

## 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- QC Inspector Level 3

**SECTOR:** AUTOMOTIVE

**SUB-SECTOR:** MANUFACTURING SUPPORT

**OCCUPATION:** QUALITY ASSURANCE

**JOB ROLE:** QC INSPECTOR LEVEL 3

**REFERENCE ID:** ASC/Q6301

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

**Brief Job Description:** Individuals at this job need to be responsible for the quality inspection of the manufactured products in order to deliver high quality to customers

**Personal Attributes:** This job requires the individual to be able to coordinate internally and externally within the organization. The individual should be result oriented, and possess strong quality management skills. The individual should also be able to demonstrate skills for mathematical reasoning, problem solving, relationship building and leadership.

### Qualifications Pack For QC Inspector L3

Job Details	Qualifications Pack Code	ASC/Q 6301		
	Job Role	QC Inspector- L3		
	Credits(NSQF)	TBD	Version number	1.0
	Sector	Automotive	Drafted on	13/08/13
	Sub-sector	Manufacturing Support	Last reviewed on	27/08/13
	Occupation	Quality Assurance	Next review date	Under revision expected date of revised version 31-Dec-15
	NSQC Clearance on	20/07/2015		

<b>Job Role</b>	<b>QC Inspector- L3</b>
<b>Role Description</b>	inspecting the manufactured products as per the quality standards
<b>NSQF level</b>	3
<b>Minimum Educational Qualifications*</b>	ITI in Mechanical/Electrical/Electronic Engineering ( Product content based)
<b>Maximum Educational Qualifications*</b>	Not Applicable
<b>Training</b> (Suggested but not mandatory)	<ul style="list-style-type: none"> <li>Compulsory: APQP/CP, pre-delivery inspection techniques, handling Basic inspection equipment , Introduction to MSA / SPC, PFMEA etc.</li> <li>Voluntary:7 QC tools, , problem solving techniques, Decision making hierarchy in organization</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 Act1948 :- No one can be employed before attaining the age of 15- 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.</p> <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>	<ul style="list-style-type: none"> <li>minimum 1-3 years in Quality/ Manufacturing department</li> </ul>
<b>Applicable National Occupational Standards (NOS)</b>	<p><b>Compulsory:</b></p> <ol style="list-style-type: none"> <li><a href="#">ASC/N 6301: Inspect and maintain the product quality</a></li> <li><a href="#">ASC/N 0021: Maintain 5S at the work premises</a></li> <li><a href="#">ASC/N 0006: Maintain a safe and healthy working environment</a></li> </ol>
<b>Performance Criteria</b>	As described in the relevant OS units

## Qualifications Pack For QC Inspector L3

### Definitions

Keywords /Term	Description
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.
Function	Function is an activity necessary for achieving the key purpose of the sector, occupation, or an 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 OS.
Sub-function	Sub-functions are sub-activities essential to fulfill the achieving the objectives of the function.
Job role	Job role defines a unique set of functions that together form a unique employment opportunity in an organization.
Occupational Standards (OS)	OS specify the standards of performance an individual must achieve when carrying out a function in the workplace, together with the knowledge and understanding they need to meet that standard consistently. Occupational Standards are applicable both in the Indian and global contexts.
Performance Criteria	Performance criteria are statements that together specify the standard of performance required when carrying out a task.
National Occupational Standards (OS)	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.

### Qualifications Pack For QC Inspector L3

Knowledge and Understanding	Knowledge and understanding are statements which together specify the technical, generic, professional and organizational specific knowledge that an individual needs in order to perform to the required standard.
Organizational Context	Organizational context includes the way the organization is structured and how it operates, including the extent of operative knowledge managers have of their relevant areas of responsibility.
Technical Knowledge	Technical knowledge is the specific knowledge needed to accomplish specific designated responsibilities.
Core Skills/ Generic Skills	Core skills or generic skills 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.
Keywords /Terms	Description
NOS	National Occupational Standard(s)
NSQF	National Standards Qualifications Framework
QP	Qualifications Pack
SAP- ERP	System Application and Products- Enterprise Resource Management software
PPC	Production Planning and Control
HSE	Health , Safety and Environment
PPAP	Production Part Approval Process
PO	Purchase Order
TS	TS 16949 system
APQP	Advanced Product Quality Planning
RCA	Root Cause Analysis
QMS	Quality Management System
MSA	Measurement System Analysis
PFMEA	Process failure Mode & Effects analysis
CP	Control Plan
R & R	Repeatability & Reproducibility

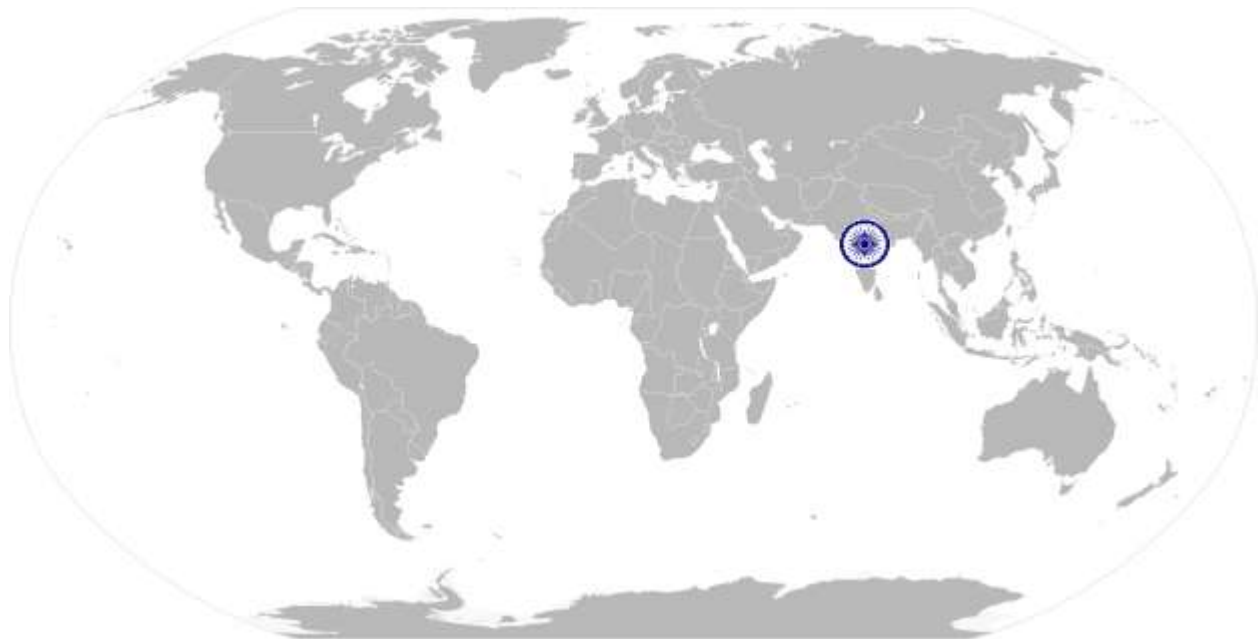
Acronyms

ASC/N6301

Inspect and maintain the product quality

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# National Occupational Standards



## Overview

This unit is about inspection and maintenance of the quality standards for the products at various stages of Product Life

ASC/N6301

Inspect and maintain the product quality

National Occupational Standard	<b>Unit Code</b>	ASC/N6301
	<b>Unit Title (Task)</b>	Inspect and maintain the product quality
	<b>Description</b>	This OS unit is about the individual monitoring and maintaining the quality of the products
	<b>Scope</b>	<p>The unit/ task covers the following for Receipt, In Process , Final Inspection:</p> <ul style="list-style-type: none"> <li>• pre- delivery inspection of the product</li> <li>• dock audit / Development batch of product</li> <li>• coordinate with R&amp;D QA for failures, CAPA &amp; CI issues</li> </ul>
	<b>Performance Criteria(PC) w.r.t. the Scope</b>	
	<b>Element</b>	<b>Performance Criteria</b>
	<b>Inspection of final product</b>	<p>To be competent, the user/individual on the job must be able to:</p> <p>PC1. conduct the process of Inspection at the stages :</p> <ul style="list-style-type: none"> <li>• complete dimensional /Layout Inspection at development stage &amp; later as per the periodicity such as annual for re- validation</li> <li>• in the Production phase as per the CP/ Quality plan/ sampling Plan/ stage inspection plans/ First off IR</li> </ul> <p>PC2. handle Inspection equipment and Instruments such as</p> <ul style="list-style-type: none"> <li>• vernier, micrometers</li> <li>• height Gauge &amp; surface plate</li> <li>• acceptance/ Combination Gauges</li> <li>• simple gauges – bore, air , profile</li> </ul> <p>for safe storage, calibration at pre-decided frequency and have an acceptable level of R &amp; R as per SOP of the organization</p> <p>PC3. conduct a inspection of the product covering the following checkpoints:</p> <ul style="list-style-type: none"> <li>• visual Inspection of the part for scratches, dents , damages, packing as per the norms etc.</li> <li>• special inspection co-ordinate with other agencies e.g. Lab :Material, Lab: Standards Room, assembly / performance trials etc.</li> <li>• identification sticker/number/label placed on the product</li> <li>• functioning of the product and its components</li> <li>• documentation pertaining to the Quality</li> </ul> <p>PC4. coordinate with the respective process owners / seniors in QA and implement CAPA for discrepancies in the parameters identified in the report on immediate basis</p> <p>PC5. participate in checking the effectiveness of implementation and repeat the process till the discrepancies are resolved</p> <p>PC6. document the observations of the inspection and maintain records of</p> <p>PC7. IR, ERP-System record and special process capability index calculation/</p>

**ASC/N6301**

**Inspect and maintain the product quality**

	<p>charting as per the SOP raise a scrap note and dispose off the scrapped product in the scrap yard as per the defined procedure maintaining the HSE compliance</p> <p>PC8. As is the case i.e. New product/process development / Production phase, the reports and Part Submission Warrant, PPAP are to be prepared.</p> <p>PC9. based on the implementation of information flow system in organization like ERP/SAP , upload the reports</p>
<p><b>Dock audit of the sample batch</b></p>	<p>To be competent , the user/individual on the job must be able to:</p> <p>PC10. conduct a dock audit of a sample batch from the production lot of the ready to dispatch final products covering the following checkpoints :</p> <ul style="list-style-type: none"> <li>• product in good shape with no visible damage</li> <li>• presence of sharp edges in the product</li> <li>• wear and tear of the product</li> <li>• presence of any physical defects</li> <li>• packaging of product according to customer specification</li> <li>• packaging boxes as per the requirement for preservation</li> <li>• customer PO Number on the shipping labels</li> <li>• boxes labeled correctly with packer name</li> <li>• count on the Bill of Lading match the count on the pallet</li> <li>• boxes stacked neatly in case of pallet arrangement</li> <li>• Damages of the pallet like nails sticking out, broken boards, etc.</li> </ul> <p>PC11. coordinate with the respective process owners/Stores and implement CAPA for discrepancies identified in the dock audit on immediate basis</p> <p>PC12. review the effectiveness of implementation and repeat the process till the discrepancies are resolved</p> <p>PC13. document the observations of dock audit and maintain records</p> <p>PC14. based on the implementation of information flow system in organization like ERP/SAP , upload the reports</p>
<p><b>Coordination with R&amp;D / Quality Manager CAPA , CI</b></p>	<p>To be competent , the user/individual on the job must be able to:</p> <p>PC15. work as a CFT member of the team formed for solving a problem pertaining to the products handled .Collect data regarding the problem as decided in the team discussions</p> <p>PC16. participate for preparation of Fault tree, conducting simulation and implementation of actions</p> <p>PC17. participate for updating relevant documentation</p> <p>PC18. assist the NPD department in efficient development of the new product by sharing all the problems related to QCD observed in the existing products</p>
<p><b>Knowledge and Understanding (K)</b></p>	
<p><b>A. Organizational Context</b> (Knowledge of the company /</p>	<p>The user/individual on the job needs to know and understand:</p> <p>KA1. product portfolio of organization</p> <p>KA2. the manufacturing processes of organization</p> <p>KA3. material classification criteria followed by organization</p>

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**Inspect and maintain the product quality**

organization and its processes)	<p>KA4. policies and procedures for storage and preservation of materials</p> <p>KA5. policies , compliances and systems followed for HSE</p> <p>KA6. TS-16949/any other QMS system guidelines followed in the organization</p> <p>KA7. New Process/Product development protocol and methodology</p>
<b>B. Technical Knowledge</b>	<p>The individual on the job needs to have elementary knowledge of the following so as to interpret the Quality Requirements :</p> <p>KB1. manufacturing process being followed for each product</p> <p>KB2. inspection checkpoints NPD, Production, Dock Audit etc.</p> <p>KB3. APQP procedures</p> <p>KB4. problem solving &amp; analysis tools like 8Ds, five why analysis etc.</p> <p>KB5. RCA analysis techniques</p> <p>KB6. requirements for PPAP-PFMEA,CP</p> <p>KB7. requirements for TS-16949/QMS system followed</p> <p>KB8. rejection / Inspection reports</p> <p>KB9. testing equipments operational knowledge</p> <p>KB10. resource &amp; information systems like SAP, ERP etc.</p>
<b>Skills (S)</b>	
<b>A. Core Skills/ Generic Skills</b>	<b>Reading and Writing skills</b>
	<p>The user/ individual on the job needs to know and understand how to:</p> <p>SA1. document the observations in the inspection format using precise terms for description of the defects , phenomenon etc.</p> <p>SA2. understand the contents mentioned on the identification sticker</p> <p>SA3. prepare reports/excel sheet/MIS for review of quality manager and senior management</p>
	<b>Communication skills</b>
	<p>The user/ individual on the job needs to know and understand how to communicate with:</p> <p>SA4. the concerned departments for failures/any issues</p> <p>SA5. NPD department for new product development</p> <p>SA6. concerned departments for dock audit and resolution of the discrepancies observed</p> <p>SA7. senior management for updating the progress and seeking their support</p> <p>SA8. team members for reviewing the progress of day to day activities</p>
	<b>Teamwork and multitasking</b>
	<p>The user/ individual on the job needs to know and understand how to:</p> <p>SA9. work as an effective team members ensuring smooth execution of the inspection of the product in an efficient and timely manner</p> <p>SA10. coordinate with various departments like NPDCFT ,Marketing, R&amp;D etc. based on the requirement</p> <p>SA11. share operation knowledge with colleagues</p>
<b>B. Professional Skills</b>	<b>Critical thinking</b>
	<p>The user/ individual on the job needs to know and understand how to:</p> <p>SB1. coordinate with the process owners and devise countermeasures for effective</p>



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**Inspect and maintain the product quality**

	<p>handling of the non-conformities observed in IR and dock audit</p> <p>SB2. understand and analyze the inspection report for providing inputs to NPD department for new product development</p> <p>SB3. interpret the customer ( Internal / external) feedback and translate it into the development of the new product in coordination with NPD department</p> <p>SB4. identify problems (technical and non-technical), disruptions and delays</p>
	<p><b>Problem Solving</b></p>
	<p>The user/individual on the job needs to know and understand how to:</p> <p>SB5. think through and devise the countermeasure for resolution for any quality related issue observed</p> <p>SB6. work on actions to be taken on immediate basis in case of frequent rejections</p> <p>SB7. devise and implement interim/permanent countermeasures for the non-conformities observed in the field failures/warranty issues using analysis tools like 4Ds , 8Ds etc.</p>
	<p><b>Reflective thinking</b></p>
	<p>The user/individual on the job needs to know how to:</p> <p>SB8. analyze the interim countermeasures taken for the resolution of non-conformities observed in the production section and dock audit to accordingly devise the permanent countermeasures for prevention from re-occurrence</p>

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Inspect and maintain the product quality

## NOS Version Control

<b>NOS Code</b>	ASC/N6301		
<b>Credits(NSQF)</b>	TBD	<b>Version number</b>	1.0
<b>Industry</b>	Automotive	<b>Drafted on</b>	13/08/13
<b>Industry Sub-sector</b>	Manufacturing Support	<b>Last reviewed on</b>	27/08/13
<b>Occupation</b>	Quality Assurance	<b>Next review date</b>	Under revision expected date of revised version 31-Dec-15

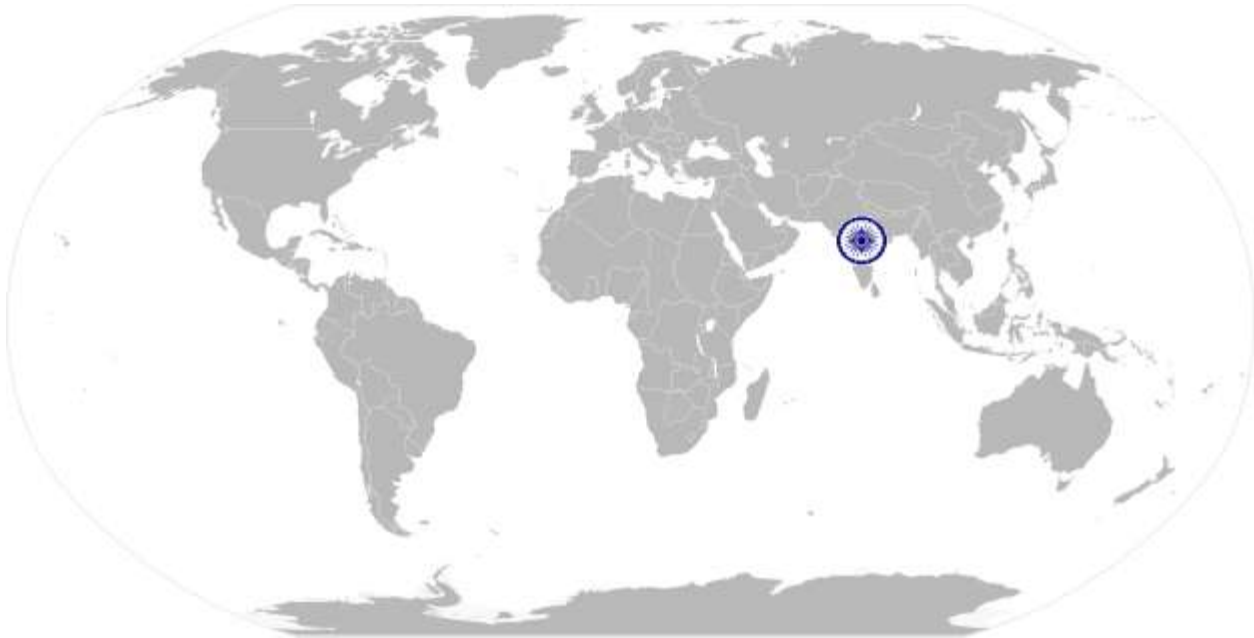


ASC/N0021

Maintain 5S at the work premises

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# National Occupational Standards



## Overview

This unit is about establishing a Safe, Healthy and Environment friendly workplace at the organization and supplier's shop floor

ASC/N0021

Maintain 5S at the work premises

National Occupational Standard

<b>Unit Code</b>	ASC/N 0021
<b>Unit Title (Task)</b>	Maintain 5S at the work premises
<b>Description</b>	This OS unit is about creating a Safe and Healthy work place, adhering to the safety guidelines in the working area of the organization and vendor's shop floor, following practices which are not impacting the environment in a negative manner
<b>Scope</b>	This unit/task covers the following: Types of processes: <ul style="list-style-type: none"> <li>customer quality assurance</li> </ul> Types of products <ul style="list-style-type: none"> <li>individual child parts</li> <li>part assemblies</li> <li>final products</li> </ul>
<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>	To be competent , the user/individual on the job must be able to : <ul style="list-style-type: none"> <li>PC1. identify activities which can cause potential injury through sharp objects, burns, fall, electricity, gas leakages, radiation, poisonous fumes, chemicals ,loud noise</li> <li>PC2. inform the concerned authorities about the potential risks identified in the processes, workplace area/ layout, materials used etc</li> <li>PC3. inform the concerned authorities about damages which can potentially harm man/ machine during operations</li> <li>PC4. create awareness amongst other by sharing information on the identified risks</li> </ul>
<b>Create and sustain a Safe, clean and environment friendly work place</b>	<ul style="list-style-type: none"> <li>PC5. follow the instructions given on the equipment manual describing the operating process of the equipments</li> <li>PC6. follow the Safety, Health and Environment related practices developed by the organization</li> <li>PC7. operate the machine using the recommended Personal Protective Equipments (PPE)</li> <li>PC8. maintain a clean and safe working environment near the workplace and ensure there is no spillage of chemicals, production waste, oil, solvents etc</li> <li>PC9. maintain high standards of personal hygiene at the work place</li> <li>PC10. ensure that the waste disposal takes place in the designated area as per organization SOP</li> </ul>

ASC/N0021

Maintain 5S at the work premises

	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
<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: KA1. relevant standards, procedures and policies related to Health, Safety and Environment followed in the company
<b>A. Technical Knowledge</b>	The user/individual on the job needs to know and understand: KB1. basic knowledge of Safety procedures( fire fighting, first aid)within the organization KB2. basic knowledge of various types of PPEs and their usage KB3. basic knowledge of risks associated with each occupation in the organization KB4. knowledge of personal hygiene and how an individual can contribute towards creating a highly safe and clean working environment
<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: SA1. write basic level notes and observations
	<b>Reading Skills</b>
	The user/individual on the job needs to know and understand how to: SA2. read safety instructions put up across the plant premises SA3. read safety precautions mentioned in equipment manuals and panels to understand the potential risks associate with the equipment
	<b>Oral Communication (Listening and Speaking skills)</b>
	The user/individual on the job needs to know and understand how to: SA4. effectively communicate information to team members and Inform employees in the plant and concerned functions about potentials Safety, Health and Environment related risks observed SA5. question operator/ supervisor in order to understand the safety related issues SA6. attentively listen with full attention and comprehend the information given by the speaker during safety drills and training programs
<b>B. Professional Skills</b>	<b>Judgmental Thinking</b>
	The user/individual on the job needs to know and understand how to: SB1. use common sense and make judgments during day to day basis

ASC/N0021

Maintain 5S at the work premises

	SB2. use reasoning skills to identify and resolve basic problems
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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>	13/08/13
<b>Industry Sub-sector</b>	Manufacturing Support	<b>Last reviewed on</b>	27/08/13
<b>Occupation</b>	Quality Assurance	<b>Next review date</b>	Under revision expected date of revised version 31-Dec-15

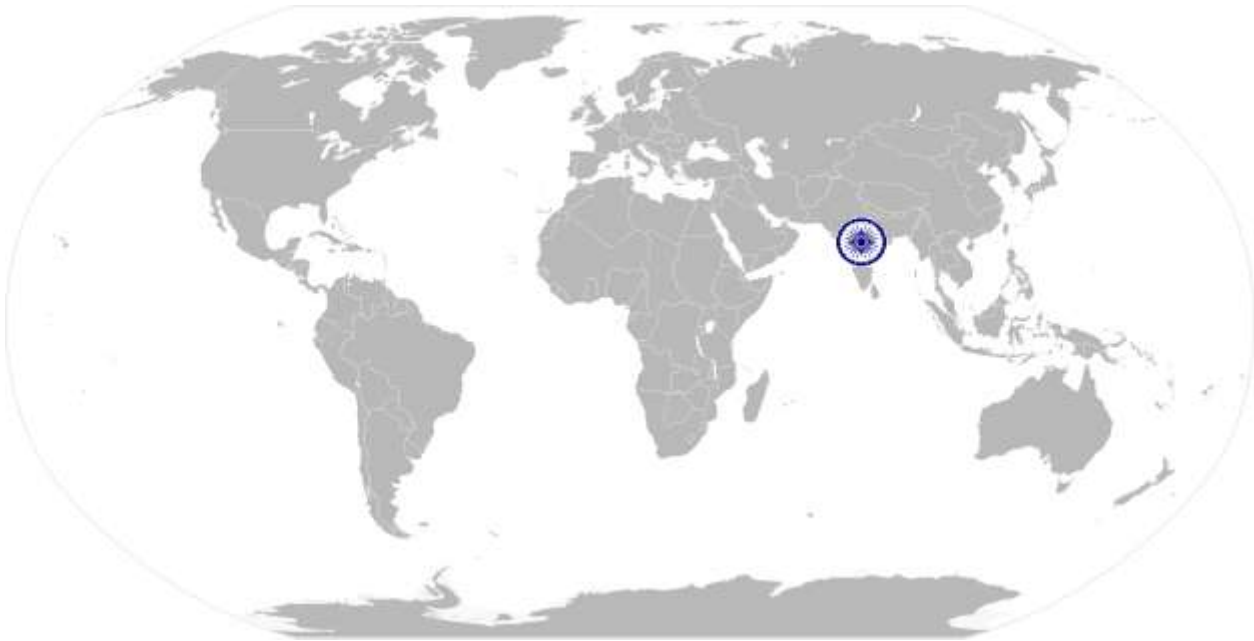


ASC/N0006

Maintain a safe and healthy working environment

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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/N0006

Maintain a safe and healthy working environment

National Occupational Standard

<b>Unit Code</b>	<b>ASC/N 0006</b>
<b>Unit Title (Task)</b>	<b>Maintain a safe and healthy working environment</b>
<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 un-necessary 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 labeled 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 labeling 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>



ASC/N0006

Maintain a safe and healthy working environment

<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>KB1. have basic knowledge of 5S procedures            KB2. know various types 5s practices followed in various areas            KB3. understand the 5S checklists provided in the department/ team            KB4. have skills to identify useful &amp; non useful items            KB5. have knowledge of labels , signs &amp; colors used as indicators            KB6. Have knowledge on how to sort and store various types of tools, equipment, material etc.            KB7. know , how to identify various types of waste products            KB8. understand the impact of waste/ dirt/ dust/unwanted substances on the process/ environment/ machinery/ human body            KB9. have knowledge of best ways of cleaning &amp; waste disposal            KB10. understand the importance of standardization in processes</p>

ASC/N0006

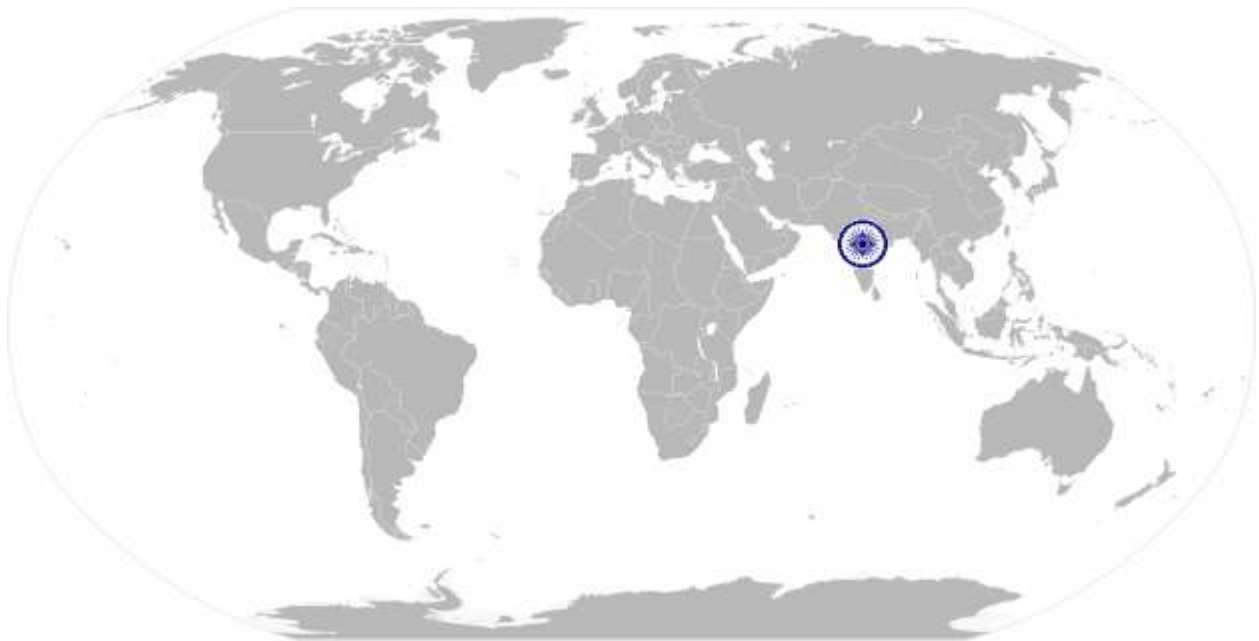
**Maintain a safe and healthy working environment**

	<p>KB11. understand the importance of sustainability in 5S          KB12. have knowledge of TQM process          KB13. have knowledge of various materials and storage norms          KB14. 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: SA1. write basic level notes and observations SA2. note down observations (if any) related to the process SA3. 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: SA4. 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: SA5. effectively communicate information to team members inform employees in the plant and concerned functions about 5S SA6. question the process head in order to understand the 5S related issues SA7. attentively listen with full attention and comprehend the information given by the speaker during 5S training programs
	<b>B. Professional Skills</b>
The user/individual on the job needs to know and understand how to: SB1. use common sense and make judgments during day to day basis SB2. 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: SB3. persuade co team members to follow 5 S SB4. 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 : SB5. use innovative skills to perform and manage 5 S activities at the work desk and the shop floor SB6. exhibit inquisitive behavior to seek feedback and question on the existing set patterns of work	
<b>Self –Discipline</b>	

ASC/N0006

**Maintain a safe and healthy working environment**

	<p>The user/individual on the job needs to know and understand how to:</p> <ul style="list-style-type: none"><li>SB7. do what is right, not what is a popular practices</li><li>SB8. follow shop floor rules&amp; regulations and avoid deviations; make 5S an integral way of life</li><li>SB9. ensure self-cleanliness on a daily basis</li><li>SB10. demonstrate the will to keep the work area in a clean and orderly manner</li></ul>
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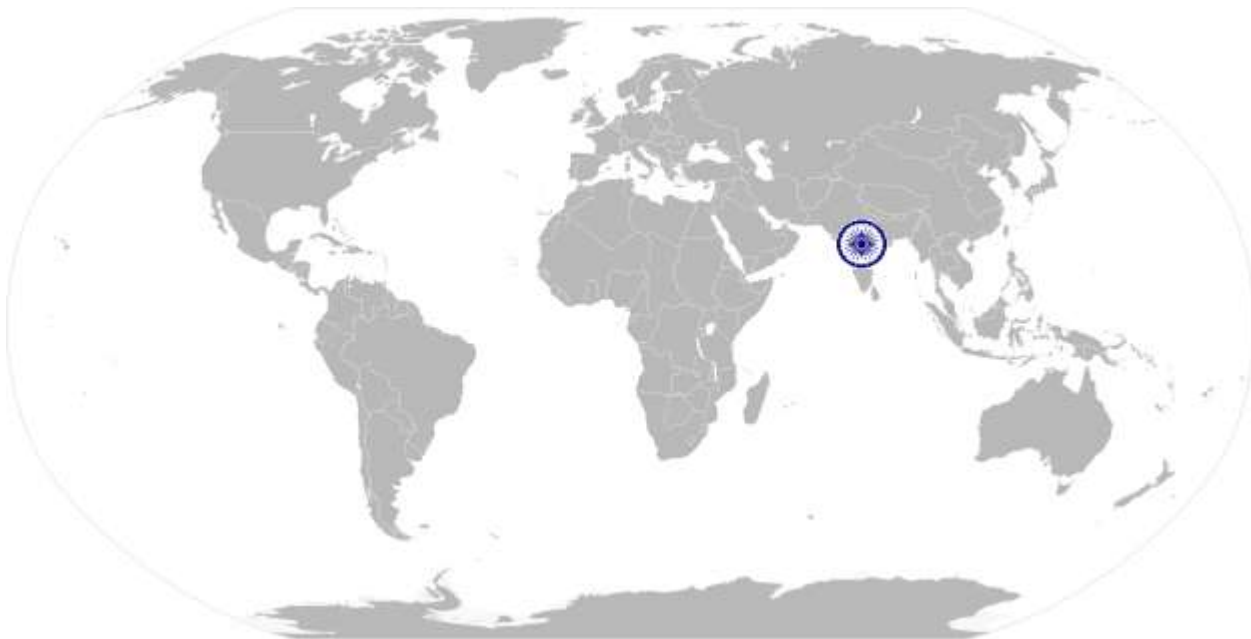


ASC/N0006

Maintain a safe and healthy working environment

## 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>	13/08/13
<b>Industry Sub-sector</b>	Manufacturing/ R&D	<b>Last reviewed on</b>	27/08/13
<b>Occupation</b>	Quality Assurance	<b>Next review date</b>	Under revision expected date of revised version 31-Dec-15



### Qualification Pack for QC Inspector Level 3

#### Criteria for assessment of Trainees

JOB ROLE	QC Inspector L3
Qualification Pack	ASC/Q 6301
No. Of NOS	1 Role specific ,2 generic

NOS Title/ NOS Elements	NOS & Performance Criterion Description	Marks allocation		
		Theory	Viva	Practical
ASC/N6301	<b>Inspect and maintain the product quality</b>			
Inspection of final product	To be competent, the user/individual on the job must be able to :			
	PC1. conduct the process of Inspection at the stages : <ul style="list-style-type: none"> <li>complete dimensional /Layout Inspection at development stage &amp; later as per the periodicity such as annual for re- validation</li> <li>in the Production phase as per the CP/ Quality plan/ sampling Plan/ stage inspection plans/ First off IR</li> </ul>		20	50
	PC2. handle Inspection equipment and Instruments such as <ul style="list-style-type: none"> <li>vernier, micrometers</li> <li>height Gauge &amp; surface plate</li> <li>acceptance/ Combination Gauges</li> <li>simple gauges – bore, air , profile</li> </ul> for safe storage, calibration at pre-decided frequency and have an acceptable level of R & R as per SOP of the organization		10	40
	PC3. conduct a inspection of the product covering the following checkpoints: <ul style="list-style-type: none"> <li>visual Inspection of the part for scratches, dents , damages, packing as per the norms etc.</li> <li>special inspection co-ordinate with other agencies e.g. Lab :Material, Lab: Standards Room, assembly / performance trials etc.</li> <li>identification sticker/number/label placed on the product</li> <li>functioning of the product and its components</li> </ul>		10	30
			10	10

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	<ul style="list-style-type: none"> <li>• documentation pertaining to the Quality</li> </ul> <p>PC4. coordinate with the respective process owners / seniors in QA and implement CAPA for discrepancies in the parameters identified in the report on immediate basis</p> <p>PC5. participate in checking the effectiveness of implementation and repeat the process till the discrepancies are resolved</p> <p>PC6. document the observations of the inspection and maintain records of</p> <p>PC7. IR, ERP-System record and special process capability index calculation/ charting as per the SOP raise a scrap note and dispose off the scrapped product in the scrap yard as per the defined procedure maintaining the HSE compliance</p> <p>PC8. As is the case i.e. New product/process development / Production phase, the reports and Part Submission Warrant, PPAP are to be prepared.</p> <p>PC9. based on the implementation of information flow system in organization like ERP/SAP , upload the reports</p>		10	30
<p><b>Dock audit of the sample batch</b></p>	<p>To be competent , the user/individual on the job must be able to:</p> <p>PC10. conduct a dock audit of a sample batch from the production lot of the ready to dispatch final products covering the following checkpoints :</p> <ul style="list-style-type: none"> <li>• product in good shape with no visible damage</li> <li>• presence of sharp edges in the product</li> <li>• wear and tear of the product</li> <li>• presence of any physical defects</li> <li>• packaging of product according to customer specification</li> <li>• packaging boxes as per the requirement for preservation</li> <li>• customer PO Number on the shipping labels</li> <li>• boxes labeled correctly with</li> </ul>		40	80

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	<p>packer name</p> <ul style="list-style-type: none"> <li>count on the Bill of Lading match the count on the pallet</li> <li>boxes stacked neatly in case of pallet arrangement</li> <li>damages of the pallet like nails sticking out, broken boards, etc.</li> </ul> <p>PC11. coordinate with the respective process owners/Stores and implement CAPA for discrepancies identified in the dock audit on immediate basis</p> <p>PC12. review the effectiveness of implementation and repeat the process till the discrepancies are resolved</p> <p>PC13. document the observations of dock audit and maintain records</p> <p>PC14. based on the implementation of information flow system in organization like ERP/SAP , upload the reports</p>			
<b>Coordination with R&amp;D / Quality Manager CAPA , CI</b>	<p>To be competent , the user/individual on the job must be able to:</p> <p>PC15. work as a CFT member of the team formed for solving a problem pertaining to the products handled .Collect data regarding the problem as decided in the team discussions</p> <p>PC16. participate for preparation of Fault tree, conducting simulation and implementation of actions</p> <p>PC17. participate for updating relevant documentation</p> <p>PC18. assist the NPD department in efficient development of the new product by sharing all the problems related to QCD observed in the existing products</p>		30	10
	<b>Subtotal</b>		<b>130</b>	<b>250</b>
<b>ASC/N 0021</b>	<b>Maintain 5S at the work premises</b>	<b>Theory</b>	<b>Viva</b>	<b>Practical</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</p>			

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	<p>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>		20	40
<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 equipment</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 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 0006</b>	<b>Maintain a safe and healthy working environment</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 labeled as red tag items for the process area and keep them in the correct places</p>		10	20



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	<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>		10	20
<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 labeling 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>		10	20
<b>Ensure sustenance</b>	<p>PC14 Follow the daily cleaning standards and schedules to create a clean working environment</p> <p>PC15 Attend all training programs for employees on 5 S</p> <p>PC16 Support the team during the audit of 5 S</p> <p>PC17 Participate actively in employee work groups on 5S and encourage team members for active participation</p> <p>PC18 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>		10	20
	<b>Sub total</b>		<b>40</b>	<b>80</b>
	<b>Total</b>	<b>130</b>	<b>240</b>	<b>410</b>



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