre

OCCUPATION: Mixing

REFERENCE ID: RSC/Q0112

ALIGNED TO: NCO-2015/NIL

Brief Job Description: The rubber internal mixer operator is responsible for mixing the raw materials in the internal mixing machine/ Kneader to prepare rubber compound which is processed further to obtain final compounds.

Personal Attributes: This job requires the individual to work independently and be comfortable in performing laborious work. He should be result oriented and positive in attitude. The individual must be willing to work in the factory environment.

Job Details

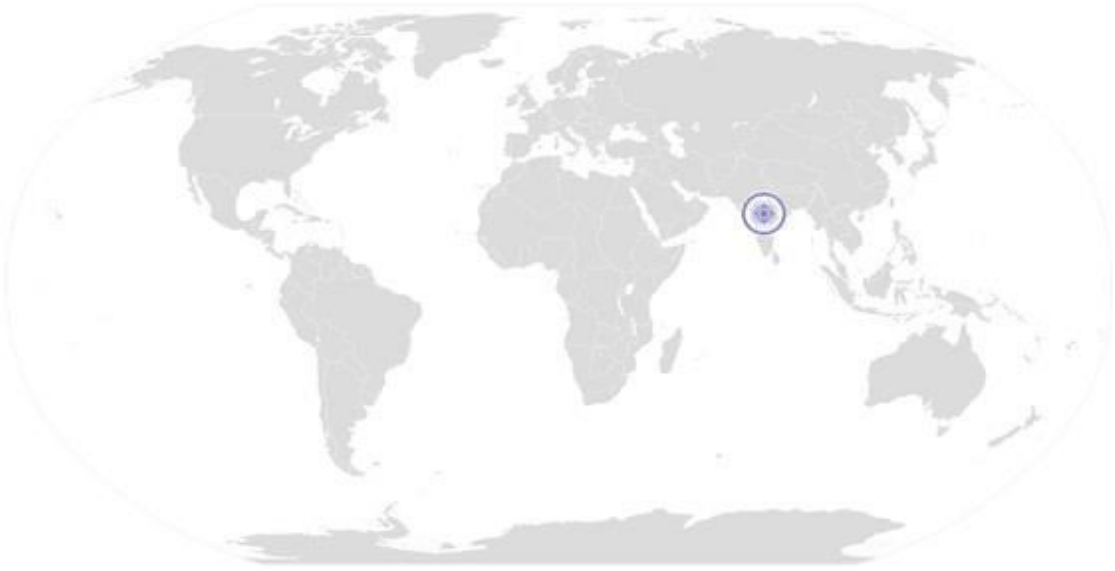
Qualifications Pack Code	**RSC/Q0112**		
Job Role	**Rubber Internal Mixer Operator**		
Credits(NSQF)	**TBD**	**Version number**	**2.0**
Sector	**Rubber Manufacturing**	**Drafted on**	**20/03/2013**
Sub-sector	**Tyre and Non- tyre**	**Last reviewed on**	**23/08/2017**
Occupation	**Mixing**	**Next review date**	**23/08/2021**
NSQC Clearance on			

Job Role	**Rubber Internal Mixer Operator**
Role Description	The rubber internal mixer operator is responsible for mixing the raw materials in the internal mixing machine/ Kneader to prepare rubber compound which is processed further to obtain final compounds.
NSQF level **Minimum Educational Qualifications*** **Maximum Educational Qualifications***	4 Class VIIIth Pass
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:** 1. RSC/N0133 - Prepare internal mixer and accessories_v2 2. RSC/N0134 - Mix in internal mixer to prepare rubber compound_v2 3. RSC/N0135 - Undertake post internal mixing activities_v2 4. RSC/N5001 - Carry out housekeeping in rubber product manufacturing 5. RSC/N5002 -Carry out reporting and documentation 6. RSC/N5003 - Carry out quality checks 7. RSC/N5004 - Carry out problem identification and escalation 8. RSC/N5007 - Carry out health and safety
Performance Criteria	As described in the relevant OS units

Definitions

Keywords /Terms	Description
Sector	Sector is a conglomeration of different business operations having similar businesses and interests. It may also be defined as a distinct subset of the economy whose components share similar characteristics and interests.
Sub-sector	Sub-sector is derived from a further breakdown based on the characteristics and interests of its components.
Occupation	Occupation is a set of job roles, which perform similar/related set of functions in an industry.
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 internal mixer/kneader and other accessories for mixing raw material to make rubber compound.

National Occupational Standard

Unit Code	RSC/N0133
Unit Title (Task)	Prepare internal mixer and accessories_v2
Description	This unit is about preparing internal mixer/kneader and other accessories for mixing raw material to make rubber compound.
Scope	This OS unit/task covers the following: • Ensuring housekeeping and safety in the mixing area • Ensuring functioning of other accessories required like hydraulic/pneumatic system, temperature control unit (TCU), lubrication system, energy control system, dust/ fume extractor including upstream and downstream material/ batch handling equipment as appropriate • Setting the parameters for Health and Safety on the internal mixer/kneader as per company's SOP

Performance Criteria (PC) w.r.t. the Scope	
Element	**Performance Criteria**
Equipment readiness	To be competent, the user/individual on the job must be able to: PC1. Ensure that the mixer is clean and ready for operation PC2. Ensure functioning of safety features of Internal Mixer and other accessories PC3. Ensure proper functioning of different upstream and downstream equipment attached with the Mixer like hydraulic/pneumatic system, temperature control unit (TCU), lubrication system, energy control system (power integrator), dust extractor including material/ batch handling equipment as appropriate PC4. Set parameters for the equipment (mixing cycle time, temperature, energy and pressure) and Filler & Oil loading system as per company's SOP
Raw material appropriateness	PC5. Ensure availability of pre-weighed, approved rubber and other ingredients to be fed as per batch requirement PC6. Ensure that weighing scale (put up or the scale used for weighing rubber, mixed chemicals) is calibrated PC7. Ensure that rubber compound to be fed is approved by laboratory PC8. Ensure that all raw materials have been assembled/organized (in correct sequence, if applicable) to be fed into mixer PC9. Ensure all ingredients are homogeneously mixed.
Health & Safety	PC10. Ensure proper housekeeping and safety in mixing area PC11. Ensure that electrical devices that may be exposed to carbon black dust are sealed. PC12. Blow periodically the electrical devices with clean/dry compressed air or vacuum clean. PC13. Ensure that the exhaust systems are used to maintain the concentration levels of various particulate matters within limits. PC14. Adhere to all safety norms (like wearing protective gloves, shoes, Safety Glasses etc) PC15. Comply with health, safety, environment guidelines, regulations etc in

	accordance with international/national standards or organizational SOP
Knowledge and Understanding (K)	
A. Organizational Context (Knowledge of the company / organization and its processes)	The user/individual on the job needs to know and understand: KA1. Manufacturing process, including Rubber mastication, master batch and final batch process KA2. Implications of poorly prepared equipment, power failure etc KA3. Importance of identifying non-conforming material and storage of the same KA4. Risk and impact of not following defined procedures/work instructions KA5. Escalation matrix for reporting identified problems KA6. Types of documentation in organization and importance of the same KA7. Records to be maintained and implications of non-maintenance of the same KA8. Importance of housekeeping & good shop floor practices (eg 3S/5S and /or plant practices) KA9. Health, Safety and Environment guidelines, legislation and regulations as applicable KA10. Personal protection(Which protective equipment to be used when and how) KA11. Impact of poor practices on health, safety and environment KA12. Potential hazards and actions to minimize the same KA13. Escalation matrix and escalation procedure for reporting hazards KA14. Importance of FIFO KA15. The usage of different fire extinguishers KA16. Impact of various practices on cost, quality, productivity, delivery and safety KA17. Handover/ Takeover the equipment/ work area as per company's SOP
B. Technical Knowledge	The user/individual on the job needs to know and understand: KB1. Kneader/Internal mixing equipment and operation (Equipment working, possible setting levels, typical process followed for different batches) KB2. Knowledge of upstream and downstream equipments liked to mixer equipment KB3. Possible causes of common mixing problems and their remedies KB4. Tolerance levels for various parameters(time, temperature, ram pressure, Fill factor, Rotor rpm and batch weight) and their effect on mixed batch KB5. Health hazards of process and compounding ingredients KB6. Implications of delays in preparation process KB7. Types of defects leading to rejections, indicators, reasons and possible solutions. KB8. Cleanliness and safety requirements for commencing a mixing batch operation KB9. Units of measurement KB10. The effect of wrong weighing of ingredients KB11. Response to emergencies e.g. Power failures ,fire and system failures and manual intervention to avoid disaster KB12. Appropriate batch size with respect to appropriate machinery KB13. Functioning of exhaust systems and potential hazards due to malfunctioning of dust collector and fume extract systems KB14. Operation of PLC KB15. Multi-skilling within crew operation as appropriate KB16. Simple mathematics for specific gravity and batch weight calculation

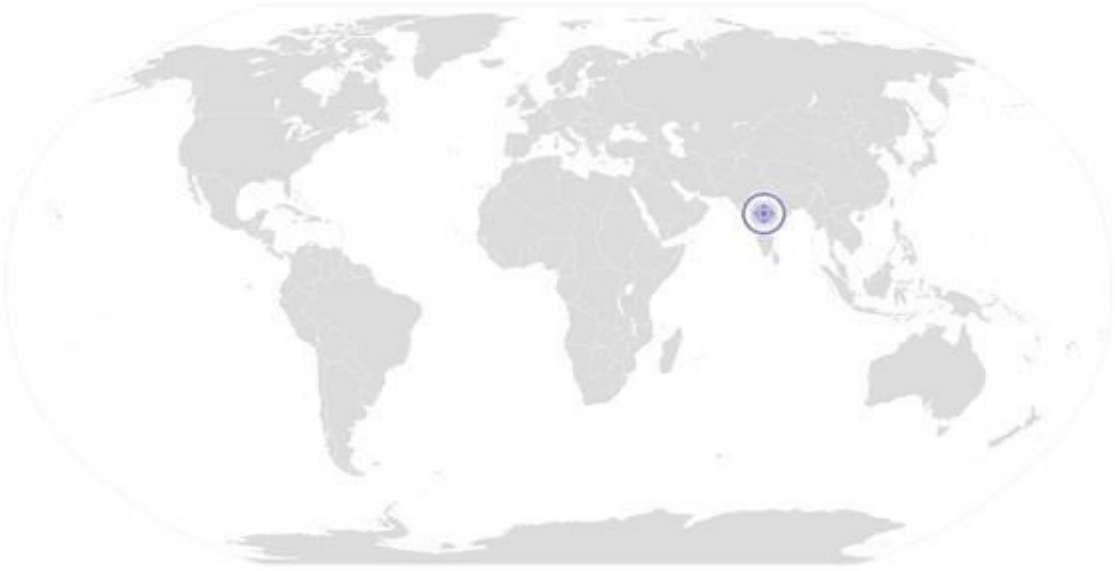
Skills (S)	
A. Core Skills/ Generic Skills	**Writing Skills**
	The user/ individual on the job needs to know and understand how to: SA1. Construct simple sentences and express ideas clearly through written communication SA2. Fill up appropriate technical forms, process charts, activity logs in required 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
	SA5. Read and understand manuals, health and safety instructions, memos, reports, job cards etc SA6. Read images, graphs, diagrams SA7. Understand the various coding systems as per company norms
	Oral Communication
	SA8. Express statements, opinions or information clearly so that others can hear and understand SA9. Respond appropriately to any queries SA10. Communicate with supervisor SA11. Communicate with upstream and downstream teams
	Life Skills
	Integrity SA12. Practice honesty with respect to company property and time SA13. Communicate with people in a form and manner and using language that is open and respectful SA14. Resolve any difficulties in relationships with colleagues , or get help from an appropriate person, in a way that preserves goodwill and trust **Motivation** SA15. Take responsibility for completing one's own work assignment SA16. Take initiative to enhance/learn skills in ones's area of work SA17. The capacity to learn from experience in a range of settings and scenarios and the capacity to reflect on and analyse one's learning. SA18. The capacity to envisage and articulate personal goals; to develop strategies and take action to achieve them. **Reliability** SA19. Avoid absenteeism SA20. Act objectively , rather than impulsively or emotionally when faced with difficult/stressful or emotional situations

	SA21. Work in disciplined factory environment SA22. Be punctual
B. Professional Skills	**Decision Making**
	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. Plan for the mixing as per schedule SB11. Organize all the ingredients required for mixing rubber compound
	Customer Centricity
	SB12. Match customer needs/specification by adjusting the processing conditions (interact with customer in case any clarification required) 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. SB14. Complete the assigned task in timely manner so that the final product is delivered in the timeline given by the customer. SB15. Communicate effectively to the superior/customer for any delay in supplies to the clients. SB16. Work towards fulfilling the customers requirement as per their demand. SB17. In case of any complaint, ensure its timely resolution if the problem is emanating at his level SB18. Communicate effectively to the superior/customer for any delay in resolving the problem faced by the customer. SB19. Maintain good/cordial relation with customers. SB20. Work on the feedback received from customer regarding the product.
	Problem Solving

	SB21. Solve problems emanating during mixing operation SB22. Apply problem-solving approaches in different situations
	Analytical Thinking
	SB23. Proper collection of material as per schedule SB24. Identify defects in the material and communicate it at the earliest and suggest improvements(if any) in process/material based on experience SB25. Diagnose common problems in the machine based on visual inspection, sound, temperature etc SB26. Suggest improvements(if any) in process based on experience
	Critical Thinking
	SB27. Seek clarification on problems from others SB28. Refer anomalies to the line manager

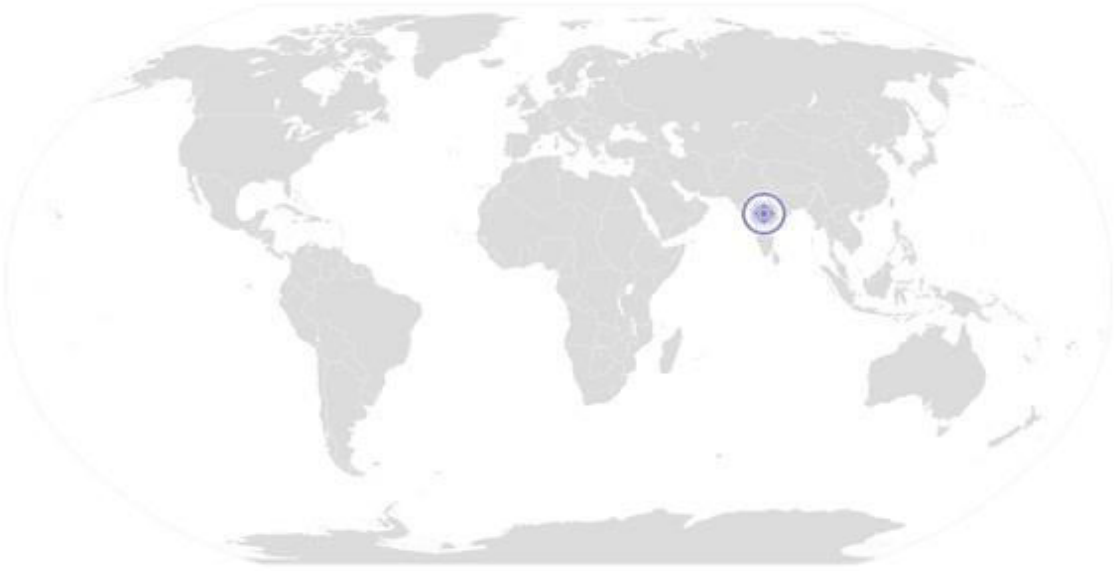
NOS Version Control

NOS Code	**RSC/N0133**		
Credits(NSQF)	**TBD**	**Version number**	**2.0**
Industry	**Rubber Manufacturing**	**Drafted on**	**20/03/2013**
Industry Sub-sector	**Tyre and Non- tyre**	**Last reviewed on**	**23/08/2017**
Occupation	**Mixing**	**Next review date**	**23/08/2021**



Back to QP

National Occupational Standard



Overview

This unit is about mixing raw material in internal mixer/kneader to prepare rubber compound.

National Occupational Standard

Unit Code	RSC/N0134
Unit Title (Task)	**Mix in internal mixer to prepare rubber compound_v2**
Description	This unit is about mixing raw material in internal mixer/kneader to prepare rubber compound.
Scope	This unit/task covers the following: • Mixing raw materials in internal mixer/kneader • Operations • Ensuring housekeeping and safety in the mixing area

Performance Criteria (PC) w.r.t. the Scope	
Element	**Performance Criteria**
Raw material appropriateness	To be competent, the user/individual on the job must be able to : PC1. Handle the rubber compound to avoid contamination PC2. Ensure that batch size of rubber mix is as per company's SOP PC3. Ensure that identified & approved materials are used.
Operations	PC4. Ensure that the sequence in shift is based on raw material availability to maximize output PC5. Add the ingredients in sequence as per SOP considering different types of mixing process possible PC6. Check and adjust cooling water flow rate (mixing temperature control) PC7. Raise Ram/open kneader and brush powder inside kneader As per cycle, from machine side as per SOP PC8. Control mixing process and completion as per SOP (temperature or time or energy as programmed / specified) PC9. Release the batch after completion of mixing cycle as per SOP PC10. Inform the batch off mill man about the release of batch as per SOP. PC11. Prepare the Internal Mixer/Kneader for next batch as per Planning.
Housekeeping & Safety	PC12. Ensure proper housekeeping and safety in mixing area PC13. Ensure that the electrical devices that may be exposed to carbon black dust are sealed. PC14. Blow periodically the electrical devices with clean/dry compressed air or vacuum clean. PC15. Ensure that the exhaust systems are used to maintain the concentration levels of various particulate matters remain within limits. PC16. Adhere to all safety norms (like wearing protective gloves, mask, shoes, safety glasses etc) PC17. Comply with health, safety, environment guidelines, regulations etc in accordance with international/national standards or organizational SOP

Knowledge and Understanding (K)	
A. Organizational Context (Knowledge of the company / organization and	The user/individual on the job needs to know and understand: KA1. Manufacturing process, including master batch, re-milling and final batch process KA2. Different types of batches that are run in plant KA3. The specific materials, including quantities, to be used KA4. Properties of compounds

its processes)	KA5. Material disposal procedure, importance of appropriate disposal of material and implications of not following the material disposal procedure KA6. Quality and damage checks to be done and importance of the same KA7. Implications of poorly prepared material, power failure etc KA8. Importance of identifying non-conforming products and storage of the same KA9. Risk and impact of not following defined procedures/work instructions KA10. Escalation matrix for reporting identified issues KA11. Types of documentation in organization and importance of the same KA12. Records to be maintained and implications of non-maintenance of the same KA13. Importance of housekeeping & good shop floor practices (e.g.3S/5S) KA14. Health, Safety and Environment guidelines, legislation and regulations as applicable KA15. Personal protection(Which protective equipment to be used and how) KA16. Impact of poor practices on health, safety and environment KA17. Potential hazards and actions to minimize the same KA18. Escalation matrix and escalation procedure for reporting hazards KA19. Importance of FIFO KA20. The usage of different fire extinguisher KA21. Impact of various practices on cost, quality, productivity, delivery and safety KA22. Handover/ Takeover the equipment/work area as per company's SOP
B. Technical Knowledge	The user/individual on the job needs to know and understand: KB1. Internal mixer/kneader and its operation, including operation of console in case of PLC/Microprocessor control KB2. Possible causes of common mixing problems (loose fillers, crumbly discharge, scattered batch, gel formation in the mixing operation)and their remedies KB3. Tolerance levels for various parameters (time, temperature, ram pressure, fill factor, Rotor rpm and batch weight) and their effect on mixed batch KB4. Handling of different types of materials KB5. Implications of overheating during mixing and adopting measures like increasing water flow, adjusting nip gap, increasing number of cuts. KB6. Troubleshooting- Knowledge of abnormalities and what response to make in case of abnormalities in equipment performance KB7. Health hazards of process and compounding ingredients KB8. Cleanliness and safety requirements for operating a internal mixing machine KB9. Awareness of different material forms to avoid dusting (E.g. Usage of polymer bound or treated rubber chemicals, refined Aromatic process oil) KB10. Proper compound mixing and ingredient dispersion KB11. Effect of improper processing on properties of rubber compound & product KB12. The process and importance of quality check ,including visual inspection KB13. Implications of poorly prepared material, power failure etc KB14. Types of defects leading to rejections, indicators, reasons and possible solutions. KB15. Implications of delays in production process owing to issues in synchronization

	with upstream/downstream equipments KB16. Units of measurement KB17. Response to emergencies e.g. Power failures, fire and system failures and manual intervention to avoid disaster KB18. Increase of process temperature on stability of compounding ingredients KB19. Appropriate batch size with respect to appropriate machinery KB20. When and where to use cleaner batches and their disposal KB21. Simple mathematics for specific gravity and batch weight calculation
Skills (S)	
A. Core Skills/ Generic Skills	**Writing Skills** The user/ individual on the job needs to know and understand how to: SA1. Construct simple sentences 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 SA5. Read and understand manuals, health and safety instructions, memos, reports, job cards etc SA6. Read images, graphs, diagrams SA7. Understand the various coding systems as per company norms
	Oral Communication SA8. Express statements, opinions or information clearly so that others can hear and understand SA9. Respond appropriately to any queries SA10. Communicate with supervisor SA11. Communicate with upstream and downstream teams
	Life Skills **Integrity** SA12. Practice honesty with respect to company property and time SA13. Communicate with people in a form and manner and using language that is open and respectful SA14. Resolve any difficulties in relationships with colleagues , or get help from an appropriate person, in a way that preserves goodwill and trust **Motivation** SA15. Take responsibility for completing one's own work assignment SA16. Take initiative to enhance/learn skills in ones's area of work

	SA17. The capacity to learn from experience in a range of settings and scenarios and the capacity to reflect on and analyse one's learning. SA18. The capacity to envisage and articulate personal goals; to develop strategies and take action to achieve them. **Reliability** SA19. Avoid absenteeism SA20. Act objectively , rather than impulsively or emotionally when faced with difficult/stressful or emotional situations SA21. Work in disciplined factory environment SA22. Be punctual
B. Professional Skills	**Decision Making**
	The individual 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. Utilize the raw material for maximizing product SB11. Organize mixing process to achieve set targets SB12. Organize the remaining material
	Customer Centricity
	SB13. Match customer needs/specification by adjusting the processing conditions (interact with customer in case any clarification required) SB14. 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. SB15. Complete the assigned task in timely manner so that the final product is delivered in the timeline given by the customer. SB16. Communicate effectively to the superior/customer for any delay in supplies to

	the clients. SB17. Work towards fulfilling the customers requirement as per their demand. SB18. In case of any complaint, ensure its timely resolution if the problem is emanating at his level SB19. Communicate effectively to the superior/customer for any delay in resolving the problem faced by the customer. SB20. Maintain good/cordial relation with customers. SB21. Work on the feedback received from customer regarding the product.
	Problem Solving
	SB22. Interpret quality of compound SB23. Suggest improvements(if any) in process/product/materials based on results and experience
	Analytical Thinking
	SB24. Proper collection of compound as per requirement SB25. Identify defects in the material and communicate it at the earliest and suggest improvements(if any) in process/material based on experience SB26. Diagnose common problems in the machine based on visual inspection, sound, temperature etc SB27. Suggest improvements(if any) in process based on experience
	Critical Thinking
	SB28. Seek clarification on problems from others SB29. Apply problem-solving approaches in different situations SB30. Refer anomalies to the line manager

NOS Version Control

NOS Code	**RSC /N0134**		
Credits(NSQF)	**TBD**	**Version number**	**2.0**
Industry	**Rubber Manufacturing**	**Drafted on**	**20/03/2013**
Industry Sub-sector	**Tyre and Non- tyre**	**Last reviewed on**	**23/08/2017**
Occupation	**Mixing**	**Next review date**	**23/08/2021**

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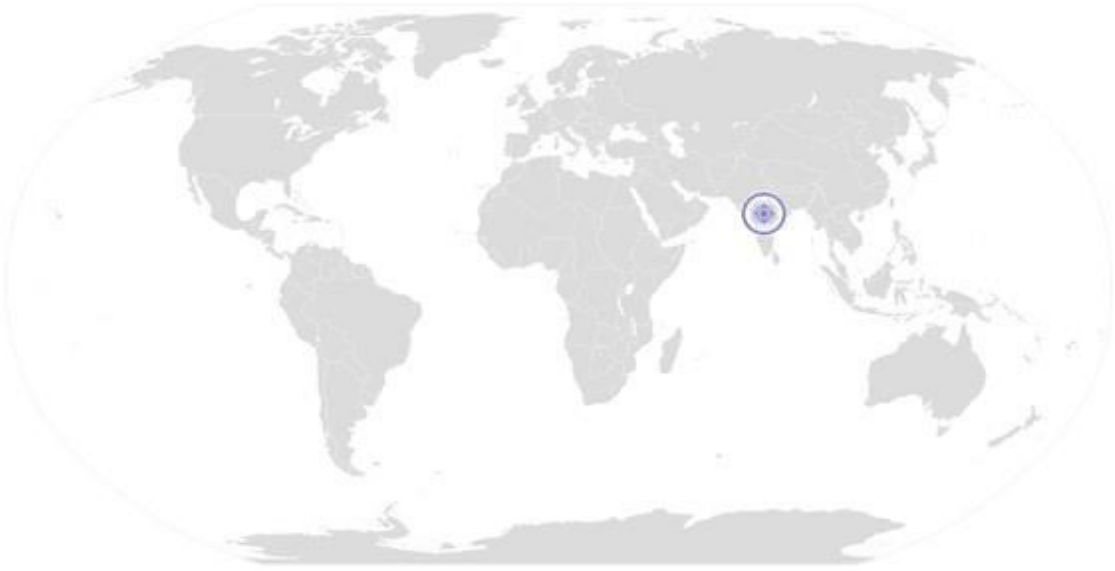
National Occupational Standard



Overview

This unit is about undertaking activities post mixing of raw materials in internal mixer/kneader.

National Occupational Standard

Unit Code	RSC/N0135
Unit Title (Task)	**Undertake post internal mixing activities_v2**
Description	This unit is about undertaking activities after performing mixing operation in internal mixer/kneader.
Scope	This unit/task covers the following: • Operate and Unload rubber compound • Disposal of unused material • Form appropriate batches of the compound and mark the batch for proper identification in further processing • Send sample to lab for testing and transfer remaining material to designated area • Ensuring housekeeping and safety in the mixing area
Performance Criteria (PC) w.r.t. the Scope	
Element	**Performance Criteria**
Operations	To be competent, the user/individual on the job must be able to PC1. Tilt the kneader on completion of cycle or discharge the batch from internal mixer after completion of mixing cycle PC2. Unload master batch/compound in a tray PC3. Ensure that no compound has been left inside (before charging for next batch) PC4. Handle the finished batch on dump mill as per SOP PC5. Ensure shifting of the batch from dump mill to the batch off unit for cooling & stacking on the skids as per SOP PC6. Handover the equipment to the next operator in clean and good condition
Material disposal	PC7. Dispose waste material in safe manner as per company's SOP
Batch Marking	PC8. Ensure identification and traceability by batch marking/ coding for the right product as per instructions laid down by the company (in terms of batch number, colour, date stamp etc)
Sampling	PC9. Send sample of specified compound/ batch in specified form to lab for testing PC10. Send the remaining material to the designated storage area
Housekeeping & Safety	PC11. Ensure housekeeping and safety in mixing area PC12. Ensure that electrical devices that may be exposed to carbon black dust are sealed. PC13. Blow periodically the electrical devices with clean/dry compressed air or vacuum clean. PC14. Ensure that the exhaust systems are used to maintain the concentration levels of various particulate matters remain within limits. PC15. Adhere to all safety norms (like wearing protective gloves, shoes etc) PC16. Comply with health, safety, environment guidelines, regulations etc in accordance with international/national standards or organizational SOP
Knowledge and Understanding (K)	
A. Organizational Context (Knowledge of the	The user/individual on the job needs to know and understand: KA1. Implications of poorly prepared material, power failure etc KA2. Knowledge of the equipment /s for laying down the mixed stock in sheet form

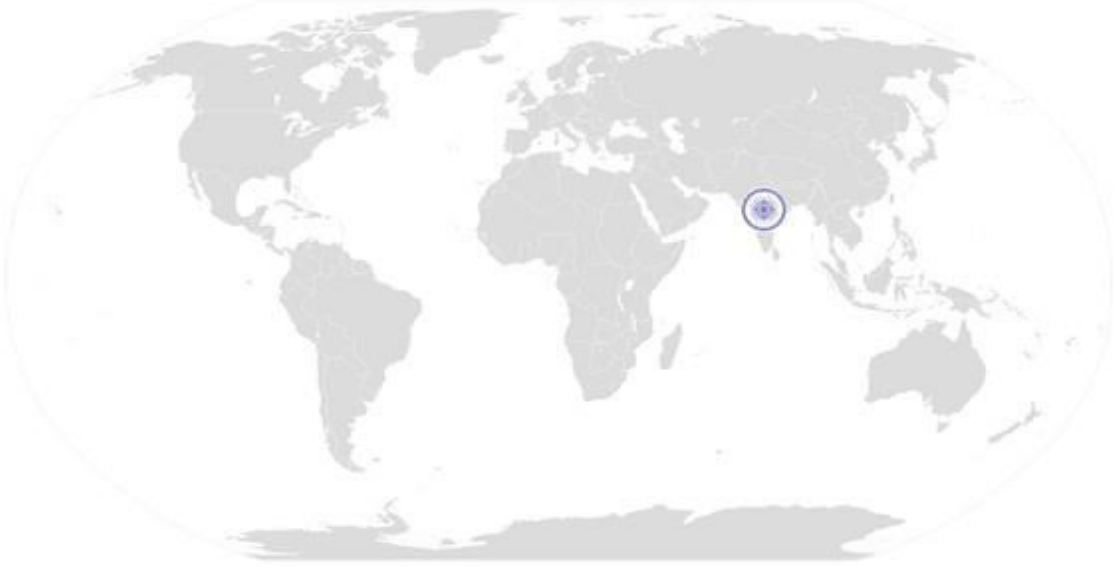
company / organization and its processes)	KA3. Material disposal procedure, importance of appropriate disposal of material and implications of not following the material disposal procedure KA4. Significance of batch marking KA5. Importance of identifying non-conforming product and storage of the same KA6. Risk and impact of not following defined procedures/work instructions KA7. Escalation matrix and procedure for reporting identified problems KA8. Types of documentation in organization and importance of the same KA9. Records to be maintained and implications of non-maintenance of the same KA10. Importance of housekeeping & good shop floor practices (eg 3S/5S) KA11. Health, Safety and Environment guidelines, legislation and regulations as applicable KA12. Personal protection(Which protective equipment to be used when and how) KA13. Potential hazards and actions to minimize the same KA14. Impact of poor practices on health, safety and environment KA15. Escalation matrix and procedure for reporting hazards KA16. Importance of FIFO KA17. The usage of different fire extinguishers KA18. Impact of various practices on cost, quality, productivity, delivery and safety KA19. Handover/ Takeover the equipment/ work area as per company's SOP
B. Technical Knowledge	The user/individual on the job needs to know and understand: KB1. Batch marking techniques KB2. Possible causes of common mixing problems & their remedies KB3. Implications of incorrect batch marking KB4. Implications of inappropriate waste disposal KB5. Types of defects leading to rejections, indicators, reasons and possible solutions. KB6. Units of measurement KB7. Coding systems for identification and traceability KB8. Response to emergencies e.g. Power failures ,fire and system failures KB9. Use of weighing scales KB10. Storage life of the compound KB11. Ambient temperature and effect on compound KB12. Simple mathematics for specific gravity and batch weight calculation
Skills (S)	
A. Core Skills/ Generic Skills	**Writing Skills**
	The user/ individual on the job needs to know and understand how to: SA1. Construct simple sentences 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

	The user/individual on the job needs to know and understand how to: SA5. Read and understand manuals, health and safety instructions, memos, reports, job cards etc SA6. Read images, graphs, diagrams SA7. Understand the various coding systems as per company norms
	Oral Communication
	SA8. Express statements, opinions or information clearly so that others can hear and understand SA9. Respond appropriately to any queries SA10. Communicate with supervisor SA11. Communicate with upstream and downstream teams
	Life Skills
	Integrity SA12. Practice honesty with respect to company property and time SA13. Communicate with people in a form and manner and using language that is open and respectful SA14. Resolve any difficulties in relationships with colleagues , or get help from an appropriate person, in a way that preserves goodwill and trust **Motivation** SA15. Take responsibility for completing one's own work assignment SA16. Take initiative to enhance/learn skills in ones's area of work SA17. The capacity to learn from experience in a range of settings and scenarios and the capacity to reflect on and analyse one's learning. SA18. Is open to new ways of doing things SA19. The capacity to envisage and articulate personal goals; to develop strategies and take action to achieve them. **Reliability** SA20. Avoid absenteeism SA21. Act objectively , rather than impulsively or emotionally when faced with difficult/stressful or emotional situations SA22. Work in disciplined factory environment SA23. Be punctual
B. Professional Skills	**Decision Making**
	The individual 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. Dispose of waste material properly SB11. Send sample in timely manner SB12. Co-ordinate activity with the person and department associated with next step of production process
	Customer Centricity
	SB13. Match customer needs/specification by adjusting the processing conditions (interact with customer in case any clarification required) SB14. 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. SB15. Complete the assigned task in timely manner so that the final product is delivered in the timeline given by the customer. SB16. Communicate effectively to the superior/customer for any delay in supplies to the clients. SB17. Work towards fulfilling the customers requirement as per their demand. SB18. In case of any complaint, ensure its timely resolution if the problem is emanating at his level SB19. Communicate effectively to the superior/customer for any delay in resolving the problem faced by the customer. SB20. Maintain good/cordial relation with customers. SB21. Work on the feedback received from customer regarding the product.
	Problem Solving
	SB22. Interpret quality of compound SB23. Utilize the raw material in best possible manner minimizing waste SB24. Modify the mix as per change in requirement
	Analytical Thinking
	SB25. Carry out proper collection of waste material SB26. Identify defects in the material and communicate it at the earliest and suggest improvements(if any) in process/material based on experience SB27. Diagnose common problems in the machine based on visual inspection, sound, temperature etc SB28. Suggest improvements(if any) in process based on experience
	Critical Thinking
	SB29. Seek clarification on problems from others SB30. Apply problem-solving approaches in different situations SB31. Refer anomalies to the Supervisor

NOS Version Control

NOS Code	RSC/N0135		
Credits(NSQF)	TBD	Version number	2.0
Industry	Rubber Manufacturing	Drafted on	20/03/2013
Industry Sub-sector	Tyre and Non- tyre	Last reviewed on	23/08/2017
Occupation	Mixing	Next review date	23/08/2021



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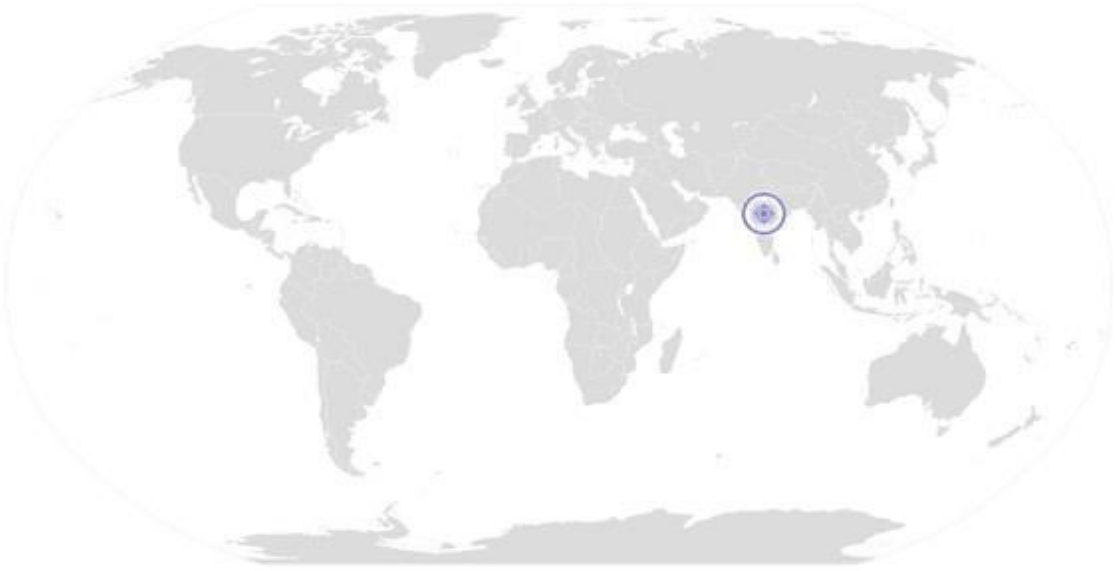

Overview

This unit is about carrying out housekeeping

National Occupational Standard

Unit Code	RSC /N5001
Unit Title (Task)	**Carry out housekeeping in rubber product manufacturing**
Description	This unit is about carrying out housekeeping activities
Scope	This unit/task covers the following: • Preparing for housekeeping activities • Carry out housekeeping operations • Post housekeeping activities • General
Performance Criteria (PC) w.r.t. the Scope	
Element	**Performance Criteria**
Pre housekeeping activities	To be competent, the user/individual on the job must be able to: PC1. Inspect the area while taking into account various surfaces PC2. Identify the material requirements for cleaning the areas inspected, by considering risk, time, efficiency and type of stain PC3. Ensure that the cleaning equipment is in proper working condition PC4. Select the suitable alternatives for cleaning the areas in case the appropriate equipment and materials are not available and inform the appropriate person PC5. Plan the sequence for cleaning the area to avoid re-soiling clean areas and surfaces PC6. Inform the affected people about the cleaning activity PC7. Display the appropriate signage for the work being conducted PC8. Ensure that there is adequate ventilation for the work being carried out PC9. Wear the personal protective equipment required for the cleaning method and materials being used
Operations	PC10. Use the correct cleaning method for the work area, type of soiling and surface PC11. Carry out cleaning activity without disturbing others PC12. Deal with accidental damage, if any, caused while carrying out the work PC13. Report to the appropriate person any difficulties in carrying out your work PC14. Identify and report to the appropriate person any additional cleaning required that is outside one's responsibility or skill
Post housekeeping activities	PC15. Ensure that there is no oily substance on the floor to avoid slippage PC16. Ensure that no scrap material is lying around PC17. Maintain and store housekeeping equipment and supplies PC18. Follow workplace procedures to deal with any accidental damage caused during the cleaning process PC19. Ensure that, on completion of the work, the area is left clean and dry and meets requirements 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 PC21. Dispose the waste garnered from the activity in an appropriate manner

	PC22. Dispose of used and un-used solutions according to manufacturer's instructions, and clean the equipment thoroughly
General	PC23. Maintain schedules and records for housekeeping duty PC24. Replenish any necessary supplies or consumables
Knowledge and Understanding (K)	
A. Organizational Context (Knowledge of the company / organization and its processes)	KA1. Importance of learning proper procedures and techniques KA2. Implications of not following the organizational requirement for approval for undertaking the specific task KA3. Importance of completing the activities as per the schedule KA4. Implications of not following the defined procedures/work instructions KA5. Importance of team work KA6. Health, Safety and Environment guidelines, legislation and regulations as applicable KA7. Actions to be taken in case of non-conformity to behavioral standards of the organization KA8. Impact of poor practices on the individual's and organization's performance KA9. Importance of optimal utilization of resources KA10. Importance of providing feedback for improvement KA11. Importance of indigenous knowledge for evolving/adopting operation specific practices KA12. Rectification/solution of problems/conflicts for the smooth functioning of the organization KA13. Importance of documentation/reporting as per guidelines and procedures KA14. Knowledge of do's and don'ts (company's HR instructions) KA15. Importance of attending trouble shooting KA16. Importance of subject learning/ training KA17. Importance of Product and its application
B. Technical Knowledge	The user/individual on the job needs to know and understand: 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	**Writing Skills**
	The user/ individual on the job needs to know and understand how to: 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
	SA5. Read and understand manuals, health and safety instructions, memos, reports, job cards etc SA6. Read images, graphs, diagrams SA7. Understand the various coding systems as per company norms
	Oral Communication
	SA8. Express statements, opinions or information clearly so that others can hear and understand SA9. Respond appropriately to any queries SA10. Communicate with supervisor SA11. Communicate with upstream and downstream teams
	Life Skills
	Integrity SA12. Practice honesty with respect to company property and time SA13. Communicate with people in a form and manner and using language that is open and respectful SA14. Resolve any difficulties in relationships with colleagues , or get help from an appropriate person, in a way that preserves goodwill and trust **Motivation** SA15. Take responsibility for completing one's own work assignment SA16. Take initiative to enhance/learn skills in one's area of work SA17. The capacity to learn from experience in a range of settings and scenarios and the capacity to reflect on and analyze one's learning.

	SA18. Is open to new ways of doing things SA19. The capacity to envisage and articulate personal goals; to develop strategies and take action to achieve them. **Reliability** SA20. Avoid absenteeism SA21. Act objectively , rather than impulsively or emotionally when faced with difficult/stressful or emotional situations SA22. Work in disciplined factory environment SA23. Be punctual
B. Professional Skills	**Decision Making**
	The individual 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. Plan and organize the factors of production to execute the business plan SB11. Fix up tasks and allotment of the same SB12. Assign tasks to suitable persons SB13. Motivate them for better output and time bound completion of tasks
	Customer Centricity
	SB14. Match customer needs/specification by adjusting the processing conditions (interact with customer in case any clarification required) SB15. 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. SB16. Complete the assigned task in timely manner so that the final product is delivered in the timeline given by the customer. SB17. Communicate effectively to the superior/customer for any delay in supplies to

	the clients. SB18. Work towards fulfilling the customers requirement as per their demand. SB19. In case of any complaint, ensure its timely resolution if the problem is emanating at his level SB20. Communicate effectively to the superior/customer for any delay in resolving the problem faced by the customer. SB21. Maintain good/cordial relation with customers. SB22. Work on the feedback received from customer regarding the product.
	Problem Solving
	SB23. Interpret quality for sheet SB24. Suggest improvements(if any) in process/product/materials based on results and experience
	Analytical Thinking
	SB25. Proper collection of waste material SB26. Identify defects in the material and communicate it at the earliest and suggest improvements(if any) in process/material based on experience SB27. Diagnose common problems in the machine based on visual inspection, sound, temperature etc SB28. Suggest improvements(if any) in process based on experience
	Critical Thinking
	SB29. Seek clarification on problems from others SB30. Apply problem-solving approaches in different situations SB31. Refer anomalies to the line manager

NOS Version Control

NOS Code	**RSC/N5001**		
Credits(NSQF)	**TBD**	**Version number**	**2.0**
Industry	**Rubber Manufacturing**	**Drafted on**	**20/03/2013**
Industry Sub-sector	**Tyre and Non- tyre**	**Last reviewed on**	**23/08/2017**
Occupation	**Mixing**	**Next review date**	**23/08/2021**

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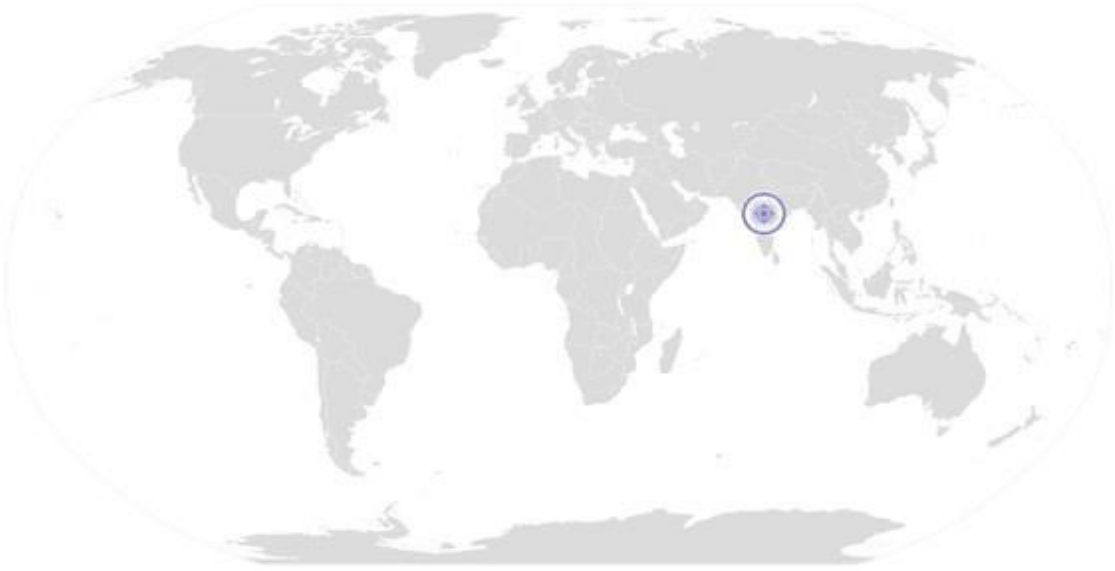

Overview

This unit is about reporting and documentation

National Occupational Standard

Unit Code	RSC/N5002
Unit Title (Task)	Carry out reporting and documentation
Description	This unit is about carrying out reporting and documentation
Scope	This unit/task covers the following: • Reporting of data/problem/incidents etc • Documentation • Information Security
Performance Criteria (PC) w.r.t. the Scope	
Element	**Performance Criteria**
Reporting	To be competent, the user/individual on the job must be able to: PC1. Report data/problems/incidents as applicable in a timely manner PC2. Report to the appropriate authority as laid down by the company PC3. Follow reporting procedures as prescribed by the company
Recording and Documentation	PC4. Identify documentation to be completed relating to one's role PC5. Record details accurately an appropriate format PC6. Complete all documentation within stipulated time according to company procedure PC7. Ensure that the final document meets with the requirements of the persons who requested it or make any amendments accordingly PC8. Make sure documents are available to all appropriate authorities to inspect
Information Security	PC9. Respond to requests for information in an appropriate manner whilst following organizational procedures PC10. Inform the appropriate authority of requests for information received
Knowledge and Understanding (K)	
A. Organizational Context (Knowledge of the company / organization and its processes)	KA1. Importance of learning proper procedures and techniques KA2. Implications of not following the organizational requirement for approval for undertaking the specific task KA3. Importance of completing the activities as per the schedule KA4. Implications of not following the defined procedures/work instructions KA5. Importance of team work KA6. Health, Safety and Environment guidelines, legislation and regulations as applicable KA7. Actions to be taken in case of non-conformity to behavioral standards of the organization KA8. Impact of poor practices on the individual's and organization's performance KA9. Importance of optimal utilization of resources KA10. Importance of providing feedback for improvement KA11. Importance of indigenous knowledge for evolving/adopting operation specific practices KA12. Rectification/solution of problems/conflicts for the smooth functioning of the

	organization KA13. Importance of documentation/reporting as per guidelines and procedures KA14. Knowledge of do's and don'ts (company's HR instructions) KA15. Importance of attending trouble shooting KA16. Importance of subject learning/ training KA17. Importance of Product and its application
B. Technical Knowledge	The user/individual on the job needs to know and understand: KB1. Different methods of recording information KB2. Various documents that need to be maintained KB3. Company procedure for filling/maintaining up the documents KB4. Procedures for reporting to the appropriate authority KB5. Procedures for recording damage, breakages etc KB6. Reporting incidents where standard operating procedures are not followed KB7. The importance of complete and accurate documentation KB8. How to maintain complete documentation accurately and within agreed timescales KB9. The importance of ensuring that the documents are correct KB10. The actions to be taken if the documents are not correct KB11. The importance of maintaining the security and confidentiality of recorded information KB12. Procedures to maintain confidentiality of information KB13. The appropriate method for responding to requests for information KB14. The reporting procedures to followed before disclosing information to any outside party
Skills (S)	
A. Core Skills/ Generic Skills	**Writing Skills**
	The user/ individual on the job needs to know and understand how to: SA1. Construct simple sentences 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
	SA5. Read and understand manuals, health and safety instructions, memos, reports, job cards etc SA6. Read images, graphs, diagrams SA7. Understand the various coding systems as per company norms
	Oral Communication

	SA8. Express statements, opinions or information clearly so that others can hear and understand SA9. Respond appropriately to any queries SA10. Communicate with supervisor SA11. Communicate with upstream and downstream teams
	Life Skills
	Integrity SA12. Practice honesty with respect to company property and time SA13. Communicate with people in a form and manner and using language that is open and respectful SA14. Resolve any difficulties in relationships with colleagues , or get help from an appropriate person, in a way that preserves goodwill and trust **Motivation** SA15. Take responsibility for completing one's own work assignment SA16. Take initiative to enhance/learn skills in ones's area of work SA17. The capacity to learn from experience in a range of settings and scenarios and the capacity to reflect on and analyse one's learning. SA18. Is open to new ways of doing things SA19. The capacity to envisage and articulate personal goals; to develop strategies and take action to achieve them. **Reliability** SA20. Avoid absenteeism SA21. Act objectively , rather than impulsively or emotionally when faced with difficult/stressful or emotional situations SA22. Work in disciplined factory environment SA23. Be punctual
B. Professional Skills	**Decision Making**
	The individual 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. Plan and organize the factors of production to execute the business plan SB11. Fix up tasks and allotment of the same SB12. Assign tasks to suitable persons SB13. Motivate them for better output and time bound completion of tasks
	Customer Centricity
	SB14. Match customer needs/specification by adjusting the processing conditions (interact with customer in case any clarification required) SB15. 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. SB16. Complete the assigned task in timely manner so that the final product is delivered in the timeline given by the customer. SB17. Communicate effectively to the superior/customer for any delay in supplies to the clients. SB18. Work towards fulfilling the customers requirement as per their demand. SB19. In case of any complaint, ensure its timely resolution if the problem is emanating at his level SB20. Communicate effectively to the superior/customer for any delay in resolving the problem faced by the customer. SB21. Maintain good/cordial relation with customers. SB22. Work on the feedback received from customer regarding the product.
	Problem Solving
	SB23. Interpret quality for sheet SB24. Suggest improvements(if any) in process/product/materials based on results and experience
	Analytical Thinking
	SB25. Proper collection of waste material SB26. Identify defects in the material and communicate it at the earliest and suggest improvements(if any) in process/material based on experience SB27. Diagnose common problems in the machine based on visual inspection, sound, temperature etc SB28. Suggest improvements(if any) in process based on experience
	Critical Thinking
	SB29. Seek clarification on problems from others SB30. Apply problem-solving approaches in different situations SB31. Refer anomalies to the line manager

NOS Version Control

NOS Code	RSC/N5002		
Credits(NSQF)	TBD	Version number	2.0
Industry	Rubber Manufacturing	Drafted on	20/03/2013
Industry Sub-sector	Tyre and Non- tyre	Last reviewed on	23/08/2017
Occupation	Mixing	Next review date	23/08/2021

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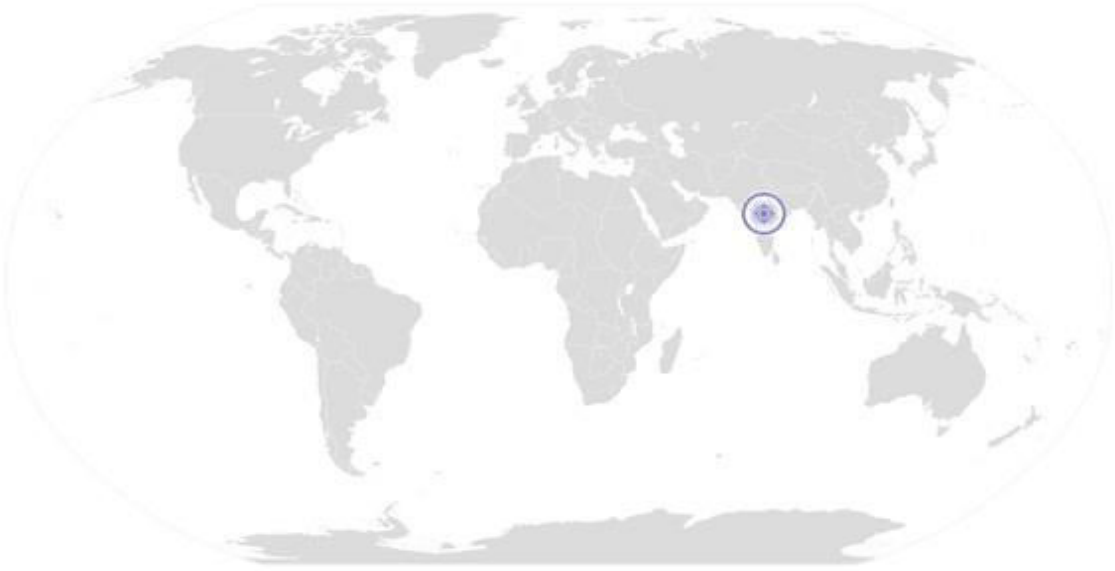

Overview

This unit is about carrying out quality checks

National Occupational Standard

Unit Code	RSC/N5003
Unit Title (Task)	Carry out quality checks
Description	This unit is about carrying out quality control activities
Scope	This unit/task covers the following: • Carrying out quality checks and inspect to identify problems • Analysis and take corrective actions • Reporting the results

Performance Criteria (PC) w.r.t. the Scope	
Element	**Performance Criteria**
Inspection	To be competent, the user/individual on the job must be able to: PC1. Ensure that total range of checks are regularly and consistently performed PC2. Use appropriate measuring instruments, equipment, tools, accessories etc ,as required
Analysis	PC3. Identify non-conformities to quality assurance standards PC4. Identify potential causes of non-conformities to quality assurance standards PC5. Identify impact on final product due to non-conformance to company standards PC6. Evaluating the need for action to ensure that problems do not recur PC7. Suggest corrective action to address problem PC8. Review effectiveness of corrective action
Reporting	PC9. Interpret the results of the quality check correctly PC10. Take up results of the findings with QC in charge/appropriate authority. PC11. Take up the results of the findings within stipulated time PC12. Record of results of action taken PC13. Record adjustments not covered by established procedures for future reference PC14. Review effectiveness of action taken PC15. Follow reporting procedures where the cause of defect cannot be identified

Knowledge and Understanding (K)	
A. Organizational Context (Knowledge of the company / organization and its processes)	KA1. Importance of learning proper procedures and techniques KA2. Implications of not following the organizational requirement for approval for undertaking the specific task KA3. Importance of completing the activities as per the schedule KA4. Implications of not following the defined procedures/work instructions KA5. Importance of team work KA6. Health, Safety and Environment guidelines, legislation and regulations as applicable KA7. Actions to be taken in case of non-conformity to behavioral standards of the organization KA8. Impact of poor practices on the individual's and organization's performance KA9. Importance of optimal utilization of resources KA10. Importance of providing feedback for improvement KA11. Importance of indigenous knowledge for evolving/adopting operation specific

	practices KA12. Rectification/solution of problems/conflicts for the smooth functioning of the organization KA13. Importance of documentation/reporting as per guidelines and procedures KA14. Knowledge of do's and don'ts (company's HR instructions) KA15. Importance of attending trouble shooting KA16. Importance of subject learning/ training KA17. Importance of Product and its application
B. Technical Knowledge	The user/individual on the job needs to know and understand: KB1. The importance of quality control procedures KB2. Relevance and importance of activities and how they contribute to the achievement of the quality objectives, KB3. Proper procedure for selecting the material/product and performing quality checks without affecting the material KB4. Availability of work instructions, as necessary, KB5. Characteristics of the product/material KB6. Use of suitable equipment KB7. Availability and use of monitoring and measuring devices, KB8. Requirements of records KB9. Importance of maintaining accurate up-to-date records KB10. The need to report within the stipulated time KB11. Implications of inaccurate measuring and testing instruments and equipment KB12. The cost of non-conformance to quality standards KB13. Implications (impact on internal/external customers) of defective products, materials or components
Skills (S)	
A. Core Skills/ Generic Skills	**Writing Skills**
	The user/ individual on the job needs to know and understand how to: SA1. Construct simple sentences 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
	SA5. Read and understand manuals, health and safety instructions, memos, reports, job cards etc SA6. Read images, graphs, diagrams SA7. Understand the various coding systems as per company norms
	Oral Communication

	SA8. Express statements, opinions or information clearly so that others can hear and understand SA9. Respond appropriately to any queries SA10. Communicate with supervisor SA11. Communicate with upstream and downstream teams
	Life Skills
	Integrity SA12. Practice honesty with respect to company property and time SA13. Communicate with people in a form and manner and using language that is open and respectful SA14. Resolve any difficulties in relationships with colleagues , or get help from an appropriate person, in a way that preserves goodwill and trust **Motivation** SA15. Take responsibility for completing one's own work assignment SA16. Take initiative to enhance/learn skills in one's area of work SA17. The capacity to learn from experience in a range of settings and scenarios and the capacity to reflect on and analyse one's learning. SA18. Is open to new ways of doing things SA19. The capacity to envisage and articulate personal goals; to develop strategies and take action to achieve them. **Reliability** SA20. Avoid absenteeism SA21. Act objectively , rather than impulsively or emotionally when faced with difficult/stressful or emotional situations SA22. Work in disciplined factory environment SA23. Be punctual
B. Professional Skills	**Decision Making**
	The individual 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. Plan and organize the factors of production to execute the business plan SB11. Fix up tasks and allotment of the same SB12. Assign tasks to suitable persons SB13. Motivate them for better output and time bound completion of tasks
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	Problem Solving
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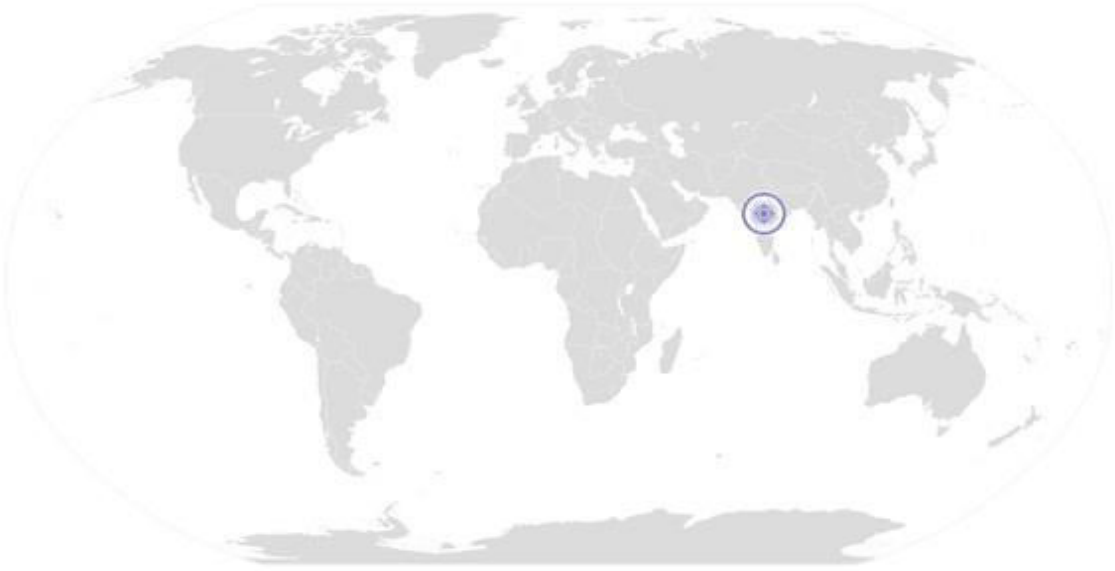
	Analytical Thinking
	SB25. Proper collection of waste material SB26. Identify defects in the material and communicate it at the earliest and suggest improvements(if any) in process/material based on experience SB27. Diagnose common problems in the machine based on visual inspection, sound, temperature etc SB28. Suggest improvements(if any) in process based on experience
	Critical Thinking
	SB29. Seek clarification on problems from others SB30. Apply problem-solving approaches in different situations SB31. Refer anomalies to the line manager

NOS Version Control

NOS Code	RSC /N5003		
Credits(NSQF)	TBD	Version number	2.0
Industry	Rubber Manufacturing	Drafted on	20/03/2013
Industry Sub-sector	Tyre and Non- tyre	Last reviewed on	23/08/2017
Occupation	Mixing	Next review date	23/08/2021



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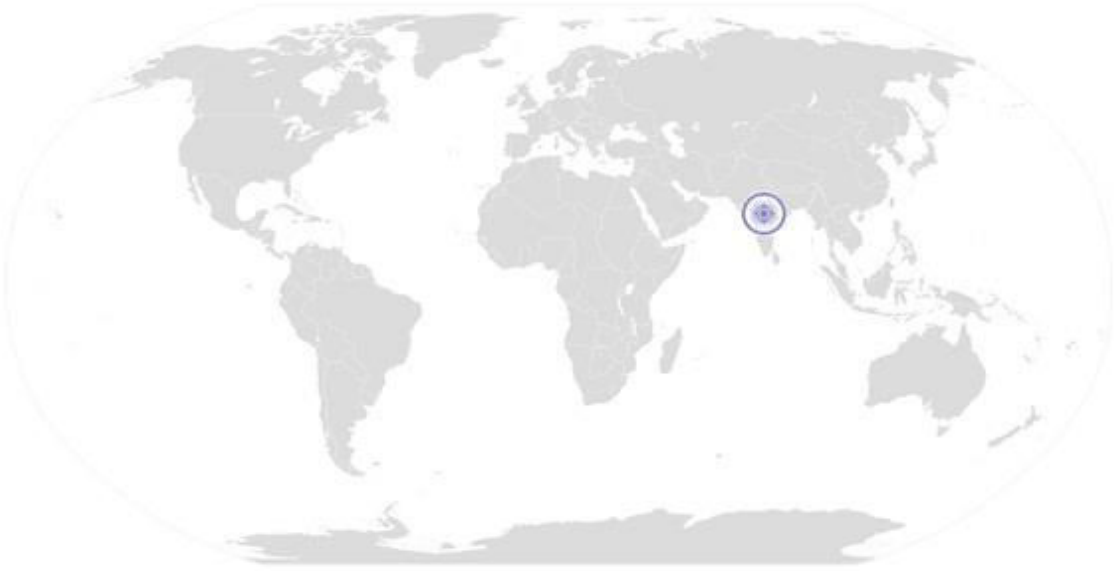

Overview

This unit is about 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	This unit/task covers the following:
	• Identify problems across:
	  ○ Raw materials
	  ○ Compounds
	  ○ Product
	  ○ Equipment
	  ○ Others
	• Identify solutions to problems
	• Take corrective action
	• Escalation of unresolved identified problems

Performance Criteria (PC) w.r.t. the Scope	
Element	**Performance Criteria**
Problem Identification	To be competent, the user/individual on the job must be able to: 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
Necessary Action	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 PC18. Ensure that correct solution is identified to an identified problem PC19. Take corrective action for problems identified according to the company procedures PC20. Ensure that no delays are caused as a result of failure to take necessary action
Problem Escalation	PC21. Escalate problem as per laid down escalation matrix PC22. Escalate the problem within stipulated time PC23. Escalate the problem in an appropriate manner PC24. Ensure that no delays are caused as a result of failure to escalate problems

Knowledge and Understanding (K)

A. Organizational Context (Knowledge of the company / organization and its processes)	KA1. Importance of learning proper procedures and techniques KA2. Implications of not following the organizational requirement for approval for undertaking the specific task KA3. Importance of completing the activities as per the schedule KA4. Implications of not following the defined procedures/work instructions KA5. Importance of team work KA6. Health, Safety and Environment guidelines, legislation and regulations as applicable KA7. Actions to be taken in case of non-conformity to behavioral standards of the organization KA8. Impact of poor practices on the individual's and organization's performance KA9. Importance of optimal utilization of resources KA10. Importance of providing feedback for improvement KA11. Importance of indigenous knowledge for evolving/adopting operation specific practices KA12. Rectification/solution of problems/conflicts for the smooth functioning of the organization KA13. Importance of documentation/reporting as per guidelines and procedures KA14. Knowledge of do's and don'ts (company's HR instructions) KA15. Importance of attending trouble shooting KA16. Importance of subject learning/ training KA17. Importance of Product and its application
B. Technical Knowledge	The user/individual on the job needs to know and understand: KB1. Indicators of problems KB2. The working of the equipment and accessories(if applicable) KB3. The impact of operations on the user and equipment(if applicable) KB4. The impact of operations on the final product (if applicable) KB5. The effect of not rectifying the problems identified KB6. The reason for the occurrence of previous problems KB7. Measures and steps that have been taken to address the previous problems KB8. Possible solutions for various problems KB9. The correct method for carrying out corrective actions outlined for each problem KB10. The impact of not carrying out the corrective actions KB11. The documentation procedure for recording such problems, as per company norms KB12. The escalation matrix for reporting problems KB13. Escalation matrix for reporting unresolved problems KB14. The time frame within which in which each problem needs to be escalated KB15. Manner in which each problem needs to be escalated
Skills (S)	
A. Core Skills/	**Writing Skills**

Generic Skills	The user/ individual on the job needs to know and understand how to: 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
	SA5. Read and understand manuals, health and safety instructions, memos, reports, job cards etc SA6. Read images, graphs, diagrams SA7. Understand the various coding systems as per company norms
	Oral Communication
	SA8. Express statements, opinions or information clearly so that others can hear and understand SA9. Respond appropriately to any queries SA10. Communicate with supervisor SA11. Communicate with upstream and downstream teams
	Life Skills
	Integrity SA12. Practice honesty with respect to company property and time SA13. Communicate with people in a form and manner and using language that is open and respectful SA14. Resolve any difficulties in relationships with colleagues , or get help from an appropriate person, in a way that preserves goodwill and trust **Motivation** SA15. Take responsibility for completing one's own work assignment SA16. Take initiative to enhance/learn skills in one's area of work SA17. The capacity to learn from experience in a range of settings and scenarios and the capacity to reflect on and analyse one's learning. SA18. Is open to new ways of doing things SA19. The capacity to envisage and articulate personal goals; to develop strategies and take action to achieve them. **Reliability** SA20. Avoid absenteeism SA21. Act objectively , rather than impulsively or emotionally when faced with difficult/stressful or emotional situations SA22. Work in disciplined factory environment

	SA23. Be punctual
B. Professional Skills	**Decision Making**
	The individual 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. Plan and organize the factors of production to execute the business plan SB11. Fix up tasks and allotment of the same SB12. Assign tasks to suitable persons SB13. Motivate them for better output and time bound completion of tasks
	Customer Centricity
	SB14. Match customer needs/specification by adjusting the processing conditions (interact with customer in case any clarification required) SB15. 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. SB16. Complete the assigned task in timely manner so that the final product is delivered in the timeline given by the customer. SB17. Communicate effectively to the superior/customer for any delay in supplies to the clients. SB18. Work towards fulfilling the customers requirement as per their demand. SB19. In case of any complaint, ensure its timely resolution if the problem is emanating at his level SB20. Communicate effectively to the superior/customer for any delay in resolving the problem faced by the customer. SB21. Maintain good/cordial relation with customers. SB22. Work on the feedback received from customer regarding the product.

	Problem Solving
	SB23. Interpret quality for sheet SB24. Suggest improvements(if any) in process/product/materials based on results and experience
	Analytical Thinking
	SB25. Proper collection of waste material SB26. Identify defects in the material and communicate it at the earliest and suggest improvements(if any) in process/material based on experience SB27. Diagnose common problems in the machine based on visual inspection, sound, temperature etc SB28. Suggest improvements(if any) in process based on experience
	Critical Thinking
	SB29. Seek clarification on problems from others SB30. Apply problem-solving approaches in different situations SB31. Refer anomalies to the line manager

NOS Version Control

NOS Code	RSC/N5004		
Credits(NSQF)	TBD	Version number	2.0
Industry	Rubber Manufacturing	Drafted on	20/03/2013
Industry Sub-sector	Tyre and Non- tyre	Last reviewed on	23/08/2017
Occupation	Mixing	Next review date	23/08/2021

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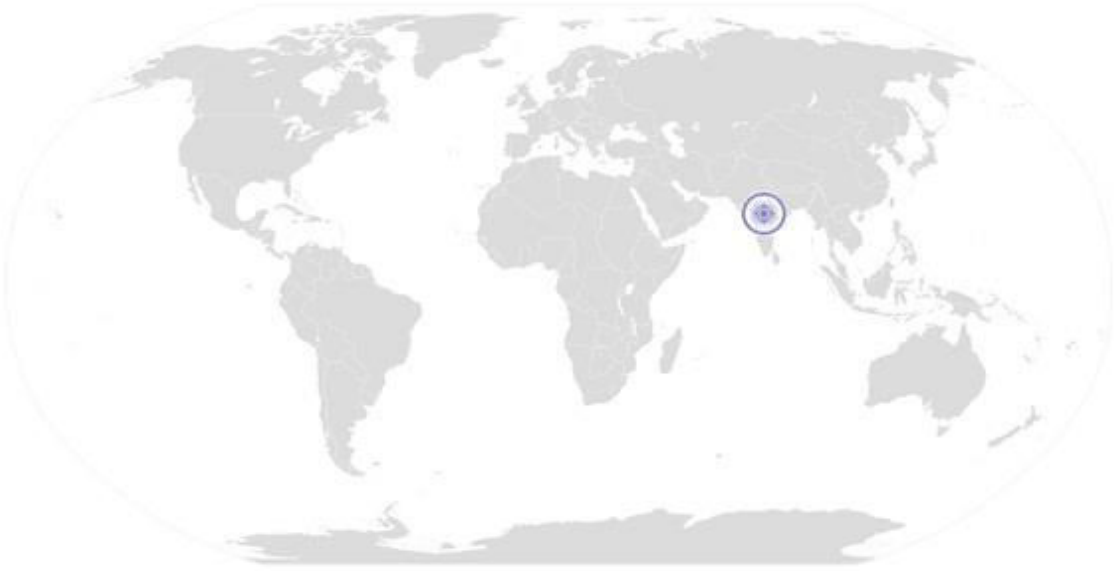
National Occupational Standard



Overview

This unit is about health & safety

National Occupational Standard

Unit Code	RSC/N5007
Unit Title (Task)	**Carry Out Health & Safety**
Description	This unit is about maintaining health and safety of self and others at workplace.
Scope	This unit/task covers the following: • 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	To be competent, the individual on the job must be able to: PC1. Undertake basic safety checks before operation of all machinery and equipment and report hazards to the appropriate supervisor 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. PC3. Read and understand the hazards of use and contamination mentioned on the labels of chemicals, utilities etc PC4. Assess the risk prior to performing manual handling jobs and work is carried out according to currently recommended safe practices. PC5. Use equipment and materials safely and correctly and return the same to designated storage when not in use PC6. Dispose off waste safely and correctly in a designated area PC7. Recognize the risk to bystanders and take action to reduce risk associated with jobs in the workplace PC8. Perform work in a manner which minimizes environmental damage PC9. Monitor closely all procedures and work instructions for controlling risk PC10. Report any accidents, incidents or problems without delay to an appropriate person and take immediate necessary action to reduce further danger.
Render appropriate emergency procedures	PC11. Follow procedures for dealing with accidents, fires and emergencies, including communicating location and directions to emergency. PC12. Follow emergency procedures as per company standards and workplace requirements. PC13. Use Emergency equipment in accordance with manufacturers' specifications and workplace requirements. PC14. Provide treatment appropriate to the patient's injuries in accordance with recognized first aid techniques. PC15. Recover (if practical), clean, inspect/test, refurbish, replace and store the first

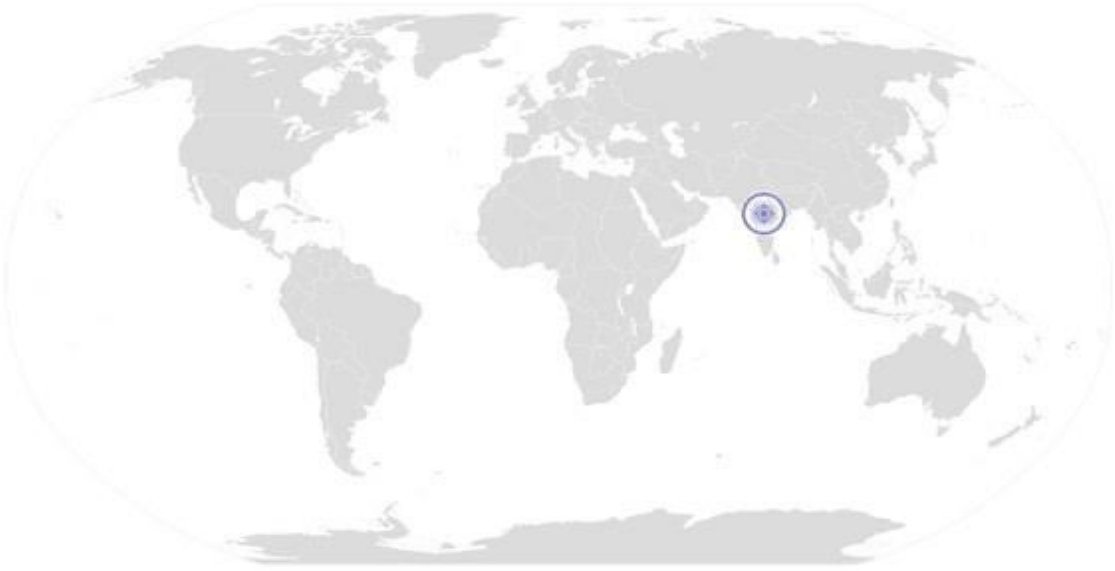
	aid equipment as appropriate PC16. Dispose off medical waste in accordance with workplace requirements PC17. Report details of first aid administered in accordance with work place procedures.
Maintain standard safety procedures at the workplace	PC18. Comply with general safety procedures PC19. Follow 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	The individual on the job needs to know and understand: 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 KB10. Personal hygiene and fitness requirements KB11. General duties under the relevant health and safety legislation KB12. What personal protective equipment and clothing should be worn and how it is cared for KB13. The correct and safe way to use materials and equipment required for work KB14. The importance of good housekeeping in the workplace KB15. Safe disposal methods for waste KB16. Methods for minimizing environmental damage during work
Skills (S)	
A. Core Skills/ Generic Skills	**Writing Skills** The individual on the job needs to know and understand how to: SA1. Record data which are required for record keeping purpose SA2. Report problems to the appropriate person in a timely manner SA3. Write descriptions and details about incidents in reports
	Reading Skills SA4. Read instruction manuals for hand tools and equipment SA5. Read instructions on work orders and procedures
	Oral Communication SA6. Receive instructions and seek advice from superiors SA7. Communicate clearly and effectively with others
B. Professional Skills	**Decision Making** To be competent, the individual must be able 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. 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

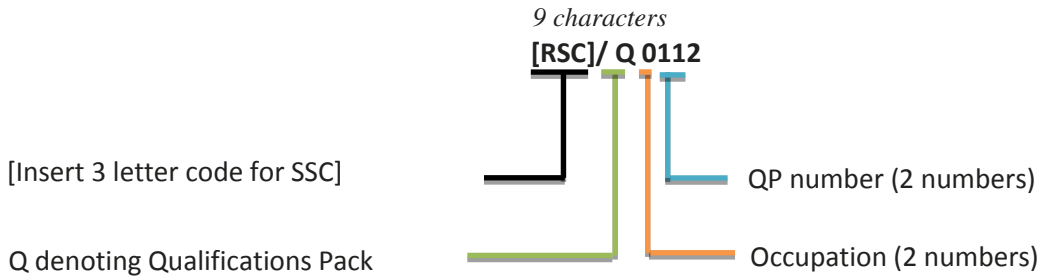
NOS Code	**RSC/N5007**		
Credits(NSQF)	**TBD**	**Version number**	**1.0**
Industry	**Rubber Industry**	**Drafted on**	**27/02/17**
Industry Sub-sector	**Tyre, Non Tyre**	**Last reviewed on**	**23/08/2017**
Occupation	**Mixing**	**Next review date**	**23/08/2021**



Annexure

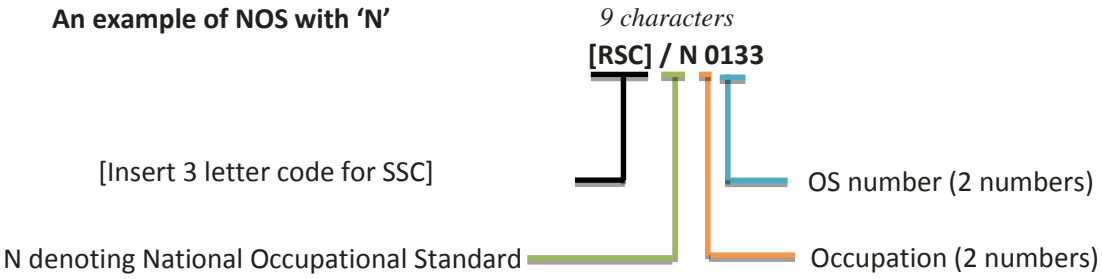
Nomenclature for QP and NOS

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 **Q**P or NOS	N
Next two numbers	Occupation code	01
Next two numbers	OS number	33

Criteria For Assessment Of Trainees

Job Role: Rubber Internal Mixer Operator
Qualification Pack Code: RSC/Q0112
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 Total Marks: 700				Marks Allocation	
Assessment outcomes	**Assessment Criteria for outcomes**	**Total Marks**	**Out Of**	**Theory**	**Skills Practical**
RSC/N0133 Prepare internal mixer and accessories_v 2	PC1. Ensure that the mixer is clean and ready for operation	100	3	3	0
	PC2. Ensure functioning of safety features of Internal Mixer and other accessories		4	4	0
	PC3. Ensure proper functioning of different upstream and downstream equipment attached with the Mixer like hydraulic/pneumatic system, temperature control unit (TCU), lubrication system, energy control system (power integrator), dust extractor including material/ batch handling equipment as appropriate		15	5	10
	PC4. Set parameters for the equipment (mixing cycle time, temperature, energy and pressure) and Filler & Oil loading system as per company's SOP Raw material appropriateness		15	5	10
	PC5. Ensure availability of pre-weighed, approved rubber and other ingredients to be fed as per batch requirement		8	3	5
	PC6. Ensure that weighing scale(Put up or the scale used for weighing rubber, mixed chemicals) is calibrated		8	3	5
	PC7. Ensure that rubber compound to be fed is approved by laboratory		3	3	0
	PC8. Ensure that all raw materials have been assembled/organized (in correct sequence, if applicable) to be fed into mixer		8	3	5

	PC9. Ensure all ingredients are homogeneously mixed.		3	3	0
	PC10. Ensure proper housekeeping and safety in mixing area		3	3	0
	PC11. Ensure that electrical devices that may be exposed to carbon black dust are sealed.		3	3	0
	PC12. Blow periodically the electrical devices with clean/dry compressed air or vacuum clean.		3	3	0
	PC13. Ensure that the exhaust systems are used to maintain the concentration levels		8	3	5
	PC14. Adhere to all safety norms (like wearing protective gloves, shoes, Safety Glasses etc)		8	3	5
	PC15. Comply with health, safety, environment guidelines, regulations etc in accordance with international/national standards or organizational SOP		8	3	5
	Total		**100**	**50**	**50**
RSC/N0134 Mix in internal mixer to prepare rubber compound_v2	PC1. Handle the rubber compound to avoid contamination	100	3	3	0
	PC2. Ensure that batch size of rubber mix is as per company's SOP		3	3	0
	PC3. Ensure that identified & approved materials are used.		8	3	5
	PC4. Ensure that the sequence in shift is based on raw material availability to maximize output		8	3	5
	PC5. Add the ingredients in sequence as per SOP considering different types of mixing process possible		8	3	5
	PC6. Check and adjust cooling water flow rate (mixing temperature control)		10	5	5
	PC7. As per cycle, raise Ram/open kneader and brush powder inside kneader from machine side as per SOP		10	5	5
	PC8. Control mixing process and completion as per SOP (temperature or time or energy as programmed/ specified)		15	5	10
	PC9. Release the batch after completion of mixing cycle as per SOP		4	4	0
	PC10. Inform the batch off mill man about the release of batch as per SOP.		3	3	0
	PC11. Prepare the Internal Mixer for next batch as per Planning.		3	3	0
	PC12. Ensure Housekeeping and Safety in mixing area		3	3	0
	PC13. Ensure that electrical devices that may be exposed to carbon black dust are sealed.		3	3	0
	PC14. Blow periodically the electrical devices with clean/dry compressed air or vacuum clean.		3	3	0
	PC15. Ensure that the exhaust systems are used to maintain the concentration levels of various particulate matters within limits		6	3	3
	PC16. Adhere to all safety norms (like wearing protective gloves, shoes, Safety Glasses, etc.)		5	4	1
	PC17. Comply with health, safety, environment guidelines, regulations etc in accordance with international/national standards or organizational SOP		5	4	1
	Total		**100**	**60**	**40**
RSC/N0135 Undertake post internal	PC1. Tilt the kneader on completion of cycle or discharge the batch from internal mixer after completion of mixing cycle	100	8	3	5
	PC2. Unload master batch/compound in a tray		8	3	5

mixing activities_v2	PC3. Ensure that no compound has been left inside (before charging for next batch)		7	2	5
	PC4. Handle the finished batch on dump mill as per SOP		3	3	0
	PC5. Ensure shifting of the batch from dump mill to the batch off unit for cooling & stacking on the skids as per SOP		3	3	0
	PC6. Handover the equipment to the next operator in clean and good condition		3	3	0
	PC7. Dispose waste material in safe manner as per company's SOP		8	4	4
	PC8. Ensure identification and traceability by batch marking/ coding for the right product as per instructions laid down by the company (in terms of batch number, colour, date stamp etc)		14	4	10
	PC9. Send sample of specified compound/ batch in specified form to lab for testing		4	4	0
	PC10. Send the remaining material to the designated storage area		5	0	5
	PC11. Ensure Housekeeping and Safety in mixing area		4	4	0
	PC12. Ensure that electrical devices that may be exposed to carbon black dust are sealed		4	4	0
	PC13. Blow periodically the electrical devices with clean/dry compressed air or vacuum clean		4	4	0
	PC14. Ensure that the exhaust systems are used to maintain the concentration levels of various particulate matters within limits		9	5	4
	PC15. Adhere to all safety norms (like wearing protective gloves, shoes, Safety Glasses, etc)		8	2	6
	PC16. Comply with health, safety, environment guidelines, regulations etc in accordance with international/national standards or organizational SOP		8	2	6
	Total		**100**	**50**	**50**
RSC/N5001 Carry out housekeeping in rubber product manufacturing	PC1. Inspect the area while taking into account various surfaces	100	3	3	0
	PC2. Inspect the area is free of usable material intended for mixing on the floor .				
	PC3. Identify the material requirements for cleaning the areas inspected, by considering risk, time, efficiency and type of stain		3	3	0
	PC4. Ensure that the cleaning equipment is in proper working condition		3	3	0
	PC5. 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
	PC6. Plan the sequence for cleaning the area to avoid re-soiling clean areas and surfaces		3	3	0
	PC7. Inform the affected people about the cleaning activity		2	2	0
	PC8. Display the appropriate signage for the work being conducted		3	3	0
	PC9. Ensure that there is adequate ventilation for the work being carried out		3	3	0
	PC10. Wear the personal protective equipment required for the cleaning method and materials being used		3	3	0
	PC11. Use the correct cleaning method for the work area, type of soiling and surface		3	3	0
	PC12. Carry out cleaning activity without disturbing others		3	3	0
	PC13. Deal with accidental damage, if any, caused while carrying out		3	3	0

	the work				
	PC14. Report to the appropriate person any difficulties in carrying out your work		3	3	0
	PC15. Identify and report to the appropriate person any additional cleaning required that is outside one's responsibility or skill		3	3	0
	PC16. Ensure that there is no oily substance on the floor to avoid slippage		9	3	6
	PC17. Ensure that no scrap material is lying around		9	3	6
	PC18. Maintain and store housekeeping equipment and supplies		3	3	0
	PC19. Follow workplace procedures to deal with any accidental damage caused during the cleaning process		3	3	0
	PC20. Ensure that, on completion of the work, the area is left clean and dry and meets requirements		8	2	6
	PC21. 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
	PC22. Dispose the waste garnered from the activity in an appropriate manner		9	3	6
	PC23. Dispose of used and un-used solutions according to manufacturer's instructions, and clean the equipment thoroughly		9	3	6
	PC24. Maintain schedules and records for housekeeping duty		3	3	0
	PC25. 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		5	3	2

	company standards				
	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 be identified		2	2	0
	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		3	2	1
	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
	PC 19. Follow standard safety procedures while handling equipment, hazardous material or tool		0	0	0
	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.		8	5	3

	PC21. Ensure no accidents and damages at the workplace, reporting of any breach of company safety procedure		0	0	0
	PC22. Keep the workplace organized, swept, clean and hazard free		8	5	3
	PC23. Attend fire drills and other safety related workshops organized at the workplace		4	2	2
	PC24. Be aware of first aid, evacuation and emergency procedures		4	2	2
	PC25. Be alert of any events and do not be negligent to any safety procedures to be followed		0	0	0
	PC26. Avoid accidents while using hazardous chemicals, machines, sharp tools and equipment		4	2	2
	PC27.Use safety materials such as protective gear, goggles, caps, shoes, etc.(as applicable with workplace)		4	2	2
	PC28. Handle heavy and hazardous materials with care and using appropriate tools and handling equipment such as trolleys, ladders		4	2	2
	Total		**100**	**60**	**40**