

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-Machine Shop Supervisor

SECTOR: AUTOMOTIVE

SUB-SECTOR: MANUFACTURING

OCCUPATION: MACHINING

JOB ROLE: MACHINING SUPERVISOR

REFERENCE ID: ASC/Q3505

ALIGNED TO: NCO-2004/8218.20

Machining Supervisor: Also known as line leader/ team leader, the role entails manufacturing products through supervising staff, organizing and monitoring work flow for various machining processes including displaying process understanding, ensuring compliance and team management

Brief Job Description: Machining Supervisor role covers supervision of operations for different machine tools performed both manually and through automatic/ CNC machines/ robots. This role primarily involves supervising all kinds of machining and in-line inspection activities for quality verification, resolving line operation issues, review of fixtures etc.

Personal Attributes: The individual should have detailed orientation towards the requisite process for the line, ensure effective management of the team, sensitivity to problem solving, quick decision making, reading, writing and communication skills and sensitivity towards safety for self and equipment used. Also, listening skills, organizations ERP process understanding and ability to motivate team members

Job Details	Qualifications Pack Code	ASC/Q3505		
	Job Role	Machining Supervisor		
	Credits(NSQF)	TBD	Version number	1.0
	Industry	Automotive	Drafted on	20/11/2013
	Sub-sector	Manufacturing	Last reviewed on	28/12/2013
	Occupation	Machining	Next review date	Under revision expected date of revised version 31-Dec-15
	NSQC Clearance on	05/08/15		

Job Role	Machining Supervisor
Role Description	This role is responsible for supervising the various machining processes such as milling, grinding, broaching, honing etc. and managing operations for a line or a shift to fulfil the production plan through ensuring machining the part as per work instructions/ standard operating procedures
NSQF level	5
Minimum Educational Qualifications	ITI Mechanical
Maximum Educational Qualifications	Diploma in Mechanical Engineering
Training (Suggested but not mandatory)	<ul style="list-style-type: none"> Different types of machining activities (like Turning, Milling, Grinding, Boring, Broaching, Honing, Facing, Shaping, Blanking, Shaving, Hobbing etc.) and usage of fixtures tools etc. 5S and Safety Process Documentation IT and ERP Awareness Quality Management Systems
Minimum Job Entry Age	<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"> 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 & processes and also that the employee in this bracket will be working under supervision. <p>3 Please note that under the Factories Act 1948, different States may have slightly varying provision which need to be adhered to.</p>
Experience	3-4 years in various machining activities

Occupational Standards (OS)	<p>ASC/N3510: Supervise and manage different pre, actual and post machining operations</p> <p>ASC/N0013: Understand process requirements, ensure process implementation</p> <p>ASC/N0014: Manage production related operations of the shift/ line on a day to day basis</p> <p>ASC/N0015: Manage the team on the line/ shift on a day to day basis</p> <p>ASC/ N0006: Maintain a safe and healthy working environment</p> <p>ASC/N0022: Ensure implementation of 5S activities at the shop floor and the office area</p> <p>Optional: N.A.</p>
Performance Criteria	As described in the relevant NOS units

Definitions

Keywords /Terms	Description
Core Skills/Generic Skills	Core Skills or Generic Skills are a group of skills that are key to learning and working in today's world. These skills are typically needed in any work environment. In the context of the NOS, these include communication related skills that are applicable to most job roles.
Function	Function is an activity necessary for achieving the key purpose of the sector, occupation, or area of work, which can be carried out by a person or a group of persons. Functions are identified through functional analysis and form the basis of NOS.
Job role	Job role defines a unique set of functions that together form a unique employment opportunity in an organization.
Knowledge and Understanding	Knowledge and Understanding are statements which together specify the technical, generic, professional and organizational specific knowledge that an individual needs in order to perform to the required standard.
National Occupational Standards (NOS)	NOS are Occupational Standards which apply uniquely in the Indian context
Occupation	Occupation is a set of job roles, which perform similar/related set of functions in an industry.
Organisational Context	Organisational Context includes the way the organization is structured and how it operates, including the extent of operative knowledge managers have of their relevant areas of responsibility.
Performance Criteria	Performance Criteria are statements that together specify the standard of performance required when carrying out a task.
Qualifications Pack(QP)	Qualifications Pack comprises the set of NOS, together with the educational, training and other criteria required to perform a job role. A Qualifications Pack is assigned a unique qualification pack code.
Qualifications Pack Code	Qualifications Pack Code is a unique reference code that identifies a qualifications pack.
Scope	Scope is the set of statements specifying the range of variables that an individual may have to deal with in carrying out the function which have a critical impact on the quality of performance required.
Sector	Sector is a conglomeration of different business operations having similar businesses and interests. It may also be defined as a distinct subset of the economy whose components share similar characteristics and interests.

Sub-Sector	Sub-sector is derived from a further breakdown based on the characteristics and interests of its components.
Sub-functions	Sub-functions are sub-activities essential to fulfil the achieving the objectives of the function.
Technical Knowledge	Technical Knowledge is the specific knowledge needed to accomplish specific designated responsibilities.
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.
Keywords /Terms	Description
NOS	National Occupational Standard(s)
NSQF	National Skills Qualifications Framework
OEM	Original Equipment Manufacturer
OS	Occupational Standard(s)
QP	Qualifications Pack
5 S	Technique of maintaining orderliness –Japanese terminology
CP	Control Plan
WI	Work Instructions

ASC/N3510

Supervise and manage different pre-, actual and post-machining operations

National Occupational Standards



Overview

This Occupational Standard describes the knowledge, understanding and skills required of an individual to supervise and manage different pre, actual and post machining operations

ASC/N3510

Supervise and manage different pre-, actual and post-machining operations

National Occupational Standard

Unit Code	ASC/N3510
Unit Title (Task)	Supervise and manage different pre, actual and post machining operations
Description	This NOS is about supervising end to end operations to ensure that the final products manufactured with all machining operations as per the quality and production norms set by the organization
Scope	<p>The machining supervisor will be responsible for:</p> <ul style="list-style-type: none"> Ensuring all pre-machining activities Monitoring/ Observing/ Recording machining operations Ensure completion of all post machining activities <p>The role is responsible for interacting with assembly line, heat treatment, materials management team, maintenance team and quality control & assurance teams</p>
Performance Criteria (PC) w.r.t. the Scope	
Element	Performance Criteria
A. Ensuring all Pre-machining activities	<p>PC1. Before starting the machining operations, help the machining operator in understanding of the task at hand</p> <p>PC2. Ensure that the team members understand and follow all the do's and don'ts of the manufacturing process as defined in SOPs/ Work Instructions or defined by supervisors/ master technicians</p> <p>PC3. Help operator understand the tooling requirements (fixtures, cutting tools, jigs etc.) and the type of coolant, lubricant etc.</p> <p>PC4. Ensure the machine stops are set or guides or programmes as per the specified lengths indicated through scales or work instructions</p> <p>PC5. Assist the Master Machining Technician Program the CNC/ numerically controlled machine as per the work instructions</p> <p>PC6. Ensure that the right material removal rate is set while programming the machine as per specified requirements E.g. for Hobbing set the ratio for the rotation of the shafts/spindle which determine the number of teeth made on the work piece</p> <p>PC7. For manual wheel dressing activities for grinding operations ensure proper balancing and dressing before operation</p> <p>PC8. Ensure that the raw material is available for machining operations and the movement of product happens as per route cards etc.</p>
B. Monitor/ Observe / Record machining operations	<p>PC9. Observe machine operations to detect defects in the component manufactured</p> <p>PC10. Observe the machine operations for any malfunctions and immediately inform the maintenance team of any malfunction observed to prevent damage to the machining equipment/ output product</p> <p>PC11. Ensure recording operational data is being done such as pressure readings, length of strokes, feed rates, speed etc. in the formats specified</p> <p>PC12. Ensure tool replacement as per recommended tool life in no. of pieces</p>
C. Ensure completion of all post machining	<p>PC13. Ensure that the machine is maintained as per proper operational condition/ daily maintenance check</p> <p>PC14. Ensure removal of chips is completed by the operator from different machine areas and dispose of scrap or waste material into the disposal area in</p>

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Supervise and manage different pre-, actual and post-machining operations

activities	<p>accordance with the company policies and environmental regulations</p> <p>PC15. Perform minor repairs and adjustments to the machine and notify maintenance team when major service/ repair is required</p> <p>PC16. Ensure all de-burring processes are complete through the use of the correct tool to remove the extra burrs, sharp edges, rust and chips from the metal surface</p> <p>PC17. Ensure that the operator is using devices like micrometers, vernier calipers, gauges, rulers and any other inspection equipment for measuring specifications with valid calibration status</p> <p>PC18. Ensure that calibration points are sent to the in-house agencies/ external as applicable</p> <p>PC19. Ensure changing different worn machine accessories, such as cutting/ grinding/ broaching/ hobbing tools (as per tool life listed, recommended) other hand tools</p>
Knowledge and Understanding (K) w.r.t. the scope	
Element	Knowledge and Understanding
A. Organisational Context (Knowledge of the Company/ Organisation and its processes)	<p>The user/individual on the job needs to know and understand:</p> <p>KA1. relevant manufacturing standards and procedures followed in the company</p> <p>KA2. different types of products manufactured by the company</p> <p>KA3. functional processes like Procurement, Store management, inventory management, quality management and key contact points for query resolution</p> <p>KA4. quality norms and standards prescribed in the Quality Manual by the organization for welding</p> <p>KA5. 5S and Safety norms practiced in the organization</p>
B. Technical Knowledge	<p>The user/individual on the job needs to know and understand:</p> <p>KB1. different types of machining processes</p> <p>KB2. basic fundamentals of machines and mechanics</p> <p>KB3. different types of tools used in the machining process with respect to type of process to be conducted</p> <p>KB4. basic principles of 5 S in manufacturing – Cleaning, sorting, scrap handling etc.</p> <p>KB5. the application of coolant and lubricants and their properties</p> <p>KB6. Impact of various machining processes on the final product outcome</p> <p>KB7. basic Arithmetic and calculation methods for tolerance limits</p> <p>KB8. metallurgical properties of metals used for machining</p> <p>KB9. the methods of using instruments like Vernier callipers, Micrometers, rulers and other inspection tools</p> <p>KB10. various National and International machining standards used in automotive sector in India</p> <p>KB11. how to read and interpret sketches and engineering drawings</p> <p>KB12. how to visually represent the final product output and hence decide on the key steps to be followed for machining</p> <p>KB13. safety guidelines related to different machines</p>
Skills (S) w.r.t. the scope	

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Element	Skills
A. Core Skills/ Generic Skills	Writing skills and reading Skills
	<p>The user/ individual on the job needs to know and understand how to:</p> <p>SA1. document information from the manuals, discussion notes, process charts etc.</p> <p>SA2. create small notes/ work documents/ diagrams for operators and helpers to help them understand the process</p> <p>SA3. write inter departmental notes/ memos or make suitable entries in the online system</p> <p>SA4. read equipment manuals and process documents to understand the equipment and processes better</p> <p>SA5. read internal information memos send by internal customers (other functions within the organization)</p>
	Oral Communication (Listening and Speaking skills)
	<p>The user/individual on the job needs to know and understand how to:</p> <p>SA6. discuss task lists, schedules, and work-loads with the operative team members</p> <p>SA7. answer the queries raised by the operative team as well as intercompany departments</p> <p>SA8. effectively communicate with the operators and helpers and make them aware of work expectations, targets, policies, processes etc.</p> <p>SA9. attentively listen with full attention the queries and grievances raised by the operative team and comprehend the information given by the speaker</p>
B. Professional Skills	Analytical thinking
	<p>The user/individual on the job needs to know and understand how to:</p> <p>SB1. break the problem into smaller issues and tasks to arrive at a solution</p> <p>SB2. understand inter process relationship and establish relationship between various parts of the problem</p> <p>SB3. leverage experience to find effective solutions to problems</p> <p>SB4. use basic analytical tools to arrive at solutions</p>
	Plan and Organise
	<p>The user/individual on the job needs to know and understand how to:</p> <p>SB5. plan, organize and prioritize the work order and jobs received from the production manager</p> <p>SB6. manage the schedule plan for the operators and helpers on the line/shift</p> <p>SB7. validate all process/ equipment manuals so that the final process selected is correct</p> <p>SB8. selected is correct</p> <p>SB9. organize information, tools, manuals etc. on the shop floor so that sorting becomes easy</p> <p>SB10. reorganize resources on the line/ shift in case of change of plans</p>
	Judgment and Critical Thinking
	<p>The user/individual on the job needs to know and understand how to:</p> <p>SB11. use common sense and make judgments during day to day basis</p> <p>SB12. use reasoning skills to identify and resolve problems</p> <p>SB13. use intuition to detect any potential problems which could arise during operations</p>
	Ownership

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	<p>The user/individual on the job needs to know and understand how to:</p> <p>SB14. accept additional responsibility for self and the team</p> <p>SB15. encourage self and other to take greater responsibilities</p> <p>SB16. ensure that the work allocated to the team is completed as per timelines and quality norms</p> <p>SB17. identify obstacles and bottlenecks in the process and on own find basic level solutions for removing these obstacles</p>
	Quality Consciousness
	<p>The user/individual on the job needs to know and understand how to:</p> <p>SB18. identify defective parts in the manufacturing line by comparing</p> <p>SB19. manufactured pieces with the work standard</p> <p>SB20. link the defect observed with the overall impact on the performance of the component/ automobile</p> <p>SB21. support and contribute in monitoring and delivering high quality output from self and others</p> <p>SB22. train team members on maintaining quality standards set by the organization</p>
	Decision making
	<p>The user/individual on the job needs to know and understand how to:</p> <p>SB23. use previous experience in resolving problems and taking decisions</p> <p>SB24. make timely and independent decisions on the line/ shift within the boundaries of the delegation matrix of the organization</p>

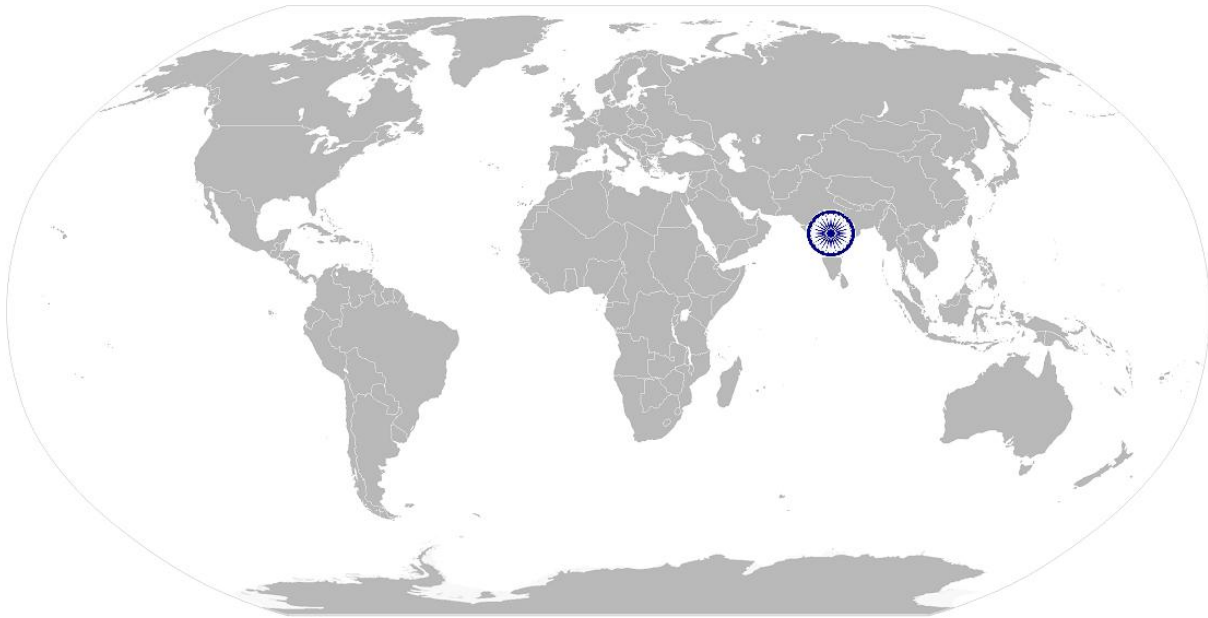
NOS Version Control

NOS Code	ASC/N3510		
Credits(NSQF)	TBD	Version number	1.0
Industry	Automotive	Drafted on	20/11/2013
Industry Sub-sector	Manufacturing	Last reviewed on	28/12/2013
Occupation	Machining	Next review date	Under revision expected date of revised version 31-Dec-15

ASC/N0013

Understand process requirements, ensure process implementation

National Occupational Standard



Overview

This unit is about the understanding all the required processes, ensuring implementation of the same and providing basic inputs for its improvement

ASC/N0013

Understand process requirements, ensure process implementation

National Occupational Standard

Unit Code	ASC /N0013
Unit Title (Task)	Understand process requirements, ensure process implementation
Description	This NOS is about understanding for the required processes, ensuring implementation of processes as per the Work instruction/ SOPs/ Control Plan and also providing basic level of inputs for process improvement through deploying different tools/ participating in analysis
Scope	<p>The machining supervisor will be responsible for:</p> <ul style="list-style-type: none"> Understanding all requisite processes in detail and ensuring implementation Data Analysis Support and provide basic level of inputs for process improvements initiatives <p>The role is responsible for interacting with manufacturing lines, materials management, maintenance team, quality control & quality assurance, process engineering and safety teams</p>
Performance Criteria(PC) w.r.t. the Scope	
Element	Performance Criteria
Understanding all the requisite processes in detail and ensuring implementation	<p>PC1. Display detailed understanding of all the requisite processes to be adopted for completing the work order through reading the process manuals/ Work Instructions/Standard Operating Procedures for the production job</p> <p>PC2. Share knowledge of processes , inputs and outputs with the operators to enhance their skill levels</p> <p>PC3. Ensure the various SOW/WI created by the master technician are displayed and understood at each and every work station</p> <p>PC4. Maintain work flow by monitoring steps of the processes, setting variables, observing control points and equipment</p> <p>PC5. Support in defining detailed processes for each step and line</p> <p>PC6. Monitor various process parameters on a regular basis and ensure compliance to agreed standards (e.g. ambient air quality, stack monitoring, water quality monitoring etc.)</p> <p>PC7. Ensuring recording and reporting procedures and systems are in place</p> <p>PC8. Facilitating corrections to malfunctions within process control points</p> <p>PC9. Ensure 5S implementation in the production line by analysing possible areas of systems and process improvements and ensure implementation of the recommended measures to address the gaps</p> <p>PC10. Ensure successful implementation of the completed Poka Yoke and kaizen on the running line</p>
Data Analysis	<p>PC11. Ensure compilation of data of breakdown maintenance and reporting the same to the maintenance team</p> <p>PC12. Conduct random sampling on the incoming quality of material and provide the relevant feedback on the same to the store</p> <p>PC13. Conduct random sampling of the process parameters and WIP products</p>

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Understand process requirements, ensure process implementation

	<p>and provide necessary feedback to the line leaders</p> <p>PC14. Conduct random sampling of the finished goods and provide the necessary feedback</p> <p>PC15. Conduct batch wise product quality check in order to ensure that the quality of the product produced meet customer requirements</p>
Support and provide basic level of inputs for process improvement initiatives	<p>PC16. Support in ensuring optimum resource utilization and wastage reduction through process improvements, Kaizens, TQM, Poka Yoke etc.</p> <p>PC17. Support and provide inputs on analysis of breakdown trends and current maintenance process to identify areas for improvement to achieve cost savings and reduce breakdown timing</p> <p>PC18. Identify trends and action points for machining as when they get unfavourable</p> <p>PC19. Identify areas of improvement in the existing processes/systems and take counter measures to adhere to the identified Kaizens</p> <p>PC20. Support the master technician in sharing inputs from the line for various Poka Yoke , kaizen activities</p> <p>PC21. Encourage team members/ operators to suggest quality improvement measures through suggestion schemes, evaluate feasibility of the ideas and discuss their implementation with seniors</p> <p>PC22. Support in analysing internal & external rejection data, planning and ensuring implementation of the corrective measures</p>
Knowledge and Understanding (K)	
A. Organizational Context (Knowledge of the company / organization and its processes)	<p>The user/individual on the job needs to know and understand:</p> <p>KA1. relevant manufacturing standards and procedures followed in the company in detail</p> <p>KA2. different types of products manufactured by the company</p> <p>KA3. knowledge of functional processes like Procurement, Store management, inventory management, quality management and key contact points for query resolution</p> <p>KA4. quality norms and standards prescribed in the Quality Manual by the organization for painting</p> <p>KA5. 5S and Safety norms practiced in the organization</p>
B. Technical Knowledge	<p>The user/individual on the job needs to know and understand:</p> <p>KB1. different types of manufacturing processes used</p> <p>KB2. requirement of raw materials used in the process</p> <p>KB3. about tools, jigs and fixtures , their usage and maintenance methods</p> <p>KB4. how to operate the machine in both, automatic and manual mode</p> <p>KB5. using engineering drawings, sketches, control plan and work instructions in the plant</p> <p>KB6. usage of various measurement tools like Vernier, Calipers, Micrometres, rulers, scales, weighing machines etc</p> <p>KB7. different types of defects which may arise due to improper manufacturing and the impact of the defect on product performance</p> <p>KB8. metallurgical and chemical properties of material involved I</p> <p>KB9. about the hazards involved in the process operations and usage of PPEs</p> <p>KB10. about handling of electrical equipment and circuits, rectifiers and</p>

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Understand process requirements, ensure process implementation

	<p>control panel etc</p> <p>KB11. how to measure the correct specifications of the output in the terms of thickness, hardness, durability, tightness, finesse etc.</p> <p>KB12. various problems solving tools like 7QC, Why Analysis, Brain storming etc.</p> <p>KB13. basic Arithmetic and calculation methods</p> <p>KB14. key areas of power consumption/ steam consumption, compressed air consumption etc.</p> <p>KB15. Various data entry tools and formats used in the organization</p> <p>KB16. ability to visualize the final product output and hence decide on the key steps and parameters to be followed</p> <p>KB17. about the various hazards related to various chemicals if used in the processes</p>
Skills (s) [optional]	
A. Core Skills/ Generic Skills	<p>Writing and reading skills</p> <p>The user/ individual on the job needs to know and understand how to:</p> <p>SA1. document information from the manuals, discussion notes, process charts etc.</p> <p>SA2. create small notes/ work documents/ diagrams for operators and helpers to help them understand the process</p> <p>SA3. write inter departmental notes/ memos or make suitable entries in the online system</p> <p>SA4. read equipment manuals and process documents to understand the equipment and processes better</p> <p>SA5. read internal information memos send by internal customers (other functions within the organization)</p>
	<p>Oral Communication (Listening and Speaking skills)</p> <p>The user/individual on the job needs to know and understand how to:</p> <p>SA6. discuss task lists, schedules, and work-loads with the operative team members</p> <p>SA7. answer the queries raised by the operative team as well as intercompany departments</p> <p>SA8. effectively communicate with the operators and helpers and make them aware of work expectations, targets, policies, processes etc.</p> <p>SA9. attentively listen with full attention the queries and grievances raised by the operative team and comprehend the information given by the speaker</p>
	<p>Team Leadership</p> <p>The user/individual on the job needs to know and understand:</p> <p>SB1. communicate effectively to the team members</p> <p>SB2. identify conflicts in the team and try to resolve them at the earliest</p> <p>SB3. interact and engage with the team members on a day to day basis</p> <p>SB4. counsel and coach the operators and help them resolve issues</p> <p>SB5. timely highlight to the management about any good work/ achievement</p>
B. Professional Skills	

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Understand process requirements, ensure process implementation

	by the operators and helpers
	Analytical Thinking
	The user/individual on the job needs to know and understand how to:
	SB6. break the problem into smaller issues and tasks to arrive at a solution
	SB7. understand inter process relationship and establish relationship between various parts of the problem
	SB8. leverage experience to find effective solutions to problems
	SB9. use basic analytical tools to arrive at solutions
	Plan and Organize
	The user/individual on the job needs to know and understand how to:
	SB10. plan, organize and prioritize the work order and jobs received from the production manager
	SB11. manage the schedule plan for the operators and helpers on the line/shift
	SB12. validate all process/ equipment manuals so that the final process selected is correct
	SB13. organize information, tools, manuals etc. on the shop floor so that sorting becomes easy
	SB14. reorganize resources on the line/ shift in case of change of plans
	Judgment and Critical Thinking
	The user/individual on the job needs to know and understand how to:
	SB15. use common sense and make judgments during day to day basis
	SB16. use reasoning skills to identify and resolve problems
	SB17. use intuition to detect any potential problems which could arise during operations
	Ownership
	The user/individual on the job needs to know and understand how to:
	SB18. accept additional responsibility for self and the team
	SB19. encourage self and other to take greater responsibilities
	SB20. ensure that the work allocated to the team is completed as per timelines and quality norms
	SB21. identify obstacles and bottlenecks in the process and on own find basic level solutions for removing these obstacles
	Team Work
	The user/individual on the job needs to know and understand how to:
	SB22. motivate and provide support for the team on the shop floor
	SB23. encourage collaboration between team members
	SB24. resolve team issues and grievances to manage conflicts within the team
	SB25. create an environment of approachability, trust and openness within the team
	SB26. ensure role clarity for all operators and helpers on the line/ shift
	SB27. escalate any team related issues to the concerned person at the right time
	Quality Consciousness

ASC/N0013

Understand process requirements, ensure process implementation

	<p>The user/individual on the job needs to know and understand how to:</p> <p>SB28. identify defective parts in the manufacturing line by comparing manufactured pieces with the work standard</p> <p>SB29. link the defect observed with the overall impact on the performance of the component/ automobile</p> <p>SB30. support and contribute in monitoring and delivering high quality output from self and others</p> <p>SB31. train team members on maintaining quality standards set by the organization</p>
	Decision making
	<p>The user/individual on the job needs to know and understand how to:</p> <p>SB32. use previous experience in resolving problems and taking decisions</p> <p>SB33. make timely and independent decisions on the line/ shift within the boundaries of the delegation matrix of the organization</p>

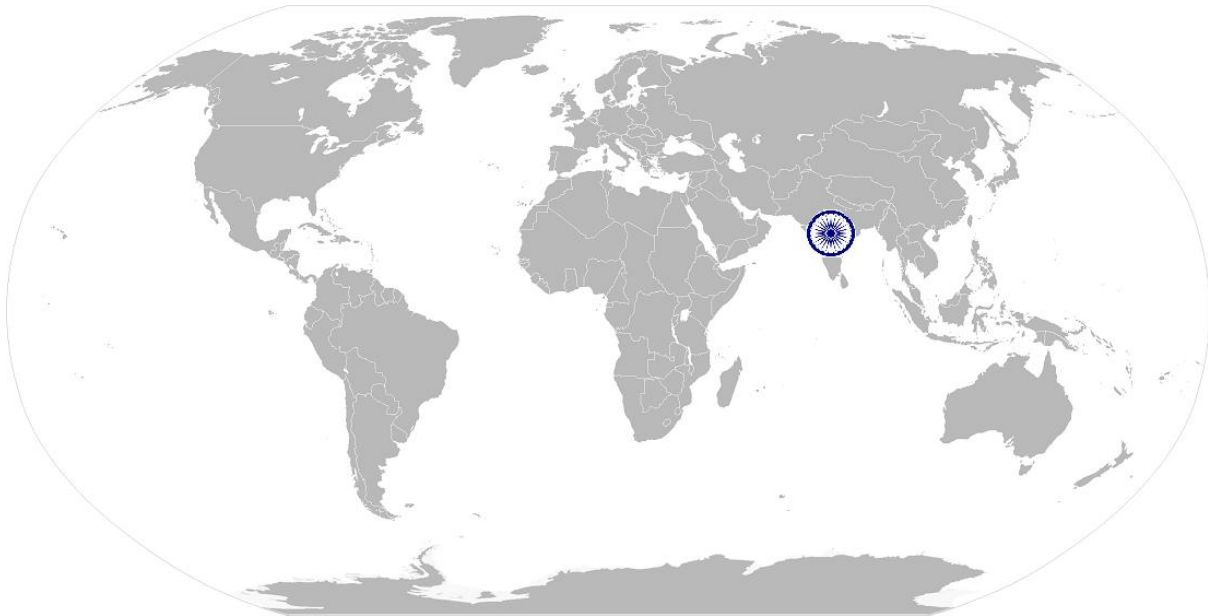
NOS Version Control

NOS Code	ASC/N0013		
Credits(NSQF)	TBD	Version number	1.0
Industry	Automotive	Drafted on	20/11/2013
Industry Sub-sector	Manufacturing	Last reviewed on	28/12/2013
Occupation	Machining	Next review date	Under revision expected date of revised version 31-Dec-15

ASC/N0014

Manage the production related operations of the shift/ line on a day to day basis

National Occupational Standard



Overview

This unit is about the Supervisor ensuring the effective, efficient and safe production output

ASC/N0014

Manage the production related operations of the shift/ line on a day to day basis

National Occupational Standard

Unit Code	ASC /N0014
Unit Title (Task)	Manage the production related operations of the shift/ line on a day to day basis
Description	This NOS is about managing production related operations of the shift/line on a day to day basis
Scope	<p>The machining supervisor will be responsible for:</p> <ul style="list-style-type: none"> • Manpower Management • Materials Management • Supervise production operations • Ensure conformance to product and process quality • Implementation of initiatives <p>The role holder will be responsible for interacting with manufacturing line, materials management team, maintenance team, quality assurance & quality control, HR/IR, production engineering and production planning & control</p>
Performance Criteria(PC) w.r.t. the Scope	
Element	Performance Criteria
Manpower Management	<p>PC1. Undertake effective shift planning based on manpower allocation as per the skill matrix and shift handling to place right manpower on the right workstation in coordination with Production In-charge to achieve production targets</p> <p>PC2. Support Shift In Charge/ Process head/ Shop head is finalizing the shift rosters for the week and month based on the production plan available</p>
Material Management	<p>PC3. Send inventory requirements to Stores and Purchase department and follow up with stores and purchase to ensure timely receipt of material (Spares, Consumables)</p> <p>PC4. Ensure that the material and work piece movement on the shop floor conforms to the TAT time prescribed in the SOP/ Work Plans so that production targets are met for the line/ shift</p>
Supervise Production Operations	<p>PC5. Support the In Charge/ Shop head in fulfilment of the production plan for the shop in a given line/ shift</p> <p>PC6. Coordinate with various functions like material management, stores, paint shop, assembly line, quality, safety, production planning etc. to ensure communication of required information and resolution of queries</p> <p>PC7. Responsible for End of Line Inspection under supervision</p> <p>PC8. Ensure that the operators and helpers have the required tools and equipment at the start of the process</p> <p>PC9. Facilitate the production runs along with Engineering and Quality function</p> <p>PC10. Ensure optimal resource utilization(man , machine and material) and streamlining of activities within the shift</p> <p>PC11. Identify & implement action steps to reduce losses and wastages during shift operation and ensure minimum rejection of components</p> <p>PC12. Prepare daily and monthly production MIS reports to match actual performance vis-à-vis the targets and report the same to Production In-chart</p>

ASC/N0014

Manage the production related operations of the shift/ line on a day to day basis

	<p>PC13. Verify the production and material movement related data entries in the system (manual/ ERP) for the line/ shift and ensure correctness of the data</p> <p>PC16. Support the In charge/ Engineer/ Shop Head in analysing the various data sheets related to production, maintenance, manpower deployment etc.</p> <p>PC17. Support the maintenance team in finalizing the preventive maintenance schedule for the shop/ line</p> <p>PC18. Support the maintenance function to ensure execution of the maintenance schedules</p> <p>PC19. Ensure shift handover to the next shift supervisor</p> <p>PC20. Observe and note the consumption of energy, fuel, steam on the production line and support the engineer in optimization of utilization of factors of production</p> <p>PC21. Ensure that the operator and helper are using the required Personal Protective Equipment like Goggles, masks, gloves and other PPE's at the time of conducting the painting operation</p>
Conformance to Product and Process Quality	<p>PC22. Conduct incoming quality inspection of material and provide the relevant feedback on the same to the store</p> <p>PC23. Conduct quality inspection of the process parameters, lab parameters and WIP products and provide necessary feedback to the line leaders</p> <p>PC24. Conduct quality inspection of the finished goods and provide the necessary feedback</p> <p>PC25. Conduct quality inspection of the first sample/batch to ensure that the quality of the product produced meet customer requirements</p> <p>PC26. Conduct inspection and analysis of the defects observed in the process and products</p>
Implementation of Initiatives	<p>PC27. Take overall responsibility to ensure adherence to Safety standards by all employees and establish zero accident practice in the section</p> <p>PC28. Implement various business excellence techniques like Kaizen, 5S initiatives, etc</p>
Knowledge and Understanding (K)	
A. Organizational Context (Knowledge of the company / organization and its processes)	<p>The user/individual on the job needs to know and understand:</p> <p>KA1.relevant manufacturing standards and procedures followed in the company in detail</p> <p>KA2.different types of products manufactured by the company</p> <p>KA3.knowledge of functional processes like Procurement, Store management, inventory management, quality management and key contact points for query resolution</p> <p>KA4.quality norms and standards prescribed in the Quality Manual by the organization for painting</p> <p>KA5.5S and Safety norms practiced in the organization</p>
B. Technical Knowledge	<p>The user/individual on the job needs to know and understand:</p> <p>KA6. different types of manufacturing processes</p> <p>KA7. requirement of raw materials used in the process</p> <p>KA8. about tools, jigs and fixtures , their usage and maintenance</p>

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Manage the production related operations of the shift/ line on a day to day basis

	KA9. how to operate both in automatic and manual mode KA10. about the various hazards related to various chemicals if used in the processes KA11. different types of defects which may arise due to improper manufacturing KA12. basic Arithmetic and calculation methods KA13. ability to visualize the final product output and hence decide on the key steps to be followed KA14. about the hazards involved in the process operations KA15. about handling of electrical equipment and circuits, rectifiers and control panel etc. KA16. metallurgical and chemical properties of the material under usage KA17. how to measure the correct specifications of the output in the terms of thickness, hardness, durability, tightness etc KA18. how to visualize the final product output and hence decide on the parameters of temperature, pressure, current and voltage KA19. various problems solving tools like 7QC, Why Analysis, Brain storming
Skills (s) [optional]	
A. Core Skills/ Generic Skills	Writing and reading skills The user/ individual on the job needs to know and understand how to: SA1. document information from the manuals, discussion notes, process charts etc. SA2. create small notes/ work documents/ diagrams for operators and helpers to help them understand the process SA3. write inter departmental notes/ memos or make suitable entries in the online system SA4. read equipment manuals and process documents to understand the equipment and processes better SA5. read internal information memos send by internal customers (other functions within the organization)
	Oral Communication (Listening and Speaking skills) The user/individual on the job needs to know and understand how to: SA6. discuss task lists, schedules, and work-loads with the operative team members SA7. answer the queries raised by the operative team as well as intercompany departments SA8. effectively communicate with the operators and helpers and make them aware of work expectations, targets, policies, processes etc. SA9. attentively listen with full attention the queries and grievances raised by the operative team and comprehend the information given by the speaker
	Team Leadership The user/individual on the job needs to know and understand: SB1. communicate effectively to the team members
B. Professional Skills	

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Manage the production related operations of the shift/ line on a day to day basis

	SB2. identify conflicts in the team and try to resolve them at the earliest SB3. interact and engage with the team members on a day to day basis SB4. counsel and coach the operators and help them resolve issues SB5. timely highlight to the management about any good work/ achievement by the operators and helpers
	Analytical Thinking
	The user/individual on the job needs to know and understand how to: SB6. break the problem into smaller issues and tasks to arrive at a solution SB7. understand inter process relationship and establish relationship between various parts of the problem SB8. leverage experience to find effective solutions to problems SB9. use basic analytical tools to arrive at solutions
	Plan and Organize
	The user/individual on the job needs to know and understand how to: SB10. plan, organize and prioritize the work order and jobs received from the production manager SB11. manage the schedule plan for the operators and helpers on the line/shift SB12. validate all process/ equipment manuals so that the final process selected is correct SB13. organize information, tools, manuals etc. on the shop floor so that sorting becomes easy SB15. reorganize resources on the line/ shift in case of change of plans
	Judgment and Critical Thinking
	The user/individual on the job needs to know and understand how to: SB16. use common sense and make judgments during day to day basis SB17. use reasoning skills to identify and resolve problems SB18. use intuition to detect any potential problems which could arise during operations
	Ownership
	The user/individual on the job needs to know and understand how to: SB19. accept additional responsibility for self and the team SB20. encourage self and other to take greater responsibilities SB21. ensure that the work allocated to the team is completed as per timelines and quality norms SB22. identify obstacles and bottlenecks in the process and on own find basic level solutions for removing these obstacles
	Team Work
	The user/individual on the job needs to know and understand how to: SB23. motivate and provide support for the team on the shop floor SB24. encourage collaboration between team members SB25. resolve team issues and grievances to manage conflicts within the team SB26. create an environment of approachability, trust and openness within

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Manage the production related operations of the shift/ line on a day to day basis

	the team
	SB27. ensure role clarity for all operators and helpers on the line/ shift
	SB28. escalate any team related issues to the concerned person at the right time
	Quality Consciousness
	<p>The user/individual on the job needs to know and understand how to:</p> <p>SB29. identify defective parts in the manufacturing line by comparing manufactured pieces with the work standard</p> <p>SB30. link the defect observed with the overall impact on the performance of the component/ automobile</p> <p>SB31. support and contribute in monitoring and delivering high quality output from self and others</p> <p>SB32. train team members on maintaining quality standards set by the organization</p>
	Decision making
	<p>The user/individual on the job needs to know and understand how to:</p> <p>SB33. use previous experience in resolving problems and taking decisions</p> <p>SB34. make timely and independent decisions on the line/ shift within the boundaries of the delegation matrix of the organization</p>



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Manage the production related operations of the shift/ line on a day to day basis

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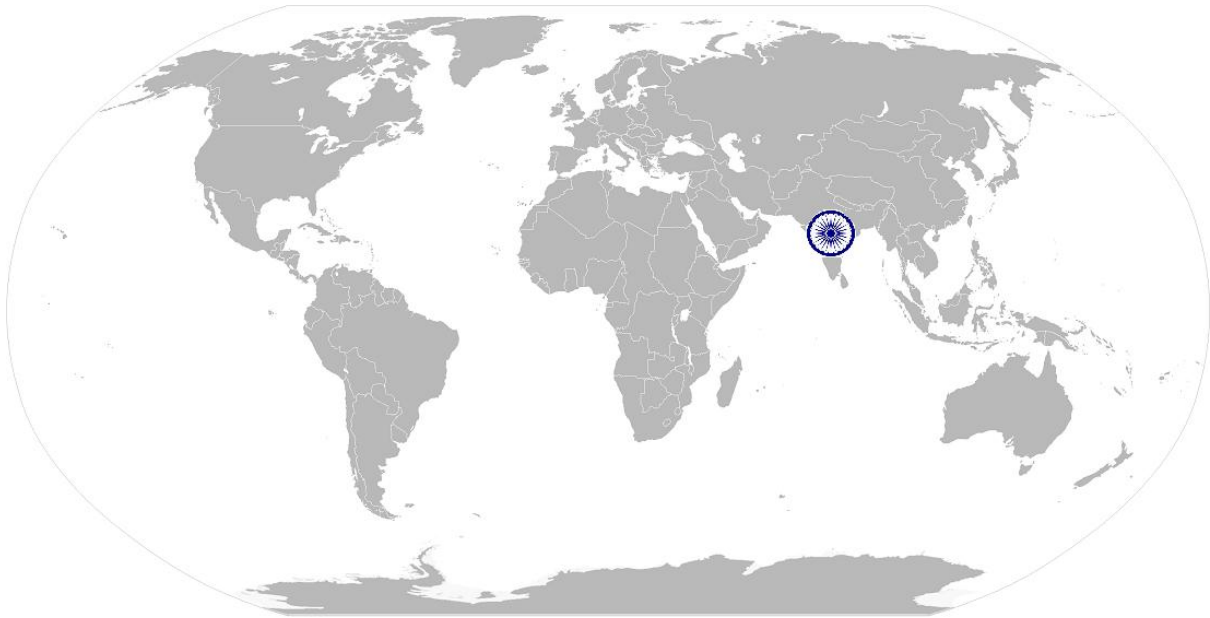
NOS Code	ASC/N0014		
Credits(NSQF)	TBD	Version number	1.0
Industry	Automotive	Drafted on	20/11/2013
Industry Sub-sector	Manufacturing	Last reviewed on	28/12/2013
Occupation	Machining	Next review date	Under revision expected date of revised version 31-Dec-15



ASC/N0015

Manage the team on the line/ shift on a day to day basis

National Occupational Standard



Overview

This unit is about effective management of the team of operators and helpers for day to day operations in the line/ shift

ASC/N0015

Manage the team on the line/ shift on a day to day basis

National Occupational Standard

Unit Code	ASC /N0015
Unit Title (Task)	Manage the team on the line/ shift on a day to day basis
Description	This NOS is about managing the team of operatives and helpers on day to day basis, ensuring their shift deployment, motivating them by involving them in various engagement initiatives at the shop floor, helping them improve the skills levels and managing their grievances in the best possible manner in order to maximize the people productivity at the shop floor
Scope	<p>The machining supervisor will be responsible for:</p> <ul style="list-style-type: none"> Engaging the shop floor work force through employee communication and employee engagement Support the shift in charge in finalizing manpower deployment Employee performance measurement and employee development Grievance management for operators and helpers <p>The role holder will be responsible for interacting with manufacturing line, materials management team, maintenance team, quality assurance & quality control, HR/IR, production engineering and production planning & control</p>
Performance Criteria(PC) w.r.t. the Scope	
Element	Performance Criteria
Engaging the shop floor work force through employee communication and employee engagement	<p>PC1. Ensure operators and helpers on the production line/ shift are aware of the job expectations on a daily basis</p> <p>PC2. Ensure that the operators are aware of the production targets and the timelines required to process a work order as finalized in the production plan</p> <p>PC3. Involve operators and helpers for the daily floor meeting/ morning meetings/ staff meetings to communicate information intended for them</p> <p>PC4. Ensure communication to line operators/ helpers on any changes in policies/ processes by the organization through required verbal/ written mechanisms</p> <p>PC5. Ensure participation of employees in various engagement initiatives organized at the plant and other place by the organization to increase morale</p> <p>PC6. Involve operators and helpers in Quality Circles, TQM & Kaizen meets, Brainstorming sessions, safety drills etc. to increase their involvement in manufacturing operations</p> <p>PC7. Ensure availability of tea, snacks, drinking water and basic hygiene facilities at the shop floor for the operative workforce</p> <p>PC8. Escalate issues to Shift In Charges/ concerned staff in case of any issue related to operative deployment and engagement</p>
Support the Shift In Charge in finalizing manpower deployment	<p>PC9. Support the Shift In Charges in finalizing the shift planning and manpower deployment for the shift/ line as per the proposed production plan</p> <p>PC10. Support the Shift In Charge/ Production Manager in creating week wise</p>

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Manage the team on the line/ shift on a day to day basis

	<p>shift rosters for the shift/ line manpower and ensure rotation of manpower as per the organizational norms and guidelines</p> <p>PC11.Maintain the information on leaves/ IN Out time keeping and shift/ line overtime for the operatives and helpers and share the information with the concerned as and when required</p> <p>PC12.Support the Shift In Charge/ Production Manager in identifying skilled manpower and updation of the Skill Matrix/ Skill Chart for the shift/ line/ process area</p> <p>PC13.Ensure identification and deployment of right skilled people at the right places on the line/ process area</p>
Employee Performance Measurement and Employee Development	<p>PC14.Ensure that all the operative manpower is aware of the production targets, production plan and daily productivity targets</p> <p>PC15.Track the daily performance of the operators and helpers during the shift and note the achievement levels in a manual register/ online IT enabled system</p> <p>PC16.Provide feedback to the operators and helper in case of any process deviation observed by the supervisor</p> <p>PC17.Provide feedback to Shift In Charges/ Production Managers pertaining to performance appraisals of operators and helpers</p> <p>PC18.Ensure that the operatives are trained and are aware of the processes which need to be followed on the shop floor during the production process</p> <p>PC19.Support the Shift In Charges/ Production Managers/ Training team in training of entry level operators and helpers in the plant</p> <p>PC20.Share knowledge of processes , inputs and outputs with the operators to enhance their skill levels</p> <p>PC21.Other than technical trainings, support the team in delivering trainings related to quality and safety for the operators and helpers</p> <p>PC22.Ensure identification of training needs, training budget, CAPA etc.</p>
Grievance Management for Operators and Helpers	<p>PC23.In case the operating staff has any queries, ensure that the queries are resolved either by self or escalated to the concerned person</p> <p>PC24.Listen to issues related to workmen problems/ work men grievances/ Complaints/ Personal Problems etc. for the operators and helpers</p> <p>PC25.Resolve issues which are under the purview of the supervisor and escalate the ones which need higher intervention to the concerned team</p> <p>PC26.Counsel employees for any work related issues or any personal problems highlighted by the employee</p>
Knowledge and Understanding (K)	
A. Organizational Context (Knowledge of the company / organization and its processes)	<p>The user/individual on the job needs to know and understand:</p> <p>KA1. relevant HR Policies and Processes followed by the organization</p> <p>KA2. different types of products manufactured by the company</p> <p>KA3. knowledge of functional processes like Procurement, Store management, inventory management, quality management and key contact points for query resolution</p> <p>KA4. 5S and Safety norms practiced in the organization</p>

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Manage the team on the line/ shift on a day to day basis

B. Technical Knowledge	<p>The user/individual on the job needs to know and understand:</p> <p>KA5. different types of manufacturing processes</p> <p>KA6. various grievance management tools available in the organization</p> <p>KA7. various problems solving tools like 7QC, Why Analysis, Brain storming</p> <p>KA8. different types of communication channels practiced by the organization</p> <p>KA9. the method of noting observations, maintaining records and sharing them with the concerned in the required format</p> <p>KA10. knowledge of shift roster norms and guidelines</p>
Skills (s) [optional]	
A. Core Skills/ Generic Skills	<p>Writing and reading skills</p> <p>The user/ individual on the job needs to know and understand how to:</p> <p>SA1. document information from the manuals, discussion notes, process charts etc.</p> <p>SA2. create small notes/ work documents/ diagrams for operators and helpers to help them understand the process</p> <p>SA3. write inter departmental notes/ memos or make suitable entries in the online system</p> <p>SA4. read equipment manuals and process documents to understand the equipment and processes better</p> <p>SA5. read internal information memo/ send by internal customers (other functions within the organization)</p> <p>Oral Communication (Listening and Speaking skills)</p> <p>The user/individual on the job needs to know and understand how to:</p> <p>SA6. discuss task lists, schedules, and work-loads with the operative team members</p> <p>SA7. answer the queries raised by the operative team as well as intercompany departments</p> <p>SA8. effectively communicate with the operators and helpers and make them aware of work expectations, targets, policies, processes etc.</p> <p>SA9. attentively listen with full attention the queries and grievances raised by the operative team and comprehend the information given by the speaker</p>
B. Professional Skills	<p>Team Leadership</p> <p>The user/individual on the job needs to know and understand:</p> <p>SB1. communicate effectively to the team members</p> <p>SB2. identify conflicts in the team and try to resolve them at the earliest</p> <p>SB3. interact and engage with the team members on a day to day basis</p> <p>SB4. counsel and coach the operators and help them resolve issues</p> <p>SB5. timely highlight to the management about any good work/ achievement by the operators and helpers</p> <p>Analytical Thinking</p>

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Manage the team on the line/ shift on a day to day basis

	<p>The user/individual on the job needs to know and understand how to:</p> <p>SB6. break the problem into smaller issues and tasks to arrive at a solution</p> <p>SB7. understand inter process relationship and establish relationship between various parts of the problem</p> <p>SB8. leverage experience to find effective solutions to problems</p> <p>SB9. use basic analytical tools to arrive at solutions</p>
	Plan and Organize
	<p>The user/individual on the job needs to know and understand how to:</p> <p>SB10. plan, organize and prioritize the work order and jobs received from the production manager</p> <p>SB11. manage the schedule plan for the operators and helpers on the line/shift</p> <p>SB12. validate all process/ equipment manuals so that the final process selected is correct</p> <p>SB13. organize information, tools, manuals etc. on the shop floor so that sorting becomes easy</p> <p>SB14. reorganize resources on the line/ shift in case of change of plans</p>
	Judgment and Critical Thinking
	<p>The user/individual on the job needs to know and understand how to:</p> <p>SB15. use common sense and make judgments during day to day basis</p> <p>SB16. use reasoning skills to identify and resolve problems</p> <p>SB17. use intuition to detect any potential problems which could arise during operations</p>
	Ownership
	<p>The user/individual on the job needs to know and understand how to:</p> <p>SB18. accept additional responsibility for self and the team</p> <p>SB19. encourage self and other to take greater responsibilities</p> <p>SB20. ensure that the work allocated to the team is completed as per timelines and quality norms</p> <p>SB21. identify obstacles and bottlenecks in the process and on own find basic level solutions for removing these obstacles</p>
	Team Work
	<p>The user/individual on the job needs to know and understand how to:</p> <p>SB22. motivate and provide support for the team on the shop floor</p> <p>SB23. encourage collaboration between team members</p> <p>SB24. resolve team issues and grievances to manage conflicts within the team</p> <p>SB25. create an environment of approachability, trust and openness within the team</p> <p>SB26. ensure role clarity for all operators and helpers on the line/ shift</p> <p>SB27. escalate any team related issues to the concerned person at the right time</p>
	Quality Consciousness
	<p>The user/individual on the job needs to know and understand how to:</p> <p>SB28. identify defective parts in the manufacturing line by comparing</p>

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Manage the team on the line/ shift on a day to day basis

	SB29. manufactured pieces with the work standard SB30. link the defect observed with the overall impact on the performance of the component/ automobile SB31. support and contribute in monitoring and delivering high quality output from self and others SB32. train team members on maintaining quality standards set by the organization
	Decision making
	The user/individual on the job needs to know and understand how to: SB33. use previous experience in resolving problems and taking decisions SB34. make timely and independent decisions on the line/ shift within the boundaries of the delegation matrix of the organization

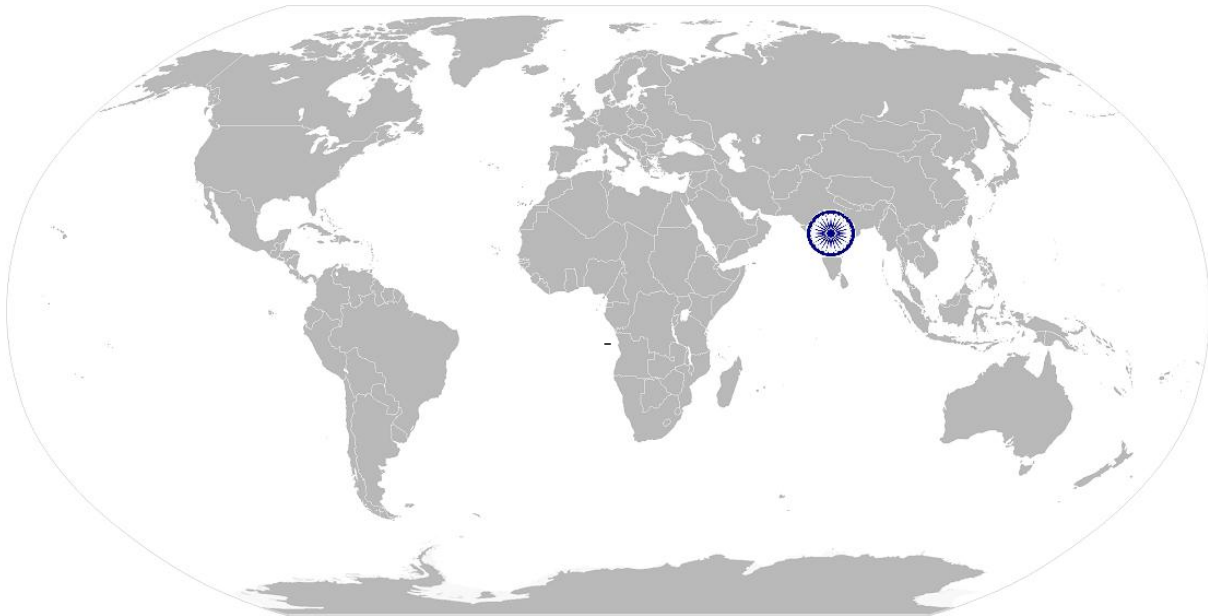
NOS Version Control

NOS Code	ASC/N0015		
Credits(NSQF)	TBD	Version number	1.0
Industry	Automotive	Drafted on	20/11/2013
Industry Sub-sector	Manufacturing	Last reviewed on	28/12/2013
Occupation	Machining	Next review date	Under revision expected date of revised version 31-Dec-15

ASC/N0006

Maintain a Safe and Healthy working environment

National Occupational Standard



Overview

This unit is about maintaining a Safe and Healthy working environment

ASC/N0006

Maintain a Safe and Healthy working environment

National Occupational Standard

Unit Code	ASC/N0006
Unit Title (Task)	Maintain a safe and healthy working environment
Description	This NOS 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 and training team members on health and safety related issues
Scope	<p>The machining supervisor will be responsible for:</p> <ul style="list-style-type: none"> Identifying and reporting the risks identified Create and sustain a safe, clean and environment friendly work place <p>The role holder will be responsible for interacting with manufacturing line, materials management team, maintenance team, quality assurance & quality control, HR/IR, production engineering and production planning & control</p>
Performance Criteria (PC) w.r.t. the Scope	
Element	Performance Criteria
Identify and report the risks identified	<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. Identify areas in the plant which are potentially hazardous/ unhygienic in nature</p> <p>PC3. Conduct regular checks on machine health to identify potential hazards due to wear and tear of machine</p> <p>PC4. Ensure that all equipment are tested of safety conformance as per the cycle/ timelines identified in the organization</p> <p>PC5. Inform the shop head and the safety team about the potential risks identified in the processes, workplace area/ layout, material used, malfunctioning of safety related equipment etc.</p> <p>PC6. Inform the maintenance team about machine breakdowns, damages which can potentially harm man/ machine during operations and analyse their defects to prevent any future damage to men/ machine</p> <p>PC7. Ensure that all risk involving and hazardous areas near the work place are marked/ tagged in order to caution the users of the work area/ machinery</p> <p>PC8. Create awareness amongst other by sharing information on the identified risks. Ensure that periodic awareness sessions are conducted for the helpers and operatives to make them aware of the risks identified</p>
Create and sustain a Safe, clean and environment friendly work place	<p>PC9. Support the Safety team in risk identification and creation of a risk mitigation plan</p> <p>PC10. Train team members on safety and health related issues</p>

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Maintain a Safe and Healthy working environment

	<p>PC11. Ensure that all team members operate the machine using the recommended Personal Protective Equipment (PPE) and also ensure self-usage of the required PPEs</p> <p>PC12. Ensure that all operatives follow the instructions given on the equipment manual describing the operating process of the equipment to prevent any hazard</p> <p>PC13. Ensure that all team members follow the Safety, Health and Environment related practices developed by the organization</p> <p>PC14. Ensure that a clean and safe working environment near the work place is maintained and that there is no spillage of chemicals, production waste, oil, solvents etc. in the working area</p> <p>PC15. Ensure that the first aid safety kit at the work place/ shop floor contains the requisite items to respond to minor injuries. Also may sure that the operatives and helpers are made aware of these items and their usage</p> <p>PC16. Ensure that a documented record of all minor and major injuries is kept and updated on the shop floor</p> <p>PC17. Ensure that the waste disposal is done in the designated area and manner as per organization SOP</p> <p>PC18. Attend all safety and fire drills to be self-aware of safety hazards and preventive techniques and ensure that the team participate in all the required safety and fire drills</p> <p>PC19. Participate in all safety related initiatives like Safety Committee participations, Safety Day Celebrations etc.</p> <p>PC20. Maintain high standards of personal hygiene at the work place</p> <p>PC21. Ensure that any activity performed by the team members which may negatively impact their health and productivity is immediately brought to notice by the supervisor</p> <p>PC22. Periodically counsel and train employees on good health and safe working practices.</p> <p>PC23. Inform 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>
Knowledge and Understanding (K)w.r.t. the scope	
Element	Knowledge and Understanding
A. Organizational Context (Knowledge of the company / organization and its processes)	<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 & hierarchy for escalation</p>
B. Technical Knowledge	<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. knowledge of various types of PPEs and their usage</p> <p>KB3. basic knowledge of risks/hazards associated with each</p>

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Maintain a Safe and Healthy working environment

	<p>occupation in the organization</p> <p>KB4. how to safely operate various tools and machines and risks associated with the tools/ equipment</p> <p>KB5. knowledge of personal hygiene and how an individual can contribute towards creating a highly safe and clean working environment</p>
Skills (S)w.r.t. the scope	
Element	Skills
A. Core Skills/ Generic Skills	Writing Skills
	<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>SA2. note down observations (if any) related to the process</p> <p>SA3. write information documents to internal departments/ internal teams</p>
	Reading Skills
	<p>The user/individual on the job needs to know and understand how to:</p> <p>SA4. read safety instructions put up across the plant premises</p> <p>SA5. read safety precautions mentioned in equipment manuals and panels to understand the potential risks associated</p>
	Oral Communication (Listening and Speaking skills)
	<p>The user/individual on the job needs to know and understand how to:</p> <p>SA6. effectively communicate information to team members</p> <p>SA7. Inform employees in the plant and concerned functions about events, incidents & potential risks observed related to Safety, Health and Environment.</p> <p>SA8. question the process head/ safety team in order to understand the safety related issues</p> <p>SA9. attentively listen with full attention and comprehend the information given by the speaker during safety drills and training programs</p>
B. Professional Skills	Judgmental Thinking
	<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>
	Persuasion skills
	<p>The user/ individual on the jobs needs to know and understand how to:</p> <p>SB3. persuade team members to wear Personal Protective Equipment as per requirement</p> <p>SB4. ensure that the team understands the importance of using various machines and equipment without creating any risk to human/ machine</p> <p>SB5. train team members on various risks identified</p>
	Analytical Thinking
	<p>The user/individual on the job needs to know and understand how to:</p>

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Maintain a Safe and Healthy working environment

	SB6. break the problem into smaller issues and tasks to arrive at a solution SB7. understand inter process relationship and establish relationship between various parts of the problem SB8. leverage experience to find effective solutions to problems SB9. use basic analytical tools to arrive at solutions
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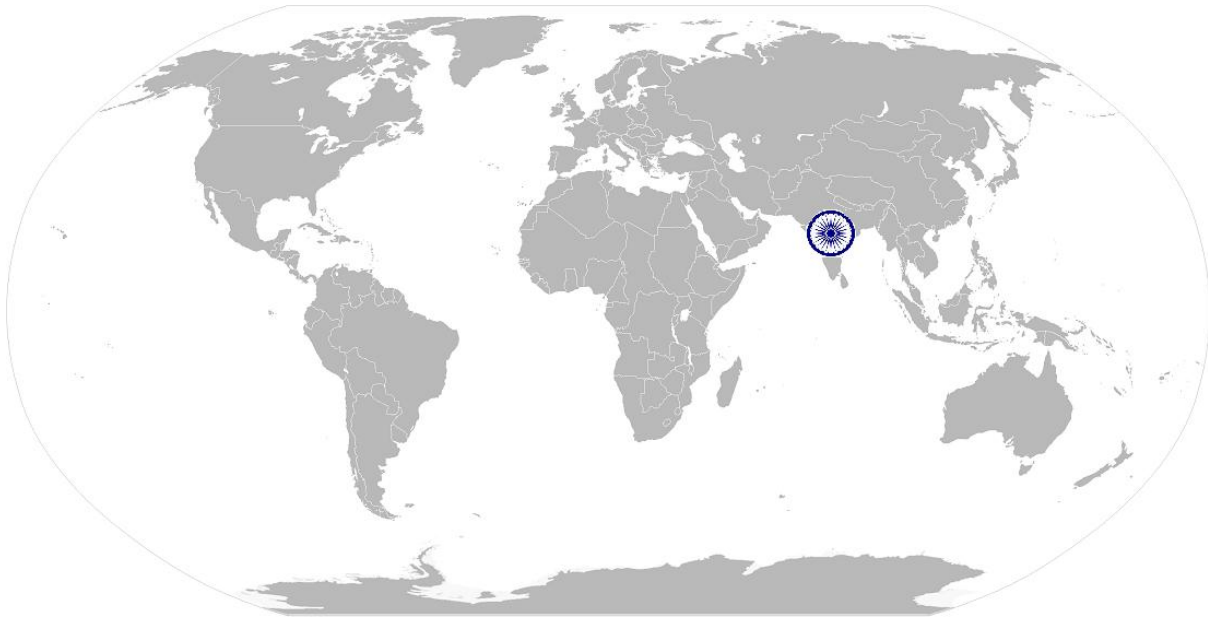
NOS Code	ASC/N0006		
Credits(NSQF)	TBD	Version number	1.0
Industry	Automotive	Drafted on	20/11/2013
Industry Sub-sector	Manufacturing	Last reviewed on	28/12/2013
Occupation	Machining	Next review date	Under revision expected date of revised version 31-Dec-15



ASC/N0022

Ensure implementation of 5S activities at the shop floor and the office area

National Occupational Standard



Overview

This unit is about the implementing the various principles of 5S and ensure that the given guidelines are followed to ensure a clean and efficient working environment in the organization

ASC/N0022

Ensure implementation of 5S activities at the shop floor and the office area

National Occupational Standard

Unit Code	ASC/N0022
Unit Title (Task)	Ensure implementation of 5S activities at the shop floor & the office area
Description	This NOS is about overseeing the implementation of all 5 S activities both at the shop floor and the office area by the team members and training the team in implementation of the 5S principles
Scope	<p>The individual needs to</p> <ul style="list-style-type: none"> Ensure sorting, streamlining/ organizing, storage and documentation, systematic cleaning, standardization and sustenance across the plant and office premises of the organization as given in the organization guidelines
Performance Criteria (PC) w.r.t. the Scope	
Element	Performance Criteria
Ensure proper sorting of items at the work place	<p>PC1. Ensure all recyclable materials are put in designated containers</p> <p>PC2. Ensure no Tools, fixtures & jigs are lying on workstations unless in use and no un-necessary items is lying on workbenches or work surfaces unless in use</p> <p>PC3. Ensure that the operators and other team members are segregating the waste in hazardous/ Non Hazardous waste as per the sorting work instructions</p> <p>PC4. Ensure that all the operators are following the technique of waste disposal and waste storage in the designated bins</p> <p>PC5. Segregate the items which are labeled at red tag items for the process area and keep them in the correct places</p> <p>PC6. Ensure that all the tools/ equipment/ fasteners/ spare parts are arranged as per specifications/ utility into proper trays, cabinets, lockers as mentioned in the 5S guidelines/ work instructions</p> <p>PC7. Check for return of any type of extra material and tools to the designated sections and make sure that no additional material/ tool is lying near the work area</p> <p>PC8. Oversee removal of unnecessary equipment, storage, furniture, unneeded inventory, supplies, parts and material</p> <p>PC9. Ensure that areas of material storage areas are not overflowing</p> <p>PC10. Ensure proper stacking and storage of 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>
Ensure proper documentation and storage – streamlining & organizing the workplace	<p>PC11. Ensure that the team follows the given instructions and checks for labelling of fluids, oils, lubricants, solvents, chemicals etc. and proper storage of the same to avoid spillage, leakage, fire etc.</p> <p>PC12. Make sure that all material and tools are stored in the designated places and in the manner indicated in the 5S instructions</p> <p>PC13. Ensure that organizing the workplace takes place with due considerations to the principles of wasted motions, ergonomics,</p>

ASC/N0022

Ensure implementation of 5S activities at the shop floor and the office area

	work & method study .
Ensure cleaning of self and the work place	<p>PC14. Ensure that the area has floors swept, machinery clean and is generally neat and tidy. In case of cleaning, ensure that correct displays are maintained on the floor which indicate potential safety hazards</p> <p>PC15. Ensure workbenches and work surfaces are clean and in good condition</p> <p>PC16. Ensure adherence to the cleaning schedule for the lighting system to ensure proper illumination</p> <p>PC17. Ensure self-cleanliness - clean uniform, clean shoes, clean gloves, clean helmets, personal hygiene</p>
Ensure standardization	<p>PC18. Ensure that daily cleaning standards and schedules to create a clean working environment are followed across the plant</p> <p>PC19. Oversee that various cleaning and organizing tasks have been developed and assigned for the work area</p> <p>PC20. Ensure logical and user friendly documentation and file management for all activities across the plant and create guidelines around standardization of processes</p> <p>PC21. Ensure timely creation and sharing of the 5S checklists</p> <p>PC22. Ensure that the 5S manual are available as per the timelines</p>
Ensure sustenance	<p>PC23. Ensure team cooperation during the audit of 5 S activities</p> <p>PC24. Ensure that workmen are periodically trained to address challenges related to 5S</p> <p>PC25. Participate actively in employee work groups on 5S and encourage team members for active participation</p> <p>PC26. Oversee that the staff/operators are trained and fully understand 5s procedures</p> <p>PC27. Ensure that all the guidelines for What to do and What not to do to build sustainability in 5S are mentioned in the 5S check lists/ work instructions and are easily searchable</p> <p>PC28. Ensure continuous training of the team members on 5S in order to increase their awareness and support implementation</p> <p>PC29. Ensure that all visual controls, notice boards, symbols etc. at the manufacturing place are created, working and are put up as per the requirement</p>
Knowledge and Understanding (K) w.r.t. the scope	
Element	Knowledge and Understanding
C. Organizational Context (Knowledge of the company / organization and its processes)	<p>The user/individual on the job needs to know and understand:</p> <p>KA3. relevant standards, procedures and policies related to 5S followed in the company</p>

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D. Technical Knowledge	<p>The user/individual on the job needs to :</p> <p>KB6. have basic knowledge of 5S procedures</p> <p>KB7. know various types 5s practices followed in various areas</p> <p>KB8. understand the 5S checklists provided in the department/ team</p> <p>KB9. have skills to identify useful & non useful items</p> <p>KB10. have knowledge of labels , signs & colours used as indicators</p> <p>KB11. Have knowledge on how to sort and store various types of tools, equipment, material etc.</p> <p>KB12. know , how to identify various types of waste products</p> <p>KB13. understand the impact of waste/ dirt/ dust/unwanted substances on the process/ environment/ machinery/ human body</p> <p>KB14. have knowledge of best and environment protective ways of cleaning & waste disposal</p> <p>KB15. understand the importance of standardization in processes</p> <p>KB16. understand the importance of sustainability in 5S</p> <p>KB17. have knowledge of TQM process</p> <p>KB18. have knowledge of various materials and storage norms</p> <p>KB19. understand visual controls, symbols, graphs etc.</p>
Skills (S)w.r.t. the scope	
Element	Skills
A. Core Skills/ Generic Skills	Writing Skills
	<p>The user/ individual on the job needs to know and understand how to:</p> <p>SA10. write basic level notes and observations</p> <p>SA11. note down observations (if any) related to the process</p> <p>SA12. write information documents to internal departments/ internal teams</p>
	Reading Skills
	<p>The user/individual on the job needs to know and understand how to:</p> <p>SA13. read 5S instructions put up across the plant premises</p>
	Oral Communication (Listening and Speaking skills)
	<p>The user/individual on the job needs to know and understand how to:</p> <p>SA14. effectively communicate information to team members inform employees in the plant and concerned functions about 5S</p> <p>SA15. question the process head in order to understand the 5S related issues</p> <p>SA16. attentively listen with full attention and comprehend the information given by the speaker during 5S training programs</p>
B. Professional Skills	Judgmental Thinking
	<p>The user/individual on the job needs to know and understand how to:</p> <p>SB10. use common sense and make judgments during day to day basis</p> <p>SB11. use reasoning skills to identify and resolve basic problems using 5S</p>

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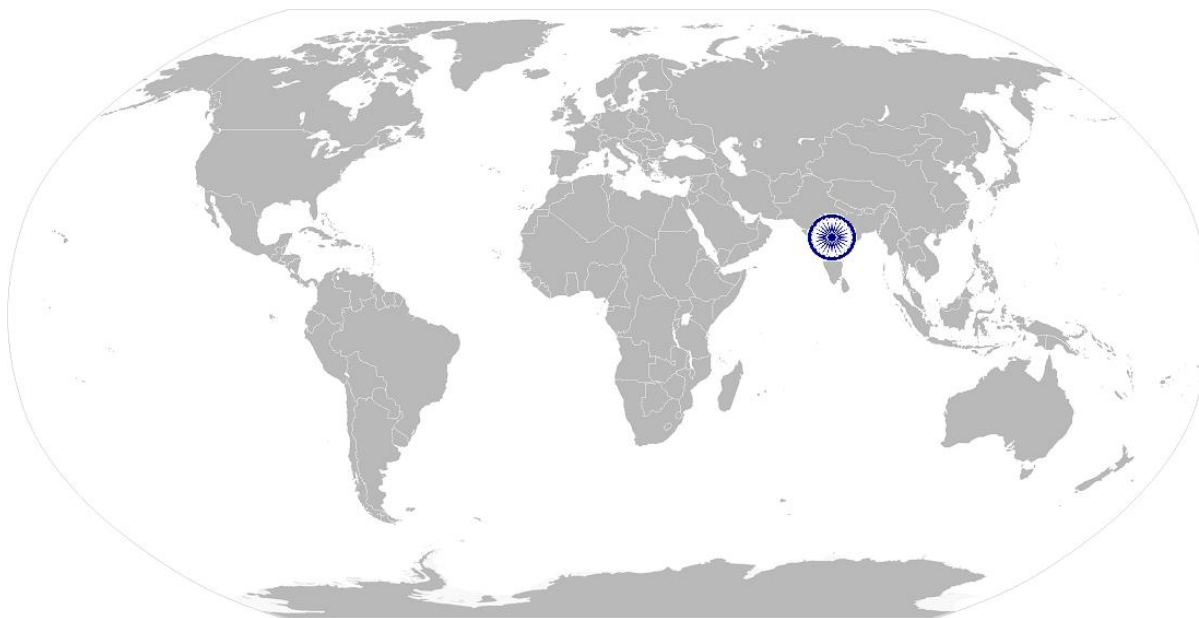
	Persuasion The user/ individual on the jobs needs to know and understand how to: SB12. persuade team members to follow 5 S SB13. ensure that the team members understand the importance of using 5 S tool
	Creativity The user/individual on the job needs to know and understand how to : SB14. use innovative skills to perform and manage 5 S activities at the work desk and the shop floor SB15. exhibit inquisitive behaviour to seek feedback and question on the existing set patterns of work emerge, techniques in CA/CI around 5 S work practices
	Self –Discipline The user/individual on the job needs to know and understand how to: SB16. do what is right, not what is a popular practice SB17. follow shop floor rules& regulations and avoid deviations SB18. lead by example in the plant premises while performing activities related to 5S SB19. ensure self-cleanliness on a daily basis SB20. demonstrate the will to keep the work area in a clean and orderly manner
	Ownership The user/individual on the job needs to know and understand how to: SB21. accept additional responsibility for self and the team SB22. encourage self and other to take greater responsibilities for managing 5S SB23. identify obstacles and bottlenecks in the process and find basic level solutions for removing these obstacles
	Decision making The user/individual on the job needs to know and understand how to: SB24. use previous experience in resolving problems and taking decisions SB25. make timely and independent decisions on the line/ shift within the boundaries of the delegation matrix of the organization

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NOS Version Control

NOS Code	ASC/N0022		
Credits(NSQF)	TBD	Version number	1.0
Industry	Automotive	Drafted on	1/03/2014
Industry Sub-sector	Manufacturing/ R&D	Last reviewed on	15/03/2014
Occupation	Machining	Next review date	Under revision expected date of revised version 31-Dec-15



Criteria for assessment of Trainees

JOB ROLE	Machine shop supervisor
Qualification Pack	ASC/Q 3505
No. Of NOS	1 Role specific ,5 generic

Assessable Outcomes	Assessment criteria	Marks Allocation		
		Theory	Viva	Practical
ASC/N3510	Supervise and manage different pre, actual and post machining operations			
Ensuring all Pre-machining activities	PC1. Before starting the machining operations, help the machining operator in understanding of the task at hand PC2. Ensure that the team members understand and follow all the does and don'ts of the manufacturing process as defined in SOPs/ Work Instructions or defined by supervisors/ master technicians PC3. Help operator understand the tooling requirements) fixtures, cutting tools, jigs etc.) and the type of coolant, lubricant etc. PC4. Ensure the machine stops are set or guides or programmes as per the specified lengths indicated through scales or work instructions PC5. Assist the Master Machining Technician Program the CNC/ numerically controlled machine as per the work instructions PC6. Ensure that the right material removal rate is set while			
			35	30

	<p>programming the machine as per specified requirements E.g. for Hobbing set the ratio for the rotation of the shafts/spindle which determine the number of teeth made on the work piece</p> <p>PC7. For manual wheel dressing activities for grinding operations ensure proper balancing and dressing before operation</p> <p>PC8. Ensure that the raw material is available for machining operations and the movement of product happens as per route cards etc.</p>			
Monitor/ Observe / Record machining operations	<p>PC9. Observe machine operations to detect defects in the component manufactured</p> <p>PC10. Observe the machine operations for any malfunctions and immediately inform the maintenance team of any malfunction observed to prevent damage to the machining equipment/ output product</p> <p>PC11. Ensure recording operational data is being done such as pressure readings, length of strokes, feed rates, speed etc. in the formats specified</p> <p>PC12. Ensure tool replacement as per recommended tool life in no. of pieces</p>		35	30
Ensure completion of all post machining activities	<p>PC13. Ensure that the machine is maintained as per proper operational condition/ daily maintenance check</p> <p>PC14. Ensure removal of chips is completed by the operator from different machine areas and dispose of scrap or waste material into the disposal area in accordance with the company</p>		35	30

	<p>policies and environmental regulations</p> <p>PC15. Perform minor repairs and adjustments to the machine and notify maintenance team when major service/ repair is required</p> <p>PC16. Ensure all de-burring processes are complete through the use of the correct tool to remove the extra burrs, sharp edges, rust and chips from the metal surface</p> <p>PC17. Ensure that the operator is using devices like micrometers, vernier calipers, gauges, rulers and any other inspection equipment for measuring specifications with valid calibration status</p> <p>PC18. Ensure that calibration points are sent to the in-house agencies/ external as applicable</p> <p>PC19. Ensure changing different worn machine accessories, such as cutting/ grinding/ broaching/ hobbing tools (as per tool life listed, recommended) other hand tools</p>			
	Sub Total	105	105	90
ASC/N0013	Understand process requirements, ensure process implementation			
Understanding all the requisite processes in detail and ensuring implementation	<p>PC1. Display detailed understanding of all the requisite processes to be adopted for completing the work order through reading the process manuals/ Work Instructions/Standard Operating Procedures for the production job</p> <p>PC2. Share knowledge of processes, inputs and outputs with the operators to enhance their skill levels</p> <p>PC3. Ensure the various SOW/WI created by the master technician are displayed and understood at each and every work station</p> <p>PC4. Maintain work flow by monitoring steps of the processes, setting</p>		20	15

	<p>variables, observing control points and equipment</p> <p>PC5. Support in defining detailed processes for each step and line</p> <p>PC6. Monitor various process parameters on a regular basis and ensure compliance to agreed standards (e.g. ambient air quality, stack monitoring, water quality monitoring etc.)</p> <p>PC7. Ensuring recording and reporting procedures and systems are in place</p> <p>PC8. Facilitating corrections to malfunctions within process control points</p> <p>PC9. Ensure 5S implementation in the production line by analysing possible areas of systems and process improvements and ensure implementation of the recommended measures to address the gaps</p> <p>PC10. Ensure successful implementation of the completed Poka Yoke and kaizen on the running line</p>			
Data Analysis	<p>PC11. Ensure compilation of data of breakdown maintenance and reporting the same to the maintenance team</p> <p>PC12. Conduct random sampling on the incoming quality of material and provide the relevant feedback on the same to the store</p> <p>PC13. Conduct random sampling of the process parameters and WIP products and provide necessary feedback to the line leaders</p> <p>PC14. Conduct random sampling of the finished goods and provide the necessary feedback</p> <p>PC15. Conduct batch wise product quality check in order to ensure that the quality of the product produced meet customer requirements</p>		15	15
Support and provide basic level of inputs for process improvement initiatives	<p>PC16. Support in ensuring optimum resource utilization and wastage reduction through process improvements, Kaizens, TQM, Poka Yoke etc.</p> <p>PC17. Support and provide inputs on analysis of breakdown trends and current maintenance process to identify areas for improvement to achieve cost savings and reduce breakdown timing</p>		15	15

	PC18. Identify trends and action points for machining as when they get unfavourable PC19. Identify areas of improvement in the existing processes/systems and take counter measures to adhere to the identified Kaizens PC20. Support the master technician in sharing inputs from the line for various Poka Yoke , kaizen activities PC21. Encourage team members/ operators to suggest quality improvement measures through suggestion schemes, evaluate feasibility of the ideas and discuss their implementation with seniors PC22. Support in analysing internal & external rejection data, planning and ensuring implementation of the corrective measures			
	Sub Total	50	50	45
ASC/N0014	Manage the production related operations of the shift/ line on a day to day basis			
Manpower Management	PC1. Undertake effective shift planning based on manpower allocation as per the skill matrix and shift handling to place right manpower on the right workstation in coordination with Production In-charge to achieve production targets PC2. Support Shift In Charge/ Process head/ Shop head in finalizing the shift rosters for the week and month based on the production plan available		20	15
Material Management	PC3. Send inventory requirements to Stores and Purchase department and follow up with stores and purchase to ensure timely receipt of material (Spares, Consumables) PC4. Ensure that the material and work piece movement on the shop floor conforms to the TAT time prescribed in the SOP/ Work Plans so that production targets are met for the line/ shift		20	15
Supervise Production Operations	PC5. Support the In Charge/ Shop head in fulfilment of the production plan for the shop in a given line/ shift PC6. Coordinate with various functions like		20	15

	<p>material management, stores, paint shop, assembly line, quality, safety, production planning etc. to ensure communication of required information and resolution of queries</p> <p>PC7. Responsible for End of Line Inspection under supervision</p> <p>PC8. Ensure that the operators and helpers have the required tools and equipment at the start of the process</p> <p>PC9. Facilitate the production runs along with Engineering and Quality function</p> <p>PC10. Ensure optimal resource utilization(man , machine and material) and streamlining of activities within the shift</p> <p>PC11. Identify & implement action steps to reduce losses and wastages during shift operation and ensure minimum rejection of components</p> <p>PC12. Prepare daily and monthly production MIS reports to match actual performance vis-à-vis the targets and report the same to Production In-chart</p> <p>PC13. Verify the production and material movement related data entries in the</p> <p>PC14. system (manual/ ERP) for the line/ shift and ensure correctness of the</p> <p>PC15. data</p> <p>PC16. Support the In charge/ Engineer/ Shop Head in analysing the various data sheets related to production, maintenance, manpower deployment etc.</p> <p>PC17. Support the maintenance team in finalizing the preventive maintenance schedule for the shop/ line</p> <p>PC18. Support the maintenance function to ensure execution of the maintenance schedules</p> <p>PC19. Ensure shift handover to the next shift supervisor</p> <p>PC20. Observe and note the consumption of energy, fuel, steam on the production line and support the engineer in optimization of utilization of factors of production</p> <p>PC21. Ensure that the operator and helper are using the required Personal Protective Equipment like Goggles, masks, gloves and other PPE's at the time of</p>			
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	conducting the painting operation			
Conformance to Product and Process Quality	PC22. Conduct incoming quality inspection of material and provide the relevant feedback on the same to the store PC23. Conduct quality inspection of the process parameters, lab parameters and WIP products and provide necessary feedback to the line leaders PC24. Conduct quality inspection of the finished goods and provide the necessary feedback PC25. Conduct quality inspection of the first sample/batch to ensure that the quality of the product produced meet customer requirements PC26. Conduct inspection and analysis of the defects observed in the process and products		15	15
Implementation of Initiatives	PC27. Take overall responsibility to ensure adherence to Safety standards by all employees and establish zero accident practice in the section PC28. Implement various business excellence techniques like Kaizen, 5S initiatives, etc		15	15
	Sub Total	90	90	75
ASC/N0015	Manage the team on the line/ shift on a day to day basis			
Engaging the shop floor work force through employee communication and employee engagement	PC1. Ensure operators and helpers on the production line/ shift are aware of the job expectations on a daily basis PC2. Ensure that the operators are aware of the production targets and the timelines required to process a work order as finalized in the production plan PC3. Involve operators and helpers for the daily floor meeting/ morning meetings/ staff meetings to communicate information intended for them PC4. Ensure communication to line operators/ helpers on any changes		20	15

	<p>in policies/ processes by the organization through required verbal/ written mechanisms</p> <p>PC5. Ensure participation of employees in various engagement initiatives organized at the plant and other place by the organization to increase morale</p> <p>PC6. Involve operators and helpers in Quality Circles, TQM & Kaizen meets, Brainstorming sessions, safety drills etc. to increase their involvement in manufacturing operations</p> <p>PC7. Ensure availability of tea, snacks, drinking water and basic hygiene facilities at the shop floor for the operative workforce</p> <p>PC8. Escalate issues to Shift In Charges/ concerned staff in case of any issue related to operative deployment and engagement</p>			
Support the Shift In Charge in finalizing manpower deployment	<p>PC9. Support the Shift In Charges in finalizing the shift planning and manpower deployment for the shift/ line as per the proposed production plan</p> <p>PC10. Support the Shift In Charge/ Production Manager is creating week wise shift rosters for the shift/ line manpower and ensure rotation of manpower as per the organizational norms and guidelines</p> <p>PC11. Maintain the information on leaves/ IN Out time keeping and shift/ line overtime for the operatives and helpers and share the information with the concerned as and when required</p> <p>PC12. Support the Shift In Charge/ Production Manager in identifying skilled manpower and up dation of the Skill Matrix/ Skill Chart for the shift/ line/ process area</p>		10	10

	PC13.Ensure identification and deployment of right skilled people at the right places on the line/ process area			
Employee Performance Measurement and Employee Development	PC14.Ensure that all the operative manpower is aware of the production targets, production plan and daily productivity targets PC15.Track the daily performance of the operators and helpers during the shift and note the achievement levels in a manual register/ online IT enabled system PC16.Provide feedback to the operators and helper in case of any process deviation observed by the supervisor PC17.Provide feedback to Shift In Charges/ Production Managers pertaining to performance appraisals of operators and helpers PC18.Ensure that the operatives are trained and are aware of the processes which need to be followed on the shop floor during the production process PC19.Support the Shift In Charges/ Production Managers/ Training team in training of entry level operators and helpers in the plant PC20.Share knowledge of processes , inputs and outputs with the operators to enhance their skill levels PC21.Other than technical trainings, support the team in delivering trainings related to quality and safety for the operators and helpers PC22.Ensure identification of training needs, training budget, CAPA etc.		10	10
Grievance Management for Operators and	PC23.In case the operating staff has any queries, ensure that the queries are resolved either by self or		10	10

Helpers	<p>escalated to the concerned person</p> <p>PC24.Listen to issues related to workmen problems/ work men grievances/ Complaints/ Personal Problems etc. for the operators and helpers</p> <p>PC25.Resolve issues which are under the purview of the supervisor and escalate the ones which need higher intervention to the concerned team</p> <p>PC26.Counsel employees for any work related issues or any personal problems highlighted by the employee</p>			
	Sub Total	50	50	45
ASC/ N0006	Maintain a safe and healthy working environment			
Identify and report the risks identified	<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. Identify areas in the plant which are potentially hazardous/unhygienic in nature</p> <p>PC3. Conduct regular checks on machine health to identify potential hazards due to wear and tear of machine</p> <p>PC4. Ensure that all equipment are tested of safety conformance as per the cycle/ timelines identified in the organization</p> <p>PC5. Inform the shop head and the safety team about the potential risks identified in the processes, workplace area/ layout, material used, malfunctioning of safety related equipment</p>		20	15

	<p>etc.</p> <p>PC6. Inform the maintenance team about machine breakdowns, damages which can potentially harm man/ machine during operations and analyse their defects to prevent any future damage to men/ machine</p> <p>PC7. Ensure that all risk involving and hazardous areas near the work place are marked/ tagged in order to caution the users of the work area/ machinery</p> <p>PC8. Create awareness amongst other by sharing information on the identified risks. Ensure that periodic awareness sessions are conducted for the helpers and operatives to make them aware of the risks identified.</p>			
Create and sustain a Safe, clean and environment friendly work place	<p>PC9. Support the Safety team in risk identification and creation of a risk mitigation plan</p> <p>PC10. Train team members on safety and health related issues</p> <p>PC11. Ensure that all team members operate the machine using the recommended Personal Protective Equipment (PPE) and also ensure self-usage of the required PPEs</p> <p>PC12. Ensure that all operatives follow the instructions given on the equipment manual describing the operating process of the equipment to prevent any hazard</p> <p>PC13. Ensure that all team members follow the Safety, Health and Environment related practices developed by the organization</p> <p>PC14. Ensure that a clean and safe working environment near the</p>		15	15

	<p>work place is maintained and that there is no spillage of chemicals, production waste, oil, solvents etc. in the working area</p> <p>PC15. Ensure that the first aid safety kit at the work place/ shop floor contains the requisite items to respond to minor injuries. Also may sure that the operatives and helpers are made aware of these items and their usage</p> <p>PC16. Ensure that a documented record of all minor and major injuries is kept and updated on the shop floor</p> <p>PC17. Ensure that the waste disposal is done in the designated area and manner as per organization SOP</p> <p>PC18. Attend all safety and fire drills to be self-aware of safety hazards and preventive techniques and ensure that the team participate in all the required safety and fire drills</p> <p>PC19. Participate in all safety related initiatives like Safety Committee participations, Safety Day Celebrations etc.</p> <p>PC20. Maintain high standards of personal hygiene at the work place</p> <p>PC21. Ensure that any activity performed by the team members which may negatively impact their health and productivity is immediately brought to notice by the supervisor</p> <p>PC22. Periodically counsel and train employees on good health and safe working practices.</p> <p>PC23. Inform the medical officer/ HR in case of self or an employee's illness of contagious nature so that preventive</p>			
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	actions can be planned for others			
	Sub Total	35	35	30
ASC/N0022	Ensure implementation of 5S activities at the shop floor & the office area			
Ensure proper sorting of items at the work place	PC1. Ensure all recyclable materials are put in designated containers PC2. Ensure no Tools, fixtures & jigs are lying on workstations unless in use and no un-necessary items is lying on workbenches or work surfaces unless in use PC3. Ensure that the operators and other team members are segregating the waste in hazardous/ Non Hazardous waste as per the sorting work instructions PC4. Ensure that all the operators are following the technique of waste disposal and waste storage in the designated bins PC5. Segregate the items which are labelled at red tag items for the process area and keep them in the correct places PC6. Ensure that all the tools/ equipment/ fasteners/ spare parts are arranged as per specifications/ utility into proper trays, cabinets, lockers as mentioned in the 5S guidelines/ work instructions PC7. Check for return of any type of extra material and tools to the designated sections and make sure that no additional material/ tool is lying near the work area PC8. Oversee removal of unnecessary equipment, storage, furniture, unneeded inventory, supplies, parts and material PC9. Ensure that areas of material storage areas are not overflowing			

	PC10. Ensure proper stacking and storage of 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			
Ensure proper documentation and storage – streamlining & organizing the workplace	PC11. Ensure that the team follows the given instructions and checks for labelling of fluids, oils, lubricants, solvents, chemicals etc. and proper storage of the same to avoid spillage, leakage, fire etc. PC12. Make sure that all material and tools are stored in the designated places and in the manner indicated in the 5S instructions PC13. Ensure that organizing the workplace takes place with due considerations to the principles of wasted motions, ergonomics, work & method study .			
Ensure cleaning of self and the work place	PC14. Ensure that the area has floors swept, machinery clean and is generally neat and tidy. In case of cleaning, ensure that correct displays are maintained on the floor which indicate potential safety hazards PC15. Ensure workbenches and work surfaces are clean and in good condition PC16. Ensure adherence to the cleaning schedule for the lighting system to ensure proper illumination PC17. Ensure self-cleanliness - clean uniform, clean shoes, clean gloves, clean helmets, personal hygiene			
Ensure standardization	PC18. Ensure that daily cleaning standards and schedules to create a clean working environment are followed across the plant PC19. Oversee that various cleaning and organizing tasks have been developed and assigned for the work area			

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	Sub Total			
		20	20	15
	Total Marks	350	350	300