



Automotive Quality Control Inspector

QP Code: ASC/Q6303

Version: 2.0

NSQF Level: 4

Automotive Skills Development Council || 153, Gr Floor, Okhla Industrial Area, Phase - III, Leela Building
New Delhi - 110020

Contents

ASC/Q6303: Automotive Quality Control Inspector	3
<i>Brief Job Description</i>	3
Applicable National Occupational Standards (NOS)	3
<i>Compulsory NOS</i>	3
<i>Qualification Pack (QP) Parameters</i>	3
ASC/N9803: Organize work and resources (Manufacturing)	5
ASC/N9802: Interact effectively with colleagues, customers and others.....	11
ASC/N6303: Inspect and maintain the automotive product and process quality and implemet corrective actions	15
Assessment Guidelines and Weightage.....	19
<i>Assessment Guidelines</i>	19
<i>Assessment Weightage</i>	20
Acronyms	21
Glossary	22

ASC/Q6303: Automotive Quality Control Inspector

Brief Job Description

The individual is responsible for the conducting inspection and maintaining quality of the manufactured automotive products and related processes to deliver high quality products to customers.

Personal Attributes

The person should be patient, organised, team-oriented and have the ability to work for long hours in adverse conditions. They should be keen observers and have an eye for detail and quality.

Applicable National Occupational Standards (NOS)

Compulsory NOS:

1. [ASC/N9803: Organize work and resources \(Manufacturing\)](#)
2. [ASC/N9802: Interact effectively with colleagues, customers and others](#)
3. [ASC/N6303: Inspect and maintain the automotive product and process quality and implement corrective actions](#)

Qualification Pack (QP) Parameters

Sector	Automotive
Sub-Sector	Manufacturing Support
Occupation	Quality Assurance
Country	India
NSQF Level	4
Aligned to NCO/ISCO/ISIC Code	NCO-2015/3139.5001

Minimum Educational Qualification & Experience	<p>10th Class + 1 year ITI with 3 Years of experience</p> <p>OR</p> <p>10th Class + 2 years ITI with 2 Years of experience</p> <p>OR</p> <p>12th Class with 2 Years of experience experience in Quality</p> <p>OR</p> <p>Certificate-NSQF (Automotive Quality Control Assistant Level 3) with 2 Years of experience</p>
Minimum Level of Education for Training in School	
Pre-Requisite License or Training	NA
Minimum Job Entry Age	19 Years
Last Reviewed On	NA
Next Review Date	NA
NSQC Approval Date	
Version	2.0

ASC/N9803: Organize work and resources (Manufacturing)

Description

This NOS unit is about implementing safety, planning work, adopting sustainable practices for optimising use of resources

Scope

The scope covers the following :

- Maintain safe and secure working environment
- Health and hygiene
- Perform work as per quality standards
- Effective waste management practices
- Material/energy conservation practices

Elements and Performance Criteria

Maintain safe and secure working environment

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

- PC1. identify hazardous activities and the possible causes of risks or accidents in the workplace
- PC2. follow safe working practices while dealing with hazards to ensure safety of self and others
- PC3. carry out routine check of the machine for identifying potential hazards
- PC4. use appropriate protective clothing/equipment for specific tasks and work
- PC5. follow safety hazards and preventive techniques during fire drill
- PC6. report any identified breaches in health, safety and security policies and procedures to the designated person

Health and hygiene

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

- PC7. ensure workstation and equipment are regularly clean and sanitized
- PC8. clean hands with soap, alcohol-based sanitizer regularly
- PC9. avoid contact with ill people and self-isolate in a similar situation
- PC10. wear and dispose PPEs regularly and appropriately
- PC11. report advanced hygiene and sanitation issues to appropriate authority
- PC12. follow stress and anxiety management techniques

Perform work as per quality standards

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

- PC13. ensure that work is accomplished as per the requirements within the specified timeline
- PC14. ensure team goals are given preference over individual goals

Effective waste management practices

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

- PC15. follow the fundamentals of 5S for waste management
- PC16. segregate waste into different categories

- PC17. follow processes specified for disposal of hazardous waste
- PC18. identify recyclable, non-recyclable and hazardous waste
- PC19. dispose non-recyclable, recyclable and reusable waste appropriately at identified location

Material/energy conservation practices

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

- PC20. identify ways to optimize usage of material in various tasks/activities/processes
- PC21. check for spills/leakages in various tasks/activities/processes
- PC22. plug spills/leakages and escalate to appropriate authority if unable to rectify
- PC23. check if the equipment/machine is functioning normally before commencing work and rectify wherever required
- PC24. report malfunctioning (fumes/ sparks/emission/vibration/noise) and lapse in maintenance of equipment
- PC25. ensure electrical equipment and appliances are properly connected and turned off when not in use

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1. organisation procedures for health, safety and security, individual role and responsibilities in this context
- KU2. the organisation's emergency procedures for different emergency situations and the importance of following the same
- KU3. evacuation procedures for workers and visitors
- KU4. how and when to report hazards as well as the limits of responsibility for dealing with hazards
- KU5. potential hazards, risks and threats based on the nature of work
- KU6. preventative and remedial actions to be taken in case of exposure to toxic material
- KU7. various types of fire extinguisher
- KU8. various types of safety signs and their meaning
- KU9. appropriate first aid treatment relevant to different condition e.g. bleeding, minor burns, eye injuries etc.
- KU10. relevant standards, procedures and policies related to 5S followed in the company
- KU11. the various materials used and their storage norms
- KU12. efficient utilisation of material and water
- KU13. basics of electricity and prevalent energy efficient devices
- KU14. common practices of conserving electricity
- KU15. common sources and ways to minimize pollution
- KU16. categorisation of waste into dry, wet, recyclable, non-recyclable and items of single-use plastics
- KU17. usage of different colors of dustbins
- KU18. waste management techniques
- KU19. significance of greening

Generic Skills (GS)

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

- GS1. read safety instructions/guidelines
- GS2. modify work practices to improve them
- GS3. ask for clarifications from superior about the job requirement
- GS4. work with supervisors/team members to carry out work related tasks
- GS5. complete tasks efficiently and accurately within stipulated time
- GS6. inform/report to concerned person in case of any problem
- GS7. make timely decisions for efficient utilization of resources
- GS8. write reports such as accident report, in at least English/regional language
- GS9. be punctual and utilize time efficiently

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Maintain safe and secure working environment</i>	11	5	-	7
PC1. identify hazardous activities and the possible causes of risks or accidents in the workplace	2	1	-	2
PC2. follow safe working practices while dealing with hazards to ensure safety of self and others	2	-	-	1
PC3. carry out routine check of the machine for identifying potential hazards	2	1	-	1
PC4. use appropriate protective clothing/equipment for specific tasks and work	2	1	-	1
PC5. follow safety hazards and preventive techniques during fire drill	2	1	-	1
PC6. report any identified breaches in health, safety and security policies and procedures to the designated person	1	1	-	1
<i>Health and hygiene</i>	7	5	-	2
PC7. ensure workstation and equipment are regularly clean and sanitized	2	2	-	1
PC8. clean hands with soap, alcohol-based sanitizer regularly	1	1	-	1
PC9. avoid contact with ill people and self-isolate in a similar situation	1	-	-	-
PC10. wear and dispose PPEs regularly and appropriately	1	-	-	-
PC11. report advanced hygiene and sanitation issues to appropriate authority	1	1	-	-
PC12. follow stress and anxiety management techniques	1	1	-	-
<i>Perform work as per quality standards</i>	5	3	-	2
PC13. ensure that work is accomplished as per the requirements within the specified timeline	2	2	-	1

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC14. ensure team goals are given preference over individual goals	3	1	-	1
<i>Effective waste management practices</i>	15	10	-	4
PC15. follow the fundamentals of 5S for waste management	3	2	-	1
PC16. segregate waste into different categories	2	1	-	-
PC17. follow processes specified for disposal of hazardous waste	2	2	-	1
PC18. identify recyclable, non-recyclable and hazardous waste	4	2	-	1
PC19. dispose non-recyclable, recyclable and reusable waste appropriately at identified location	4	3	-	1
<i>Material/energy conservation practices</i>	12	7	-	5
PC20. identify ways to optimize usage of material in various tasks/activities/processes	2	1	-	1
PC21. check for spills/leakages in various tasks/activities/processes	2	1	-	1
PC22. plug spills/leakages and escalate to appropriate authority if unable to rectify	2	1	-	-
PC23. check if the equipment/machine is functioning normally before commencing work and rectify wherever required	2	2	-	1
PC24. report malfunctioning (fumes/sparks/emission/vibration/noise) and lapse in maintenance of equipment	2	1	-	1
PC25. ensure electrical equipment and appliances are properly connected and turned off when not in use	2	1	-	1
NOS Total	50	30	-	20

National Occupational Standards (NOS) Parameters

NOS Code	ASC/N9803
NOS Name	Organize work and resources (Manufacturing)
Sector	Automotive
Sub-Sector	Generic
Occupation	Generic
NSQF Level	3
Credits	TBD
Version	1.0
Last Reviewed Date	NA
Next Review Date	24/12/2025
NSQC Clearance Date	25/02/2021

ASC/N9802: Interact effectively with colleagues, customers and others

Description

This NOS unit is about communicating with customers and colleagues/superiors, either in own work group or in other work groups within organisation.

Scope

The scope covers the following :

- Communicate effectively with colleagues, customers and others
- Interact with supervisor or superior

Elements and Performance Criteria

Communicate effectively with colleagues, customers and others

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

- PC1. maintain clear communication with colleagues, customers and others, wherever needed, through all means i.e. face-to-face, telephonic or written
- PC2. adjust communication styles to reflect gender and persons with disability (PwD) sensitivity
- PC3. work in a way that shows respect for colleagues and others
- PC4. follow the organisation's policies and procedures while working in a team
- PC5. respect personal space of colleagues and customers

Interact with supervisor or superior

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

- PC6. identify work requirements by receiving instructions from reporting supervisor
- PC7. escalate problems to supervisors that cannot be handled including repairs and maintenance of machine
- PC8. report the completed work
- PC9. rectify errors as per feedback

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1. the importance of effective communication and establishing good working relationships with colleagues and supervisor
- KU2. different methods of communication as per the circumstances
- KU3. gender based concepts, issues and legislation

Generic Skills (GS)

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

- GS1. read instructions/guidelines/procedures

- GS2. listen effectively and orally communicate information
- GS3. ask for clarification and advice from the concerned person
- GS4. maintain positive and effective relationships with colleagues and customers
- GS5. evaluate the possible solution(s) to the problem
- GS6. deliver consistent and reliable service to customers
- GS7. complete written work with attention to detail
- GS8. check that the work meets customer requirements

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Communicate effectively with colleagues, customers and others</i>	36	11	-	14
PC1. maintain clear communication with colleagues, customers and others, wherever needed, through all means i.e. face-to-face, telephonic or written	8	-	-	4
PC2. adjust communication styles to reflect gender and persons with disability (PwD) sensitivity	8	-	-	-
PC3. work in a way that shows respect for colleagues and others	7	4	-	3
PC4. follow the organisation's policies and procedures while working in a team	7	4	-	3
PC5. respect personal space of colleagues and customers	6	3	-	4
<i>Interact with supervisor or superior</i>	14	19	-	6
PC6. identify work requirements by receiving instructions from reporting supervisor	7	4	-	-
PC7. escalate problems to supervisors that cannot be handled including repairs and maintenance of machine	-	5	-	3
PC8. report the completed work	7	5	-	-
PC9. rectify errors as per feedback	-	5	-	3
NOS Total	50	30	-	20

National Occupational Standards (NOS) Parameters

NOS Code	ASC/N9802
NOS Name	Interact effectively with colleagues, customers and others
Sector	Automotive
Sub-Sector	Generic
Occupation	Generic
NSQF Level	3
Credits	TBD
Version	1.0
Last Reviewed Date	NA
Next Review Date	22/09/2025
NSQC Clearance Date	25/02/2021

ASC/N6303: Inspect and maintain the automotive product and process quality and implement corrective actions

Description

This NOS unit is about the individual inspecting and maintaining the quality of the products and processes

Scope

The scope covers the following :

- Preparing for inspection process
- Perform inspection process
- Coordinate with the team and line incharge/supervisor

Elements and Performance Criteria

Preparing for inspection process

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

- PC1. interpret the inspection check sheet and coordinate with the superior for confirming inspection tasks and inspection criteria based on the standards for product/process
- PC2. identify and arrange testing equipment, measuring instruments, gauges, parts etc. required during the quality inspection process
- PC3. ensure that tools, gauges and measuring instruments to be used for inspection process are calibrated

Perform inspection process

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

- PC4. follow safety practices recommended by organisation during quality inspection process
- PC5. conduct and guide the quality control assistant in conducting the visual inspection of part or product for scratches, dents, damages, packing etc. as per the norms and quality standards
- PC6. conduct and guide the quality control assistant in conducting the dimensional and functional check of part or product by using inspection and measuring instrument such as vernier caliper, bore gauge, Go/NOGO gauge, micrometer etc.
- PC7. judge the part or product through reference for feel, touch, sound, smell, etc. if the measurement is not possible
- PC8. maintain and preserve the tested samples to track inspection history of automotive part or product tested and use it as defect/limit samples
- PC9. ensure that the sticker/number/label is placed on the inspected automotive part or product
- PC10. conduct automotive process inspection to verify the process control items by using pressure gauge, temperature gauge, voltmeter/ ammeter etc.
- PC11. prepare first-off inspection report by referring to process inspection standard/process parameter sheet/control plan
- PC12. record the observations of the inspection and update the records such as inspection report, charts in graphical pattern and other documents, manually or electronically as per the SOP
- PC13. raise a scrap note and ensure that scrapped part or product in the scrap yard is disposed-off as per the organisational specified procedure

Co-ordinate with the team, and line incharge/supervisor

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

- PC14. work as a CFT member of the team formed for problem solving and corrective actions pertaining to the products handled
- PC15. collect data related to the problems identified during inspection process, analyse it with team and identify the corrective actions for clearing the discrepancies
- PC16. coordinate with the respective process line leader/supervisor and implement corrective action for discrepancies identified in the inspection report
- PC17. coordinate with the team and identify opportunities for improvements in productivity, quality, cost, safety and morale
- PC18. verify the daily check items for e.g. poka yoke, mould functioning, fixture condition etc.

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1. company's quality inspection standards and processes
- KU2. classification of measuring instruments such as direct/indirect, precision/non-precision etc.
- KU3. Standard Operating Procedures (SOP) recommended by OEM for using testing equipment, gauges and measuring instruments such as vernier, Micrometers, height gauge, surface plate, etc.
- KU4. QMS system guidelines followed in the organization such as IATF-16949
- KU5. how to check the calibration of measuring instruments, gauges etc.
- KU6. manufacturing process being followed for each product
- KU7. inspection checkpoints for the parts, product and process
- KU8. documentation required regarding quality inspection process
- KU9. basic operation of software such as SAP, ERP etc.
- KU10. use of appropriate PPE, material handling equipment and tools for completing the inspection tasks
- KU11. problem solving & analysis tools like 8Ds, five why analysis etc.
- KU12. Root Cause Analysis (RCA) techniques

Generic Skills (GS)

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

- GS1. read quality process related standard documents
- GS2. communicate the inspection activities requirements to the supervisor and co-workers
- GS3. prepare reports related to inspection process in English/regional language
- GS4. recognise a workplace problem and take suitable action
- GS5. analyse and apply the information gathered from observation, experience, reasoning or communication to act efficiently
- GS6. complete the assigned tasks as per schedule
- GS7. plan and organise work according to the work requirements

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Preparing for inspection process</i>	10	9	-	4
PC1. interpret the inspection check sheet and coordinate with the superior for confirming inspection tasks and inspection criteria based on the standards for product/process	2	3	-	1
PC2. identify and arrange testing equipment, measuring instruments, gauges, parts etc. required during the quality inspection process	5	3	-	2
PC3. ensure that tools, gauges and measuring instruments to be used for inspection process are calibrated	3	3	-	1
<i>Perform inspection process</i>	15	30	-	12
PC4. follow safety practices recommended by organisation during quality inspection process	1	1	-	1
PC5. conduct and guide the quality control assistant in conducting the visual inspection of part or product for scratches, dents, damages, packing etc. as per the norms and quality standards	3	6	-	2
PC6. conduct and guide the quality control assistant in conducting the dimensional and functional check of part or product by using inspection and measuring instrument such as vernier caliper, bore gauge, Go/NOGO gauge, micrometer etc.	3	5	-	2
PC7. judge the part or product through reference for feel, touch, sound, smell, etc. if the measurement is not possible	2	4	-	1
PC8. maintain and preserve the tested samples to track inspection history of automotive part or product tested and use it as defect/limit samples	1	3	-	1
PC9. ensure that the sticker/number/label is placed on the inspected automotive part or product	1	1	-	-
PC10. conduct automotive process inspection to verify the process control items by using pressure gauge, temperature gauge, voltmeter/ ammeter etc.	2	3	-	2

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC11. prepare first-off inspection report by referring to process inspection standard/process parameter sheet/control plan	1	3	-	1
PC12. record the observations of the inspection and update the records such as inspection report, charts in graphical pattern and other documents, manually or electronically as per the SOP	1	3	-	1
PC13. raise a scrap note and ensure that scrapped part or product in the scrap yard is disposed-off as per the organisational specified procedure	-	1	-	1
<i>Co-ordinate with the team, and line incharge/supervisor</i>	5	11	-	4
PC14. work as a CFT member of the team formed for problem solving and corrective actions pertaining to the products handled	1	2	-	-
PC15. collect data related to the problems identified during inspection process, analyse it with team and identify the corrective actions for clearing the discrepancies	1	3	-	2
PC16. coordinate with the respective process line leader/supervisor and implement corrective action for discrepancies identified in the inspection report	1	2	-	1
PC17. coordinate with the team and identify opportunities for improvements in productivity, quality, cost, safety and morale	1	2	-	-
PC18. verify the daily check items for e.g. poka yoke, mould functioning, fixture condition etc.	1	2	-	1
NOS Total	30	50	-	20

National Occupational Standards (NOS) Parameters

NOS Code	ASC/N6303
NOS Name	Inspect and maintain the automotive product and process quality and implement corrective actions
Sector	Automotive
Sub-Sector	Manufacturing Support
Occupation	Quality Assurance
NSQF Level	4
Credits	TBD
Version	2.0
Last Reviewed Date	NA
Next Review Date	NA
NSQC Clearance Date	

Assessment Guidelines and Assessment Weightage

Assessment Guidelines

1. Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Performance Criteria (PC) (PC) will be assigned marks proportional to its importance in NOS. SSC will also lay down proportion of marks for Theory and Skills Practical for each PC.
2. The assessment for the theory part will be based on knowledge bank of questions created by the SSC.
3. Individual assessment agencies will create unique question papers for theory part for each candidate at each examination/training centre (as per assessment criteria below).
4. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/ training centre based on these criteria.
5. In case of successfully passing only certain number of NOSs, the trainee is eligible to take subsequent assessment on the balance NOS's to pass the Qualification Pack.
6. In case of unsuccessful completion, the trainee may seek reassessment on the Qualification Pack

Minimum Aggregate Passing % at QP Level : 70

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

Assessment Weightage

Compulsory NOS

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
ASC/N9803.Organize work and resources (Manufacturing)	50	30	-	20	100	15
ASC/N9802.Interact effectively with colleagues, customers and others	50	30	-	20	100	10
ASC/N6303.Inspect and maintain the automotive product and process quality and implemet corrective actions	30	50	-	20	100	75
Total	130	110	-	60	300	100

Acronyms

NOS	National Occupational Standard(s)
NSQF	National Skills Qualifications Framework
QP	Qualifications Pack
TVET	Technical and Vocational Education and Training
PPE	Personal Protective Equipment
PwD	Person with Disability
SOP	Standard Operating Practices
PwD	Persons with Disability
CFT	Customer Focus Team
RCA	Root Cause Analysis
PPE	Personal Protective Equipment
SAP	Systems Applications and Products
ERP	Enterprise Resource Planning
QMS	Quality Management System

Glossary

Sector	Sector is a conglomeration of different business operations having similar business and interests. It may also be defined as a distinct subset of the economy whose components share similar characteristics and interests.
Sub-sector	Sub-sector is derived from a further breakdown based on the characteristics and interests of its components.
Occupation	Occupation is a set of job roles, which perform similar/ related set of functions in an industry.
Job role	Job role defines a unique set of functions that together form a unique employment opportunity in an organisation.
Occupational Standards (OS)	OS specify the standards of performance an individual must achieve when carrying out a function in the workplace, together with the Knowledge and Understanding (KU) they need to meet that standard consistently. Occupational Standards are applicable both in the Indian and global contexts.
Performance Criteria (PC)	Performance Criteria (PC) are statements that together specify the standard of performance required when carrying out a task.
National Occupational Standards (NOS)	NOS are occupational standards which apply uniquely in the Indian context.
Qualifications Pack (QP)	QP comprises the set of OS, together with the educational, training and other criteria required to perform a job role. A QP is assigned a unique qualifications pack code.
Unit Code	Unit code is a unique identifier for an Occupational Standard, which is denoted by an 'N'
Unit Title	Unit title gives a clear overall statement about what the incumbent should be able to do.
Description	Description gives a short summary of the unit content. This would be helpful to anyone searching on a database to verify that this is the appropriate OS they are looking for.
Scope	Scope is a set of statements specifying the range of variables that an individual may have to deal with in carrying out the function which have a critical impact on quality of performance required.
Knowledge and Understanding (KU)	Knowledge and Understanding (KU) are statements which together specify the technical, generic, professional and organisational specific knowledge that an individual needs in order to perform to the required standard.

<p>Organisational Context</p>	<p>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.</p>
<p>Technical Knowledge</p>	<p>Technical knowledge is the specific knowledge needed to accomplish specific designated responsibilities.</p>
<p>Core Skills/ Generic Skills (GS)</p>	<p>Core skills or Generic Skills (GS) are a group of skills that are the key to learning and working in today's world. These skills are typically needed in any work environment in today's world. These skills are typically needed in any work environment. In the context of the OS, these include communication related skills that are applicable to most job roles.</p>
<p>Electives</p>	<p>Electives are NOS/set of NOS that are identified by the sector as contributive to specialization in a job role. There may be multiple electives within a QP for each specialized job role. Trainees must select at least one elective for the successful completion of a QP with Electives.</p>
<p>Options</p>	<p>Options are NOS/set of NOS that are identified by the sector as additional skills. There may be multiple options within a QP. It is not mandatory to select any of the options to complete a QP with Options.</p>