

QUALIFICATIONS PACK - OCCUPATIONAL STANDARDS FOR PAINTS AND COATINGS INDUSTRY

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Introduction

Qualifications Pack: Extrusion Operator

SECTOR: PAINTS AND COATINGS

SUB-SECTOR: MANUFACTURING

OCCUPATION: Production – Powder Coating

REFERENCE ID: PCS/Q0602

ALIGNED TO: NCO-2004/ NIL

The Extrusion Operator converts the raw materials into flakes after premixing, in line with the process chart, and operating the mill.

Brief Job Description: The individual at work feeds the raw materials for premixing and operates the extrusion machine in order to obtain the flakes, for powder paint manufacturing process, as per company's or customer's specifications working under supervision

Personal Attributes: The job requires the individual to have: good physical strength, ability to work in paint-redolent environment, attention to details, good eyesight, and superior hand-eye coordination.

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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Job Details

Qualifications Pack Code	PCS/Q0602		
Job Role	Extrusion Operator		
Credits(NSQF)	TBD	Version number	1.0
Sector	Paints and Coatings	Drafted on	17/02/16
Sub-sector	Manufacturing	Last reviewed on	31/03/16
Occupation	Production - Powder Coating	Next review date	31/03/18
NSQC Clearance on	NA		

Job Role	Extrusion Operator
Role Description	Converting the raw materials into flakes after pre-mixing in line with the process chart and by operating the mill
NSQF level	3
Minimum Educational Qualifications	Preferably 5 TH Standard
Maximum Educational Qualifications	12 th standard
Training (Suggested but not mandatory)	Not Applicable
Minimum Job Entry Age	18 years
Experience	Not Applicable
Applicable National Occupational Standards (NOS)	<p>Compulsory:</p> <ol style="list-style-type: none"> 1. PCS/N0602 Pre-mix the raw materials 2. PCS/N0603 Operate the extrusion mill 3. PCS/N9901 Coordinate with colleagues and customers 4. PCS/N9902 Maintain standards of product/ service quality 5. PCS/N9903 Maintain OH&S standards and follow environmental norms <p>Optional:</p> <ol style="list-style-type: none"> 1. NA
Performance Criteria	As described in the relevant OS units

Qualifications Pack For Extrusion operator

Definitions

Keywords /Terms	Description
Core Skills/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 NOS, these include communication related skills that are applicable to most job roles.
Function	Function is an activity necessary for achieving the key purpose of the sector, occupation, or area of work, which can be carried out by a person or a group of persons. Functions are identified through functional analysis and form the basis of NOS.
Job role	Job role defines a unique set of functions that together form a unique employment opportunity in an organization.
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.
National Occupational Standards (NOS)	NOS are Occupational Standards which apply uniquely in the Indian context
Occupation	Occupation is a set of job roles, which perform similar/related set of functions in an industry.
Organisational Context	Organisational 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.
Performance Criteria	Performance Criteria are statements that together specify the standard of performance required when carrying out a task.
Qualifications Pack(QP)	Qualifications Pack comprises the set of NOS, together with the educational, training and other criteria required to perform a job role. A Qualifications Pack is assigned a unique qualification pack code.
Qualifications Pack Code	Qualifications Pack Code is a unique reference code that identifies a qualifications pack.
Scope	Scope is the 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 the quality of performance required.
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.
Sub-functions	Sub-functions are sub-activities essential to fulfil the achieving the objectives of the function.
Technical Knowledge	Technical Knowledge is the specific knowledge needed to accomplish specific designated responsibilities.

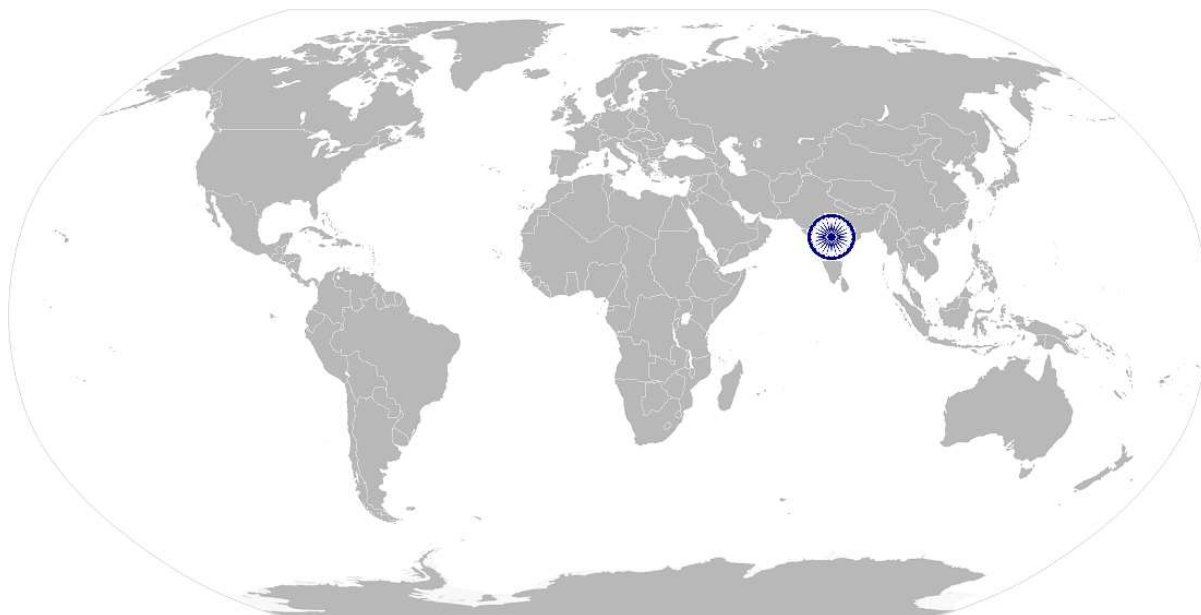
Qualifications Pack For Extrusion operator

Acronyms

Keywords /Terms	Description
NSQF	National Skills Qualifications Framework
QP	Qualification Pack
OS	Occupational Standards
OH&S	Occupational Health and Safety
PPE	Personal Protective Equipment
HR	Human Resources
TBD	To be done



National Occupational Standard



Overview

This unit is about pre-mixing the raw materials by understanding the process work sheet in line with company's or customer's specifications

PCS/N0602

Pre-mix the raw materials

Unit Code	PCS/N0602
Unit Title (Task)	Pre-mix the raw materials
Description	This OS unit is about pre-mixing the raw materials by understanding the process work sheet in line with company's or customer's specifications
Scope	<p>This unit/task covers the following:</p> <ul style="list-style-type: none"> Understand the process work or doc-sheet Collect the requisite raw materials from store Calibrate the mixer Pre mix the raw materials <p>Range statement: Extrusion machine, weigh tools</p>
Performance Criteria(PC) w.r.t. the Scope	
Element	Performance Criteria
Understanding the process sheet	<p>To be competent, the user/ individual must be able to:</p> <p>PC1. receive the process doc-sheet from the shift in-charge or production supervisor</p> <p>PC2. understand the overall process flow</p> <p>PC3. understand the specific instructions pertaining to the pre mix and extruder operation</p> <p>PC4. assimilate the materials required</p>
Collecting the requisite raw materials from store	<p>To be competent, the user/ individual must be able to:</p> <p>PC1. understand the raw materials resin, hardener, pigment, additive, fillers, etc required for the batch</p> <p>PC2. understand the location of the above mentioned class of raw materials in the store</p> <p>PC3. weigh the appropriate quantities of the raw materials using the appropriate aids and equipment like scales, gloves, etc</p> <p>PC4. replace the excess raw materials in the appropriate locations</p> <p>PC5. record the details of the raw materials taken for the batch</p>
Calibrating the mixer	<p>To be competent, the user/ individual must be able to:</p> <p>PC6. identify the mixer controls in the equipment control room or chamber</p> <p>PC7. calibrate the mixer by modifying specifications such as temperature, flow, discharge control, etc.</p> <p>PC8. ensure the calibration is in line with the process requirements</p> <p>PC9. ensure the other equipment controls are not modified, once set</p> <p>PC10. notify the shift in-charge or production supervisor about completion of calibration before exiting the equipment control room or chamber</p>
Pre mixing the raw materials	<p>To be competent, the user/ individual must be able to:</p> <p>PC11. take the weighed raw materials like resin, hardener, pigment, additive, fillers, etc</p> <p>PC12. approach the mixer and position appropriately to load the same</p> <p>PC13. load the mixer with the raw materials</p>

PCS/N0602

Pre-mix the raw materials

	<p>PC14. ensure that the mixing process is carried out for the requisite time</p> <p>PC15. ensure that the mixed by-product moves to the extruder</p> <p>PC16. halt the mixer after a particular batch, if required</p>
Knowledge and Understanding (K)	
A. Organizational Context (Knowledge of the company / organization and its processes)	<p>The individual on the job needs to know and understand:</p> <p>KA1. company's policy and work instructions on quality standards,</p> <p>KA2. company's personnel management and incentives rules</p> <p>KA3. importance of the individual's role in the workflow</p> <p>KA4. reporting structure</p> <p>KA5. occupational health and safety standards</p> <p>KA6. production area layout and quality standards</p> <p>KA7. store area layout</p>
B. Technical Knowledge	<p>The individual on the job needs to know and understand:</p> <p>KB1. different types of powder paints, their properties and uses</p> <p>KB2. overall powder paint manufacturing process</p> <p>KB3. basic properties of various resins, additives and other chemicals used</p> <p>KB4. standard operating procedures of powder paint manufacturing process</p> <p>KB5. mechanism of mixer operation</p> <p>KB6. different types of mixers available in the market and their uses</p> <p>KB7. significance of various process controls, e.g., air velocity and pressure gauges, rejecter elements and aperture, rejecter speed, feed and air ratios</p> <p>KB8. regular maintenance requirements of the mixer</p> <p>KB9. mixer calibration process and precautions</p> <p>KB10. the significance of use of safety gear while operating the mixer</p> <p>KB11. the output of every sub process in the overall powder manufacturing process</p> <p>KB12. quality standards as per company's standards</p> <p>KB13. weighing tools and methodologies</p> <p>KB14. store material recording</p> <p>KB15. material handling</p>
Skills (S)	
A. Core Skills/ Generic Skills	Reading Skills
	<p>The user/individual on the job needs to know and understand how:</p> <p>SA1. to read company's work instructions, docs and quality policy</p> <p>SA2. to read instruction manuals</p>
	Writing Skills
	<p>The user/individual on the job needs to know and understand how:</p> <p>SA3. to maintain the record as per company's policy</p> <p>SA4. to note down calibration details</p> <p>SA5. to note down details of raw materials taken for a particular batch</p>
	Oral Communication (Listening and Speaking skills)
	<p>The user/individual on the job needs to know and understand how to:</p>

PCS/N0602

Pre-mix the raw materials

	<p>SA6. interact with shift in-charge or production supervisor for smooth workflow</p> <p>SA7. convey process related concerns and work status in time for shift in-charge or production supervisor in professionally acceptable language</p> <p>SA8. interact with other team members in the production area in order to achieve time and quality related targets smoothly</p>
B. Professional Skills	Decision Making
	<p>The user/individual on the job needs to know and understand how:</p> <p>SB1. to calibrate the mixer using controls</p> <p>SB2. to take the right quantities of raw materials depending on process sheet</p>
	Plan and Organize
	<p>The user/individual on the job needs to know and understand how:</p> <p>SB3. to schedule the sequence of work process</p> <p>SB4. to arrange for materials, tools, logistics, machines and required to do the work</p> <p>SB5. to communicate to persons involved in the process as per company's standards</p> <p>SB6. to carry necessary documents as per company's standards</p>
	Customer Centricity
	<p>The user/individual on the job needs to know and understand how to:</p> <p>SB7. ensure the completion of work as per the process sheet to adhere to customer expectation</p>
	Problem Solving
	<p>The user/individual on the job needs to know and understand how to:</p> <p>SB8. resolve work related problems in the powder paint production process by effective communication or escalating to superior</p>
	Analytical Thinking
	<p>The user/individual on the job needs to know and understand how to:</p> <p>SB9. interpret process sheet</p> <p>SB10. manage the preparation process so that the pre-mixing may be done in line with process requirements</p> <p>SB11. improve work process to optimise time</p>
	Critical Thinking
	<p>The user/individual on the job needs to know and understand how to:</p> <p>SB12. flag process deviation or delays</p> <p>SB13. achieve specified productivity standards</p>

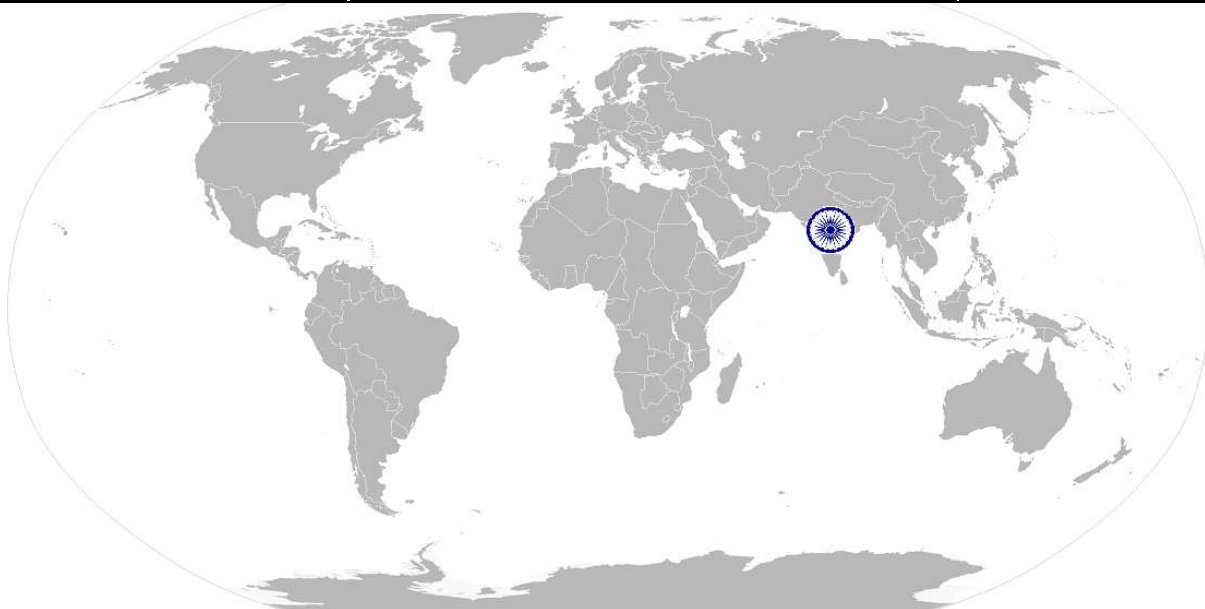


PCS/N0602

Pre-mix the raw materials

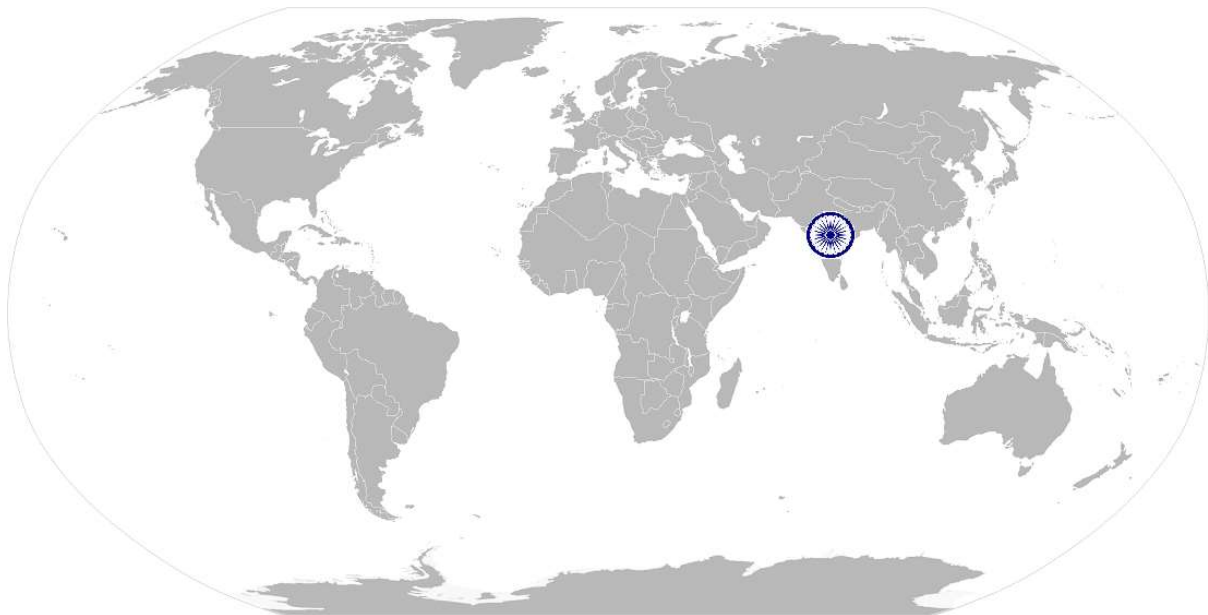
NOS Version Control

NOS Code	PCS/N0602		
Credits(NSQF)	TBD	Version number	1.0
Industry	Paints and Coatings	Drafted on	17/02/16
Industry Sub-sector	Manufacturing	Last reviewed on	31/03/16
Occupation	Production – Powder Coating	Next review date	31/03/18





National Occupational Standard



Overview

This unit is about operating the extrusion mill in order to obtain the flakes for further grinding into powder paint.

PCS/N0603

Operate the extrusion mill

National Occupational Standard

Unit Code	PCS/N0603
Unit Title (Task)	Operate the extrusion mill
Description	This OS unit is about operating the extrusion mill in order to obtain the flakes for further grinding into powder paint
Scope	<p>This unit/task covers the following:</p> <ul style="list-style-type: none"> • Calibrate the extruder • Operate the extruder • Visually track the quality of powder paint process • Clean the extruder <p>Range statement: Extrusion machine, weigh tools</p>
Performance Criteria(PC) w.r.t. the Scope	
Element	Performance Criteria
Calibrating the extruder	<p>To be competent, the user/ individual must be able to:</p> <p>PC1. identify extruder controls in the equipment control room or chamber</p> <p>PC2. calibrate the extruder by modifying specifications such as temperature, flow, pressure, etc.</p> <p>PC3. ensure the calibration is in line with the process requirements</p> <p>PC4. ensure the other equipment controls are not modified, once set</p> <p>PC5. notify the shift in-charge or production supervisor about completion of calibration before exiting the equipment control room or chamber</p>
Operating the extruder	<p>To be competent, the user/ individual must be able to:</p> <p>PC6. operate the extruder as per standard operating procedure</p> <p>PC7. ensure the flakes are discharged in the discharge crater</p> <p>PC8. ensure the flakes are cooled for the stipulated time</p> <p>PC9. ensure the ground product moves to the next stage, i.e., grinding process in stipulated time and as per specified quality standards</p> <p>PC10. cease the operation once the batch is completed</p>
Visual tracking of quality of powder paint process	<p>To be competent, the user/ individual must be able to:</p> <p>PC11. inspect the overall process flow in order to achieve productivity standards</p> <p>PC12. visually assess the flakes from the extruder to check if they are in line with process requirement</p> <p>PC13. notify the shift in-charge / production supervisor in case of any significant deviation from the process requirements</p>
Cleaning the extruder	<p>To be competent, the user/ individual must be able to:</p> <p>PC14. identify the various parts / chambers of the extruder</p> <p>PC15. understand how the extruder needs to be handled during cleaning</p> <p>PC16. clean the various parts of the extruder like barrel, liner, flow channels, etc.</p> <p>PC17. make the extruder ready in working condition for next batch</p>
Knowledge and Understanding (K)	
A. Organizational	<p>The individual on the job needs to know and understand:</p> <p>KA1. company's policy and work instructions on quality standards,</p>



PCS/N0603

Operate the extrusion mill

Context (Knowledge of the company / organization and its processes)	KA2. company's personnel management and incentives rules KA3. importance of the individual's role in the workflow KA4. reporting structure KA5. occupational health and safety standards KA6. production area layout and standards KA7. cleanliness norms of organization
B. Technical Knowledge	The individual on the job needs to know and understand: KB1. various types of materials used to clean the extruder KB2. overall powder paint manufacturing process KB3. effects of various resins, additives and other chemicals on extruder and how they need to be cleaned KB4. various parts of the extruder such as barrel, liner, flow channels frame, etc. KB5. different types of extruders available in the market and their cleaning procedures KB6. regular maintenance requirements of the extruder KB7. extruder calibration process and precautions KB8. extruder operation procedures KB9. the significance of use of safety gear while cleaning the extruder KB10. impact of calibration parameters on the overall process KB11. cooling period for the flakes depending on the end product KB12. significance of making the extruder ready for the next batch post cleaning KB13. waste disposal techniques KB14. the hazards and safety precautions associated with the cleaning process KB15. various cleaning techniques KB16. the handling of supplies and tools in safe and sound manner KB17. quality standards that have to be maintained while cleaning
Skills (S)	
A. Core Skills/ Generic Skills	Reading Skills
	The user/individual on the job needs to know and understand how: SA1. to read company's work instructions and quality policy SA2. to read instructions displayed
	Writing Skills
	The user/individual on the job needs to know and understand how: SA3. to complete the necessary documentation as per company's work instructions SA4. to create and maintain cleaning records
	Oral Communication (Listening and Speaking skills)
	The user/individual on the job needs to know and understand how: SA5. listen to shift in-charge / production supervisor SA6. answer the queries of shift in-charge / production supervisor in professionally acceptable language SA7. interact with other team members in the production area

PCS/N0603

Operate the extrusion mill

B. Professional Skills	Decision Making
	The user/individual on the job needs to know and understand how: SB1. to select the chemical for effective extruder cleaning SB2. to undertake extruder cleaning using chemicals and manual tools without damaging it SB3. to inform shift in charge / production supervisor in time about any problems or hazards SB4. to calibrate the extruder parameters like temperature, pressure, time, etc.
	Plan and Organize
	The user/individual on the job needs to know and understand how: SB5. to prepare for contingencies or rescheduling or special requirements SB6. to prioritize the work process in order to complete as per agreed schedule SB7. to work in coordination with co-workers to do the quality work in time SB8. to manage time so that the overall production flow is not impacted
	Customer Centricity
	The user/individual on the job needs to know and understand how to: SB9. ensure the completion of work as per the process sheet to adhere to customer expectation
	Problem Solving
	The user/individual on the job needs to know and understand how: SB10. to solve work related problems, e.g., cleaning equipment management SB11. to coordinate with team and customer to find satisfactory solutions to contingences
	Analytical Thinking
	The user/individual on the job needs to know and understand how to: SB12. use varieties of hand tools like clean spray hose, brush or stick etc. SB13. undertake routine maintenance of hand tools SB14. estimate the time taken for extruder cleaning SB15. assess effort required for extruder cleaning SB16. assess and estimate the chemicals and tools required for extruder cleaning SB17. assemble the extruder post cleaning SB18. interpret process sheet SB19. manage the preparation process so that the extrusion may be done in line with process requirements SB20. improve work process to optimise time SB21. ensure the flakes have cooled sufficiently before grinding
	Critical Thinking
	The user/individual on the job needs to know and understand how to: SB22. flag process deviation or delays

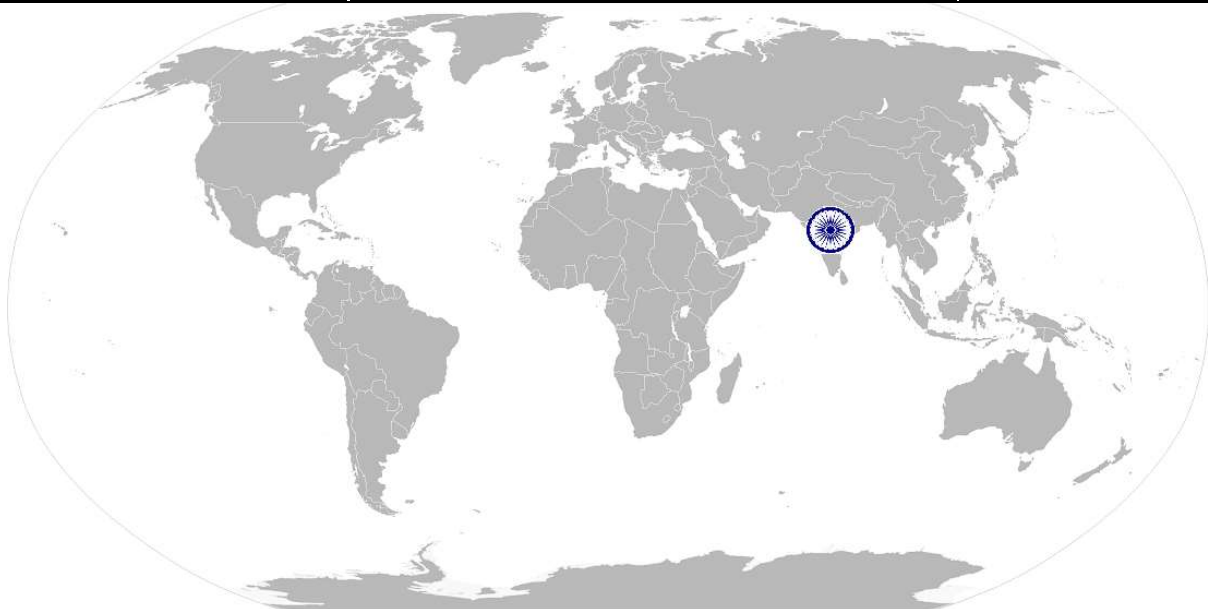


PCS/N0603

Operate the extrusion mill

NOS Version Control

NOS Code	PCS/N0603		
Credits(NSQF)	TBD	Version number	1.0
Industry	Paints and Coatings	Drafted on	17/02/16
Industry Sub-sector	Manufacturing	Last reviewed on	31/03/16
Occupation	Production – Powder Coating	Next review date	31/03/18





National Occupational Standard



Overview

This unit is about communicating effectively with superiors, colleagues and customers to achieve a smooth workflow.



PCS/N9901

Communicate with colleagues and/ or customers

National Occupational Standard

Unit Code	PCS/N9901
Unit Title (Task)	Coordinate with colleagues and/or customers
Description	This OS unit is about communicating effectively with superiors, colleagues and customer to achieve a smooth workflow
Scope	<p>This unit/task covers the following:</p> <ul style="list-style-type: none"> • Interact with superior • Communicate with colleagues • Communicate effectively with customers, if required
Performance Criteria(PC) w.r.t. the Scope	
Element	Performance Criteria
Interacting with superior	<p>To be competent, the user/ individual must be able to:</p> <p>PC1. receive job order and instructions from reporting superior</p> <p>PC2. understand the work output requirements, targets, performance indicators and incentives</p> <p>PC3. deliver quality work on time and report any anticipated reasons for delays</p> <p>PC4. escalate unresolved problems or complaints to the relevant senior</p> <p>PC5. communicate maintenance and repair schedule proactively to the superior</p> <p>PC6. receive feedback on work standards</p> <p>PC7. document the completed work schedule and handover to the superior</p>
Communicating with colleagues	<p>To be competent, the user/ individual must be able to:</p> <p>PC8. exhibit trust, support and respect to all the colleagues in the workplace</p> <p>PC9. aim to achieve smooth workflow</p> <p>PC10. help and assist colleagues with information and knowledge</p> <p>PC11. seek assistance from the colleagues when required</p> <p>PC12. identify the potential and existing conflicts with the colleagues and resolve</p> <p>PC13. pass on essential information to other colleagues on timely basis</p> <p>PC14. maintain the etiquette, use polite language, demonstrate responsible and disciplined behaviors to the colleagues</p> <p>PC15. interact with colleagues from different functions clearly and effectively on all aspects to carry out the work among the team and understand the nature of their work</p> <p>PC16. put team over individual goals and multi task or share work where necessary supporting the colleagues</p> <p>PC17. highlight any errors of colleagues, help to rectify and ensure quality output</p> <p>PC18. work with cooperation, coordination, communication and collaboration, with shared goals and supporting each others performance</p>
Communicating effectively with customers, if required	<p>To be competent, the user/ individual must be able to:</p> <p>PC19. ask more questions to the customers and identify their needs</p> <p>PC20. possess strong knowledge on the product, services and market</p> <p>PC21. brief the customers clearly on potential costs and hazards</p> <p>PC22. communicate with the customers in a polite, professional and friendly manner</p> <p>PC23. build effective but impersonal relationship with the customers</p>

PCS/N9901

Coordinate with colleagues and/ or customers

	<p>PC24. ensure the appropriate language and tone are used with customers</p> <p>PC25. listen actively and have a two way communication</p> <p>PC26. be sensitive to the gender, cultural and social differences such as modes of greeting, formality, etc.</p> <p>PC27. understand the customer expectations correctly and provide the appropriate products and services</p> <p>PC28. understand the customer dissatisfaction and address or escalate their complaints effectively</p> <p>PC29. maintain a positive, sensible and cooperative manner all time</p> <p>PC30. ensure to maintain a proper body language, dress code, gestures and etiquettes towards the customers</p> <p>PC31. avoid interrupting the customers while they talk</p> <p>PC32. ensure to avoid negative questions and statements to the customers</p> <p>PC33. inform the customers on any issues or problems before hand and also on the developments involving them</p> <p>PC34. ensure to respond back to the customer immediately for their voice messages, e-mails, apps, etc.</p> <p>PC35. develop good rapport with the customers and promote other products and services</p> <p>PC36. seek feedback from the customers on their understanding to what was discussed</p> <p>PC37. explain the terms and conditions clearly</p>
Knowledge and Understanding (K)	
<p>A. Organizational</p> <p>Context (Knowledge of the company / organization and its processes)</p>	<p>The user/individual on the job needs to know and understand:</p> <p>KA1. company's policies on personnel management, effective team work at workplace</p> <p>KA2. company's HR policies</p> <p>KA3. company's reporting structure</p> <p>KA4. company's documentation policy</p> <p>KA5. company's customer profile</p> <p>KA6. occupational health and safety standards</p>
<p>B. Technical Knowledge</p>	<p>The user/individual on the job needs to know and understand:</p> <p>KB1. methods for effective communication with various categories of people and the different departments in the organization</p> <p>KB2. significance of team coordination and productivity targets of the organisation</p> <p>KB3. how to record the job activity as required on various types of documents?</p> <p>KB4. how to use computer or smartphone to communicate effectively and productively?</p> <p>KB5. significance of helping colleagues with specific issues and problems</p> <p>KB6. importance of meeting quality and time standards as a team</p> <p>KB7. how to practice effective listening and talking</p> <p>KB8. effective use of voice tone and pitch for communication</p> <p>KB9. how to demonstrate ethics and convey discipline to the customers?</p>



PCS/N9901

Coordinate with colleagues and/ or customers

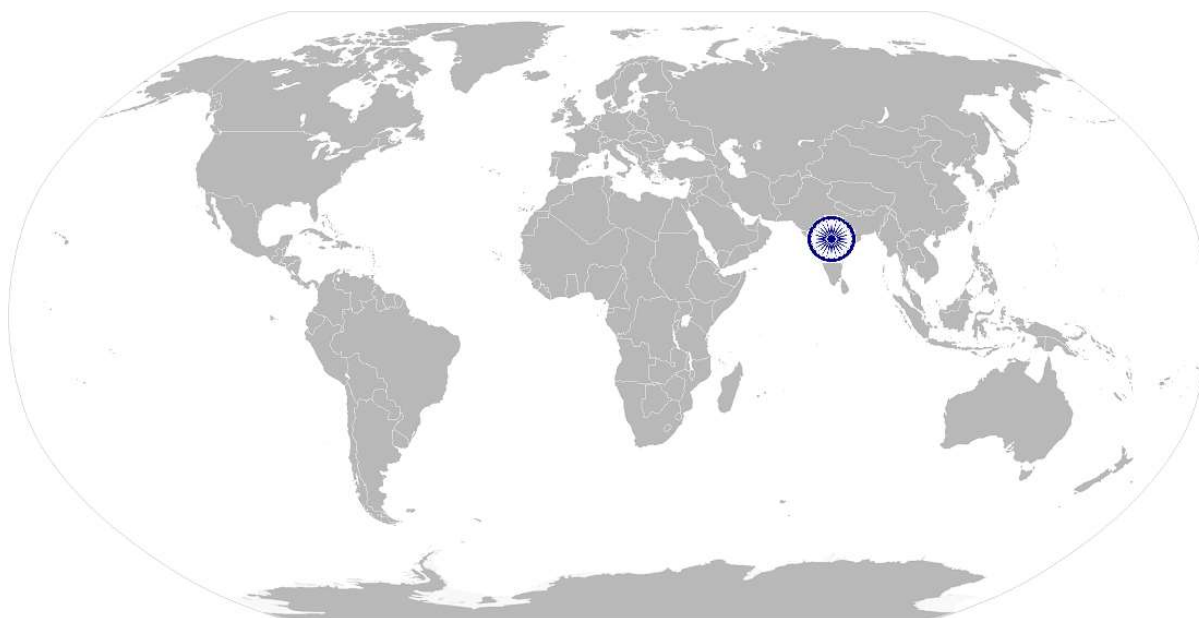
	KB10. how to build effective working relationship with mutual trust and respect within the team KB11. importance of dealing with grievances effectively and in time
Skills (S)	
A. Core Skills/ Generic Skills	Reading Skills
	The user/ individual on the job needs to know and understand how to: SA1. read job sheets, company policy documents and information displayed at the workplace SA2. read notes/comments from the supervisor
	Writing Skills
	The user/ individual on the job needs to know and understand how to: SA3. fill up documentation pertaining to job requirement
	Oral Communication (Listening and Speaking skills)
	The user/ individual on the job needs to know and understand how to: SA4. interact with team members to work efficiently SA5. communicate effectively with superior to achieve smooth workflow SA6. communicate effectively with the customers to build a good rapport with them SA7. use language that the customer or colleague understands SA8. use the communications systems of the company, e.g., telephone, fax, public announcement systems SA9. E-mail and use Internet for communicating SA10. use of audio-visual aids to communicate complex issues
	Decision Making
	The user/ individual on the job needs to know and understand how to: SB1. spot and communicate potential areas of disruptions to work process and report the same SB2. report to supervisor and deal with a colleague individually, depending on the type of concern
	Plan and Organize
	The user/ individual on the job needs to know and understand how to: SB3. plan communication strategy in order to avoid conflicts and work disruption
B. Professional Skills	Customer Centricity
	The user/ individual on the job needs to know and understand how to: SB4. practice patient listening, careful talking and paraphrasing in order to avoid misunderstanding
	Problem Solving
	The user/ individual on the job needs to know and understand how to: SB5. coordinate with different departments and multi-task as necessary SB6. contribute to quality of team work and achieve smooth workflow SB7. share work load as required



PCS/N9901

Coordinate with colleagues and/ or customers

	SB8. delegate work in consultation with superior or as necessary instead of allowing work to pile up
	Analytical Thinking
	The user/ individual on the job needs to know and understand how to: SB9. resolve recurring inter-personal conflicts by clear and two-way dialogue
	Critical Thinking
	The user/ individual on the job needs to know and understand how to: SB10. improve work processes by interacting with others and adopting best practices





PCS/N9901

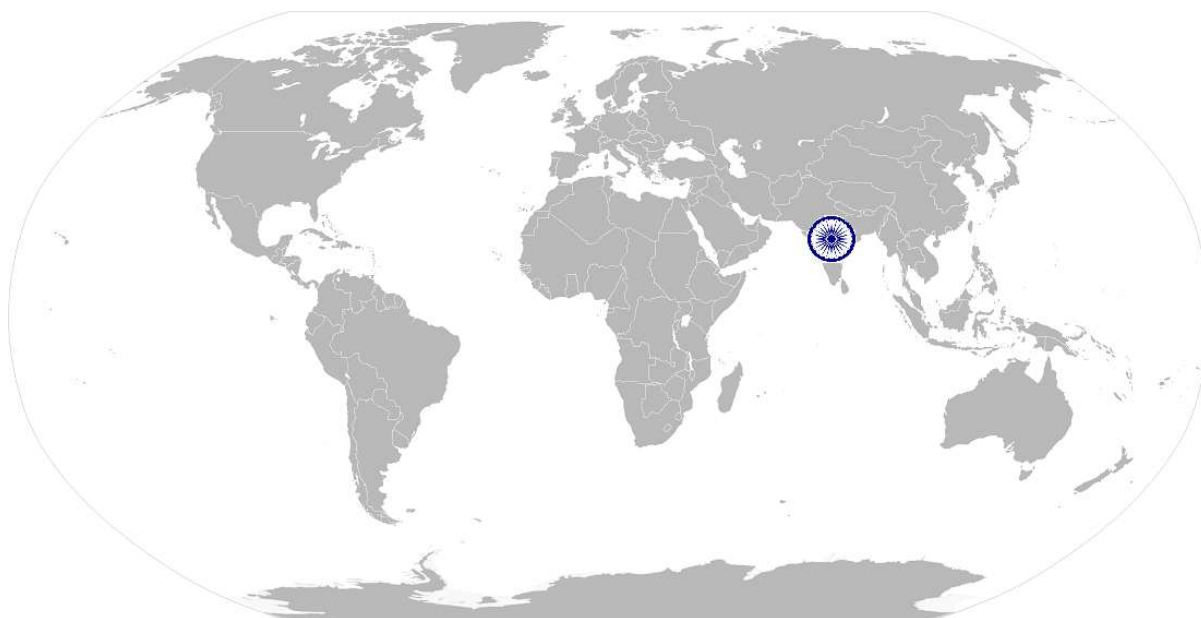
Coordinate with colleagues and/ or customers

NOS Version Control

NOS Code	PCS/N9901		
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Industry	Paints and Coatings	Drafted on	17/02/16
Industry Sub-sector	Manufacturing and Application	Last reviewed on	31/03/16
Occupation	Production – Powder Coating	Next review date	31/03/18



National Occupational Standard



Overview

This unit is about understanding accepted levels of standards of product quality or customer service and executing the designated work in a manner that results in 100% satisfaction.

PCS/N9902

Maintain standards of product/service quality

National Occupational Standard

Unit Code	PCS/N9902
Unit Title (Task)	Maintain standards of product/ service quality
Description	This OS unit is about understanding accepted levels of standards of product quality or customer service and executing the designated work in a manner that results in 100% satisfaction.
Scope	<p>This unit/task covers the following:</p> <ul style="list-style-type: none"> Engage with superior or customers to understand their product/service quality requirements Achieve 100% satisfaction for given quality Work to fulfil end-customers's expectations
Performance Criteria(PC) w.r.t. the Scope	
Element	Performance Criteria
Engaging with superior or customers to understand product/ service quality requirements	<p>To be competent, the user/ individual must be able to:</p> <p>PC1. keep in mind the profiles of expected customers</p> <p>PC2. understand the target customers and their product/ service quality requirements as defined by the company</p> <p>PC3. receive superior's/ customer feedback from regularly</p> <p>PC4. aim to build a good connect with the customers through quality product/ service</p> <p>PC5. keep tab on frequent discussions with regular customers on general likes and dislikes in the market, latest trends, customer expectations, etc.</p> <p>PC6. receive updates on regular feedbacks from the clients on current service, complaints, and improvements to be made, etc.</p> <p>PC7. if necessary, compulsively seek customer rating of product/ service in order to help develop a set of regularly improved procedures</p> <p>PC8. demonstrate quality orientation at all level</p> <p>PC9. aim to gain their long lasting loyalty through satisfaction</p>
Achieving 100% customer satisfaction for given quality	<p>To be competent, the user/ individual must be able to:</p> <p>PC10. ensure 100% customer satisfaction via product/ service quality</p> <p>PC11. treat the customers fairly and with due respect</p> <p>PC12. focus on executing company's marketing strategies and product development needs</p> <p>PC13. focus on enhancing brand value of company by maintaining or enhancing quality standards</p>
Fulfilling customer requirement	<p>To be competent, the user/ individual must be able to:</p> <p>PC14. ensure that customer expectations are met</p> <p>PC15. learn to read customers' needs and wants</p> <p>PC16. willingly accept and implement new and innovative products and services that help improve customer satisfaction</p> <p>PC17. communicate feedback of customer to senior, especially, the negative feedback</p> <p>PC18. maintain close contact with the customers and focus groups</p>

PCS/N9902

Maintain standards of product/ service quality

	<p>PC19. offer promotions to improve product satisfaction level to the customers periodically</p> <p>PC20. weigh the cost of fulfilling unscheduled customer requests, consult with senior and advise the customer on alternatives</p>
Knowledge and Understanding (K)	
<p>A. Organizational</p> <p>Context (Knowledge of the company / organization and its processes)</p>	<p>The user/individual on the job needs to know and understand:</p> <p>KA1. company's quality standards policy</p> <p>KA2. company's HR policies</p> <p>KA3. company's reporting structure</p> <p>KA4. company's documentation policy for quality compliance</p> <p>KA5. company's end-customer profile</p>
<p>B. Technical Knowledge</p>	<p>The user/individual on the job needs to know and understand:</p> <p>KB1. significance of maintaining or enhancing company's quality standards</p> <p>KB2. significance of treating the customers with respect and professional way</p> <p>KB3. different types of parameters tested for quality</p> <p>KB4. test pass/ fail criteria and acceptable tolerance levels</p> <p>KB5. equipment used for quality tests</p> <p>KB6. importance of gaining customer loyalty</p> <p>KB7. methods of engaging with the customers effectively and professionally, for customer facing activities</p> <p>KB8. ways to improve company's customer satisfaction rating</p> <p>KB9. prevailing market standards of customer satisfaction</p> <p>KB10. standard operating procedure (SOP)</p> <p>KB11. the variety of common and unscheduled requests to expect in customer facing activities</p> <p>KB12. significance of being transparent and courteous under all circumstances involving customer interaction without losing composure</p>
Skills (S)	
<p>A. Core Skills/ Generic Skills</p>	<p>Reading Skills</p> <p>The user/ individual on the job needs to know and understand how to:</p> <p>SA1. read job sheets, company policy documents and information displayed at the workplace about quality standards</p> <p>SA2. read notes/comments from the supervisor</p>
	<p>Writing Skills</p> <p>The user/ individual on the job needs to know and understand how to:</p> <p>SA3. fill up documentation pertaining to one's role in customer satisfaction</p>
	<p>Oral Communication (Listening and Speaking skills)</p> <p>The user/ individual on the job needs to know and understand how to:</p> <p>SA4. interact with team members to achieve quality standards</p> <p>SA5. communicate effectively with customers in field jobs</p>



PCS/N9902

Maintain standards of product/ service quality

	<p>SA6. engage with customer to understand their expectations in field jobs</p> <p>SA7. company standards and effectiveness improvements pattern</p> <p>SA8. resolve customer's concerns satisfactorily within timeframe stipulated by the company or as agreed with customer or colleague</p> <p>SA9. use Internet for updating on current quality related practices</p> <p>SA10. use of audio-visual aids to communicate recurring quality concerns</p>
B. Professional Skills	Decision Making
	<p>The user/ individual on the job needs to know and understand:</p> <p>SB1. how to spot and when to report potential areas of recurring quality concerns</p> <p>SB2. how to address the complaints and handle the dissatisfied the customers</p>
	Plan and Organize
	<p>The user/ individual on the job needs to know and understand:</p> <p>SB3. how to plan workflow to achieve/ deliver 100% quality in the given time and with given equipment</p>
	Customer Centricity
	<p>The user/ individual on the job needs to know and understand:</p> <p>SB4. how to earn full customer loyalty</p>
	Problem Solving
	<p>The user/ individual on the job needs to know and understand how to:</p> <p>SB5. coordinate with different departments in order to service the customer better</p> <p>SB6. contribute to quality of team work and achieve smooth workflow</p> <p>SB7. share work load as required</p>
	Analytical Thinking
	<p>The user/ individual on the job needs to know and understand how to:</p> <p>SB8. communicate new product quality standards to different stakeholders in the market and train colleagues for quality, if required</p>
	Critical Thinking
	<p>The user/ individual on the job needs to know and understand how to:</p> <p>SB9. improve work processes by interacting with customers and adopting best practices</p> <p>SB10. resolve recurring inter-personal or system related conflicts with colleagues that hinder customer service</p> <p>SB11. act upon constructively on any problems as pointed by customers</p> <p>SB12. handle personality clashes effectively</p>



PCS/N9902

Maintain standards of product/ service quality

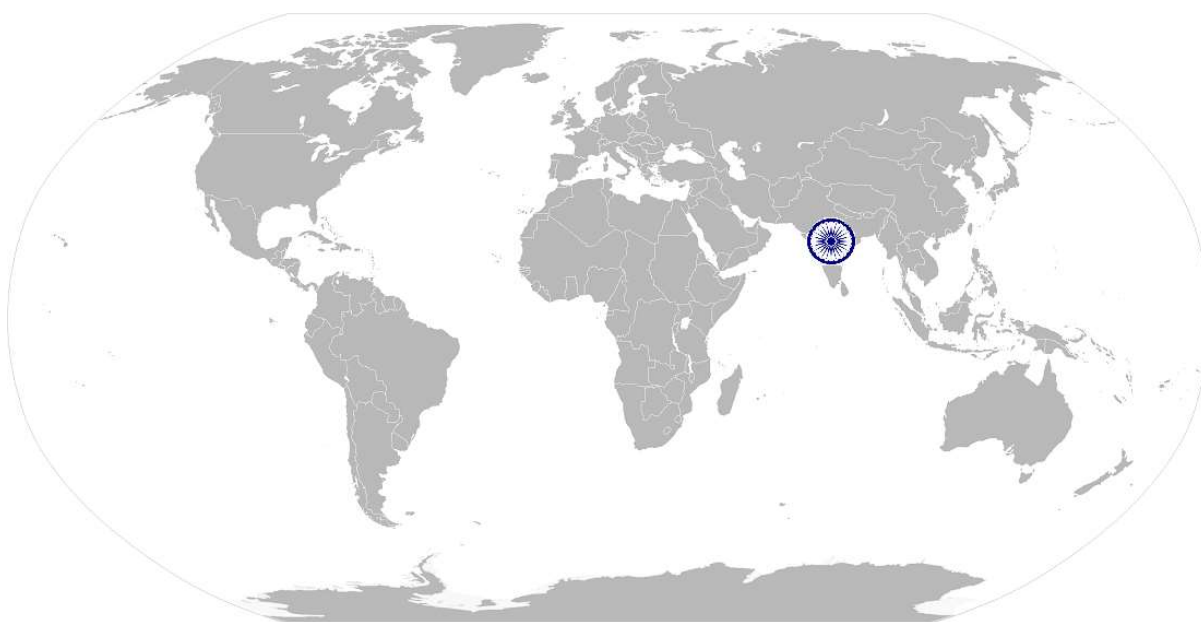
NOS Version Control

NOS Code	PCS/N9902		
Credits(NSQF)	TBD	Version number	1.0
Industry	Paints and Coatings	Drafted on	17/02/16
Industry Sub-sector	Manufacturing and Application	Last reviewed on	31/03/16
Occupation	Production – Powder Coating	Next review date	31/03/18





National Occupational Standard



Overview

This unit is about complying with workplace health, hygiene, safety and environmental standards to have a hazard-free environment and avoid downtime. It is also about following government laid norms for waste treatment and disposal.

PCS/N9903 Maintain OH&S standards and follow environmental norms

National Occupational Standard

Unit Code	PCS/N9903
Unit Title (Task)	Maintain OH&S standards and follow environmental norms
Description	This OS unit is about complying with workplace health, hygiene, safety and environmental standards to have a hazard-free environment and avoid downtime. It is also about following government laid norms for waste treatment and disposal
Scope	<p>This unit/task covers the following:</p> <ul style="list-style-type: none"> • Take precautionary measures to avoid work hazards and environmental damage • Follow standard health, safety and environmental policies and procedures • Use safety tools and/ or personal protective equipment • Achieve health, safety and environmental standards
Performance Criteria(PC) w.r.t. the Scope	
Element	Performance Criteria
Taking precautionary measures to avoid health, safety and environmental hazards	<p>To be competent, the user/ individual must be able to:</p> <p>PC1. assess the various health, safety and environmental hazards in the work areas</p> <p>PC2. take necessary steps to eliminate or minimize the hazards</p> <p>PC3. analyze the causes of accidents at the workplace</p> <p>PC4. suggest measures to prevent such accidents from taking place</p> <p>PC5. take preventive measures to avoid risk of burns and other injury due to contact with hot surfaces, gas, fire, hot fluids/ liquids, etc.</p> <p>PC6. suggest methods to improve the existing safety procedures at the workplace</p> <p>PC7. dispose waste in the designated areas safely as per company's policies and rules</p> <p>PC8. maintain appropriate ventilation in the rooms while there is more exposure to paint vapours</p> <p>PC9. avoid dumping unused cans to safeguard the environment</p>
Following standard health, safety and environmental policies and procedure	<p>To be competent, the user/individual must be able to:</p> <p>PC10. be aware of the locations of fire extinguishers, emergency exits, etc.</p> <p>PC11. practice correct emergency procedures</p> <p>PC12. check and review the storage areas frequently</p> <p>PC13. stack items in an organized way and use safe lifting techniques to reduce risk of injuries from handling procedures at the storage areas</p> <p>PC14. ensure to be safe while handling materials, tools, acids, chemicals, equipment, etc.</p> <p>PC15. store the chemicals and acids in a well-ventilated and locked areas with warning signs displayed</p> <p>PC16. ensure safe techniques while moving furniture and fixtures</p> <p>PC17. ensure to reduce risk of injury from use of electrical tools</p> <p>PC18. read the manufacturer's manual carefully before use of any equipment</p> <p>PC19. unplug the electrical equipment before performing maintenance</p> <p>PC20. keep the floors free from oil, water and grease to avoid slippery surface</p> <p>PC21. use rubber mats in the places where floors are constantly wet</p> <p>PC22. ensure safety from injuries of cuts to loss of fingers, while handling sharp</p>

PCS/N9903 Maintain OH&S standards and follow environmental norms

	<p>hazardous tools and equipment</p> <p>PC23. use flat surfaces, secure holding and protective wear while using such sharp tools</p> <p>PC24. use health, safety and environmental protection practices for storing, cleaning, and maintaining tools, equipment, and supplies</p> <p>PC25. practice ergonomic lifting, bending, or moving equipment and supplies</p> <p>PC26. identify the requirement for maintaining environmental norms</p> <p>PC27. comply with the environmental safety norms while on work to prevent accidents and health hazards</p> <p>PC28. follow company policies and rules regarding use of hazardous materials to avoid health, safety and environmental impacts caused by them</p>
Using safety tools or Personal Protective Equipment	<p>To be competent, the user/individual must be able to:</p> <p>PC29. ensure the employees have access to first aid kit when needed</p> <p>PC30. ensure all equipment and tools are stored and maintained properly and safe to use</p> <p>PC31. ensure to use personal protective equipment and safety gear such as gloves, mask, headwear, footwear, glasses, goggles, etc. for specific tasks and work conditions where required</p> <p>PC32. ensure to display safety signs at places where necessary for people to be cautious</p> <p>PC33. ensure electrical precautions such as insulated clothing, adequate equipment insulation, dry work area, switch off the power supply when not required, etc.</p> <p>PC34. ensure availability of general health and safety equipment such as fire extinguishers, first aid equipment, safety equipment, clothing, safety installations such as fire exits, exhaust fans, etc.</p>
Achieving health, safety and environmental standards	<p>To be competent, the user/individual must be able to:</p> <p>PC35. document all the first aid treatments, inspections, etc., conducted to keep track of the safety measures undertaken</p> <p>PC36. document all the environmental hazards caused and the measures undertaken to comply with the established safety procedures of the workplace</p> <p>PC37. report to the supervisor on any problems and hazards identified and any breach of environmental procedures.</p> <p>PC38. ensure zero accident at workplace</p> <p>PC39. adhere to safety standards and ensure no material damage</p> <p>PC40. take necessary action and correct any environmental hazards caused</p>
Knowledge and Understanding (K)	
A. Organizational Context (Knowledge of the company / organization and its processes)	<p>The individual on the job needs to know and understand:</p> <p>KA1. company's policies on health, safety and environmental procedures at the workplace</p> <p>KA2. company's reporting structure</p> <p>KA3. company's documentation policy</p> <p>KA4. occupational health, safety and environmental standards.</p>



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B. Technical Knowledge	<p>The individual on the job needs to know and understand:</p> <ul style="list-style-type: none"> KB1. the purpose and usage of protective gears such as gloves , protective goggles, masks, etc. while working KB2. use of first aid at workplace KB3. significance of accidental risks to the worker and productivity loss KB4. reporting procedure or heirarchy for signs of damage and potential hazards KB5. methods to minimize accidental risks KB6. safe handling of chemicals, acids, etc. for cleaning KB7. material handling procedure KB8. standard operating procedure for safety drills and equipment maintenance KB9. precautionary activities to be followed for work place safety KB10. operation of tools and electrical equipment KB11. emergency procedures to be followed in case of an mishap such as fire, accidents, etc. KB12. government and company's environmental norms KB13. solid, liquid and gaseous waste disposal, treatment norms and equipment KB14. necessary action to be taken for the hazards identified KB15. methods to minimize environmental hazards KB16. precautionary activities to be followed to minimize environmental impacts
Skills (S)	
A. Core Skills/ Generic Skills	<p>Reading Skills</p> <p>The user/individual on the job needs to know and understand how to:</p> <ul style="list-style-type: none"> SA1. read and interpret the relevant organisation policies, procedures and diagrams that identify health, safety and safe environmental practices. SA2. read job sheets, company policy documents and information displayed at the workplace for health, safety and environment. SA3. read notes/comments from the supervisor <p>Writing Skills</p> <p>The user/individual on the job needs to know and understand how to:</p> <ul style="list-style-type: none"> SA4. fill up documentation related to health, safety and environmental standards, if required <p>Oral Communication (Listening and Speaking skills)</p> <p>The user/individual on the job needs to know and understand how to:</p> <ul style="list-style-type: none"> SA5. verbally report health, safety and environmental hazards and poor organisation practice. SA6. communicate to the supervisor about the work health, safety and environmental issues SA7. receive instructions from supervisor on minimizing the risks SA8. communicate with co-workers about the precautions to be taken for hazards free work



PCS/N9903 Maintain OH&S standards and follow environmental norms

B. Professional Skills	Decision Making
	The user/individual on the job needs to know and understand how to:
	SB1. take preventive measures for the identified hazards
	SB2. select appropriate hand tools and personal protection equipment
	SB3. identify first aid needs in case of an injury
	Plan and Organize
	The user/individual on the job needs to know and understand how to:
	SB4. incorporate elements of health, safety and environment in daily work practices
	Customer Centricity
	The user/ individual on the job needs to know and understand how to:
	SB5. ensure targeted product/ service delivery by practicing stipulated standards of occupational health safety and environmental measures
	Problem Solving
	The user/individual on the job needs to know and understand how to:
	SB6. take care of personal and equipment protection
	SB7. identify the hazards and suggest possible solutions
	Analytical Thinking
	The user/individual on the job needs to know and understand how to:
	SB8. use safety equipment such as fire extinguisher during fire accidents
	SB9. store chemicals and tools in a safe way
	SB10. use tools and equipment without causing any injury to fellow workers
	SB11. analyse the seriousness of the hazards
	Critical Thinking
	The user/individual on the job needs to know and understand how to:
	SB12. evolve smooth workflow by avoiding hazards at workplace
	SB13. evaluate and apply the possible solutions for the hazards, as necessary



PCS/N9903 Maintain OH&S standards and follow environmental norms

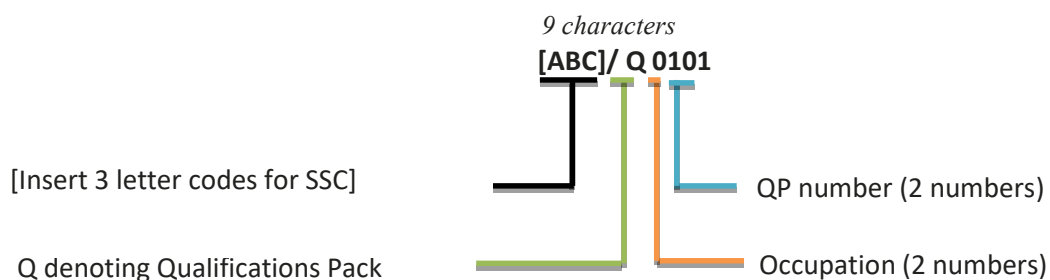
NOS Version Control

NOS Code	PCS/N9903		
Credits(NSQF)	TBD	Version number	1.0
Industry	Paints and Coatings	Drafted on	17/02/16
Industry Sub-sector	Manufacturing and Application	Last reviewed on	31/03/16
Occupation	Production - Powder Coating	Next review date	31/03/18

Annexure

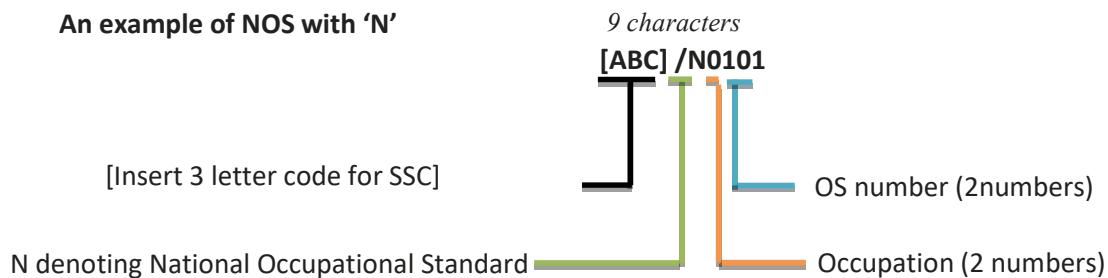
Nomenclature for QP and NOS

Qualifications Pack



Occupational Standard

An example of NOS with 'N'



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

Sub-sector	Range of Occupation numbers
Manufacturing	01 - 49
Application	50 - 59
Unused	60 - 97
Generic occupation	98 - 99

Sequence	Description	Example
Three letters	Industry name	PCS
Slash	/	/
Next letter	Whether QP or NOS	Q / N
Next two numbers	Occupation code	01
Next two numbers	OS number	01

ASSESSMENT CRITERIA

Job Role : Extrusion Operator
Qualification Pack : PCS/Q0602
Sector Skill Council : Paints and Coatings

1. Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Performance Criteria (PC) will be assigned marks proportional to its importance in NOS. SSC will also lay down proportion of marks for Theory and Skills Practical for each PC.
2. The assessment for the theory part will be based on knowledge bank of questions created by the SSC.
3. Individual assessment agencies will create unique question papers for theory part for each candidate at each examination/training center (as per assessment criteria below)
4. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/training center based on this criteria
5. To pass the Qualification Pack , every trainee should score a minimum of 60% in every NOS
6. In case of successfully passing only certain number of NOS's, the trainee is eligible to take subsequent assessment on the balance NOS's to pass the Qualification Pack.

	Performance Criteria	Total Marks (250)	Out of	Theory	Skills Practical
PCS/N0602 Premix the raw materials	PC1. receive the process doc-sheet from the shift in-charge or production supervisor	50	2.5	1	1.5
	PC2. understand the overall process flow		2.5	1	1.5
	PC3. understand the specific instructions pertaining to the premix and extruder operation		2.5	1	1.5
	PC4. assimilate the materials required		2.5	1	1.5
	PC5. understand the raw materials resin, hardener, pigment, additive, fillers, etc. required for the batch		2.5	1	1.5
	PC6. understand the location of the above mentioned class of raw materials in the store		2.5	1	1.5
	PC7. weigh the appropriate quantities of the raw materials using the appropriate aids and equipment like scales, gloves, etc		2.5	1	1.5
	PC8. replace the excess raw materials in the appropriate locations		2.5	1	1.5
	PC9. record the details of the raw materials taken for the batch		2.5	1	1.5
	PC10. identify the mixer controls in the equipment control room or chamber		2.5	1	1.5
	PC11. calibrate the mixer by modifying specifications such as temperature, flow, discharge control, etc.		2.5	1	1.5
	PC12. ensure the calibration is in line with the process requirements		2.5	1	1.5

Qualifications Pack For Extrusion Operator

	Performance Criteria	Total Marks (250)	Out of	Theory	Skills Practical
	PC13. ensure the other equipment controls are not modified, once set		2.5	1	1.5
	PC14. notify the shift in-charge or production supervisor about completion of calibration before exiting the equipment control room or chamber		2.5	1	1.5
	PC15. take the weighed raw materials like resin, hardener, pigment, additive, fillers, etc		2.5	1	1.5
	PC16. approach the mixer and position appropriately to load the same		2.5	1	1.5
	PC17. load the mixer with the raw materials		2.5	1	1.5
	PC18. ensure that the mixing process is carried out for the requisite time		2.5	1	1.5
	PC19. ensure that the mixed by-product moves to the extruder		2.5	1	1.5
	PC20. halt the mixer after a particular batch, if required		2.5	1	1.5
	POINTS		50	20	30
	TOTAL POINTS		50		

	Performance Criteria	Total Marks (250)	Out of	Theory	Skills Practical
PCS/N0603 Operate the extrusion mill	PC1. identify extruder controls in the equipment control room or chamber	50	2.5	1	1.5
	PC2. calibrate the extruder by modifying specifications such as temperature, flow, pressure, etc.		3	1	2
	PC3. ensure the calibration is in line with the process requirements		3	1	2
	PC4. ensure the other equipment controls are not modified, once set		3	1	2
	PC5. notify the shift in-charge or production supervisor about completion of calibration before exiting the equipment control room or chamber		3	1	2
	PC6. operate the extruder as per standard operating procedure		3	1	2
	PC7. ensure the flakes are discharged in the discharge crater		3	1	2
	PC8. ensure the flakes are cooled for the stipulated time		3	1	2
	PC9. ensure the ground product moves to the next stage, i.e., grinding process in stipulated time and as per specified quality standards		3	1	2

Qualifications Pack For Extrusion Operator

	Performance Criteria	Total Marks (250)	Out of	Theory	Skills Practical
	PC10. cease the operation once the batch is completed		3	1	2
	PC11. inspect the overall process flow in order to achieve productivity standards		3	1	2
	PC12. visually assess the flakes from the extruder to check if they are in line with process requirement		3	1	2
	PC13. notify the shift in-charge / production supervisor in case of any significant deviation from the process requirements		3	1	2
	PC14. identify the various parts / chambers of the extruder		3	1	2
	PC15. understand how the extruder needs to be handled during cleaning		3	1	2
	PC16. clean the various parts of the extruder like barrel, liner, flow channels, etc.		3	1	2
	PC17. make the extruder ready in working condition for next batch		2.5	1	1.5
	POINTS		50	17	33
	TOTAL POINTS		50		

	Performance Criteria	Total Marks (250)	Out of	Theory	Skills Practical
PCS/N9901 Coordinate with colleagues and/or customers	PC1. receive job order and instructions from reporting superior	50	0.5	0.0	0.5
	PC2. understand the work output requirements, targets, performance indicators and incentives		2.0	0.5	1.5
	PC3. deliver quality work on time and report any anticipated reasons for delays		2.0	0.5	1.5
	PC4. escalate unresolved problems or complaints to the relevant senior		2.0	0.5	1.5
	PC5. communicate maintenance and repair schedule proactively to the superior		2.0	0.5	1.5
	PC6. receive feedback on work standards		1.0	0.0	1.0
	PC7. document the completed work schedule and handover to the superior		2.0	0.5	1.5
	PC8. exhibit trust, support and respect to all the colleagues in the workplace		1.0	0.25	0.75
	PC9. aim to achieve smooth workflow		2.0	0.5	1.5
	PC10. help and assist colleagues with information and knowledge		1.0	0.0	1.0
	PC11. seek assistance from the colleagues when required		1.0	0.25	0.75
	PC12. identify the potential and existing		1.0	0.25	0.75

Qualifications Pack For Extrusion Operator

	Performance Criteria	Total Marks (250)	Out of	Theory	Skills Practical
	conflicts with the colleagues and resolve				
	PC13. pass on essential information to other colleagues on timely basis		1.0	0.0	1.0
	PC14. maintain the etiquette, use polite language, demonstrate responsible and disciplined behaviors to the colleagues		2.0	0.5	1.5
	PC15. interact with colleagues from different functions clearly and effectively on all aspects to carry out the work among the team and understand the nature of their work		1.0	0.25	0.75
	PC16. put team over individual goals and multi task or share work where necessary supporting the colleagues		2.0	0.0	2.0
	PC17. highlight any errors of colleagues, help to rectify and ensure quality output		1.0	0.25	0.75
	PC18. work with cooperation, coordination, communication and collaboration, with shared goals and supporting each other's performance		1.0	0.0	1.0
	PC19. ask more questions to the customers and identify their needs		1.0	0.25	0.75
	PC20. possess strong knowledge on the product, services and market		2.0	0.5	1.5
	PC21. brief the customers clearly on potential costs and hazards		1.0	0.25	0.75
	PC22. communicate with the customers in a polite, professional and friendly manner		1.0	0.25	0.75
	PC23. build effective but impersonal relationship with the customers		0.5	0.25	0.25
	PC24. ensure the appropriate language and tone are used with customers		1.0	0.25	0.75
	PC25. listen actively and have a two way communication		1.0	0.25	0.75
	PC26. be sensitive to the gender, cultural and social differences such as modes of greeting, formality, etc.		1.0	0.25	0.75
	PC27. understand the customer expectations correctly and provide the appropriate products and services		2.0	0.5	1.5
	PC28. understand the customer dissatisfaction and address or escalate their complaints effectively		2.0	0.5	1.5
	PC29. maintain a positive, sensible and cooperative manner all time		1.0	0.25	0.75
	PC30. ensure to maintain a proper body language, dress code, gestures and etiquettes towards the customers		1.0	0.25	0.75
	PC31. avoid interrupting the customers while they talk		1.0	0.0	1.0

Qualifications Pack For Extrusion Operator

	Performance Criteria	Total Marks (250)	Out of	Theory	Skills Practical
	PC32. ensure to avoid negative questions and statements to the customers		1.0	0.0	1.0
	PC33.inform the customers on any issues or problems before hand and also on the developments involving them		2.0	0.5	1.5
	PC34. ensure to respond back to the customer immediately for their voice messages, e-mails, apps, etc.		1.0	0.0	1.0
	PC35. develop good rapport with the customers and promote other products and services		2.0	0.5	1.5
	PC36. seek feedback from the customers on their understanding to what was discussed		1.0	0.0	1.0
	PC37. explain the terms and conditions clearly		2.0	0.5	1.5
	POINTS		50	10	40
	TOTAL POINTS			50	

	Performance Criteria	Total Marks (250)	Out of	Theory	Skills Practical
PCS/N9902 Maintain standards of product/ service quality	PC1. keep in mind the profiles of expected customers	50	2.0	0.5	1.5
	PC2. understand the target customers and their product/ service quality requirements as defined by the company		3.0	0.5	2.5
	PC3. receive superior's/ customer feedback regularly		2.0	0.0	2.0
	PC4. aim to build a good connect with the customers through quality product/ service		2.0	0.5	1.5
	PC5.keep tab on frequent discussions with regular customers on general likes and dislikes in the market, latest trends, customer expectations, etc.		2.0	0.5	1.5
	PC6. receive updates on regular feedbacks from the clients on current service, complaints, and improvements to be made, etc.		2.0	0.5	1.5
	PC7. if necessary, compulsively seek customer rating of product/ service in order to help develop a set of regularly improved procedures		2.0	0.5	1.5
	PC8. demonstrate quality orientation at all level		4.0	1.5	2.5
	PC9. aim to gain their long lasting loyalty through satisfaction		3.0	1.0	2.0
	PC10. ensure 100% customer satisfaction via product/ service quality		3.0	0.5	2.5
	PC11.treat the customers fairly and with due respect		3.0	0.5	2.5

Qualifications Pack For Extrusion Operator

	Performance Criteria	Total Marks (250)	Out of	Theory	Skills Practical
	PC12. focus on executing company's marketing strategies and product development needs		3.0	1.0	2.0
	PC13. focus on enhancing brand value of company by maintaining or enhancing quality standards		3.0	1.0	2.0
	PC14. ensure that customer expectations are met		2.0	0.5	1.5
	PC15. learn to read customers' needs and wants		2.0	0.5	1.5
	PC16. willingly accept and implement new and innovative products and services that help improve customer satisfaction		3.0	1.0	2.0
	PC17. communicate feedback of customer to senior, especially, the negative feedback		2.0	0.5	1.5
	PC18. maintain close contact with the customers and focus groups		2.0	0.5	1.5
	PC19. offer promotions to improve product satisfaction level to the customers periodically		3.0	1.0	2.0
	PC20. weigh the cost of fulfilling unscheduled customer requests, consult with senior and advise the customer on alternatives		2.0	0.5	1.5
	POINTS		50	13	37
	TOTAL POINTS			50	

	Performance Criteria	Total Marks (250)	Out of	Theory	Skills Practical
PCS/N9903 Maintain O&HS standards and follow environmental norms	PC1. assess the various health, safety and environmental hazards in the work areas	50	1.5	0.4	1.1
	PC2. take necessary steps to eliminate or minimize the hazards		1.0	0.4	0.6
	PC3. analyze the causes of accidents at the workplace		1.5	0.4	1.1
	PC4. suggest measures to prevent such accidents from taking place		1.5	0.4	1.1
	PC5. take preventive measures to avoid risk of burns and other injury due to contact with hot surfaces, gas, fire, hot fluids/ liquids, etc.		1.5	0.4	1.1
	PC6. suggest methods to improve the existing safety procedures at the workplace		1.5	0.4	1.1
	PC7. dispose waste in the designated areas safely as per company's policies and rules		1.5	0.4	1.1
	PC8. maintain appropriate ventilation in the rooms while there is more exposure to		1.0	0.4	0.6

Qualifications Pack For Extrusion Operator

	Performance Criteria	Total Marks (250)	Out of	Theory	Skills Practical
	paint vapours				
	PC9. avoid dumping unused cans to safeguard the environment		1.0	0.0	1.0
	PC10. be aware of the locations of fire extinguishers, emergency exits, etc.		1.0	0.4	0.6
	PC11. practice correct emergency procedures		1.5	0.4	1.1
	PC12. check and review the storage areas frequently		1.5	0.4	1.1
	PC13. stack items in an organized way and use safe lifting techniques to reduce risk of injuries from handling procedures at the storage areas		1.5	0.4	1.1
	PC14. ensure to be safe while handling materials, tools, acids, chemicals, equipment, etc.		1.0	0.4	0.6
	PC15. store the chemicals and acids in a well-ventilated and locked areas with warning signs displayed		1.5	0.4	1.1
	PC16. ensure safe techniques while moving furniture and fixtures		1.5	0.4	1.1
	PC17. ensure to reduce risk of injury from use of electrical tools		1.5	0.4	1.1
	PC18. read the manufacturer's manual carefully before use of any equipment		1.0	0.0	1.0
	PC19. unplug the electrical equipment before performing maintenance		1.0	0.4	0.6
	PC20. keep the floors free from oil, water and grease to avoid slippery surface		1.0	0.4	0.6
	PC21. use rubber mats in the places where floors are constantly wet		1.0	0.0	1.0
	PC22. ensure safety from injuries of cuts to loss of fingers, while handling sharp hazardous tools and equipment		1.5	0.4	1.1
	PC23. use flat surfaces, secure holding and protective wear while using such sharp tools		1.5	0.4	1.1
	PC24. use health, safety and environmental protection practices for storing, cleaning, and maintaining tools, equipment, and supplies		1.5	0.4	1.1
	PC25. practice ergonomic lifting, bending, or moving equipment and supplies		1.5	0.4	1.1
	PC26. identify the requirement for maintaining environmental norms		1.0	0.4	0.6
	PC27. comply with the environmental safety norms while on work to prevent accidents and health hazards		1.0	0.4	0.6

Qualifications Pack For Extrusion Operator

	Performance Criteria	Total Marks (250)	Out of	Theory	Skills Practical
	PC28. follow company policies and rules regarding use of hazardous materials to avoid health, safety and environmental impacts caused by them		1.0	0.4	0.6
	PC29. ensure the employees have access to first aid kit when needed		1.0	0.0	1.0
	PC30. ensure all equipment and tools are stored and maintained properly and safe to use		1.0	0.4	0.6
	PC31. ensure to use personal protective equipment and safety gear such as gloves, mask, headwear, footwear, glasses, goggles, etc. for specific tasks and work conditions where required		1.5	0.4	1.1
	PC32. ensure to display safety signs at places where necessary for people to be cautious		1.5	0.4	1.1
	PC33. ensure electrical precautions such as insulated clothing, adequate equipment insulation, dry work area, switch off the power supply when not required, etc.		1.5	0.4	1.1
	PC34. ensure availability of general health and safety equipment such as fire extinguishers, first aid equipment, safety equipment, clothing, safety installations such as fire exits, exhaust fans, etc.		1.5	0.4	1.1
	PC35. document all the first aid treatments, inspections, etc., conducted to keep track of the safety measures undertaken		1.0	0.4	0.6
	PC36. document all the environmental hazards caused and the measures undertaken to comply with the established safety procedures of the workplace		1.0	0.0	1.0
	PC37. report to the supervisor on any problems and hazards identified and any breach of environmental procedures.		1.0	0.4	0.6
	PC38. ensure zero accident at workplace		1.0	0.4	0.6
	PC39. adhere to safety standards and ensure no material damage		1.0	0.4	0.6
	PC40. take necessary action and correct any environmental hazards caused		1.0	0.4	0.6
	POINTS		50	14	36
	TOTAL POINTS			50	
	GRAND TOTAL	250			