

## 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 – Lathe Operator

**SECTOR:** AUTOMOTIVE

**SUB-SECTOR:** NON FORMAL

**OCCUPATION:** AUTO COMPONENTS / AGGREGATES REPAIR

**JOB ROLE:** LATHE OPERATOR

**REFERENCE ID:** ASC/Q 1901

**ALIGNED TO:** NCO-2004/ 8211.20

**Lathe Operator** is also known as a Lathe Machinist

**Brief Job Description:** A **Lathe Operator** is responsible for setting up, operating and monitoring lathe or turning machines, shaping or threading wire, rod or bar stock. A lathe operator studies blueprints and tooling instructions to determine the correct procedure for machining the component in such a manner that facilitates maximum efficiency in tool usage and time. The operator also performs machine maintenance and checks tools for signs of wear.

**Personal Attributes:** The job requires an individual to work long hours. The individual should have good understanding of the Lathe machine including technical aspects, associated tools and equipment. The individual should have proper knowledge of the service related activities, schedules and preventive maintenance of the Lathe machine. The individual should be hard working and should have manual dexterity.

Job Details	Qualifications Pack Code	ASC/Q 1901		
	Job Role	Lathe Operator		
	Credits(NSQF)	TBD	Version number	1
	Industry	Automotive	Drafted on	20/07/13
	Sub-sector	Non Formal	Last reviewed on	20/07/13
	Occupation	Auto Components / Aggregates Repair	Next review date	20/07/15

Job Role	Lathe Operator
Role Description	Maintain and operate all types of Lathes & do related work.
NVEQF/NVQF level	4
Minimum Educational Qualifications	Class VIII
Maximum Educational Qualifications	Graduate degree or diploma in any discipline
Training (Suggested but not mandatory)	<p>On the job training</p> <ul style="list-style-type: none"> <li>Desirable for ASDC Lathe operator certificate or graduate degree / diploma in any discipline</li> <li>Compulsory for all other qualifications</li> </ul>
Experience	Not applicable
National Occupational Standards (NOS)	<p><b>Compulsory:</b></p> <p><b>ASC/ N 1901:</b> <a href="#">Perform and finish machining jobs on Lathe machine</a></p> <p><b>ASC/ N 0001:</b> <a href="#">Plan and organise work to meet expected outcomes</a></p> <p><b>ASC/ N 0002:</b> <a href="#">Work effectively in a team</a></p> <p><b>ASC/ N 0003:</b> <a href="#">Maintain a healthy, safe and secure working environment</a></p> <p><b>Optional:</b> N.A.</p>
Performance Criteria	As described in the relevant NOS units

Definitions

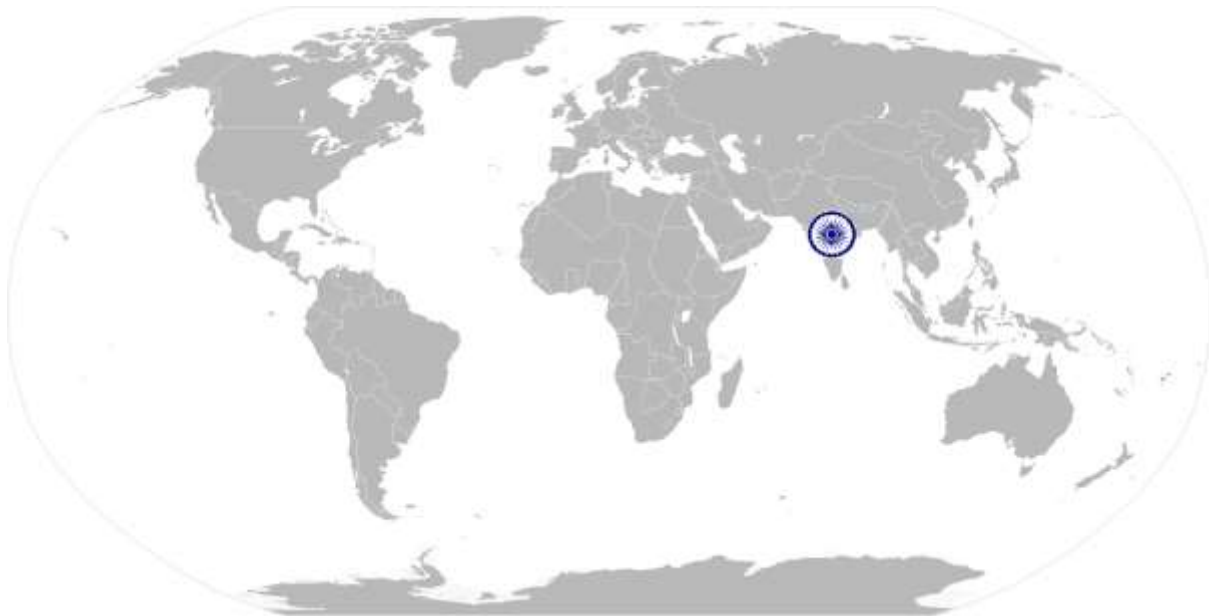
Keywords /Terms	Description
Core Skills/Generic Skills	Core skills or generic skills are a group of skills that are key to learning and working in today's world. These skills are typically needed in any work environment. In the context of the NOS, these include communication related skills that are applicable to most job roles.
Dealership	A business established or operated under an authorisation to sell or distribute an automotive company's goods and services
Description	Description gives a short summary of the unit content. This would be helpful to anyone searching on a database to verify that this is the appropriate NOS they are looking for.
Function	Function is an activity necessary for achieving the key purpose of the sector, occupation, or area of work, which can be carried out by a person or a group of persons. Functions are identified through functional analysis and form the basis of NOS.
Job role	Job role defines a unique set of functions that together form a unique employment opportunity in an organisation.
Knowledge and Understanding	Knowledge and understanding are statements which together specify the technical, generic, professional and organisational specific knowledge that an individual needs in order to perform to the required standard.
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 organisation 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.
Vehicle	Mode of personal transport including 2-wheelers, 3-wheelers and 4-wheelers (including passenger vehicles and commercial vehicles). This includes gasoline, petrol, CNG, electrical and hybrid vehicles
Vertical	Vertical may exist within a sub-sector representing different domain areas or the client industries served by the industry.
<b>Keywords /Terms</b>	<b>Description</b>
NOS	National Occupational Standard(s)
NVEQF	National Vocational Education Qualifications Framework
NVQF	National Vocational Qualifications Framework
OEM	Original Equipment Manufacturer
OS	Occupational Standard(s)
QP	Qualifications Pack

Acronyms

ASC/ N 1901: Perform and finish all machining jobs on Lathe machine

# National Occupational Standards



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## Overview


This Occupational Standard describes the knowledge, understanding and skills required of an individual to perform and finish all assigned jobs on a Lathe machine.

**ASC/ N 1901: Perform and finish all machining jobs on Lathe machine**

National Occupational Standard	<b>Unit Code</b>	ASC/N 1901
	<b>Unit Title (Task)</b>	Perform and finish all assigned jobs on Lathe machine
	<b>Description</b>	This NOS unit is about an individual who performs and finishes all machining jobs to be done using a Lathe machine
	<b>Scope</b>	This unit/task covers the following: <ul style="list-style-type: none"> <li>• set up, and operate a lathe machine</li> <li>• machine various components / aggregates on a Lathe Machine</li> </ul>
	<b>Performance Criteria (PC) w.r.t. the Scope</b>	
	<b>Element</b>	<b>Performance Criteria</b>
	<b>Machine various aggregates through a Lathe Machine</b>	<p>To be competent, the user/individual on the job must be able to:</p> <p>PC1. set up and operate numerically controlled horizontal lathe to perform machining operations, such as turning, boring, facing, and threading parts, such as castings, forgings and bar stock</p> <p>PC2. understand machine operation and adjust controls to ensure conformance with specified tolerances</p> <p>PC3. set tools before positioning them in lathe, using precision gauges and instruments</p> <p>PC4. mount work piece between centres, in chuck, or to faceplate, manually or using hoist</p> <p>PC5. select and install pre-set tooling in tool posts, turrets or indexing heads, and automatic-tool-change magazine, in sequence specified on process sheet</p> <p>PC6. depresses buttons, toggles, or sets tape and starts machining operation</p> <p>PC7. set cutting specifications and position cutting tool and work piece in relation to each other, and start machine</p> <p>PC8. select cutting speed, feed rate, and depth of cut</p> <p>PC9. move cutter or material manually or by turning hand wheel to mill work piece to specifications</p> <p>PC10. observe numerical displays on control panel and compares with data on process sheet to verify dimensional adjustments, feed rates, and speeds of machining cuts.</p> <p>PC11. verify alignment of work piece on machine, using measuring instruments, such as rules, gauges, or callipers</p> <p>PC12. mount, install, align &amp; secure tools, attachments, fixtures &amp; work pieces on machines, using hand tools &amp; precision measuring instruments</p> <p>PC13. turns dials and switches to override tape control and correct machine performance, applying practical knowledge of lathe operation</p> <p>PC14. inspects first-run piece and spot-checks succeeding pieces for conformance to specifications, using micrometers and precision dial gauges.</p> <p>PC15. studies job packet and organizes materials for next run during automatic tape-controlled cycles to shorten changeover time.</p> <p>PC16. ensure that the piece meets specifications after completing finishing works</p>



**ASC/ N 1901: Perform and finish all machining jobs on Lathe machine**

	<p>PC17. report all machine malfunctions to supervisor PC18. change worn tools and perform routine maintenance</p>
<b>Knowledge and Understanding (K) w.r.t. the scope</b>	
<b>Element</b>	<b>Knowledge and Understanding</b>
<b>A. Organisational Context</b> (Knowledge of the Company/ Organisation and its processes)	<p>The user/individual on the job needs to know and understand:</p> <p>KA1. standard operating procedures for performing operations related to lathe machine KA2. process flow of lathe operations performed KA3. organisational and professional code of ethics and standards of practice KA4. safety and health policies and regulations for the workplace</p>
<b>B. Technical Knowledge</b>	<p>The user/individual on the job needs to know and understand:</p> <p>KB1. how to operate and control machining operations related to lathe machine such as :</p> <div style="display: flex; align-items: center;">  <ul style="list-style-type: none"> <li>• turning operations</li> <li>• drilling</li> <li>• milling (peripheral and facing milling)</li> <li>• boring</li> <li>• shaping and planing</li> <li>• broaching</li> <li>• sawing</li> <li>• cutting operations</li> <li>• knurling</li> <li>• taper turning</li> </ul> </div> <p>KB2. how to adjust a rotating speed, a cutting depth and a sending speed of lathe machine</p> <p>KB3. how to use and handle tools related with operating lathe machine including :</p> <ul style="list-style-type: none"> <li>• chuck</li> <li>• face plate</li> <li>• collate</li> <li>• engine lathe</li> <li>• chucking machine</li> <li>• bar machine</li> <li>• drill press</li> <li>• vice, jig and fixture</li> <li>• milling cutters</li> <li>• pallet shuttles</li> <li>• swarfs</li> <li>• spindle</li> <li>• morse taper</li> </ul> <p>KB4. how to handle loading and unloading of lathe parts KB5. how to protect lathe parts from damage during loading and set up KB6. how to operates a forklift or lifting devices for movement of parts KB7. how to position, secure, and align cutting tools in tool holders on machines, using hand tools, and verify their positions with measuring instruments</p>

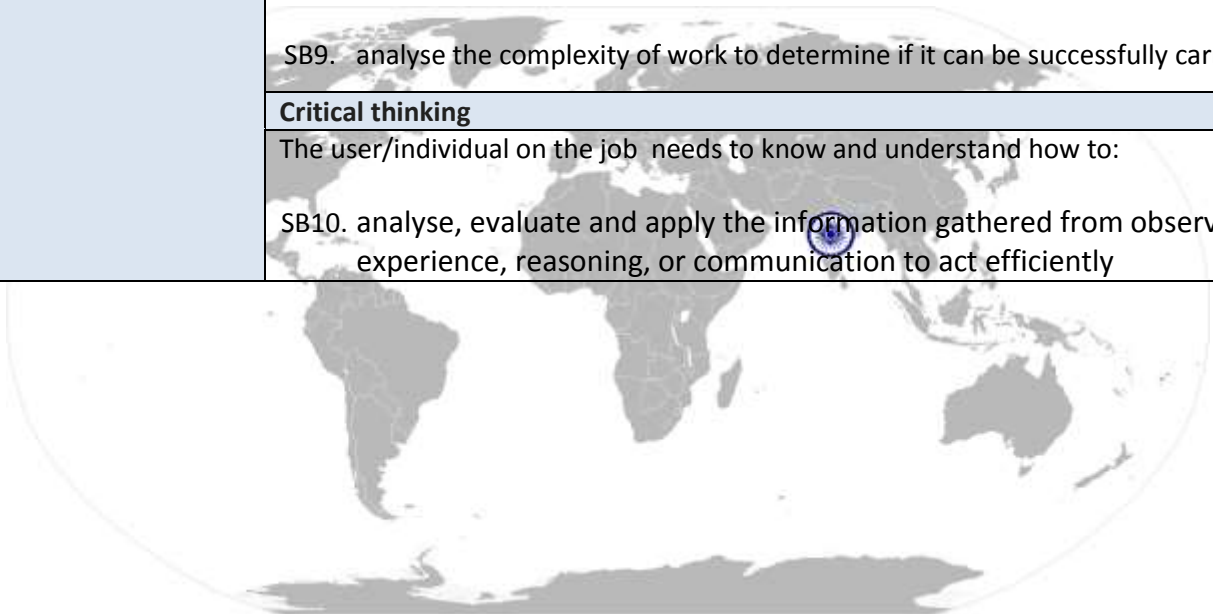
**ASC/ N 1901: Perform and finish all machining jobs on Lathe machine**

	<p>KB8. select and set cutting speed, feed rate, and depth of cut</p> <p>KB9. compute unspecified dimensions and machine settings, using knowledge of metal properties and shop mathematics</p> <p>KB10. how to replace worn tools, and sharpen dull cutting tools and dies using bench grinders or cutter-grinding machines</p> <p>KB11. how to retest and modify the lathe machine program to enhance efficiency</p>
<b>Skills (S) w.r.t. the scope</b>	
<b>Element</b>	<b>Skills</b>
<b>A. Core Skills/ Generic Skills</b>	<b>Writing skills</b>
	The user/individual on the job needs to know and understand how to:
	SA1. complete and maintain workplace records on inspection, diagnosis and repair activities
	SA2. maintain all office records required on the job (e.g. stock records, job cards, repair quotations, personnel records, time sheets, meeting notes etc.)
	SA3. record all diagnostic inspections and tests carried out on a vehicle
	SA4. write in at least one language
	<b>Reading skills</b>
The user/individual on the job needs to know and understand how to:	
SA5. read process sheets, blueprints, and sketches of part to determine machining to be done, dimensional specifications, set up, and operating requirements	
SA6. read and interpret geometric dimensions and tolerances in the job to be done involving the lathe machine	
<b>Oral Communication (Listening and Speaking skills)</b>	
The user/individual on the job needs to know and understand how to:	
SA7. interact with superiors and other support staff	
SA8. communicate with supervisor, engineers, production control, quality and other shop personnel for assignments and to resolve lathe machining or quality issues	
<b>B. Professional Skills</b>	<b>Decision making</b>
	The user/individual on the job needs to know and understand how to:
	SB1. determine the nature and objective of the analysis and evaluation required and decide on the diagnostic techniques to be applied
	<b>Plan and Organise</b>
The user/individual on the job needs to know and understand how to:	
SB2. plan work according to the pendency's as reported for repair / machining of the various components on a daily basis and provide estimates of time required for each piece of work (e.g. by evaluating work assigned on a job card and providing time estimates for each service/ repair activity)	
SB3. prioritise actions to achieve required outcomes to quality machining of the components within the given tolerance levels	



**ASC/ N 1901: Perform and finish all machining jobs on Lathe machine**

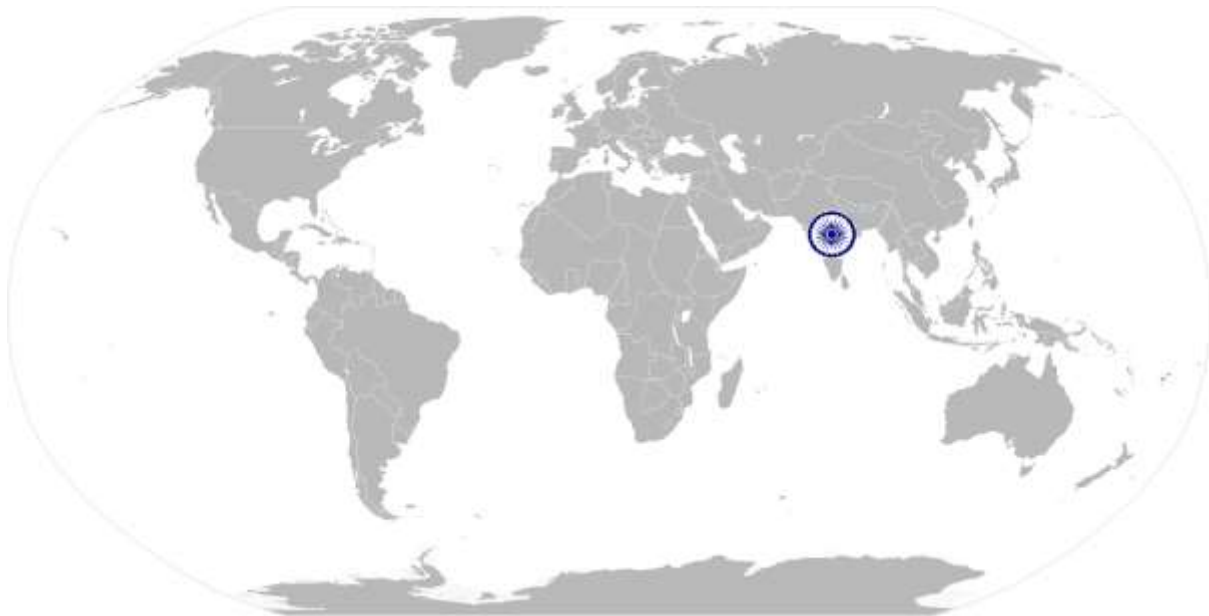
	<b>Customer centricity</b>
	The user/individual on the job needs to know and understand how to:
	SB4. ensure that customer’s requirements are assessed and satisfactory service is provided
	<b>Problem solving</b>
	The user/individual on the job needs to know and understand how to:
	SB5. recognise a workplace problem or a potential problem and take action
	SB6. determine problems needing priority action
	SB7. refer problems outside area of responsibility to concerned person (e.g. unavailability of required spare parts or materials in the workshop)
	SB8. gather information and provide assistance as required to solve problems
	<b>Analytical thinking</b>
The user/individual on the job needs to know and understand how to:	
SB9. analyse the complexity of work to determine if it can be successfully carried out	
<b>Critical thinking</b>	
The user/individual on the job needs to know and understand how to:	
SB10. analyse, evaluate and apply the information gathered from observation, experience, reasoning, or communication to act efficiently	



ASC/ N 1901: Perform and finish all machining jobs on Lathe machine

**NOS Version Control**

NOS Code	ASC/ N 1901		
Credits(NSQF)	TBD	Version number	1
Industry	Automotive	Drafted on	20/07/13
Industry Sub-sector	Non Formal	Last reviewed on	20/07/13
		Next review date	20/07/15



ASC/ N 0001: Plan and organise work to meet expected outcomes

# National Occupational Standards



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## Overview

This unit is about planning and organising an individual's work in order to complete it to the required standards, on time and within budget in terms of cost and material.

**ASC/ N 0001: Plan and organise work to meet expected outcomes**

National Occupational Standard	<b>Unit Code</b>	ASC/ N 0001
	<b>Unit Title (Task)</b>	<b>Plan and organise work to meet expected outcomes</b>
	<b>Description</b>	This NOS unit is about planning and organising an individual’s work in order to complete it to the required standards on time.
	<b>Scope</b>	This unit/task covers the following: <ul style="list-style-type: none"> <li>work requirements including various activities, deliverables or work output required in the given time, maintain set quality standards</li> <li>appropriate use of resources (both material / equipment’s and manpower)</li> </ul>
	<b>Performance Criteria (PC) w.r.t. the Scope</b>	
	<b>Element</b>	<b>Performance Criteria</b>
	<b>Work requirements including various activities within the given time and set quality standards</b>	To be competent, the user/individual on the job must be able to: <ul style="list-style-type: none"> <li>PC1. keep immediate work area clean and tidy</li> <li>PC2. treat confidential information as per the organisation’s guidelines</li> <li>PC3. work in line with organisation’s policies and procedures</li> <li>PC4. work within the limits of job role</li> <li>PC5. obtain guidance from appropriate people, where necessary</li> <li>PC6. ensure work meets the agreed requirements</li> </ul>
	<b>Appropriate use of resources</b>	<ul style="list-style-type: none"> <li>PC7. establish and agree on work requirements with appropriate people</li> <li>PC8. manage time, materials and cost effectively</li> <li>PC9. use resources in a responsible manner</li> </ul>
	<b>Knowledge and Understanding (K) w.r.t. the scope</b>	
	<b>Element</b>	<b>Knowledge and Understanding</b>
<b>A. Organisational Context (Knowledge of the Company/Organisation and its processes)</b>	The user/individual on the job needs to know and understand: <ul style="list-style-type: none"> <li>KA1. the organisation’s policies, procedures and priorities for area of work, role and responsibilities in carrying out that work</li> <li>KA2. the limits of responsibilities and when to involve others</li> <li>KA3. specific work requirements and who these must be agreed with</li> <li>KA4. the importance of having a tidy work area and how to do this</li> <li>KA5. how to prioritize workload according to urgency and importance and the benefits of this</li> <li>KA6. the organisation’s policies and procedures for dealing with confidential information and the importance of complying with these</li> <li>KA7. the purpose of keeping others updated with the progress of work</li> <li>KA8. who to obtain guidance from and the typical circumstances when this may be required</li> <li>KA9. the purpose and value of being flexible and adapting work plans</li> </ul>	

**ASC/ N 0001: Plan and organise work to meet expected outcomes**

	to reflect change
<b>B. Technical Knowledge</b>	The user/individual on the job needs to know and understand:  KB1. how to complete tasks accurately by following standard procedures KB2. technical resources needed for work and how to obtain and use these
<b>Skills (S) w.r.t. the scope</b>	
<b>Element</b>	<b>Skills</b>
<b>A. Core Skills/ Generic Skills</b>	<b>Writing Skills</b>
	The user/individual on the job needs to know and understand how to:  SA1. write in at least one language
	<b>Reading Skills</b>
	The user/individual on the job needs to know and understand how to:  SA2. read instructions, guidelines/procedures
<b>B. Professional Skills</b>	<b>Oral Communication (Listening and Speaking skills)</b>
	The user/individual on the job needs to know and understand how to:  SA3. ask for clarification and advice from appropriate persons SA4. communicate orally with colleagues
	<b>Decision Making</b>
	The user/individual on the job needs to know and understand how to:  SB1. make a decision on a suitable course of action appropriate for accurately completing the task within resources
<b>B. Professional Skills</b>	<b>Plan and Organise</b>
	The user/individual on the job needs to know and understand how to:  SB2. agree objectives and work requirements SB3. plan and organise work to achieve targets and deadlines
	<b>Customer Centricity</b>
	The user/individual on the job needs to know and understand how to:  SB4. deliver consistent and reliable service to customers SB5. check own work and ensure it meets customer requirements
<b>B. Professional Skills</b>	<b>Problem Solving</b>
	The user/individual on the job needs to know and understand how to:  SB6. refer anomalies to the concerned persons
	<b>Analytical Thinking</b>
<b>B. Professional Skills</b>	The user/individual on the job needs to know and understand how to:  SB7. analyse problems and identify work -arounds taking help from

**ASC/ N 0001: Plan and organise work to meet expected outcomes**

	concerned persons where required
	<b>Critical Thinking</b>
	The user/individual on the job needs to know and understand how to:
	SB8. apply own judgement to identify solutions in different situations





ASC/ N 0001: Plan and organise work to meet expected outcomes

NOS Version Control

NOS Code	ASC/ N 0001		
Credits(NSQF)	TBD	Version number	1
Industry	Automotive	Drafted on	10/06/13
Industry Sub-sector	NA	Last reviewed on	10/06/13
		Next review date	10/06/15



ASC/ N 0002: Work effectively in a team

# National Occupational Standards



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## Overview

**This unit is about working effectively with colleagues, either in own work group or in other work groups within organisation.**

**ASC/ N 0002: Work effectively in a team**

National Occupational Standard	<b>Unit Code</b>	ASC/ N 0002
	<b>Unit Title (Task)</b>	Work effectively in a team
	<b>Description</b>	This NOS unit is about working effectively within a team, either in individual's own work group or in other work groups outside the organisation.
	<b>Scope</b>	This unit/task covers the following: Colleagues: <ul style="list-style-type: none"> <li>Interact &amp; communicate effectively with colleagues including member in the own group as well as other groups</li> </ul>
	<b>Performance Criteria (PC) w.r.t. the Scope</b>	
	<b>Element</b>	<b>Performance Criteria</b>
	<b>Interact &amp; communicate effectively with colleagues including member in the own group as well as other groups</b>	To be competent, the user/individual on the job must be able to: <ul style="list-style-type: none"> <li>PC1. maintain clear communication with colleagues (by all means including face-to-face, telephonic as well as written)</li> <li>PC2. work with colleagues to integrate work</li> <li>PC3. pass on information to colleagues in line with organisational requirements both through verbal as well as non-verbal means</li> <li>PC4. work in ways that show respect for colleagues</li> <li>PC5. carry out commitments made to colleagues</li> <li>PC6. let colleagues know in good time if cannot carry out commitments, explaining the reasons</li> <li>PC7. identify problems in working with colleagues and take the initiative to solve these problems</li> <li>PC8. follow the organisation's policies and procedures for working with colleagues</li> </ul>
	<b>Knowledge and Understanding (K) w.r.t. the scope</b>	
	<b>Element</b>	<b>Knowledge and Understanding</b>
	<b>A. Organisational Context</b> (Knowledge of the Company/Organisation and its processes)	The user/individual on the job needs to know and understand: <ul style="list-style-type: none"> <li>KA1. the organisation's policies and procedures for working with colleagues, role and responsibilities in relation to this</li> <li>KA2. the importance of effective communication and establishing good working relationships with colleagues</li> <li>KA3. different methods of communication and the circumstances in which it is appropriate to use these</li> <li>KA4. the importance of creating an environment of trust and mutual respect</li> <li>KA5. the implications of own work on the work and schedule of others</li> </ul>
<b>B. Technical Knowledge</b>	The user/individual on the job needs to know and understand:	

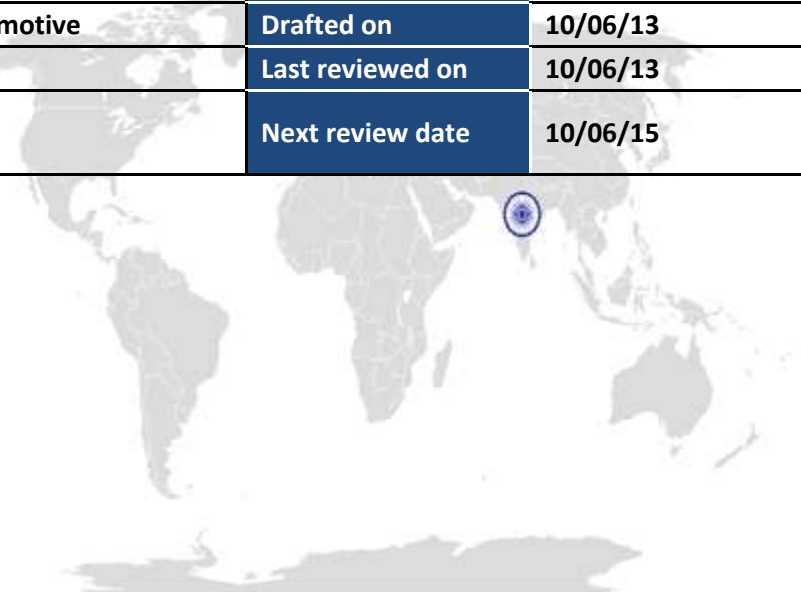
**ASC/ N 0002: Work effectively in a team**

	<p>KB1. different types of information that colleagues might need and the importance of providing this information when it is required</p> <p>KB2. the importance of helping colleagues with problems, in order to meet quality and time standards as a team</p>
<b>Skills (S) w.r.t. the scope</b>	
<b>Element</b>	<b>Skills</b>
<b>A. Core Skills/ Generic Skills</b>	<b>Writing Skills</b>
	The user/individual on the job needs to know and understand how to:
	SA1. complete written work with attention to detail
	<b>Reading Skills</b>
	The user/individual on the job needs to know and understand how to:
	SA2. read instructions, guidelines/procedures
<b>B. Professional Skills</b>	<b>Oral Communication (Listening and Speaking skills)</b>
	The user/individual on the job needs to know and understand how to:
	SA3. listen effectively and orally communicate information
	SA4. ask for clarification and advice from the concerned person
	<b>Decision Making</b>
	The user/individual on the job needs to know and understand how to:
	SB1. make decisions on a suitable course of action or response keeping in view resource utilization while meeting commitments
	<b>Plan and Organise</b>
	The user/individual on the job needs to know and understand how to:
	SB2. plan and organise work to achieve targets and deadlines
<b>Customer Centricity</b>	
The user/individual on the job needs to know and understand how to:	
SB3. check that the work meets customer requirements	
SB4. deliver consistent and reliable service to customers	
<b>Problem Solving</b>	
The user/individual on the job needs to know and understand how to:	
SB5. apply problem solving approaches in different situations	
<b>Critical Thinking</b>	
The user/individual on the job needs to know and understand how to:	
SB6. apply balanced judgements to different situations	

ASC/ N 0002: Work effectively in a team

NOS Version Control

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Industry	Automotive	Drafted on	10/06/13
Industry Sub-sector	NA	Last reviewed on	10/06/13
		Next review date	10/06/15



ASC/ N 0003: Maintain a healthy, safe and secure working environment

# National Occupational Standards



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## Overview

This unit is about monitoring work place practices and making sure they meet requirements for health, safety, security and environmental concerns.



**ASC/ N 0003: Maintain a healthy, safe and secure working environment**

National Occupational Standard	<b>Unit Code</b>	<b>ASC/ N 0003</b>
	<b>Unit Title (Task)</b>	<b>Maintain a healthy, safe and secure working environment</b>
	<b>Description</b>	This NOS unit is about monitoring the working environment and making sure it meets requirements for health, safety and security.
	<b>Scope</b>	<p>This unit/task covers the following:</p> <ul style="list-style-type: none"> <li>Resources (both material &amp; manpower) needed to maintain a safe working environment as per the prevalent norms &amp; government policies including emergency procedures for illness, accidents, fires or any other reason which may involve evacuation of the premises</li> </ul>
	<b>Performance Criteria (PC) w.r.t. the Scope</b>	
	<b>Element</b>	<b>Performance Criteria</b>
	<b>Resources needed to maintain a safe, secure working environment</b>	<p>To be competent, the user/individual on the job must be able to:</p> <p>PC1. comply with organisation’s current health, safety and security policies and procedures</p> <p>PC2. report any identified breaches in health, safety, and security policies and procedures to the designated person</p> <p>PC3. Coordinate with other resources at the workplace to achieve the healthy, safe and secure environment for all incorporating all government norms esp. for emergency situations like fires, earthquakes etc.</p> <p>PC4. identify and correct any hazards like illness, accidents, fires or any other natural calamity safely and within the limits of individual’s authority</p> <p>PC5. report any hazards outside the individual’s authority to the relevant person in line with organisational procedures and warn other people who may be affected</p> <p>PC6. follow organisation’s emergency procedures for accidents, fires or any other natural calamity</p> <p>PC7. identify and recommend opportunities for improving health, safety, and security to the designated person</p> <p>PC8. complete all health and safety records are updates and procedures well defined</p>
	<b>Knowledge and Understanding (K) w.r.t. the scope</b>	
	<b>Element</b>	<b>Knowledge and Understanding</b>
	<b>A. Organisational Context</b> (Knowledge of the Company/Organisation and its processes)	<p>The user/individual on the job needs to know and understand:</p> <p>KA1. legislative requirements and organisation’s procedures for health, safety and security and individual’s role and responsibilities in relation to this</p> <p>KA2. what is meant by a hazard, including the different types of health and safety hazards that can be found in the workplace</p> <p>KA3. how and when to report hazards</p>

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	<p>KA4. the limits of responsibility for dealing with hazards</p> <p>KA5. the organisation’s emergency procedures for different emergency situations and the importance of following these</p> <p>KA6. the importance of maintaining high standards of health, safety and security</p> <p>KA7. implications that any non-compliance with health, safety and security may have on individuals and the organisation</p>
<p><b>B. Technical Knowledge</b></p>	<p>The user/individual on the job needs to know and understand:</p> <p>KB1. different types of breaches in health, safety and security and how and when to report these</p> <p>KB2. evacuation procedures for workers and visitors</p> <p>KB3. how to summon medical assistance and the emergency services, where necessary</p> <p>KB4. how to use the health, safety and accident reporting Procedures and the importance of these</p>
<p><b>Skills (S) w.r.t. the scope</b></p>	
<p><b>Element</b></p>	<p><b>Skills</b></p>
<p><b>A. Core Skills/ Generic Skills</b></p>	<p><b>Writing Skills</b></p> <p>The user/individual on the job needs to know and understand how to:</p> <p>SA1. complete accurate, well written work with attention to detail</p> <p><b>Reading Skills</b></p> <p>The user/individual on the job needs to know and understand how to:</p> <p>SA2. read instructions, guidelines/procedures/rules</p> <p><b>Oral Communication (Listening and Speaking skills)</b></p> <p>The user/individual on the job needs to know and understand how to:</p> <p>SA3. listen to and orally communicate information with all concerned</p>
<p><b>B. Professional Skills</b></p>	<p><b>Decision Making</b></p> <p>The user/individual on the job needs to know and understand how to:</p> <p>SB1. make decisions on a suitable course of action or response</p> <p><b>Plan and Organise</b></p> <p>The user/individual on the job needs to know and understand how to:</p> <p>SB2. plan and organise work to achieve targets and deadlines</p> <p><b>Customer Centricity</b></p> <p>The user/individual on the job needs to know and understand how to:</p> <p>SB3. build and maintain positive and effective relationships with colleagues and customers</p> <p><b>Problem Solving</b></p> <p>The user/individual on the job needs to know and understand how to:</p>

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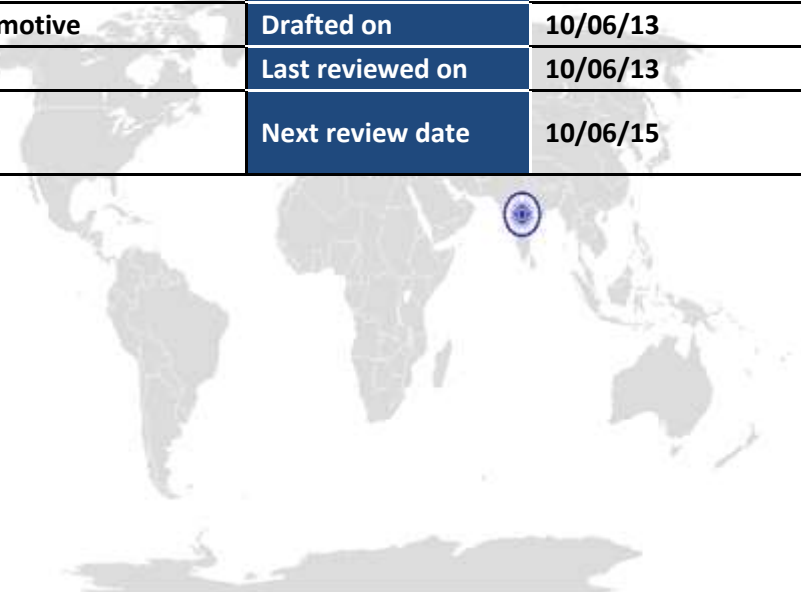
	SB4. apply problem solving approaches in different situations
	<b>Analytical Thinking</b>
	The user/individual on the job needs to know and understand how to:
	SB5. analyse data and activities
	<b>Critical Thinking</b>
	The user/individual on the job needs to know and understand how to:
	SB6. apply balanced judgements to different situations



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**NOS Version Control**

<b>NOS Code</b>	ASC/ N 0003		
<b>Credits(NSQF)</b>	TBD	<b>Version number</b>	1
<b>Industry</b>	Automotive	<b>Drafted on</b>	10/06/13
<b>Industry Sub-sector</b>	NA	<b>Last reviewed on</b>	10/06/13
		<b>Next review date</b>	10/06/15



**Qualification Pack for Lathe Operator**

<b>Criteria for assessment of Trainees</b>
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JOB ROLE	Lathe Operator L 4
Qualification Pack	ASC/Q 1901
No. Of NOS	1 Role specific ,3 generic

NOS Title/ NOS Elements	NOS & Performance Criterion Description	Marks allocation	
		Viva	Practical
<b>ASC/N 1901</b>	<b>Perform &amp; finish machining jobs on Lathe machine</b>		
<b>Machine various aggregates through a Lathe Machine</b>	To be competent, the user/individual on the job must be able to:		
	PC1. set up and operate numerically controlled horizontal lathe to perform machining operations, such as turning, boring, facing, and threading parts, such as castings, forgings and bar stock	5	15
	PC2. understand machine operation and adjust controls to ensure conformance with specified tolerances		
	PC3. set tools before positioning them in lathe, using precision gauges and instruments		
	PC4. mount work piece between centres, in chuck, or to faceplate, manually or using hoist		
	PC5. select and install pre-set tooling in tool posts, turrets or indexing heads, and automatic-tool-change magazine, in sequence specified on process sheet	25	50
	PC6. depresses buttons, toggles, or sets tape and starts machining operation		
	PC7. set cutting specifications and position cutting tool and work piece in relation to each other, and start machine		
	PC8. select cutting speed, feed rate, and depth of cut		
	PC9. move cutter or material manually or by turning hand wheel to mill work piece to specifications		
	PC10. observe numerical displays on control panel and compares with data on process sheet to verify dimensional adjustments, feed rates, and speeds of machining cuts.		
	PC11. verify alignment of work piece on machine, using measuring instruments, such as rules, gauges, or callipers		
	PC12. mount, install, align & secure tools, attachments, fixtures & work pieces on machines, using hand tools & precision measuring instruments	10	20
	PC13. turns dials and switches to override tape control and correct machine performance, applying practical knowledge of lathe operation		
	PC14. inspects first-run piece and spot-checks succeeding pieces for conformance to specifications, using micrometers and precision dial gauges.		

**Qualification Pack for Lathe Operator**

	PC15. studies job packet and organizes materials for next run during automatic tape-controlled cycles to shorten changeover time. PC16. ensure that the piece meets specifications after completing finishing works PC17. report all machine malfunctions to supervisor PC18. change worn tools and perform routine maintenance	10	25
	<b>subtotal</b>	<b>50</b>	<b>110</b>
<b>ASC/N 0001</b>	<b>Plan &amp; organize work to meet expected outcome</b>	<b>Viva</b>	<b>Practical</b>
<b>Work requirements including various activities within the given time and set quality standards</b>	To be competent, the user/individual on the job must be able to: PC1. keep immediate work area clean and tidy PC2. treat confidential information as per the organisation's guidelines PC3. work in line with organisation's policies and procedures PC4. work within the limits of job role PC5. obtain guidance from appropriate people, where necessary PC6. ensure work meets the agreed requirements	10	20
<b>Appropriate use of resources</b>	PC7. establish and agree on work requirements with appropriate people PC8. manage time, materials and cost effectively PC9. use resources in a responsible manner	20	50
	<b>subtotal</b>	<b>30</b>	<b>70</b>
<b>ASC/N 0002</b>	<b>Work effectively in a team</b>	<b>Viva</b>	<b>Practical</b>
<b>Interact &amp; communicate effectively with colleagues including member in the own group as well as other groups</b>	To be competent, the user/individual on the job must be able to: PC1. maintain clear communication with colleagues (by all means including face-to-face, telephonic as well as written) PC2. work with colleagues to integrate work PC3. pass on information to colleagues in line with organisational requirements both through verbal as well as non-verbal means PC4. work in ways that show respect for colleagues PC5. carry out commitments made to colleagues PC6. let colleagues know in good time if cannot carry out commitments, explaining the reasons PC7. identify problems in working with colleagues and take the initiative to solve these problems PC8. follow the organisation's policies and procedures for working with colleagues	30	70
	<b>subtotal</b>	<b>30</b>	<b>70</b>
<b>ASC/N 0003</b>	<b>Maintain safe , healthy environment friendly workplace</b>	<b>Viva</b>	<b>Practical</b>



**Qualification Pack for Lathe Operator**

<p><b>Resources needed to maintain a safe, secure working environment</b></p>	<p>To be competent, the user/individual on the job must be able to:</p> <ul style="list-style-type: none"> <li>PC1. comply with organisation’s current health, safety and security policies and procedures</li> <li>PC2. report any identified breaches in health, safety, and security policies and procedures to the designated person</li> <li>PC3. Coordinate with other resources at the workplace to achieve the healthy, safe and secure environment for all incorporating all government norms esp. for emergency situations like fires, earthquakes etc.</li> <li>PC4. identify and correct any hazards like illness, accidents, fires or any other natural calamity safely and within the limits of individual’s authority</li> <li>PC5. report any hazards outside the individual’s authority to the relevant person in line with organisational procedures and warn other people who may be affected</li> <li>PC6. follow organisation’s emergency procedures for accidents, fires or any other natural calamity</li> <li>PC7. identify and recommend opportunities for improving health, safety, and security to the designated person</li> <li>PC8. complete all health and safety records are updates and procedures well defined</li> </ul>	<p align="center">40</p>	<p align="center">100</p>
	<p align="right"><b>subtotal</b></p>	<p align="center"><b>40</b></p>	<p align="center"><b>100</b></p>
	<p align="right"><b>Total</b></p>	<p align="center"><b>150</b></p>	<p align="center"><b>350</b></p>