

## QUALIFICATIONS PACK - OCCUPATIONAL STANDARDS FOR AUTOMOTIVE INDUSTRY

### What are Occupational Standards(OS)?

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

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## Introduction

### Qualifications Pack-Automotive Paint shop Assistant

**SECTOR:** AUTOMOTIVE

**SUB-SECTOR:**MANUFACTURING

**OCCUPATION:** PAINTING

**JOB ROLE:** AUTOMOTIVE PAINT SHOP ASSISTANT

**REFERENCE ID:** ASC/Q3302

**ALIGNED TO:**NCO-2004/7142.80

**Painting Helper:**This role involves surface treatment, Priming and final Painting both through automatic and manual methods

**Brief Job Description:** A paint shop assistant technician will be involved in BIW Inspection, loading of the body in the conveyor and processes of Sealing and Sanding of the vehicle part

**Personal Attributes:**The person should have the following attributes  
Correct and proper Vision, no color blindness, dexterity, non allergic to chemicals, paints and thinner, able to read and right basic language

Job Details	Qualifications Pack Code	ASC/Q3302		
	Job Role	Automotive Paint- shop Assistant		
	Credits(NSQF) [OPTIONAL]	TBD	Version number	1.0
	Sector	Automotive	Drafted on	01/07/13
	Sub-sector	Manufacturing	Last reviewed on	20/07/13
	Occupation	Painting	Next review date	Under revision expected date of revised version 31-dec-15
	NSQC Clearance on	20/07/15		

<b>Job Role</b>	<b>Automotive Paint shop assistant</b>
<b>Role Description</b>	Responsible for BIW Inspection, loading of the body in the conveyor and processes of Sealing and Sanding of the vehicle part
<b>NSQF level</b>	2
<b>Minimum Educational Qualifications*</b>	Class 8
<b>Maximum Educational Qualifications*</b>	Class 10
<b>Training</b> (Suggested but not mandatory)	<ul style="list-style-type: none"> <li>5S and Safety</li> <li>Basics on painting process and painting mixing etc.</li> <li>Material handling techniques</li> </ul>
<b>Minimum Job Entry Age</b>	<p>1 ASDC recommends that candidates should seek full employment not before attaining an age of 18 years.</p> <p>2 However, as per Factories Act 1948 :</p> <ul style="list-style-type: none"> <li>- No one can be employed before attaining the age of 15</li> <li>- A person between the age of 15 – 18 (both inclusive) could be employed only With employers who follow safety and security systems &amp; processes and also that the employee in this bracket will be working under supervision.</li> </ul> <p>3 Please note that under the Factories Act 1948, different States may have slightly varying provision which need to be adhered to.</p>
<b>Experience</b>	0-2 years
<b>Applicable National Occupational Standards (NOS)</b>	<ol style="list-style-type: none"> <li><a href="#">ASC/N3303:Support the operator in the Pretreatment process</a></li> <li><a href="#">ASC/N3304:Support the operator in Body Surface Preparation, Sealant Application and Sanding Operation</a></li> <li><a href="#">ASC/N0006:Maintain a safe and healthy working environment</a></li> <li><a href="#">ASC/N0008:Conduct regular cleaning and maintenance of the equipment</a></li> <li><a href="#">ASC/N0021: Maintaining 5S in the work premises</a></li> </ol> <p><b>Optional:</b> N.A.</p>
<b>Performance Criteria</b>	As described in the relevant OS unit

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.
	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 NOS they are looking for.
	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.	

Acronyms

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.
Unit Code	Unit Code is a unique identifier for a NOS unit, which can be denoted with an ‘N’
Unit Title	Unit Title gives a clear overall statement about what the incumbent should be able to do.
Vertical	Vertical may exist within a sub-sector representing different domain areas or the client industries served by the industry.
<b>Keywords /Terms</b>	<b>Description</b>
NOS	National Occupational Standard(s)
NSQF	National Skills Qualifications Framework
OEM	Original Equipment Manufacturer
OS	Occupational Standard(s)
QP	Qualifications Pack

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# National Occupational Standards



## Overview

This unit is about BIW Inspection and loading of incoming body parts from the weld shop into the Paint Shop

<b>Unit Code</b>	ASC/N3303
<b>Unit Title (Task)</b>	Support the Operator in the Pre-Treatment Process
<b>Description</b>	This NOS is about BIW Inspection of the incoming body parts for dust, moisture, rough edges, dents etc, and get them rectified before loading in the pretreatment tanks and loading them into the Pretreatment tanks
<b>Scope</b>	The Painting helper will be responsible for <ul style="list-style-type: none"> <li>• Checking the body of the BIW</li> <li>• Checking the loading panel and all rest points</li> <li>• Escalations of any queries regarding the job</li> </ul> The job holder will cover both manual painting and automatic painting methods for painting auto components and vehicle body.
<b>Performance Criteria(PC) w.r.t. the Scope</b>	
<b>Element</b>	<b>Performance Criteria</b>
<b>Check the body as per the Quality gate inspection sheets as per Standard Operating Procedures/ Internal Quality Manual</b>	PC1. Clearly understanding the do's and don'ts of the manufacturing process as defined in SOPs/ Work Instructions or defined by supervisors PC2. Check the incoming body parts for dents as per the instructions given in the work instructions/ SOP PC3. Check the incoming body parts for burrs, metal wires as per the instructions given in the work instructions PC4. Check the incoming body parts for rusts as per the instructions given in the work instructions PC5. Return the body part if quality parameters not adhered to
<b>Press the carrier rise button in loading panel in auto mode</b>	PC6. Check visual/manual while loading the panel
<b>Check all rest point of the body. Align the body on clamp hanger if body not properly rested</b>	PC7. Check the condition of the connector, if is not ok then bypass the hanger. PC8. Check the pin point of the rested part of the body for alignment, if not properly rested, align with the help of rod.
<b>Feed the data in loading panel according to model and save it</b>	PC9. Check visual/manual while feeding the data otherwise the hanger will not move
<b>Cut wire to clamp the body</b>	PC10. Ensure proper wire cutting so that the wire doesn't come in contact with the body and body shell.
<b>Knowledge and Understanding (K)</b>	

**ASC/N3303**

**Support the Operator in the Pre-Treatment Process**

<b>A. Organizational Context</b> (Knowledge of the company / organization and its processes)	The user/individual on the job needs to know and understand: KA1. relevant standards and procedures followed in the company KA2. different types of products manufactured by the company KA3. functional processes like store management, inventory management, quality management and key contact points for query resolution
<b>B. Technical Knowledge</b>	The user/individual on the job needs to know and understand: KB1. different types of painting processes and associated equipments KB2. different types of dents, burrs etc KB3. different types of defects which may arise due to improper loading KB4. how to operate loading both in automatic and manual mode KB5. ability to visualize the final product output and hence decide on the key steps to be followed while loading
<b>Skills (S) [Optional]</b>	
<b>A. Core Skills/ Generic Skills</b>	<b>Writing Skills</b>
	The user/ individual on the job needs to know and understand how to: SA1. document information SA2. write basic level notes and observations SA3. draw basic level drawings and charts
	<b>Reading Skills</b>
	The user/individual on the job needs to know and understand how to: SA4. read equipment manuals and process documents to understand the equipments and processes better SA5. read internal information documents sent by internal customers ( other functions within the organization)
	<b>Oral Communication (Listening and Speaking skills)</b>
	The user/individual on the job needs to know and understand how to: SA6. discuss task lists, schedules, and work-loads with co-workers SA7. question internal customers/ welding shop supervisor in order to understand the nature of the problem and make a diagnosis
<b>B. Professional Skills</b>	<b>Plan and Organize</b>
	The user/individual on the job needs to know and understand how to : SB1. plan and organize the work order and jobs received from the internal customers SB2. organize all process/ equipment manuals so that finding out information is fast
	<b>Analytical Thinking</b>

ASC/N3303

**Support the Operator in the Pre-Treatment Process**

	<p>The user/individual on the job needs to know and understand how to:</p> <p>SB3. ability to understand what level of defects are acceptable and return the other body parts to the weld shop</p> <p>SB4. carefully load the body part so that proper pretreatment can happen</p> <p>SB5. carefully analyze which body has to be loaded manually and which automatically</p>
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**NOS Version Control**

<b>NOS Code</b>	ASC/N3303		
<b>Credits(NSQF)</b>	TBD	<b>Version number</b>	1.0
<b>Industry</b>	Automotive	<b>Drafted on</b>	01/07/13
<b>Industry Sub-sector</b>	Manufacturing	<b>Last reviewed on</b>	20/07/13
<b>Occupation</b>	Painting	<b>Next review date</b>	Under revision expected date of revised version 31-dec-15

Support the operator/ painter in Body Surface Preparation, Sealant Application and Sanding Operation

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# National Occupational Standard



## Overview

This unit is about supporting the operator/ painter in Body Surface Preparation, Sealant Application and Sanding Operation

**Support the operator/ painter in Body Surface Preparation, Sealant Application and Sanding Operation**

National Occupational Standard

<b>Unit Code</b>	ASC/N3304
<b>Unit Title (Task)</b>	<b>Support the operator/ painter in Body Surface Preparation, Sealant Application and Sanding Operation</b>
<b>Description</b>	This NOS is about Body Sealant Application and Sanding Operation
<b>Scope</b>	<p>The Painting helper will be responsible for</p> <ul style="list-style-type: none"> <li>• Applying recti at defined locations and doing the sanding process</li> <li>• Check for sealant application and body dents in the BIW</li> <li>• Escalations of any queries regarding the job</li> </ul> <p>The job holder will cover both manual painting and automatic painting methods for painting auto components and vehicle body</p>
<b>Performance Criteria(PC) w.r.t. the Scope</b>	
<b>Element</b>	<b>Performance Criteria</b>
<b>Apply recti at defined location of body part</b>	<p>PC1. Ensuring pressure of the sealer in sealer line as per specification.</p> <p>PC2. After gun application at each defined location if there is excess sealer or a sealer defects observed at the station, immediate rectify at the station.</p> <p>PC3. Checking the sealer supply</p> <p>PC4. Quality of the sealer: sealer should be homogenous, off-white paste free from lumps &amp; foreign particulate matter</p>
<b>Do sanding on defective areas of the body</b>	<p>The user/individual on the job needs to know and have understanding of</p> <p>PC5. Ensuring that there must be no edge at corners of the sanded area.</p> <p>PC6. Ensure completion of the sanding process flow: sanding must done in anticlockwise direction.</p>
<b>Check for sealant finish, if there is no uniformity or sealant crack, and then apply air dry sealant on that area.</b>	<p>The user/individual on the job needs to know and have understanding of</p> <p>PC7. sealant application process: sealant to be applied with sealant gun and then recti</p> <p>PC8. application to be done for smooth finish</p> <p>PC9. ensuring lux level of the booth</p>
<b>Check for dent in the body, if this defect appears, first do sanding on the area, then fill the putty on the dented area</b>	<p>The user/individual on the job needs to know and have understanding of</p> <p>PC10. the putty drying process: after putty drying, role holder needs to do uniform sanding for leveling the surface with body level, otherwise putty patch mark may generate after paint application</p>
<b>Knowledge and Understanding (K)</b>	
<b>A. Organizational Context</b> (Knowledge of the company / organization and	<p>The user/individual on the job needs to know and have understanding of</p> <p>KA1. relevant standards and procedures followed in the company</p> <p>KA2. different types of products manufactured by the company</p> <p>KA3. functional processes like store management, inventory management, quality management and key contact points for query resolution</p>

**Support the operator/ painter in Body Surface Preparation, Sealant Application and Sanding Operation**

its processes)	
<b>B. Technical Knowledge</b>	<p>The user/individual on the job needs to know and understand:</p> <p>KB6. different types of defects which may arise due to improper sealant application</p> <p>KB1. different types of defects which may arise due to improper sanding</p> <p>KB2. visualization of the final product output and hence decide on the key steps to be followed</p>
<b>Skills (S)</b>	
<b>A. Core Skills/ Generic Skills</b>	<b>Writing Skills</b>
	<p>The user/ individual on the job needs to know and understand how to:</p> <p>SA1. document information as observed during the work</p> <p>SA2. write basic level notes and observations</p>
	<b>Reading Skills</b>
	<p>The user/individual on the job needs to know and understand how to:</p> <p>SA3. read equipment manuals and process documents to understand the equipments and processes better</p> <p>SA4. read internal information memos sent by internal customers ( other functions within the organization)</p>
	<b>Oral Communication (Listening and Speaking skills)</b>
	<p>The user/individual on the job needs to know and understand how to:</p> <p>SA5. discuss task lists, schedules, and work-loads with co-workers</p> <p>SA6. question internal customers/ paint shop supervisor in order to understand the nature of the problem and make a diagnosis</p> <p>SA7. attentively listen with full attention and comprehend the information given by the speaker</p>
<b>B. Professional Skills</b>	<b>Plan and Organize</b>
	<p>The user/individual on the job needs to know and understand how to:</p> <p>SB1. plan and organize the work order and jobs received from the internal customers</p> <p>SB2. plan and organize the design documents received from internal customers</p> <p>SB3. organize all process/ equipment manuals so that sorting out information is fast</p>
	<b>Analytical Thinking</b>
	<p>The user/individual on the job needs to know and understand how to:</p> <p>SB4. carefully analyze the body part for various surface defects at every surface part</p> <p>SB5. carefully run the production line if some delay happens</p>

**Support the operator/ painter in Body Surface Preparation, Sealant Application and Sanding Operation**

**NOS Version Control**

<b>NOS Code</b>	ASC/N3304		
<b>Credits(NSQF)</b>	TBD	<b>Version number</b>	1.0
<b>Industry</b>	Automotive	<b>Drafted on</b>	01/07/13
<b>Industry Sub-sector</b>	Manufacturing	<b>Last reviewed on</b>	20/07/13
<b>Occupation</b>	Painting	<b>Next review date</b>	Under revision expected date of revised version 31-dec-15



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# National Occupational Standards



## Overview

This unit is about establishing a Safe, Healthy and Environment friendly workplace

**Maintain a safe and healthy working environment**

National Occupational Standard	<b>Unit Code</b>	ASC/N0006
	<b>Unit Title (Task)</b>	<b>Maintain a safe and healthy working environment</b>
	<b>Description</b>	This NOS unit is about creating a Safe and Healthy work place, adhering to the safety guidelines in the working area, following practices which are not impacting the environment in a negative manner
	<b>Scope</b>	The role holder will be responsible for <ul style="list-style-type: none"> <li>identifying and reporting of risks</li> <li>Adhering to the policies and processes for sustaining a safe, clean and environment friendly work place</li> </ul> This NOS will be applicable to all Automotive sector manufacturing job roles
	<b>Performance Criteria (PC) w.r.t. the Scope</b>	
	<b>Element</b>	<b>Performance Criteria</b>
	<b>Identify and report the risks identified</b>	<p>PC1. Identify activities which can cause potential injury through sharp objects, burns, fall, electricity, gas leakages, radiation, poisonous fumes, chemicals ,loud noise</p> <p>PC2. Inform the concerned authorities about the potential risks identified in the processes, workplace area/ layout, materials used etc</p> <p>PC3. Inform the concerned authorities about machine breakdowns, damages which can potentially harm man/ machine during operations</p> <p>PC4. Create awareness amongst other by sharing information on the identified risks</p>
	<b>Create and sustain a Safe, clean and environment friendly work place</b>	<p>PC5. Follow the instructions given on the equipment manual describing the operating process of the equipments</p> <p>PC6. Follow the Safety, Health and Environment related practices developed by the organization</p> <p>PC7. Operate the machine using the recommended Personal Protective Equipments (PPE)</p> <p>PC8. Maintain a clean and safe working environment near the work place and ensure there is no spillage of chemicals, production waste, oil, solvents etc</p> <p>PC9. Maintain high standards of personal hygiene at the work place</p> <p>PC10. Ensure that the waste disposal is done in the designated area and manner as per organization SOP.</p> <p>PC11. Inform appropriately the medical officer/ HR in case of self or an employee's illness of contagious nature so that preventive actions can be planned for others</p>
	<b>Knowledge and Understanding (K)w.r.t. the scope</b>	
	<b>Element</b>	<b>Knowledge and Understanding</b>

ASC/N0006

**Maintain a safe and healthy working environment**

<p><b>B. Organizational Context</b> (Knowledge of the company / organization and its processes)</p>	<p>The user/individual on the job needs to know and understand:</p> <p>KA1. relevant standards, procedures and policies related to Health, Safety and Environment followed in the company</p> <p>KA2. emergency handling procedures &amp; hierarchy for escalation</p>
<p><b>A. Technical Knowledge</b></p>	<p>The user/individual on the job needs to know and understand:</p> <p>KB1. basic knowledge of Safety procedures( fire fighting, first aid) within the organization</p> <p>KB2. basic knowledge of various types of PPEs and their usage</p> <p>KB3. basic knowledge of risks/hazards associated with each occupation in the organization</p> <p>KB4. knowledge of personal hygiene and how an individual can contribute towards creating a highly safe and clean working environment</p>
<p><b>Skills (S)w.r.t. the scope</b></p>	
<p><b>Element</b></p>	<p><b>Skills</b></p>
<p><b>A. Core Skills/ Generic Skills</b></p>	<p><b>Writing Skills</b></p> <p>The user/ individual on the job needs to know and understand how to:</p> <p>SA1. write basic level notes and observations</p> <p><b>Reading Skills</b></p> <p>The user/individual on the job needs to know and understand how to:</p> <p>SA2. read safety instructions put up across the plant premises</p> <p>SA3. read safety precautions mentioned in equipment manuals and panels to understand the potential risks associated</p> <p><b>Oral Communication (Listening and Speaking skills)</b></p> <p>The user/individual on the job needs to know and understand how to:</p> <p>SA4. effectively communicate information to team members</p> <p>SA5. inform employees in the plant and concerned functions about events, incidents &amp; potential risks observed related to Safety, Health and Environment.</p> <p>SA6. question operator/ supervisor in order to understand the safety related issues</p> <p>SA7. attentively listen with full attention and comprehend the information given by the speaker during safety drills and training programs</p>
<p><b>B. Professional Skills</b></p>	<p><b>Judgmental Thinking</b></p> <p>The user/individual on the job needs to know and understand how to:</p> <p>SB1. use common sense and make judgments during day to day basis</p> <p>SB2. use reasoning skills to identify and resolve basic problems</p>

## NOS Version Control

<b>NOS Code</b>	ASC/N0006		
<b>Credits(NSQF)</b>	TBD	<b>Version number</b>	1.0
<b>Industry</b>	Automotive	<b>Drafted on</b>	15/7/2013
<b>Industry Sub-sector</b>	Manufacturing	<b>Last reviewed on</b>	24/7/2013
<b>Occupation</b>	Painting	<b>Next review date</b>	Under revision expected date of revised version 31-dec-15



## Conduct regular cleaning and maintenance of the equipment

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### Overview

This unit is about cleaning and maintaining the equipments on a regular basis to prevent any breakdown or improper quality of work output.

<b>Unit Code</b>	ASC/N0008
<b>Unit Title (Task)</b>	Conduct regular cleaning and maintenance of the equipment
<b>Description</b>	This NOS unit is about systematically arranging the equipments in proper area, cleaning the process equipment & auxiliaries on a regular basis and doing basic level maintenance of the equipment, recording any problems related to equipment working

ASC/N0008

### Conduct regular cleaning and maintenance of the equipment

<b>Scope</b>	The role holder will be responsible for <ul style="list-style-type: none"> <li>Storing the equipment in the proper condition</li> <li>Regular cleaning and maintenance of equipments and work area</li> </ul>
<b>Performance Criteria (PC) w.r.t. the Scope</b>	
<b>Element</b>	<b>Performance Criteria</b>
<b>Storing equipments in proper condition</b>	PC1. Arrange all equipments in a proper order as indicated in the equipment manual PC2. Store equipment auxiliaries and spare parts in proper designated areas PC3. Clearly tag process related equipment parts/ spare parts as per part number or serial number so that sorting of equipments becomes easy PC4. Cover equipments so that there is limited dust collection and moisture contact
<b>Regular cleaning of the equipments and work area</b>	PC5. Regularly clean the equipments and process auxiliaries to remove any dust, moisture, waste material which would have got collected on the equipment PC6. Regularly open the equipment and clean the internal parts of the equipment PC7. Regularly clean the working area under the process and create a healthy, clean and safe working environment
<b>Conduct regular preventive maintenance of equipments</b>	PC8. Check the working of all bearing, rollers, shafts etc and oil all moving parts of the equipment on a periodic basis PC9. Check the working of non moving parts and periodically conduct preventive maintenance to prevent machine failure PC10. Periodically check the equipment calibration and report any errors to the maintenance teams for rectification
<b>Recording observations and preparing MIS</b>	PC11. Prepare periodic log sheets of equipment maintenance dates, maintenance schedules and maintenance activity conducted on the equipment
<b>Knowledge and Understanding (K) w.r.t. the scope</b>	
<b>Element</b>	<b>Knowledge and Understanding</b>
<b>A. Organizational Context</b> (Knowledge of the company / organization and its processes)	The user/individual on the job needs to know and understand: <ul style="list-style-type: none"> <li>KA1. relevant standards and procedures followed in the company for the process of maintenance and equipment storage</li> <li>KA2. functional processes like Procurement, Store management, inventory management, quality management and key contact points for query resolution</li> </ul>
<b>B. Technical Knowledge</b>	The user/individual on the job needs to know and understand: <ul style="list-style-type: none"> <li>KB1. basic level maintenance and cleaning techniques</li> <li>KB2. various solvents, chemicals, lubricants etc used during the maintenance processes</li> <li>KB3. procedure for arranging the equipments and spare parts in the prescribed manner including tagging and numbering of machine</li> </ul>

ASC/N0008

**Conduct regular cleaning and maintenance of the equipment**

	<p>parts &amp; spares</p> <p>KB4. safety precautions to be taken during cleaning and maintenance activities</p>
<b>Skills (S)w.r.t. the scope</b>	
<b>Element</b>	<b>Skills</b>
<b>A. Core Skills/ Generic Skills</b>	<b>Writing Skills</b>
	<p>The user/ individual on the job needs to know and understand how to:</p> <p>SA1. note equipment part codes, name tags etc in the prescribed formats and records for the same</p> <p>SA2. note observations related to equipment performance, breakdown, cleaning and maintenance schedules etc in the prescribed MIS format</p>
	<b>Reading Skills</b>
	<p>The user/individual on the job needs to know and understand how to:</p> <p>SA3. read equipment manuals and process documents to understand the equipments and processes better</p> <p>SA4. read instructions especially safety instructions related to equipment cleaning and maintenance</p>
<b>B. Professional Skills</b>	<b>Oral Communication (Listening and Speaking skills)</b>
	<p>The user/individual on the job needs to know and understand how to:</p> <p>SA5. discuss task lists and job requirements with co-workers</p> <p>SA6. effectively communicate information to team members</p> <p>SA7. listen and analyze any noise and vibrations in the equipment and report the same to the maintenance team for preventive action</p> <p>SA8. attentively listen with full attention and comprehend the information given by the speaker</p>
	<b>Plan and Organize</b>
	<p>The user/individual on the job needs to know and understand how to:</p> <p>SB1. plan and organize the work order and jobs received from the Operator</p> <p>SB2. organize all process/ equipment manuals so that sorting/</p> <p>SB3. accessing information is easy as per the part/ machine number in</p> <p>SB4. the specified format in the designated area</p>
<b>B. Professional Skills</b>	<b>Critical Thinking and Judgment</b>
	<p>The user/individual on the job needs to know and understand how to:</p> <p>SB5. use common sense and make judgments during day to day basis</p> <p>SB6. use reasoning skills to identify and resolve basic problems</p>

## NOS Version Control

<b>NOS Code</b>	ASC/N0008		
<b>Credits(NSQF)</b>	TBD	<b>Version number</b>	1.0
<b>Industry</b>	Automotive	<b>Drafted on</b>	15/7/2013
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<b>Occupation</b>	Painting	<b>Next review date</b>	Under revision expected date of revised version 31-dec-15

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# National Occupational Standard



## Overview

This unit is about the understanding all principles of 5S and follow the given guidelines to ensure a clean and efficient working environment in the organization

ASC/N0021

Maintaining 5S at the work premises

National Occupational Standard

<b>Unit Code</b>	ASC/N0021
<b>Unit Title (Task)</b>	Maintaining 5S at the work premises
<b>Description</b>	This NOS is about ensuring all 5 S activities both at the shop floor and the office area to facilitate increase in work productivity
<b>Scope</b>	The individual needs to <ul style="list-style-type: none"> <li>Ensure sorting, streamlining &amp; organizing, storage and documentation, cleaning, standardization and sustenance across the plant and office premises of the organization</li> </ul>
<b>Performance Criteria (PC) w.r.t. the Scope</b>	
<b>Element</b>	<b>Performance Criteria</b>
<b>Ensure sorting</b>	<p>PC1. Follow the sorting process and check that the tools, fixtures &amp; jigs that are lying on workstations are the ones in use and unnecessary items are not cluttering the workbenches or work surfaces.</p> <p>PC2. Ensure segregation of waste in hazardous/ non Hazardous waste as per the sorting work instructions</p> <p>PC3. Follow the technique of waste disposal and waste storage in the proper bins as per SOP</p> <p>PC4. Segregate the items which are labelled as red tag items for the process area and keep them in the correct places</p> <p>PC5. Sort the tools/ equipment/ fasteners/ spare parts as per specifications/ utility into proper trays, cabinets, lockers as mentioned in the 5S guidelines/ work instructions</p> <p>PC6. Ensure that areas of material storage areas are not overflowing</p> <p>PC7. Properly stack the various types of boxes and containers as per the size/ utility to avoid any fall of items/ breakage and also enable easy sorting when required</p> <p>PC8. Return the extra material and tools to the designated sections and make sure that no additional material/ tool is lying near the work area</p> <p>PC9. Follow the floor markings/ area markings used for demarcating the various sections in the plant as per the prescribed instructions and standards</p>
<b>Ensure proper documentation and storage (organizing, streamlining)</b>	<p>PC10. Follow the proper labeling mechanism of instruments/ boxes/ containers and maintaining reference files/ documents with the codes and the lists</p> <p>PC11. Check that the items in the respective areas have been identified as broken or damaged</p> <p>PC12. Follow the given instructions and check for labelling of fluids, oils, lubricants, solvents, chemicals etc. and proper storage of the same to avoid spillage, leakage, fire etc.</p> <p>PC13. Make sure that all material and tools are stored in the designated places and in the manner indicated in the 5S instructions</p>

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<p><b>Ensure cleaning of self and the work place</b></p>	<p>PC14. Check whether safety glasses are clean and in good condition            PC15. Keep all outside surfaces of recycling containers are clean            PC16. Ensure that the area has floors swept, machinery clean and generally clean. In case of cleaning, ensure that proper displays are maintained on the floor which indicate potential safety hazards            PC17. Check whether all hoses, cabling &amp; wires are clean, in good condition and clamped to avoid any mishap or mix up            PC18. Ensure workbenches and work surfaces are clean and in good condition            PC19. Follow the cleaning schedule for the lighting system to ensure proper illumination            PC20. Store the cleaning material and equipment in the correct location and in good condition            PC21. Ensure self-cleanliness - clean uniform, clean shoes, clean gloves, clean helmets, personal hygiene</p>
<p><b>Ensure sustenance</b></p>	<p>PC1. Follow the daily cleaning standards and schedules to create a clean working environment            PC2. Attend all training programs for employees on 5 S            PC3. Support the team during the audit of 5 S            PC4. Participate actively in employee work groups on 5S and encourage team members for active participation            PC5. Follow the guidelines for What to do and What not to do to build sustainability in 5S as mentioned in the 5S check lists/ work instructions</p>
<p><b>Knowledge and Understanding (K) w.r.t. the scope</b></p>	
<p><b>Element</b></p>	<p><b>Knowledge and Understanding</b></p>
<p><b>A. Organizational Context</b> (Knowledge of the company / organization and its processes)</p>	<p>The user/individual on the job needs to know and understand:            KA1. relevant standards, procedures and policies related to 5S followed in the company</p>
<p><b>B. Technical Knowledge</b></p>	<p>The user/individual on the job needs to :</p> <p>KB5. have basic knowledge of 5S procedures            KB6. know various types 5s practices followed in various areas            KB7. understand the 5S checklists provided in the department/ team            KB8. have skills to identify useful &amp; non useful items            KB9. have knowledge of labels , signs &amp; colours used as indicators            KB10. Have knowledge on how to sort and store various types of tools, equipment, material etc.            KB11. know , how to identify various types of waste products            KB12. understand the impact of waste/ dirt/ dust/unwanted substances on the process/ environment/ machinery/ human body            KB13. have knowledge of best ways of cleaning &amp; waste disposal            KB14. understand the importance of standardization in processes</p>

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	<p>KB15. understand the importance of sustainability in 5S          KB16. have knowledge of TQM process          KB17. have knowledge of various materials and storage norms          KB18. understand visual controls, symbols, graphs etc.</p>
<b>Skills (S)w.r.t. the scope</b>	
<b>Element</b>	<b>Skills</b>
<b>A. Core Skills/ Generic Skills</b>	<b>Writing Skills</b>
	The user/ individual on the job needs to know and understand how to: SA8. write basic level notes and observations SA9. note down observations (if any) related to the process SA10. write information documents to internal departments/ internal teams
	<b>Reading Skills</b>
	The user/individual on the job needs to know and understand how to: SA11. read 5S instructions put up across the plant premises
	<b>Oral Communication (Listening and Speaking skills)</b>
	The user/individual on the job needs to know and understand how to: SA12. effectively communicate information to team members inform employees in the plant and concerned functions about 5S SA13. question the process head in order to understand the 5S related issues SA14. attentively listen with full attention and comprehend the information given by the speaker during 5S training programs
<b>B. Professional Skills</b>	<b>Judgmental Thinking</b>
	The user/individual on the job needs to know and understand how to: SB3. use common sense and make judgments during day to day basis SB4. use reasoning skills to identify and resolve basic problems using 5S
	<b>Persuasion</b>
	The user/ individual on the jobs needs to know and understand how to: SB5. persuade co team members to follow 5 S SB6. ensure that the co team members understand the importance of using 5 S tool
	<b>Creativity</b>
	The user/individual on the job needs to know and understand how to : SB7. use innovative skills to perform and manage 5 S activities at the work desk and the shop floor SB8. exhibit inquisitive behaviour to seek feedback and question on the existing set patterns of work
	<b>Self –Discipline</b>

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	<p>The user/individual on the job needs to know and understand how to:</p> <p>SB9. do what is right, not what is a popular practices</p> <p>SB10. follow shop floor rules&amp; regulations and avoid deviations; make 5S an integral way of life</p> <p>SB11. ensure self-cleanliness on a daily basis</p> <p>SB12. demonstrate the will to keep the work area in a clean and orderly manner</p>
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**NOS Version Control**

<b>NOS Code</b>	ASC/N0021		
<b>Credits(NSQF)</b>	TBD	<b>Version number</b>	1.0
<b>Industry</b>	Automotive	<b>Drafted on</b>	1/03/2014
<b>Industry Sub-sector</b>	Manufacturing	<b>Last reviewed on</b>	15/03/2014
<b>Occupation</b>	Painting	<b>Next review date</b>	Under revision expected date of revised version 31-dec-15

**Qualification Pack for Automotive Paintshop Assistant**

**Criteria for assessment of Trainees**

JOB ROLE	Automotive Paint shop Assistant L2
Qualification Pack	ASC/Q 3302
No. Of NOS	2 Role specific ,3 generic

NOS Title/ NOS Elements	NOS & Performance Criterion Description	Marks allocation		
		Theory	Viva	Practical
<b>ASC/N3303</b>	<b>Support the operator in the pretreatment process</b>			
<b>Check the body as per the Quality gate inspection sheets as per Standard Operating Procedures/ Internal Quality Manual</b>	PC1. Clearly understanding the does and don'ts of the manufacturing process as defined in SOPs/ Work Instructions or defined by supervisors PC2. Check the incoming body parts for dents as per the instructions given in the work instructions/ SOP PC3. Check the incoming body parts for burrs, metal wires as per the instructions given in the work instructions PC4. Check the incoming body parts for rusts as per the instructions given in the work instructions PC5. Return the body part if quality parameters not adhered to		10	30
<b>Press the carrier rise button in loading panel in auto mode</b>	PC6. Check visual/manual while loading the panel		10	10
<b>Check all rest point of the body .Align the body on clamp hanger if body not properly rested</b>	PC7. Check the condition of the connector, if is not ok then bypass the hanger. PC8. Check the pin point of the rested part of the body for alignment, if not properly rested, align with the help of rod.		20	20
<b>Feed the data in loading panel according to model and save it</b>	PC9. Check visual/manual while feeding the data otherwise the hanger will not move		10	10
<b>Cut wire to clamp the body</b>	PC10. Ensure proper wire cutting so that the wire doesn't come in contact with the body and body shell.		10	20

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	subtotal		60	90
<b>ASC/N3304</b>	<b>Support the operator in body surface preparation, sealant application and sanding operation</b>	<b>Theory</b>	<b>viva</b>	<b>Practical</b>
<b>Apply recti at defined location of body part</b>	PC1. Ensuring pressure of the sealer in sealer line as per specification. PC2. After gun application at each defined location if there is excess sealer or a sealer defects observed at the station, immediate rectify at the station. PC3. Checking the sealer supply PC4. Quality of the sealer: sealer should be homogenous, off-white paste free from lumps & foreign particulate matter		10	30
<b>Do sanding on defective areas of the body</b>	The user/individual on the job needs to know and have understanding of PC5. Ensuring that there must be no edge at corners of the sanded area. PC6. Ensure completion of the sanding process flow: sanding must be done in anticlockwise direction.		20	30
<b>Check for sealant finish, if there is no uniformity or sealant crack, and then apply air dry sealant on that area.</b>	The user/individual on the job needs to know and have understanding of PC7. sealant application process: sealant to be applied with sealant gun and then recti PC8. application to be done for smooth finish PC9. ensuring lux level of the booth		10	40
<b>Check for dent in the body, if this defect appears, first do sanding on the area, then fill the putty on the dented area</b>	The user/individual on the job needs to know and have understanding of  PC10. the putty drying process: after putty drying, role holder needs to do uniform sanding for leveling the surface with body level, otherwise putty patch mark may generate after paint application		10	20
	<b>Subtotal</b>		<b>50</b>	<b>120</b>
<b>ASC/N0008</b>	<b>Conduct regular cleaning and maintenance of the equipment</b>	<b>Theory</b>	<b>Viva</b>	<b>Practical</b>
<b>Storing equipment in proper condition</b>	PC1. Arrange all equipment in a proper order as indicated in the equipment manual PC2. Store equipment auxiliaries and spare parts in proper designated areas PC3. Clearly tag process related equipment		15	25

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	parts/ spare parts as per part number or serial number so that sorting of equipment becomes easy PC4. Cover equipment so that there is limited dust collection and moisture contact			
<b>Regular cleaning of the equipment and work area</b>	PC5. Regularly clean the equipment and process auxiliaries to remove any dust, moisture, waste material which would have got collected on the equipment PC6. Regularly open the equipment and clean the internal parts of the equipment PC7. Regularly clean the working area under the process and create a healthy, clean and safe working environment		0	25
<b>Conduct regular preventive maintenance of equipment</b>	PC8. Check the working of all bearing, rollers, shafts etc. and oil all moving parts of the equipment on a periodic basis PC9. Check the working of non-moving parts and periodically conduct preventive maintenance to prevent machine failure PC10. Periodically check the equipment calibration and report any errors to the maintenance teams for rectification		15	30
<b>Recording observations and preparing MIS</b>	PC11. Prepare periodic log sheets of equipment maintenance dates, maintenance schedules and maintenance activity conducted on the equipment		10	10
	<b>Subtotal</b>		<b>40</b>	<b>90</b>
<b>ASC/N 0006</b>	<b>Maintain a safe and healthy working environment</b>	<b>Theory</b>	<b>Viva</b>	<b>Practical</b>
<b>Identify and report the risks identified</b>	PC1. Identify activities which can cause potential injury through sharp objects, burns, fall, electricity, gas leakages, radiation, poisonous fumes, chemicals, loud noise PC2. Inform the concerned authorities about the potential risks identified in the processes, workplace area/ layout, materials used etc. PC3. Inform the concerned authorities about machine breakdowns, damages which can potentially harm man/ machine during operations PC4. Create awareness amongst other by sharing information on the identified risks		20	40
<b>Create and sustain a Safe, clean and environment friendly work place</b>	PC5. Follow the instructions given on the equipment manual describing the operating process of the equipment PC6. Follow the Safety, Health and Environment			

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	<p>related practices developed by the organization</p> <p>PC7. Operate the machine using the recommended Personal Protective Equipment (PPE)</p> <p>PC8. Maintain a clean and safe working environment near the work place and ensure there is no spillage of chemicals, production waste, oil, solvents etc.</p> <p>PC9. Maintain high standards of personal hygiene at the work place</p> <p>PC10. Ensure that the waste disposal is done in the designated area and manner as per organization SOP.</p> <p>PC11. Inform appropriately the medical officer/ HR in case of self or an employee's illness of contagious nature so that preventive actions can be planned for others</p>		50	40
	<b>subtotal</b>		<b>70</b>	<b>80</b>
<b>ASC / N 0021</b>	<b>Maintain 5S at the work premises</b>	<b>Theory</b>	<b>Viva</b>	<b>Practical</b>
<b>Ensure sorting</b>	<p>PC1 Follow the sorting process and check that the tools, fixtures &amp; jigs that are lying on workstations are the ones in use and unnecessary items are not cluttering the workbenches or work surfaces.</p> <p>PC2 Ensure segregation of waste in hazardous/ non Hazardous waste as per the sorting work instructions</p> <p>PC3 Follow the technique of waste disposal and waste storage in the proper bins as per SOP</p> <p>PC4 Segregate the items which are labelled as red tag items for the process area and keep them in the correct places</p> <p>PC5 Sort the tools/ equipment/ fasteners/ spare parts as per specifications/ utility into proper trays, cabinets, lockers as mentioned in the 5S guidelines/ work instructions</p> <p>PC6 Ensure that areas of material storage areas are not overflowing</p> <p>PC7 Properly stack the various types of boxes and containers as per the size/ utility to avoid any fall of items/ breakage and also enable easy sorting when required</p> <p>PC8 Return the extra material and tools to the designated sections and make sure that no additional material/ tool is lying near the work area</p>		10	20
			10	20

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	PC9 Follow the floor markings/ area markings used for demarcating the various sections in the plant as per the prescribed instructions and standards			
<b>Ensure proper documentation and storage ( organizing , streamlining)</b>	PC10 Follow the proper labeling mechanism of instruments/ boxes/ containers and maintaining reference files/ documents with the codes and the lists PC11 Check that the items in the respective areas have been identified as broken or damaged PC12 Follow the given instructions and check for labelling of fluids, oils. lubricants, solvents, chemicals etc. and proper storage of the same to avoid spillage, leakage, fire etc. PC13 Make sure that all material and tools are stored in the designated places and in the manner indicated in the 5S instructions		10	20
<b>Ensure cleaning of self and the work place</b>	PC14 Check whether safety glasses are clean and in good condition PC15 Keep all outside surfaces of recycling containers are clean PC16 Ensure that the area has floors swept, machinery clean and generally clean. In case of cleaning, ensure that proper displays are maintained on the floor which indicate potential safety hazards PC17 Check whether all hoses, cabling & wires are clean, in good condition and clamped to avoid any mishap or mix up PC18 Ensure workbenches and work surfaces are clean and in good condition PC19 Follow the cleaning schedule for the lighting system to ensure proper illumination PC20 Store the cleaning material and equipment in the correct location and in good condition PC21 Ensure self-cleanliness - clean uniform, clean shoes, clean gloves, clean helmets, personal hygiene		10	40
<b>Ensure sustenance</b>	PC22 Follow the daily cleaning standards and schedules to create a clean working environment PC23 Attend all training programs for employees on 5 S PC24 Support the team during the audit of 5 S PC25 Participate actively in employee work groups on 5S and encourage team members for active participation		10	20

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	PC26 Follow the guidelines for What to do and What not to do to build sustainability in 5S as mentioned in the 5S check lists/ work instructions			
	<b>Sub total</b>		<b>50</b>	<b>120</b>
	<b>Total</b>	<b>160</b>	<b>270</b>	<b>500</b>