





Transforming the skill landscape



Powder Coater

QP Code: PCS/Q5102

Version: 2.0

NSQF Level: 4

Paints and Coatings Skill Council || B 103, Neelam Centre, S. K. Ahire Marg, Worli Mumbai – 400030







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N·S·D·C National Skill Development Corporation

PCS/Q5102: Powder Coater

Brief Job Description

The Powder Coater coats metal surfaces like home appliances, auto parts, control panels, furniture, heavy machinery, hospital equipment, office furniture, etc. The individual at work assesses the component to be coated, understands colour, powder chemistry and finish required, prepares the part for powder application and coats it using appropriate tools and equipment to achieve the desired finish as per company standards and requirement.

Personal Attributes

The job requires the individual to undertake physical labour, have good eye-sight with no colour blindness and work in all types of weather conditions.

Applicable National Occupational Standards (NOS)

Compulsory NOS:

- 1. PCS/N5109: Plan, prepare, pre-treat and coat the component with powder coating
- 2. PCS/N9901: Co-ordinate with colleagues and customers
- 3. PCS/N9902: Maintain standards of product/ service quality
- 4. PCS/N9903: Maintain OH&S standards and follow environmental norms

Qualification Pack (QP) Parameters

Sector	Paints and Coatings
Sub-Sector	Application
Occupation	Industrial Paint Application
Country	India
NSQF Level	4
Aligned to NCO/ISCO/ISIC Code	NCO-2015/ 7131.0200; 7131.0300







Minimum Educational Qualification & Experience	8th Class with 2 Years of experience OR I.T.I with 2 Years of experience OR 10th Class + I.T.I with 1 Year of experience OR 12th Class with 6 Months of experience
Minimum Level of Education for Training in School	8th Class
Pre-Requisite License or Training	Not Applicable
Minimum Job Entry Age	18 Years
Last Reviewed On	31/03/2022
Next Review Date	31/03/2025
NSQC Approval Date	31/03/2022
Version	2.0
Reference code on NQR	2022/CP/PCSC/05733
NQR Version	1.0







PCS/N5109: Plan, prepare, pre-treat and coat the component with powder coating

Description

This OS unit is planning, preparing, pre-treating and powder coating the components/ parts.

Scope

The scope covers the following :

- Plan the work
- Prepare and pre-treat the components
- Apply powder coating
- Maintain the equipment and jigs/ hangers

Elements and Performance Criteria

Plan the work

To be competent, the user/individual on the job must be able to:

- PC1. receive work instructions, review and plan to meet the quality requirements
- **PC2.** inspect the work area, assess hazards and risks and apply controls
- **PC3.** check the work site for adequate ventilation and implement steps to prevent the formation of powder cloud, explosions and fires
- PC4. check that the equipment and jigs/ hangers are suitable and ready for use

Prepare and pre-treat the components

To be competent, the user/individual on the job must be able to:

- PC5. inspect the component condition visually
- **PC6.** prepare and pre-treat the components as per SOP and instructions received
- PC7. prepare components for re-coating by removing the defects and pre-treatment as per SOP
- PC8. mask the areas not required to be coated with masking tapes, paper, plugs
- **PC9.** implement measures to maintain coating area dust free
- PC10. prepare the powder coating material for application by fluidizing the powder as per SOP
- **PC11.** ensure that the powder is fluidized throughout the application process
- **PC12.** set up the application and powder recovery system as per SOP and conduct pre-operational checks before actual coating

Apply powder coating

To be competent, the user/individual on the job must be able to:

- **PC13.** set up the recommended application parameters for the type of powder coating and application equipment
- **PC14.** operate the application equipment as recommended by the equipment manufacturer and powder coating supplier
- PC15. apply the coating to achieve the desired dry film thickness (DFT), colour, opacity and finish







PC16. cure/ dry the coating as per SOP

PC17. identify defects in the coating and take corrective measures to meet the quality requirements

Maintain the equipment and jigs/ hangers

To be competent, the user/individual on the job must be able to:

- **PC18.** clean up the work station and place the waste and discarded materials into appropriate waste bins or rubbish stock piles
- PC19. clean the application booth and equipment as per SOP
- PC20. store the application equipment safely
- **PC21.** clean the jigs/ hangers as per SOP to ensure proper earthing of the components during application
- PC22. filter the recovered powder coating before re-use

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1. company's policy and work instructions on quality standards
- KU2. importance of the individual's role in the workflow
- KU3. reporting structure of the organization
- KU4. occupational health and safety standards
- KU5. various quality of powder coating, it's performance and end use
- KU6. masking of areas of the component not required to be coated
- KU7. SOP and effective techniques of powder coating application
- KU8. common application defects and errors to avoid
- KU9. common symptoms of poor application
- **KU10.** significance of following SOP for surface preparation, pre-treatment and application of powder coating
- KU11. personal protection including the use of safety gears and equipment
- KU12. safe handling of powder coating, application equipment, jigs/ hangers
- KU13. importance of work station cleaning after coating
- KU14. need for maintenance and upkeep of application equipment
- KU15. safe disposal of waste and discarded materials as per standard norms

Generic Skills (GS)

User/individual on the job needs to know how to:

- GS1. read SOP, work instructions and instructions on equipment use
- **GS2.** write reports and maintain records as per organization policy
- GS3. practice active listening to capture task requirements from supervisor/ manager
- GS4. communicate with colleagues in a polite, pleasant, calm and clear way







- GS5. follow sequence of the work process as per SOP
- GS6. check the application equipment to ensure it's proper working
- **GS7.** deliver quality work as per agreed schedule







Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Plan the work	3	6	-	-
PC1. receive work instructions, review and plan to meet the quality requirements	-	-	-	-
PC2. inspect the work area, assess hazards and risks and apply controls	-	-	-	-
PC3. check the work site for adequate ventilation and implement steps to prevent the formation of powder cloud, explosions and fires	-	-	-	-
PC4. check that the equipment and jigs/ hangers are suitable and ready for use	-	-	-	-
Prepare and pre-treat the components	6	13	-	-
PC5. inspect the component condition visually	-	-	-	-
PC6. prepare and pre-treat the components as per SOP and instructions received	-	-	-	-
PC7. prepare components for re-coating by removing the defects and pre-treatment as per SOP	_	-	-	_
PC8. mask the areas not required to be coated with masking tapes, paper, plugs	-	-	-	-
PC9. implement measures to maintain coating area dust free	-	-	-	-
PC10. prepare the powder coating material for application by fluidizing the powder as per SOP	-	-	-	-
PC11. ensure that the powder is fluidized throughout the application process	-	-	-	-
PC12. set up the application and powder recovery system as per SOP and conduct pre-operational checks before actual coating	-	-	-	-
Apply powder coating	4	8	-	-







Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC13. set up the recommended application parameters for the type of powder coating and application equipment	-	-	-	-
PC14. operate the application equipment as recommended by the equipment manufacturer and powder coating supplier	-	-	-	-
PC15. apply the coating to achieve the desired dry film thickness (DFT), colour, opacity and finish	-	-	-	-
PC16. cure/ dry the coating as per SOP	-	-	-	-
PC17. identify defects in the coating and take corrective measures to meet the quality requirements	-	-	-	-
Maintain the equipment and jigs/ hangers	2	8	-	-
PC18. clean up the work station and place the waste and discarded materials into appropriate waste bins or rubbish stock piles	-	-	-	-
PC19. clean the application booth and equipment as per SOP	-	-	-	-
PC20. store the application equipment safely	-	-	-	-
PC21. clean the jigs/ hangers as per SOP to ensure proper earthing of the components during application	-	-	-	-
PC22. filter the recovered powder coating before re-use	-	-	-	-
NOS Total	15	35	-	-







National Occupational Standards (NOS) Parameters

NOS Code	PCS/N5109
NOS Name	Plan, prepare, pre-treat and coat the component with powder coating
Sector	Paints and Coatings
Sub-Sector	Application
Occupation	Industrial Paint Application
NSQF Level	4
Credits	TBD
Version	2.0
Last Reviewed Date	31/03/2022
Next Review Date	31/03/2025
NSQC Clearance Date	31/03/2022







PCS/N9901: Co-ordinate with colleagues and customers

Description

This OS unit is about communicating effectively with superiors, colleagues and customers, for achieving a smooth workflow.

Scope

The scope covers the following :

- Coordinate with supervisors and colleagues
- Address customer complaints and grievances
- Follow inclusive practices at work

Elements and Performance Criteria

Coordinate with supervisors and colleagues

To be competent, the user/individual on the job must be able to:

- PC1. collect job order from the supervisor
- **PC2.** establish the work output requirements, quality standards, delivery schedule, targets, performance indicators and incentive policies
- PC3. ensure prompt and quality work as per agreed timeline
- PC4. report challenges at work and reasons for delay to the supervisor
- PC5. incorporate feedback received from the supervisor and colleagues
- PC6. provide colleagues with adequate and accurate information and knowledge
- **PC7.** ensure quality output by highlighting errors committed by colleagues, thus helping them improve
- PC8. comply with the recommended steps of resolving conflicts with colleagues

Address customer complaints and grievances

To be competent, the user/individual on the job must be able to:

- PC9. prepare a list of the products/services required by internal and external customers
- PC10. comply with best practices to keep customer needs and complaints confidential
- PC11. provide customers with adequate information on potential costs and hazards
- PC12. apply organisational practices to fully understand and record customer complaints
- **PC13.** solve customer issues/complaints or escalate to concerned authorities and supervisors as per organisational policies

Follow inclusive practices at work

To be competent, the user/individual on the job must be able to:

- PC14. treat all co-workers equally, irrespective of gender and disability
- PC15. ensure equal participation of people across genders in discussions
- PC16. use gender-neutral/gender-inclusive terms while interacting with colleagues
- PC17. report instances of discriminatory action/attitude to the supervisor







Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1. company's policies on confidentiality and work ethics
- KU2. the market and the available products and services
- KU3. company's customer profile, HR policies, reporting structure and documentation policy
- **KU4.** standard templates for reports in the organization
- KU5. the productivity targets of the organization
- KU6. the importance of meeting quality standards and timelines in a team
- KU7. the dos and don'ts of customer service
- KU8. gender based concepts, issues and legislation
- KU9. various types and degrees of disability
- KU10. PwD-related legislation
- KU11. inclusive practices at the workplace

Generic Skills (GS)

User/individual on the job needs to know how to:

- **GS1.** read important documents like company's work instructions, quality policy, printed instructions and job specifications
- GS2. use effective writing skills for preparing documents required at the job
- **GS3.** communicate effectively with colleagues, supervisors and customers to achieve smooth workflow and ensure rapport
- **GS4.** organise materials and equipment required to do the work
- **GS5.** resolve inter-personal conflicts and work-related issues such as customer complaints, customised orders, etc. by making appropriate decisions at the workplace
- **GS6.** coordinate with different departments and multi-task as necessary
- GS7. delegate work in consultation with superior or as necessary instead of allowing work to pile up







Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Coordinate with supervisors and colleagues	8	16	-	-
PC1. collect job order from the supervisor	-	-	-	-
PC2. establish the work output requirements, quality standards, delivery schedule, targets, performance indicators and incentive policies	-	-	-	-
PC3. ensure prompt and quality work as per agreed timeline	-	-	-	-
PC4. report challenges at work and reasons for delay to the supervisor	-	-	-	-
PC5. incorporate feedback received from the supervisor and colleagues	-	-	-	-
PC6. provide colleagues with adequate and accurate information and knowledge	-	-	-	-
PC7. ensure quality output by highlighting errors committed by colleagues, thus helping them improve	-	-	-	-
PC8. comply with the recommended steps of resolving conflicts with colleagues	-	-	-	-
Address customer complaints and grievances	4	12	-	-
PC9. prepare a list of the products/services required by internal and external customers	-	-	-	-
PC10. comply with best practices to keep customer needs and complaints confidential	-	-	-	-
PC11. provide customers with adequate information on potential costs and hazards	-	-	-	-
PC12. apply organisational practices to fully understand and record customer complaints	-	-	-	-
PC13. solve customer issues/complaints or escalate to concerned authorities and supervisors as per organisational policies	-	-	-	-
Follow inclusive practices at work	3	7	-	-







Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC14. treat all co-workers equally, irrespective of gender and disability	-	-	-	-
PC15. ensure equal participation of people across genders in discussions	-	-	-	-
PC16. use gender-neutral/gender-inclusive terms while interacting with colleagues	-	-	_	-
PC17. report instances of discriminatory action/attitude to the supervisor	-	-	-	-
NOS Total	15	35	-	-







National Occupational Standards (NOS) Parameters

NOS Code	PCS/N9901
NOS Name	Co-ordinate with colleagues and customers
Sector	Paints and Coatings
Sub-Sector	Application, Manufacturing
Occupation	Generic
NSQF Level	4
Credits	TBD
Version	2.0
Last Reviewed Date	31/03/2022
Next Review Date	31/03/2025
NSQC Clearance Date	31/03/2022







PCS/N9902: Maintain standards of product/ service quality

Description

This OS unit is about gaining an understanding of expected standards of product quality and/or customer service and executing the designated work in a manner that results in customer satisfaction.

Scope

The scope covers the following :

- Engage with customers to understand product/ service quality requirements
- Achieve customer satisfaction for given quality

Elements and Performance Criteria

Engage with customers to understand product/ service quality requirements

To be competent, the user/individual on the job must be able to:

- PC1. identify the profiles of expected customers
- PC2. evaluate market information on latest trends and customer expectations
- **PC3.** analyse the product/service requirements and quality expectations of target customers as stipulated by the company
- PC4. provide customers with the right and quality products/services
- PC5. use appropriate close-ended questions to clarify customer requirements
- PC6. address customer queries accurately and promptly

Achieve customer satisfaction for given quality

To be competent, the user/individual on the job must be able to:

- **PC7.** participate in training sessions on new and innovative products/services as per the company's marketing strategies and product development needs
- **PC8.** demonstrate the steps of escalating negative feedback to the supervisor or concerned authorities
- **PC9.** ensure that maintenance and calibration services are extended to customers regularly as per company policies
- **PC10.** establish the cost of fulfilling unscheduled and special customer requests in consultation with senior(s) and advise the customer on alternatives
- PC11. perform appropriate tests to ensure quality adherence of the products/services

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1. company's policies on quality standards and documentation for quality compliance
- **KU2.** company's end-customer profile
- **KU3.** the market standards of customer satisfaction







- KU4. types of unscheduled and special requests expected from customers
- **KU5.** various parameters tested for quality
- KU6. test pass/fail criteria and acceptable tolerance levels
- KU7. equipment used for quality tests
- KU8. ways to improve company's customer satisfaction rating
- KU9. standard practices in customer orientation and quality adherence

Generic Skills (GS)

User/individual on the job needs to know how to:

- **GS1.** read important documents like company's work instructions, quality policy, printed instructions and job specifications
- GS2. record customer queries and complaints to support product development and enhancement
- **GS3.** communicate effectively with colleagues while discussing quality standards
- **GS4.** make appropriate decisions while recommending products/services and promotional offers to customers









Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Engage with customers to understand product/ service quality requirements	10	20	-	-
PC1. identify the profiles of expected customers	-	-	-	-
PC2. evaluate market information on latest trends and customer expectations	-	-	-	-
PC3. analyse the product/service requirements and quality expectations of target customers as stipulated by the company	-	-	-	-
PC4. provide customers with the right and quality products/services	-	-	-	-
PC5. use appropriate close-ended questions to clarify customer requirements	-	-	-	-
PC6. address customer queries accurately and promptly	-	-	-	-
Achieve customer satisfaction for given quality	5	15	-	-
PC7. participate in training sessions on new and innovative products/services as per the company's marketing strategies and product development needs	-	-	-	-
PC8. demonstrate the steps of escalating negative feedback to the supervisor or concerned authorities	-	-	-	-
PC9. ensure that maintenance and calibration services are extended to customers regularly as per company policies	-	-	-	-
PC10. establish the cost of fulfilling unscheduled and special customer requests in consultation with senior(s) and advise the customer on alternatives	-	-	-	-
PC11. perform appropriate tests to ensure quality adherence of the products/services	_	-	_	-
NOS Total	15	35	-	-







National Occupational Standards (NOS) Parameters

NOS Code	PCS/N9902
NOS Name	Maintain standards of product/ service quality
Sector	Paints and Coatings
Sub-Sector	Application, Manufacturing
Occupation	Generic
NSQF Level	4
Credits	TBD
Version	2.0
Last Reviewed Date	31/03/2022
Next Review Date	31/03/2025
NSQC Clearance Date	31/03/2022







PCS/N9903: 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

The scope covers the following :

- Prevent accidents at work place and damage to environment
- Follow standard health, safety, and environmental policies and procedures
- Use safety tools and personal protective equipment (PPE)
- Achieve health, safety and environmental standards

Elements and Performance Criteria

Prevent accidents at workplace and damage to environment

To be competent, the user/individual on the job must be able to:

- **PC1.** identify eco-friendly products and machines
- **PC2.** select suitable non-hazardous alternatives of hazardous products to control environmental pollution
- **PC3.** practise necessary steps of eliminating or minimising health, safety and environmental hazards in the work areas
- **PC4.** ensure that precautions, like masking items, are taken while painting in office/residence location to prevent damages
- PC5. practise precautions to protect children and other family members for overspray
- **PC6.** determine suitable ways of optimising the usage of resources (water, electricity, fuel, etc.) in various tasks, activities, and processes
- **PC7.** check for spills/leakages in various tasks/activities/processes, plug spills/leakages, and escalate to the appropriate authority, if unable to rectify
- PC8. ensure routine cleaning of tools, machines, and equipment
- PC9. identify processes where energy/ electricity and material utilization can be optimized
- PC10. ensure that material and water conservation processes are closely monitored at work
- **PC11.** analyse the causes of accidents at the workplace and suggest measures to prevent such accidents from recurring
- PC12. identify methods of improving the existing safety procedures at the workplace
- PC13. do not smoke, ensure no smoking and open flames at the workplace

Follow standard health, safety and environmental policies and procedures

To be competent, the user/individual on the job must be able to:

- **PC14.** segregate waste into different categories (recyclable, non-recyclable, hazardous, etc.)
- PC15. practise waste disposal in the designated areas safely as per company's policies and rules







- **PC16.** ensure appropriate ventilation in the rooms in the presence of paint vapours
- **PC17.** check if the equipment/machine is functioning normally before starting work
- **PC18.** ensure that electrical equipment and appliances are properly connected and turned off when not in use
- PC19. check if the standard process is followed for treatment of the wastewater in the unit
- **PC20.** use products, free of lead and heavy metal, that meet RoHS (restriction on heavy substances) specifications
- PC21. stack items, in an organized way, to reduce risk of injuries while handling materials
- PC22. practise handling materials, tools, acids, chemicals, equipment, etc. safely
- **PC23.** ensure that all chemicals and acids are stored in well-ventilated and locked areas with warning signs displayed
- PC24. develop a routine for unplugging the electrical equipment before performing maintenance
- PC25. ensure that the floors are free of oil, water and grease to avoid slippery surface
- **PC26.** ensure daily tasks are executed via alternative methods such as marking attendance without using biometric devices, virtual meetings, e-payments, etc.
- **PC27.** practise social distancing at workplace, e.g. increased space, 2 meters or more, between employee work areas, prevent crowding of common areas, etc.
- PC28. perform routine hygiene and sanitation checks of work area and equipment as per SOP
- PC29. check the availability of the products required to maintain hygiene and sanitation
- PC30. ensure entry and exit SOP are followed

Use safety tools and personal protective equipment (PPE)

To be competent, the user/individual on the job must be able to:

- PC31. check if all employees are aware of MSDS (Material Safety Data Sheet) details
- PC32. ensure that the employees have access to first aid kit when needed
- **PC33.** use personal protective equipment and safety gear such as gloves, mask, headwear, footwear, glasses, goggles, etc. for specific tasks and work conditions as per SOP
- **PC34.** adopt precautions like insulated clothing, adequate equipment insulation, dry work area, switching off the power supply when not required, etc.
- **PC35.** check availability of general health and safety equipment such as fire extinguishers, first aid kit, safety equipment, clothing, safety installations such as fire exits, exhaust fans, etc.

Achieve health, safety and environmental standards

To be competent, the user/individual on the job must be able to:

- **PC36.** record all first aid treatments, inspections, employees' and visitors' details, etc., to keep track of the safety measures undertaken
- PC37. assess risks and ensure corrective action as per SOPs
- **PC38.** report hazards, breaches, and incidents to appropriate authority, e.g., reporting of people with any symptoms, etc.
- PC39. comply with SOPs in case of health emergency
- PC40. support employees so that they can cope with stress, anxiety, etc.
- PC41. ensure a safe working environment for female colleagues

Knowledge and Understanding (KU)







The individual on the job needs to know and understand:

- KU1. the importance of social distancing and hygiene
- **KU2.** modes of disease transmission and symptoms of infections like fever, cough, redness, swelling and inflammation
- **KU3.** company's policies on health, safety, documentation, and environmental procedures at the workplace
- **KU4.** company's reporting structure
- KU5. common sources of pollution and ways to minimize it
- KU6. environment-friendly materials that can replace conventional materials
- KU7. government and company's environmental norms
- KU8. solid waste management rules 2016
- KU9. recommended practices for minimizing and disposing off waste
- KU10. latest methods of energy and material conservation
- KU11. potential hazards, risks, and threats based on the nature of work
- **KU12.** standard operating procedures for safe handling of chemicals, equipment and machinery
- **KU13.** the purpose and usage of protective gears such as gloves, protective goggles, masks, etc. while working
- KU14. precautionary activities and emergency procedures to be followed for workplace safety
- KU15. use of first aid at the workplace
- **KU16.** locations of fire extinguishers, emergency exits, etc.
- KU17. signs of stress and anxiety

Generic Skills (GS)

User/individual on the job needs to know how to:

- GS1. read and interpret internal communications correctly
- GS2. write formal and informal letters/emails, memos, reports, etc.
- GS3. communicate effectively with others to convey relevant information
- GS4. assess situations and make appropriate decisions
- GS5. prioritize, organize, and complete work within prescribed timelines
- GS6. address work-related issues and problems







Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Prevent accidents at workplace and damage to environment	3	8	-	-
PC1. identify eco-friendly products and machines	-	-	-	-
PC2. select suitable non-hazardous alternatives of hazardous products to control environmental pollution	-	-	-	-
PC3. practise necessary steps of eliminating or minimising health, safety and environmental hazards in the work areas	-	-	-	-
PC4. ensure that precautions, like masking items, are taken while painting in office/residence location to prevent damages	-	-	-	-
PC5. practise precautions to protect children and other family members for overspray	-	-	-	-
PC6. determine suitable ways of optimising the usage of resources (water, electricity, fuel, etc.) in various tasks, activities, and processes	-	-	-	-
PC7. check for spills/leakages in various tasks/activities/processes, plug spills/leakages, and escalate to the appropriate authority, if unable to rectify	-	-	-	-
PC8. ensure routine cleaning of tools, machines, and equipment	-	-	-	-
PC9. identify processes where energy/ electricity and material utilization can be optimized	_	-	_	-
PC10. ensure that material and water conservation processes are closely monitored at work	-	-	-	-
PC11. analyse the causes of accidents at the workplace and suggest measures to prevent such accidents from recurring	-	-	-	-
PC12. identify methods of improving the existing safety procedures at the workplace	-	-	-	-







Transforming the skill landscape

Practical Project Viva Theory **Assessment Criteria for Outcomes** Marks Marks Marks Marks PC13. do not smoke, ensure no smoking and open flames at the workplace Follow standard health, safety and environmental 7 14 policies and procedures **PC14.** segregate waste into different categories (recyclable, non-recyclable, hazardous, etc.) PC15. practise waste disposal in the designated areas safely as per company's policies and rules **PC16.** ensure appropriate ventilation in the rooms in the presence of paint vapours PC17. check if the equipment/machine is functioning normally before starting work PC18. ensure that electrical equipment and appliances are properly connected and turned off when not in use PC19. check if the standard process is followed for treatment of the wastewater in the unit PC20. use products, free of lead and heavy metal, that meet RoHS (restriction on heavy substances) specifications **PC21.** stack items, in an organized way, to reduce risk of injuries while handling materials PC22. practise handling materials, tools, acids, chemicals, equipment, etc. safely PC23. ensure that all chemicals and acids are stored in well-ventilated and locked areas with warning signs displayed **PC24.** develop a routine for unplugging the electrical equipment before performing maintenance PC25. ensure that the floors are free of oil, water and grease to avoid slippery surface







Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC26. ensure daily tasks are executed via alternative methods such as marking attendance without using biometric devices, virtual meetings, e-payments, etc.	-	-	-	-
PC27. practise social distancing at workplace, e.g. increased space, 2 meters or more, between employee work areas, prevent crowding of common areas, etc.	-	-	-	-
PC28. perform routine hygiene and sanitation checks of work area and equipment as per SOP	-	-	-	-
PC29. check the availability of the products required to maintain hygiene and sanitation	-	-	-	-
PC30. ensure entry and exit SOP are followed	-	-	-	-
Use safety tools and personal protective equipment (PPE)	2	5	-	-
PC31. check if all employees are aware of MSDS (Material Safety Data Sheet) details	-	-	-	-
PC32. ensure that the employees have access to first aid kit when needed	-	-	_	-
PC33. use personal protective equipment and safety gear such as gloves, mask, headwear, footwear, glasses, goggles, etc. for specific tasks and work conditions as per SOP	-	-	-	-
PC34. adopt precautions like insulated clothing, adequate equipment insulation, dry work area, switching off the power supply when not required, etc.	-	-	-	-
PC35. check availability of general health and safety equipment such as fire extinguishers, first aid kit, safety equipment, clothing, safety installations such as fire exits, exhaust fans, etc.	-	-	-	-
Achieve health, safety and environmental standards	3	8	-	-
PC36. record all first aid treatments, inspections, employees' and visitors' details, etc., to keep track of the safety measures undertaken	-	-	-	-







Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC37. assess risks and ensure corrective action as per SOPs	-	-	-	-
PC38. report hazards, breaches, and incidents to appropriate authority, e.g., reporting of people with any symptoms, etc.	_	_	_	-
PC39. comply with SOPs in case of health emergency	-	-	-	-
PC40. support employees so that they can cope with stress, anxiety, etc.	-	-	-	-
PC41. ensure a safe working environment for female colleagues	-	-	-	-
NOS Total	15	35	-	-







National Occupational Standards (NOS) Parameters

NOS Code	PCS/N9903
NOS Name	Maintain OH&S standards and follow environmental norms
Sector	Paints and Coatings
Sub-Sector	Application, Manufacturing
Occupation	Generic
NSQF Level	4
Credits	TBD
Version	2.0
Last Reviewed Date	31/03/2022
Next Review Date	31/03/2025
NSQC Clearance Date	31/03/2022

Assessment Guidelines and Assessment Weightage

Assessment Guidelines

1. Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Element/ Performance Criteria (PC) will be assigned marks proportional to its importance in NOS. SSC will also lay down proportion of marks for Theory and Practical Skills for each Element/ 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 practical skill for every student at each examination/ training center based on these criteria.

6. To pass the Qualification Pack assessment, every trainee should score the Recommended Pass % aggregate for the QP.

7. In case of unsuccessful completion, the trainee may seek reassessment on the Qualification Pack.







Quantication

Minimum Aggregate Passing % at QP Level : 60

(**Please note**: Every Trainee should score a minimum aggregate passing percentage as specified above, to successfully clear the Qualification Pack assessment.)

Minimum Passing % at NOS Level: 60

(**Please note**: A Trainee must score the minimum percentage for each NOS separately as well as on the QP as a whole.)

Assessment Weightage

Compulsory NOS

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
PCS/N5109.Plan, prepare, pre-treat and coat the component with powder coating	15	35	-	-	50	60
PCS/N9901.Co-ordinate with colleagues and customers	15	35	-	-	50	10
PCS/N9902.Maintain standards of product/ service quality	15	35	-	-	50	10
PCS/N9903.Maintain OH&S standards and follow environmental norms	15	35	-	-	50	20
Total	60	140	-	-	200	100







Acronyms

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







Glossary

Sector	Sector is a conglomeration of different business operations having similar business 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 organisation.
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 (KU) they need to meet that standard consistently. Occupational Standards are applicable both in the Indian and global contexts.
Performance Criteria (PC)	Performance Criteria (PC) 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 (QP)	QP comprises the set of OS, together with the educational, training and other criteria required to perform a job role. A QP is assigned a unique qualifications pack code.
Unit Code	Unit code is a unique identifier for an Occupational Standard, which is denoted by an 'N'
Unit Title	Unit title gives a clear overall statement about what the incumbent should be able to do.
Description	Description gives a short summary of the unit content. This would be helpful to anyone searching on a database to verify that this is the appropriate OS they are looking for.
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 (KU)	Knowledge and Understanding (KU) are statements which together specify the technical, generic, professional and organisational specific knowledge that an individual needs in order to perform to the required standard.
Organisational Context	Organisational context includes the way the organisation 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/ Generic Skills (GS)	Core skills or Generic Skills (GS) are a group of skills that are the key to learning and working in today's world. These skills are typically needed in any work environment 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.
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.
Sector	Sector is a conglomeration of different business operations having similar business and interests. It may also be defined as a distinct sub set 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.
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Performance Criteria (PC)	Performance Criteria (PC) are statements that together specify the standard of performance required when carrying out a task.







National Occupational Standard	National Occupational Standards (NOS) are occupational standards which apply uniquely in the Indian context.
Qualification Packs (QP)	QP comprises the set of OSs, together with the educational, training and other criteria required to perform a job role. A QP is assigned an unique Qualifications Pack code.
Unit Code	Unit code is an unique identifier for an Occupational Standard, which is denoted by a 'N'
Unit Title	Unit Title gives a clear overall statement about what the incumbent should be able to do.
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