

# Manager Supplier Quality Level 6

QP Code: ASC/Q6302

NSQF Level: 6

Automotive Skills Development Council || Automotive Skills Development Council, Sat Paul Mittal  
Building, 1/6, Siri Institutional Area  
August Kranti Marg (Khel Gaon Marg) New Delhi - 110049

## Qualification Pack

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## Qualification Pack

### ASC/Q6302: Manager Supplier Quality Level 6

#### Brief Job Description

Individuals at this job need to be responsible for overall supplier quality assurance functions for all facilities including incoming inspection, issue containment and supplier corrective actions.

#### Personal Attributes

Individuals at this job need to be responsible for overall supplier quality assurance functions for all facilities including incoming inspection, issue containment and supplier corrective actions.

#### Applicable National Occupational Standards (NOS)

##### Compulsory NOS:

1. [ASC/N0002: Work effectively in a team](#)
2. [ASC/N0006: Maintain a safe and healthy working environment](#)
3. [ASC/N0022: Ensure implementation of 5S activities at the shop floor & the office area](#)
4. [ASC/N6302: Monitor the quality of incoming materials](#)
5. [ASC/N6303: Inspect and qualify existing and new suppliers](#)
6. [ASC/N6304: Collaborate with suppliers for cost reduction and process improvement](#)
7. [ASC/N6305: Evaluate and manage performance of suppliers](#)

#### Qualification Pack (QP) Parameters

<b>Sector</b>	Automotive
<b>Sub-Sector</b>	Manufacturing Support
<b>Occupation</b>	Quality Assurance
<b>Country</b>	India
<b>NSQF Level</b>	6
<b>Aligned to NCO/ISCO/ISIC Code</b>	NCO-2015/1324.0101

### Qualification Pack

<b>Minimum Educational Qualification &amp; Experience</b>	<p>Certificate (ASDC Level 5 Certificate) with 5-10 Years of experience Quality/Manufacturing/SQA department OR Certificate (ASDC Level 5 Certificate) with 5-10 Years of experience Quality/ Manufacturing /SQA department OR Certificate (ASDC Level 5 Certificate) with 0-6 Months of experience Not applicable</p>
<b>Minimum Level of Education for Training in School</b>	
<b>Pre-Requisite License or Training</b>	<p>Compulsory: Quality Management Systems like TS16949, Lean Six Sigma; 7 QC tools, Supplier quality metrics , APQP, Continuous improvement systems, Supplier performance measurement systems, Lean systems, Data analysis tools like 8Ds etc. ,Root cause analysis methods like Fishbone/ Cause and effect diagram etc. Voluntary: Information flow systems like ERP/SAP , risk management, supplier contract management</p>
<b>Minimum Job Entry Age</b>	18 Years
<b>Last Reviewed On</b>	27/08/2013
<b>Next Review Date</b>	31/03/2020
<b>NSQC Approval Date</b>	28/09/2015
<b>Version</b>	1.0

## Qualification Pack

### ASC/N0002: Work effectively in a team

#### Description

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

#### Scope

This unit/task covers the following: Colleagues: Superiors Members of own work group People in other work groups within or outside the organisation Communicate: Face-to-face By telephone In writing

- Superiors
- Members of own work group
- People in other work groups within or outside the organisation
- Face-to-face
- By telephone
- In writing

#### Elements and Performance Criteria

##### *Effective communication*

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

- PC1.** maintain clear communication with colleagues
- PC2.** work with colleagues
- PC3.** pass on information to colleagues in line with organisational requirements
- 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 organisations policies and procedures for working with colleagues
- PC9.** ability to share resources with other members as per priority of tasks

#### Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** the organisations policies and procedures for working with colleagues, role and responsibilities in relation to this
- KU2.** the importance of effective communication and establishing good working relationships with colleagues
- KU3.** different methods of communication and the circumstances in which it is appropriate to use these
- KU4.** benefits of developing productive working relationships with colleagues
- KU5.** the importance of creating an environment of trust and mutual respect

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- KU6.** whether not meeting commitments, will have implications on individuals and the organisation
- KU7.** different types of information that colleagues might need and the importance of providing this information when it is required
- KU8.** the importance of problems, from colleagues perspective and how to provide support, where necessary, to resolve these

## Generic Skills (GS)

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

- GS1.** complete well written work with attention to detail
- GS2.** read instructions, guidelines/procedures
- GS3.** listen effectively and orally communicate information
- GS4.** make decisions on a suitable course of action or response
- GS5.** plan and organise work to achieve targets and deadlines
- GS6.** check that the work meets customer requirements
- GS7.** deliver consistent and reliable service to customers
- GS8.** apply problem solving approaches in different situations
- GS9.** apply balanced judgements to different situations
- GS10.** apply good attention to detail
- GS11.** check that the work is complete and free from errors
- GS12.** get work checked by peers
- GS13.** work effectively in a team environment

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### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Effective communication</i>				
<b>PC1.</b> maintain clear communication with colleagues	4	10	-	-
<b>PC2.</b> work with colleagues	2	7	-	-
<b>PC3.</b> pass on information to colleagues in line with organisational requirements	3	8	-	-
<b>PC4..</b> work in ways that show respect for colleagues	3	8	-	-
<b>PC5.</b> carry out commitments made to colleagues	2	8	-	-
<b>PC6.</b> let colleagues know in good time if cannot carry out commitments, explaining the reasons	2	8	-	-
<b>PC7.</b> identify problems in working with colleagues and take the initiative to solve these problems	4	9	-	-
<b>PC8.</b> follow the organisations policies and procedures for working with colleagues	3	9	-	-
<b>PC9.</b> ability to share resources with other members as per priority of tasks	2	8	-	-
<b>NOS Total</b>	<b>25</b>	<b>75</b>	-	-

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### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	ASC/N0002
<b>NOS Name</b>	Work effectively in a team
<b>Sector</b>	Automotive
<b>Sub-Sector</b>	Manufacturing and R&D, Sales and Service, Road Transportation
<b>Occupation</b>	Maintenance
<b>NSQF Level</b>	4
<b>Credits</b>	TBD
<b>Version</b>	1.0
<b>Last Reviewed Date</b>	23/09/2013
<b>Next Review Date</b>	30/09/2015
<b>NSQC Clearance Date</b>	28/09/2015



## Qualification Pack

### ASC/N0006: 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

The role holder will be responsible for

- identifying and reporting of risks
- creating and sustaining a safe, clean and environment friendly work place This NOS will be applicable to all Automotive sector manufacturing job roles

#### Elements and Performance Criteria

##### *Identify and report the risks identified*

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

- PC1..** Identify activities which can cause potential injury through sharp objects, burns, fall, electricity, gas leakages, radiation, poisonous fumes, chemicals ,loud noise
- PC2.** Inform the concerned authorities about the potential risks identified in the processes, workplace area/ layout, materials used etc
- PC3.** Inform the concerned authorities about machine breakdowns, damages which can potentially harm man/ machine during operations
- PC4.** Create awareness amongst other by sharing information on the identified risks

##### *Create and sustain a Safe, clean and environment friendly work place*

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

- PC5..** Follow the instructions given on the equipment manual describing the operating process of the equipments
- PC6..** Follow the Safety, Health and Environment related practices developed by the organization
- PC7.** Operate the machine using the recommended Personal Protective Equipments (PPE)
- PC8. .** Maintain a clean and safe working environment near the work place and ensure there is no spillage of chemicals, production waste, oil, solvents etc
- PC9.** Maintain high standards of personal hygiene at the work place
- PC10.** Ensure that the waste disposal is done in the designated area and manner as per organization SOP.
- PC11.** Inform appropriately the medical officer/ HR in case of self or an employees illness of contagious nature so that preventive actions can be planned for others

#### Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

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- KU1.** relevant standards, procedures and policies related to Health, Safety and Environment followed in the company
- KU2.** basic knowledge of Safety procedures( fire fighting, first aid) within the organization
- KU3.** knowledge of various types of PPEs and their usage
- KU4.** basic knowledge of risks/hazards associated with each occupation in the organization
- KU5.** how to safely operate various tools and machines and risks associated with the tools/ equipment
- KU6.** knowledge of personal hygiene and how an individual can contribute towards creating a highly safe and clean working environment

## Generic Skills (GS)

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

- GS1.** write basic level notes and observations
- GS2.** read safety instructions put up across the plant premises
- GS3.** read safety precautions mentioned in equipment manuals and panels to understand the potential risks associated
- GS4.** effectively communicate information to team members
- GS5.** inform employees in the plant and concerned functions about events, incidents & potential risks observed related to Safety, Health and Environment.
- GS6.** question operator/ supervisor in order to understand the safety related issues
- GS7.** attentively listen with full attention and comprehend the information given by the speaker during safety drills and training programs
- GS8.** use common sense and make judgments during day to day basis
- GS9.** use reasoning skills to identify and resolve basic problems
- GS10.** use common sense and make judgments during day to day basis
- GS11.** use reasoning skills to identify and resolve basic problems

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### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Identify and report the risks identified</i>	<b>8</b>	<b>23</b>	-	-
<b>PC1..</b> Identify activities which can cause potential injury through sharp objects, burns, fall, electricity, gas leakages, radiation, poisonous fumes, chemicals ,loud noise	3	6	-	-
<b>PC2.</b> Inform the concerned authorities about the potential risks identified in the processes, workplace area/ layout, materials used etc	2	6	-	-
<b>PC3.</b> Inform the concerned authorities about machine breakdowns, damages which can potentially harm man/ machine during operations	2	6	-	-
<b>PC4.</b> Create awareness amongst other by sharing information on the identified risks	1	5	-	-
<i>Create and sustain a Safe, clean and environment friendly work place</i>	<b>17</b>	<b>52</b>	-	-
<b>PC5..</b> Follow the instructions given on the equipment manual describing the operating process of the equipments	3	7	-	-
<b>PC6..</b> Follow the Safety, Health and Environment related practices developed by the organization	3	8	-	-
<b>PC7.</b> Operate the machine using the recommended Personal Protective Equipments (PPE)	3	8	-	-
<b>PC8. .</b> Maintain a clean and safe working environment near the work place and ensure there is no spillage of chemicals, production waste, oil, solvents etc	2	8	-	-
<b>PC9.</b> Maintain high standards of personal hygiene at the work place	2	7	-	-
<b>PC10.</b> Ensure that the waste disposal is done in the designated area and manner as per organization SOP.	3	8	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC11.</b> Inform appropriately the medical officer/ HR in case of self or an employees illness of contagious nature so that preventive actions can be planned for others	1	6	-	-
<b>NOS Total</b>	<b>25</b>	<b>75</b>	-	-

## Qualification Pack

### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	ASC/N0006
<b>NOS Name</b>	Maintain a safe and healthy working environment
<b>Sector</b>	Automotive
<b>Sub-Sector</b>	Manufacturing
<b>Occupation</b>	Maintenance
<b>NSQF Level</b>	4
<b>Credits</b>	TBD
<b>Version</b>	1.0
<b>Last Reviewed Date</b>	15/09/2013
<b>Next Review Date</b>	15/09/2015
<b>NSQC Clearance Date</b>	20/07/2015

## Qualification Pack

# ASC/N0022: 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

The individual needs to

- 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

## Elements and Performance Criteria

### *Ensure proper sorting of items at the work place*

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

- 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*

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

- 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

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- 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*

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

- 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 all recyclable materials are put in designated containers

### *Ensure standardization*

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

- PC18.** ensure that daily cleaning standards and schedules to create a clean working environment are followed across the plant
- PC19..** ensure all recyclable materials are put in designated containers
- PC20. .** ensure logical and user friendly documentation and file management for all activities across the plant and create guidelines around standardization of processes
- PC21.** ensure timely creation and sharing of the 5s checklists
- PC22.** ensure that the 5s manual are available as per the timelines

### *Ensure sustenance*

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

- PC23.** ensure team cooperation during the audit of 5 s activities
- PC24.** ensure that workmen are periodically trained to address challenges related to 5s
- PC25..** participate actively in employee work groups on 5s and encourage team members for active participation
- PC26..** oversee that the staff/operators are trained and fully understand 5s procedures
- 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
- PC28.** ensure continuous training of the team members on 5s in order to increase their awareness and support implementation
- 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

## Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** relevant standards, procedures and policies related to 5S followed in the company
- KU2.** have basic knowledge of 5S procedures
- KU3.** know various types 5s practices followed in various areas

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- KU4.** understand the 5S checklists provided in the department/ team
- KU5.** have skills to identify useful & non useful items
- KU6.** have knowledge of labels , signs & colours used as indicators
- KU7.** Have knowledge on how to sort and store various types of tools,equipment, material etc
- KU8.** know , how to identify various types of waste products
- KU9.** understand the impact of waste/ dirt/ dust/unwantedsubstances on the process/ environment/ machinery/ humanbody
- KU10.** have knowledge of best and environment protective ways ofcleaning & waste disposal
- KU11.** understand the importance of standardization in processes
- KU12.** understand the importance of sustainability in 5S
- KU13.** have knowledge of TQM process
- KU14.** have knowledge of various materials and storage norms
- KU15.** understand visual controls, symbols, graphs etc

## Generic Skills (GS)

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

- GS1.** write basic level notes and observations
- GS2.** note down observations (if any) related to the process
- GS3.** write information documents to internal departments/ internal teams
- GS4.** read 5S instructions put up across the plant premises
- GS5.** effectively communicate information to team members inform employees in the plant and concerned functions about 5S
- GS6.** question the process head in order to understand the 5S related issues
- GS7.** attentively listen with full attention and comprehend the information given by the speaker during 5S training programs
- GS8.** use common sense and make judgments during day to day basis
- GS9.** use reasoning skills to identify and resolve basic problems using 5S
- GS10.** persuade team members to follow 5 S
- GS11.** ensure that the team members understand the importance of using 5 S tool
- GS12.** use innovative skills to perform and manage 5 S activities at the work desk and the shop floor
- GS13.** 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
- GS14.** do what is right, not what is a popular practice
- GS15.** follow shop floor rules& regulations and avoid deviations
- GS16.** lead by example in the plant premises while performing activities related to 5S
- GS17.** ensure self-cleanliness on a daily basis
- GS18.** demonstrate the will to keep the work area in a clean and orderly manner
- GS19.** accept additional responsibility for self and the team
- GS20.** encourage self and other to take greater responsibilities for managing 5S



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- GS21.** identify obstacles and bottlenecks in the process and find basic level solutions for removing these obstacles
- GS22.** use previous experience in resolving problems and taking decisions
- GS23.** make timely and independent decisions on the line/ shift within the boundaries of the delegation matrix of the organization

## Qualification Pack

### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Ensure proper sorting of items at the work place</i>	<b>10</b>	<b>25</b>	-	-
<b>PC1..</b> ensure all recyclable materials are put in designated containers	1	2.5	-	-
<b>PC2.</b> 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	1	2.5	-	-
<b>PC3.</b> ensure that the operators and other team members are segregating the waste in hazardous/ non hazardous waste as per the sorting work instructions	1	2.5	-	-
<b>PC4.</b> ensure that all the operators are following the technique of waste disposal and waste storage in the designated bins	1	2.5	-	-
<b>PC5..</b> segregate the items which are labelled at red tag items for the process area and keep them in the correct places	1	2.5	-	-
<b>PC6..</b> 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	1	2.5	-	-
<b>PC7.</b> 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	1	2.5	-	-
<b>PC8. .</b> oversee removal of unnecessary equipment, storage, furniture, unneeded inventory, supplies, parts and material	1	2.5	-	-
<b>PC9.</b> ensure that areas of material storage areas are not overflowing	1	2.5	-	-
<b>PC10.</b> 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	1	2.5	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Ensure proper documentation and storage streamlining &amp; organizing the workplace</i>	<b>3</b>	<b>7.5</b>	-	-
<b>PC11.</b> 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	1	2.5	-	-
<b>PC12.</b> make sure that all material and tools are stored in the designated places and in the manner indicated in the 5s instructions	1	2.5	-	-
<b>PC13.</b> ensure that organizing the workplace takes place with due considerations to the principles of wasted motions, ergonomics, work & method study .	1	2.5	-	-
<i>Ensure cleaning of self and the work place</i>	<b>4</b>	<b>10</b>	-	-
<b>PC14.</b> 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	1	2.5	-	-
<b>PC15..</b> ensure workbenches and work surfaces are clean and in good condition	1	2.5	-	-
<b>PC16..</b> ensure adherence to the cleaning schedule for the lighting system to ensure proper illumination	1	2.5	-	-
<b>PC17..</b> ensure all recyclable materials are put in designated containers	1	2.5	-	-
<i>Ensure standardization</i>	<b>5</b>	<b>12.5</b>	-	-
<b>PC18.</b> ensure that daily cleaning standards and schedules to create a clean working environment are followed across the plant	1	2.5	-	-
<b>PC19..</b> ensure all recyclable materials are put in designated containers	1	2.5	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC20.</b> . ensure logical and user friendly documentation and file management for all activities across the plant and create guidelines around standardization of processes	1	2.5	-	-
<b>PC21.</b> ensure timely creation and sharing of the 5s checklists	1	2.5	-	-
<b>PC22.</b> ensure that the 5s manual are available as per the timelines	1	2.5	-	-
<i>Ensure sustenance</i>	<b>7</b>	<b>16</b>	-	-
<b>PC23.</b> ensure team cooperation during the audit of 5 s activities	1	2.5	-	-
<b>PC24.</b> ensure that workmen are periodically trained to address challenges related to 5s	1	2.5	-	-
<b>PC25..</b> participate actively in employee work groups on 5s and encourage team members for active participation	1	2	-	-
<b>PC26..</b> oversee that the staff/operators are trained and fully understand 5s procedures	1	2	-	-
<b>PC27.</b> . 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	1	2.5	-	-
<b>PC28.</b> ensure continuous training of the team members on 5s in order to increase their awareness and support implementation	1	2	-	-
<b>PC29.</b> ensure that all visual controls, notice boards, symbols etc at the manufacturing place are created, working and are put up as per the requirement	1	2.5	-	-
<b>NOS Total</b>	<b>29</b>	<b>71</b>	-	-

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### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	ASC/N0022
<b>NOS Name</b>	Ensure implementation of 5S activities at the shop floor & the office area
<b>Sector</b>	Automotive
<b>Sub-Sector</b>	Generic
<b>Occupation</b>	Generic
<b>NSQF Level</b>	6
<b>Credits</b>	TBD
<b>Version</b>	1.0
<b>Last Reviewed Date</b>	15/03/2014
<b>Next Review Date</b>	15/03/2016
<b>NSQC Clearance Date</b>	

## Qualification Pack

### ASC/N6302: Monitor the quality of incoming materials

#### Description

This OS unit is about the supplier quality I/C manager monitoring the quality of the incoming parts/sub-assemblies/perishable goods/tools in coordination with Stores department through existing/new vendors for maintaining the customer quality standards in the final product

#### Scope

The unit/ task covers the following:

- incoming material inspection of materials/parts/sub-assemblies/tools/gauges
- new material quality validation

#### Elements and Performance Criteria

##### *Material inspection*

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

- PC1..** ensure the inspection of the incoming parts/subassemblies/materials/tools/gauges received by Stores department for following checkpoints by team members responsible for quality :  
items received as per the drawing no items are missing quantity of items received matches quantity indicated on invoice quantity of items received matches quantity requested by laboratory manufacturers expiry date is acceptable shelf life (in case of perishable goods) items transported in the suitable ambient environment items are not crushed, broken or leaking any broken or leaking item has been handled and disposed of as per the requirements of the SOP on HSE any manufacturers alerts or changes to the package insert are noted norms for Inspection & Report are followed for the shipment inventory records are updated copy of the invoice and order request is retained in the laboratory shipment is unpacked and properly integrated with existing inventory
- PC2..** co-ordinate the preparation of inspection report with support from materials lab and inspection team members and recording in the system ; and appropriately for traceability / batch control.
- PC3..** if the incoming material is not OK, then raise a rejection note and inform the supplier quarantine the material and its invoice documents till the replacement material is received from supplier once received, re- inspect the material repeat PC2 submit the invoice and other documents to Stores
- PC4..** remotely monitor the quality of the material in coordination with process quality team while usage at shop floor
- PC5..** in case of any rejections/deviations reported by downstream process quality, or field failures reported by customer quality team ensure that the interim / permanent corrective actions are taken after investigation at the supplier end thro 8d etc.
- PC6..** review periodically impact on suppliers rating (QCD ) as per sop and decide follow through actions for communication, business impact, payments etc.
- PC7..** convene meetings with suppliers in case of frequent rejections and understand their point of concern; brainstorm and devise countermeasures

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**PC8..** support the supplier in implementing the continuous improvement projects (C.I.) at their manufacturing facility processes

### *New material quality validation*

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

**PC9..** receive the drawings/specifications, and ECN/ PCN of the new material from R&D/NPD department

**PC10..** develop an insight into the process to derive an effective audit check list

**PC11..** audit the sample part/sub-assembly manufacturing process and ensure that the guidelines of APQP, PFMEA, CP are understood & adhered to by the supplier

**PC12..** check the dimensions of the representative part/new part/sub-assembly, and identify the best supplier meeting the quality requirements for the new part/sub-assembly

**PC13..** co-ordinate specific milestones on the timeline and review the qualitative meeting of the targets for part & process.

**PC14..** co-ordinate the participation in ppap at the vendor end to ensure the process meets the requirements/ targets of QCT

**PC15..** countermeasures for the deviations, re-review of the quality

**PC16..** signoff the ppap / record along with the concerned departments and supplier representative; flag off the process for bulk.

**PC17..** prepare a periodic audit schedule and accordingly inspect the new part/subassembly for quality and performance

**PC18..** present the findings of the new material validation to the senior management and seek their inputs and support

## Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

**KU1.** product portfolio of organization

**KU2.** the manufacturing processes of organization

**KU3.** material classification criteria followed by organization

**KU4.** policies and procedures for storage and preservation of materials

**KU5.** policies , compliances and systems followed for HSE

**KU6.** list of approved suppliers for each material

**KU7.** auditing and certification methodology followed for suppliers

**KU8.** manufacturing process being followed for each product

**KU9.** incoming inspection checkpoints

**KU10.** tests performed by Metallurgy department for inspection

**KU11.** QC tools like MSA , SPC , Pareto analysis , Fishbone diagram etc.

**KU12.** Special Purpose machines(SPM) used by manufacturing processes (if any)

**KU13.** supplier environment : capacity, capability, cost structures, delivery time, reliability factors

**KU14.** packaging and transportation methods for each part and sub-assembly

**KU15.** APQP procedures

**KU16.** requirements for PPAP

## Qualification Pack

- KU17.** dimension validation and performance testing methods
- KU18.** information systems like SAP, ERP etc.
- KU19.** type of P.O.s raised in SAP

## Generic Skills (GS)

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

- GS1.** the suppliers for discrepancies observed in new parts/tool development
- GS2.** metallurgy department for new parts material dimension validation and quality testing
- GS3.** vendor development department for procurement of approved new parts
- GS4.** conduct telecon / video conferences for long distance co-ordination with suppliers (if required)of day to day activities
- GS5.** senior management for updating the progress and seeking their support
- GS6.** team members for reviewing the progress of day to day activities
- GS7.** process Quality team for performing the MSA analysis in case of new par
- GS8.** distribute workload among team members ensuring smooth progress of material inspection activity and within the desired timelines
- GS9.** coordinate with various departments like Metallurgy , Vendor Development, Manufacturing, R&D, process Quality etc. based on the requirement /subassembly validation
- GS10.** share operation knowledge with colleagues
- GS11.** understand the drawings for part/tool and interpret the key characteristics like dimensions, profile, material etc
- GS12.** prepare the dimension testing reports for the parts/sub-assemblies
- GS13.** understand the inspection reports of the Metallurgy departments
- GS14.** prepare the inspection reports and maintain records
- GS15.** think through and devise the countermeasure for resolution for any quality related issue observed in the received suppliers parts or the manufacturing process followed by the supplier
- GS16.** prepare the fall back action plan in the environment of vendors, transport mechanisms and organizations capacity/ capability
- GS17.** work on actions to be taken on immediate basis in case of part rejections during trials
- GS18.** use escalation procedures
- GS19.** identify problems (technical and non-technical), disruptions and delays
- GS20.** keep abreast of special events such as holidays/ work calendars / maintenance shutdowns of vendors & organization and plan accordingly so that the final schedules are adhered to
- GS21.** plan and monitor the ambient conditions for storage and preservation of perishable goods as per the supplier requirements in coordination with Stores department
- GS22.** in consultation with Metallurgy department , inform the suppliers for fabrication of parts with cost effective and durable alternate material



## Qualification Pack

### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Material inspection</i>	<b>16</b>	<b>35</b>	-	-
<b>PC1..</b> ensure the inspection of the incoming parts/subassemblies/materials/tools/gauges received by Stores department for following checkpoints by team members responsible for quality : items received as per the drawing no items are missing quantity of items received matches quantity indicated on invoice quantity of items received matches quantity requested by laboratory manufacturers expiry date is acceptable shelf life (in case of perishable goods) items transported in the suitable ambient environment items are not crushed, broken or leaking any broken or leaking item has been handled and disposed of as per the requirements of the SOP on HSE any manufacturers alerts or changes to the package insert are noted norms for Inspection & Report are followed for the shipment inventory records are updated copy of the invoice and order request is retained in the laboratory shipment is unpacked and properly integrated with existing inventory	2	5	-	-
<b>PC2..</b> co-ordinate the preparation of inspection report with support from materials lab and inspection team members and recording in the system ; and appropriately for traceability / batch control.	2	5	-	-
<b>PC3..</b> if the incoming material is not OK, then raise a rejection note and inform the supplier quarantine the material and its invoice documents till the replacement material is received from supplier once received, re-inspect the material repeat PC2 submit the invoice and other documents to Stores	2	5	-	-
<b>PC4..</b> remotely monitor the quality of the material in coordination with process quality team while usage at shop floor	2	4	-	-
<b>PC5..</b> in case of any rejections/deviations reported by downstream process quality, or field failures reported by customer quality team ensure that the interim / permanent corrective actions are taken after investigation at the supplier end thro 8d etc.	2	4	-	-

### Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC6..</b> review periodically impact on suppliers rating (QCD ) as per sop and decide follow through actions for communication, business impact, payments etc.	2	4	-	-
<b>PC7..</b> convene meetings with suppliers in case of frequent rejections and understand their point of concern; brainstorm and devise countermeasures	2	4	-	-
<b>PC8..</b> support the supplier in implementing the continuous improvement projects (C.I.) at their manufacturing facility processes	2	4	-	-
<i>New material quality validation</i>	<b>14</b>	<b>35</b>	-	-
<b>PC9..</b> receive the drawings/specifications, and ECN/ PCN of the new material from R&D/NPD department	2	3	-	-
<b>PC10..</b> develop an insight into the process to derive an effective audit check list	2	4	-	-
<b>PC11..</b> audit the sample part/sub-assembly manufacturing process and ensure that the guidelines of APQP, PFMEA, CP are understood & adhered to by the supplier	2	5	-	-
<b>PC12..</b> check the dimensions of the representative part/new part/sub-assembly, and identify the best supplier meeting the quality requirements for the new part/sub-assembly	2	5	-	-
<b>PC13..</b> co-ordinate specific milestones on the timeline and review the qualitative meeting of the targets for part & process.	1	3	-	-
<b>PC14..</b> co-ordinate the participation in ppap at the vendor end to ensure the process meets the requirements/ targets of QCT	1	3	-	-
<b>PC15..</b> countermeasures for the deviations, re-review of the quality	1	3	-	-
<b>PC16..</b> signoff the ppap / record along with the concerned departments and supplier representative; flag off the process for bulk.	1	3	-	-
<b>PC17..</b> prepare a periodic audit schedule and accordingly inspect the new part/subassembly for quality and performance	1	3	-	-

### Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC18..</b> present the findings of the new material validation to the senior management and seek their inputs and support	1	3	-	-
<b>NOS Total</b>	<b>30</b>	<b>70</b>	-	-

## Qualification Pack

### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	ASC/N6302
<b>NOS Name</b>	Monitor the quality of incoming materials
<b>Sector</b>	Automotive
<b>Sub-Sector</b>	Manufacturing Support
<b>Occupation</b>	Quality Assurance
<b>NSQF Level</b>	6
<b>Credits</b>	TBD
<b>Version</b>	1.0
<b>Last Reviewed Date</b>	27/08/2013
<b>Next Review Date</b>	30/07/2015
<b>NSQC Clearance Date</b>	

## Qualification Pack

### ASC/N6303: Inspect and qualify existing and new suppliers

#### Description

This OS unit is about the supplier quality assurance assistant manager ensuring evaluation and assessment of the manufacturing facilities of the existing and newsuppliers in coordination with Vendor Development department for assessing their technical , capacity and commercial capabilities

#### Scope

This unit/ task covers the following:

- auditing procedure for suppliers
- updating the supplier rating based on the audit

#### Elements and Performance Criteria

##### *Auditing procedure*

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

- PC1..** Quality : quality management Structure followed (TS16949) quality assurance through process capability and control (SPC) quality performance levels being followed by vendor for organization Capacity& capability of equipment, infrastructure, manpower to be used for parts on order work instructions display at shop floor Corrective Action and Preventive Action (CAPA) methodology change management procedures APQP guidelines implementation for new product development (PFMEA, CP ) Tier-2 supplier selection and management customer specifications communication method to Tier -2 suppliers tooling management system followed testing and inspection equipments and their incorporation in TS documents process and product validation , audit schedule and methodology rework capabilities on-site and methodology followed identification and traceability procedures record retention TPM system implementation (Total Preventive Maintenance) Evidence of 5S or similar improvement activities on shop floor Health and Safety Policy
- PC2..** Cost : dedicated team for cost improvement costing methodology quotation development technique (RFQs response) accountability for cost of poor quality for customer warranty agreements public subsidies or financial support leveraging Tier-2 suppliers for cost and delivery cost improvement through lean manufacturing commodity hedging and price fluctuations strategic sourcing plans include make/buy studies investment plans global sourcing opportunities currency risk and its effect on material costs
- PC3..** Logistics/Delivery: depth of Electronic Data Interchange (EDI) capabilities customers logistic documentation process for ordering/receiving/tracking material service delivery levels process for identification & management of NPD programs service delivery levels management for Tier-2 suppliers competency in system to adapt to market fluctuations projects for maximizing value addition and minimizing waste reduction packaging methodology process for delivering customer service parts understanding of charge-back process

##### *Updating supplier rating*

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

- PC4..** update the rating corresponding to each checkpoint as per the organization procedure i.e. 5-point scale , ryg etc.

## Qualification Pack

- PC5..** based on the status for all checkpoints , arrive at the composite score
- PC6..** as per the composite score , upgrade or downgrade the rating of supplier through manual / erp e.g. srm module of sap
- PC7..** in case of very low rating , plan suitable countermeasures from vendor and ensure re-audit of the supplier
- PC8..** if still not satisfactory, immediately convene meetings with top management and discuss about the re-consideration of business with the supplier in coordination with vendor development department
- PC9..** update the records for the supplier audited in sap
- PC10..** re-audit the supplier as per the schedule

## Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** auditing methodology used for supplier evaluation in organization
- KU2.** policies and procedures followed by suppliers for HSE
- KU3.** procedure and protocol for annulment of a contract with supplier
- KU4.** Tier-2 supplier base for the suppliers organization
- KU5.** checklist for supplier audit
- KU6.** APQP and TS 16949 guidelines
- KU7.** composite score calculation technique
- KU8.** method of updating supplier ratings in SAP
- KU9.** suppliers organization details retrieval methods from SAP
- KU10.** information flow for updating suppliers records
- KU11.** information systems like SAP , ERP etc.

## Generic Skills (GS)

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

- GS1.** communicate with team members for getting the progress for audit of each supplier
- GS2.** conduct telecon / video conferences for discussion on countermeasures implementation if necessary with suppliers
- GS3.** distribute workload among team members for performing each suppliers audit in an efficient and timely manner
- GS4.** share operation knowledge with colleagues
- GS5.** present in front of the top management the performance of the supplier in terms of Quality and delivery for their review
- GS6.** understand the documentation done by supplier complying to TS 16949 and APQP guidelines (as applicable)
- GS7.** understand the data being mentioned in MIS tool of SAP for material rejections and use it accordingly for rating suppliers

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- GS8.** interpret the financial reports of the suppliers organization
- GS9.** problems (technical and non-technical), disruptions and delays
- GS10.** escalation procedures
- GS11.** to work with a fall back action plan in the event of any issue
- GS12.** to think of new and effective methods to keep a check on the supplier performance through SAP
- GS13.** decide with respect to HSE compliance violations by suppliers and seek support from top management , if required
- GS14.** in case of any field failure/warranty issue arising due to malfunctioning of supplier part, accordingly include it in the audit and decide the rating for the supplier

## Qualification Pack

### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Auditing procedure</i>	9	30	-	-
<b>PC1.. Quality :</b> quality management Structure followed (TS16949) quality assurance through process capability and control (SPC) quality performance levels being followed by vendor for organization Capacity& capability of equipment, infrastructure, manpower to be used for parts on order work instructions display at shop floor Corrective Action and Preventive Action (CAPA) methodology change management procedures APQP guidelines implementation for new product development (PFMEA, CP ) Tier-2 supplier selection and management customer specifications communication method to Tier -2 suppliers tooling management system followed testing and inspection equipments and their incorporation in TS documents process and product validation , audit schedule and methodology rework capabilities on-site and methodology followed identification and traceability procedures record retention TPM system implementation (Total Preventive Maintenance) Evidence of 5S or similar improvement activities on shop floor Health and Safety Policy	3	10	-	-
<b>PC2.. Cost :</b> dedicated team for cost improvement costing methodology quotation development technique (RFQs response) accountability for cost of poor quality for customer warranty agreements public subsidies or financial support leveraging Tier-2 suppliers for cost and delivery cost improvement through lean manufacturing commodity hedging and price fluctuations strategic sourcing plans include make/buy studies investment plans global sourcing opportunities currency risk and its effect on material costs	3	10	-	-



### Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC3..</b> Logistics/Delivery: depth of Electronic Data Interchange (EDI) capabilities customers logistic documentation process for ordering/receiving/tracking material service delivery levels process for identification & management of NPD programs service delivery levels management for Tier-2 suppliers competency in system to adapt to market fluctuations projects for maximizing value addition and minimizing waste reduction packaging methodology process for delivering customer service parts understanding of charge-back process	3	10	-	-
<i>Updating supplier rating</i>	<b>16</b>	<b>45</b>	-	-
<b>PC4..</b> update the rating corresponding to each checkpoint as per the organization procedure i.e. 5-point scale , ryg etc.	3	7	-	-
<b>PC5..</b> based on the status for all checkpoints , arrive at the composite score	3	9	-	-
<b>PC6..</b> as per the composite score , upgrade or downgrade the rating of supplier through manual / erp e.g. srm module of sap	3	9	-	-
<b>PC7..</b> in case of very low rating , plan suitable countermeasures from vendor and ensure re-audit of the supplier	3	8	-	-
<b>PC8..</b> if still not satisfactory, immediately convene meetings with top management and discuss about the re-consideration of business with the supplier in coordination with vendor development department	2	6	-	-
<b>PC9..</b> update the records for the supplier audited in sap	1	3	-	-
<b>PC10..</b> re-audit the supplier as per the schedule	1	3	-	-
<b>NOS Total</b>	<b>25</b>	<b>75</b>	-	-

## Qualification Pack

### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	ASC/N6303
<b>NOS Name</b>	Inspect and qualify existing and new suppliers
<b>Sector</b>	Automotive
<b>Sub-Sector</b>	Manufacturing Support
<b>Occupation</b>	Quality Assurance
<b>NSQF Level</b>	6
<b>Credits</b>	TBD
<b>Version</b>	1.0
<b>Last Reviewed Date</b>	23/08/2013
<b>Next Review Date</b>	30/07/2015
<b>NSQC Clearance Date</b>	

## Qualification Pack

# ASC/N6304: Collaborate with suppliers for cost reduction and process improvement

## Description

This OS unit is about the supplier quality I/C or manager coordination with suppliers implementing process improvement measures to further enhance cost effectiveness of the supplier quality assurance process

## Scope

This unit/ task covers the following:

- analysing the cost of poor quality for suppliers
- implementing closed loop corrective actions
- engaging suppliers in quality management systems

## Elements and Performance Criteria

### *Cost of poor quality*

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

- PC1..** measure and track the cost of poor quality (COPQ) levels related to quality suppliers sourced parts/sub-assemblies by taking following into account: scrap costs due to poor quality of material received from supplier line shutdown attributed to poor quality of supplier material freight costs due to expedited shipment by suppliers because of delayed delivery of materials warranty expenses due to poor quality of materials from suppliers
- PC2..** compare the calculated copq with respect to the target levels decided by supplier quality department
- PC3..** based on the copq levels achieved , immediately discuss the same with the suppliers through telecom /meeting
- PC4..** understand the reasons for high/medium levels of copq from the respective suppliers and immediately demand the corrective actions implementation
- PC5..** monitor remotely the effectiveness of implemented corrective actions and then re-assess the copq levels on daily basis
- PC6..** re- review the progress of the copq reduction with the respective supplier based on the corrective actions and repeat the steps pc4. to pc5. till the cost reaches to the desired target levels
- PC7..** share the data on copq on periodic basis with the senior management and seek their support in case of any difficulties

### *Implementing closed loop corrective actions*

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

- PC8..** identify discrepancies with respect to the suppliers material quality , manufacturing process , material performance, delivery etc.
- PC9..** based on the requirements of the organization , prioritise the identified discrepancies jointly with the supplier and accordingly ensure investigation of the root cause
- PC10..** initiate an investigation with the concerned supplier and properly identify the root cause of the problem using rca techniques

## Qualification Pack

- PC11..** after identification of root cause , jointly brainstorm and create a list of possible corrective actions (CAPA) like amendments to a documented procedure, upgrading the skill set of an employee through a training and certification process, or recalibrating the manufacturing equipment.
- PC12..** in addition to this , capture the COPQ associated with that non-conformance
- PC13..** use that information to initiate and complete a cost recovery process with a supplier
- PC14..** if required , seek the approval of senior management in case of a critical situation
- PC15..** ensure the implementation of the identified corrective actions and monitor remotely the effectiveness of each by re-auditing the supplier
- PC16..** based on the best results , inform the supplier for the best corrective action and instruct him to implement it on permanent basis
- PC17..** repeat the process from pc8. to pc15. till the major discrepancies identified are resolved
- PC18..** remotely monitor the suppliers performance after capa implementation for maintaining all the norms related to qcd for the suppliers material in control
- PC19..** coordinate with suppliers and jointly devise the norms for qcd for the respective suppliers materials sourcing
- PC20..** if feasible , provide support to the suppliers to align their processes in such a manner that they should be able to meet the qcd
- PC21..** coordinate jointly and maintain a web based mis/scorecard/dashboard system for supplier to have continuous access to real time information with respect to suppliers performance for qcd targets
- PC22..** transfer information from suppliers quality system into organizations quality system through sap/erp
- PC23..** collaborate with the small scale suppliers and if possible, implement a webbased quality management system (qms) at suppliers end dedicated for the organization; thereby reducing the cost of ownership for the supplier
- PC24..** ensure that the relevant stakeholders in suppliers organization are adequately trained and adept to deliver the requirements of the quality management systems (qms)
- PC25..** review the methodology of quality management followed by suppliers and ensure that it is in accordance to the requirements prescribed in various qms systems standards
- PC26..** review the suppliers process and identify opportunities for ci through elimination of nva, introduction of poka yoke, observation of trends in parameters etc.

## Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** products portfolio of the suppliers organization
- KU2.** auditing methodology used for supplier evaluation in organization
- KU3.** QMS standard procedures and guidelines followed by organisation
- KU4.** policies and procedures followed by suppliers for HSE compliances
- KU5.** Tier-2 supplier base for the suppliers organization
- KU6.** information flow systems followed in suppliers organization
- KU7.** cost of poor quality (COPQ) calculation methodology

## Qualification Pack

- KU8.** checklist for supplier audit
- KU9.** TS 16949/other QMS system guidelines
- KU10.** composite score calculation technique
- KU11.** CAPA implementation procedure and methodology
- KU12.** RCA analysis techniques
- KU13.** web based QMS system knowledge and methodology of information flow
- KU14.** suppliers organization details retrieval methods from their information systems
- KU15.** information systems like SAP , ERP etc.

## Generic Skills (GS)

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

- GS1.** communicate with team members for getting the progress for audit of each supplier
- GS2.** conduct telecon / video conferences for discussion on countermeasures/CAPA implementation if necessary with suppliers
- GS3.** communicate with suppliers for implementation/modification of the information flow for the respective QMS systems
- GS4.** distribute workload among team members for evaluating suppliers performance
- GS5.** retrieve information from suppliers information system and transfer it into organizations system
- GS6.** share operation knowledge with colleagues
- GS7.** present in front of the top management the performance of the suppliers in terms of Quality and delivery for their review
- GS8.** prepare presentations for understanding of web based QMS systems at suppliers end
- GS9.** share the QCD targets adherence records with senior management and seek their feedback
- GS10.** understand the documentation done by supplier complying to TS 16949 and other QMS system guidelines (as applicable)
- GS11.** understand the various quality data for computation of COPQ
- GS12.** interpret the information flow for QMS system followed in suppliers organization
- GS13.** problems (technical and non-technical), disruptions and delays
- GS14.** escalation procedures
- GS15.** to work with a fall back action plan in the event of any discrepancy
- GS16.** to think of new and effective methods to keep a check on the supplier performance through various web based information systems
- GS17.** review the COPQ levels
- GS18.** decide with respect to fall back action plan for QMS systems non-adherence by suppliers and seek support from top management , if required

## Qualification Pack

### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Cost of poor quality</i>	<b>8</b>	<b>20</b>	-	-
<b>PC1..</b> measure and track the cost of poor quality (COPQ) levels related to quality suppliers sourced parts/sub-assemblies by taking following into account: scrap costs due to poor quality of material received from supplier line shutdown attributed to poor quality of supplier material freight costs due to expedited shipment by suppliers because of delayed delivery of materials warranty expenses due to poor quality of materials from suppliers	2	4	-	-
<b>PC2..</b> compare the calculated copq with respect to the target levels decided by supplier quality department	1	2	-	-
<b>PC3..</b> based on the copq levels achieved , immediately discuss the same with the suppliers through telecom /meeting	1	2	-	-
<b>PC4..</b> understand the reasons for high/medium levels of copq from the respective suppliers and immediately demand the corrective actions implementation	1	4	-	-
<b>PC5..</b> monitor remotely the effectiveness of implemented corrective actions and then re-assess the copq levels on daily basis	1	3	-	-
<b>PC6..</b> re- review the progress of the copq reduction with the respective supplier based on the corrective actions and repeat the steps pc4. to pc5. till the cost reaches to the desired target levels	1	3	-	-
<b>PC7..</b> share the data on copq on periodic basis with the senior management and seek their support in case of any difficulties	1	2	-	-
<i>Implementing closed loop corrective actions</i>	<b>22</b>	<b>50</b>	-	-
<b>PC8..</b> identify discrepancies with respect to the suppliers material quality , manufacturing process , material performance, delivery etc.	2	3	-	-

### Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC9..</b> based on the requirements of the organization , prioritise the identified discrepancies jointly with the supplier and accordingly ensure investigation of the root cause	1	2	-	-
<b>PC10..</b> initiate an investigation with the concerned supplier and properly identify the root cause of the problem using rca techniques	2	3	-	-
<b>PC11..</b> after identification of root cause , jointly brainstorm and create a list of possible corrective actions (CAPA) like amendments to a documented procedure, upgrading the skill set of an employee through a training and certification process, or recalibrating the manufacturing equipment.	2	3	-	-
<b>PC12..</b> in addition to this , capture the COPQ associated with that non-conformance	1	3	-	-
<b>PC13..</b> use that information to initiate and complete a cost recovery process with a supplier	1	3	-	-
<b>PC14..</b> if required , seek the approval of senior management in case of a critical situation	1	3	-	-
<b>PC15..</b> ensure the implementation of the identified corrective actions and monitor remotely the effectiveness of each by re-auditing the supplier	1	3	-	-
<b>PC16..</b> based on the best results , inform the supplier for the best corrective action and instruct him to implement it on permanent basis	1	3	-	-
<b>PC17..</b> repeat the process from pc8. to pc15. till the major discrepancies identified are resolved	1	2	-	-
<b>PC18..</b> remotely monitor the suppliers performance after capa implementation for maintaining all the norms related to qcd for the suppliers material in control	1	2	-	-
<b>PC19..</b> coordinate with suppliers and jointly devise the norms for qcd for the respective suppliers materials sourcing	1	3	-	-
<b>PC20..</b> if feasible , provide support to the suppliers to align their processes in such a manner that they should be able to meet the qcd	1	2	-	-

### Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC21..</b> coordinate jointly and maintain a web based mis/scorecard/dashboard system for supplier to have continuous access to real time information with respect to suppliers performance for qcd targets	1	3	-	-
<b>PC22..</b> transfer information from suppliers quality system into organizations quality system through sap/erp	1	2	-	-
<b>PC23..</b> collaborate with the small scale suppliers and if possible, implement a webbased quality management system (qms) at suppliers end dedicated for the organization; thereby reducing the cost of ownership for the supplier	1	3	-	-
<b>PC24..</b> ensure that the relevant stakeholders in suppliers organization are adequately trained and adept to deliver the requirements of the quality management systems (qms)	1	3	-	-
<b>PC25..</b> review the methodology of quality management followed by suppliers and ensure that it is in accordance to the requirements prescribed in various qms systems standards	1	2	-	-
<b>PC26..</b> review the suppliers process and identify opportunities for ci through elimination of nva, introduction of poka yoke, observation of trends in parameters etc.	1	2	-	-
<b>NOS Total</b>	<b>30</b>	<b>70</b>	-	-



## Qualification Pack

### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	ASC/N6304
<b>NOS Name</b>	Collaborate with suppliers for cost reduction and process improvement
<b>Sector</b>	Automotive
<b>Sub-Sector</b>	Manufacturing Support
<b>Occupation</b>	Quality Assurance
<b>NSQF Level</b>	6
<b>Credits</b>	TBD
<b>Version</b>	1.0
<b>Last Reviewed Date</b>	23/08/2013
<b>Next Review Date</b>	30/07/2015
<b>NSQC Clearance Date</b>	

## Qualification Pack

### ASC/N6305: Evaluate and manage performance of suppliers

#### Description

This OS unit is about the supplier quality manager working on strategies and techniques jointly with Sourcing/Vendor development for efficiently managing performance of suppliers

#### Scope

This unit/ task covers the following:

- managing the supplier contracts
- establishing metrics for supplier performance
- evaluating supplier performance

#### Elements and Performance Criteria

##### *Supplier contract management*

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

- PC1..** discuss with r&d , metallurgy department for defining the technical requirements for out sourced parts/sub-assemblies before identifying the key suppliers
- PC2..** ensure that the key suppliers for each part/sub-assembly are identified for all the manufacturing processes in coordination with sourcing/vendor development department
- PC3..** prepare a team of the various quality control deputy, assistant managers, qc inspectors etc. assigned for all the parts/sub-assemblies
- PC4..** ensure that the team is briefed about their individual roles and responsibilities
- PC5..** introduce the team to the sourcing/vendor development department team for better coordination
- PC6..** jointly decide the linkages in supplier contracts with the supplier performance management
- PC7..** provide the quality and operational metrics inputs to the sourcing/vendor development department for defining the contract terms
- PC8..** based on the market knowledge and specifications of the parts/subassemblies to be sourced , discuss in team and provide inputs for unit costs to sourcing/vendor development department

##### *Supplier performance metrics*

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

- PC9..** convene a meeting of team and the team from sourcing and vendor development/sourcing team to discuss and finalize the service level agreements (slas) for the supplier contracts
- PC10..** seek the approval of senior management for the finalized supplier contract guidelines
- PC11..** discuss with team the various performance metrics to be developed for suppliers performance for following parameters:
- PC12..** Quality : 5S implementation Percentage of Non conformance Avg. Corrective actions /8D response time Avg. Corrective actions /8D resolution time Past due reports/8D s On-time reports/ 8Ds

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- PC13..** Delivery : Percentage of On-time delivery Percentage of late deliveries Percentage of line items not shipped on time Percentage of line items shipped on time Actual v/s quoted lead time
- PC14..** Cost : Percentage of total cost reduction Y-O-Y Total cost reduction Y-O-Y
- PC15..** Responsiveness : Emergency requests for part change Emergency orders requested v/s shipped Compliance to payment terms Overall communications
- PC16..** Innovation : technical and process improvements best practice sharing Cost savings revenue enhancement:
- PC17..** Risk: Root cause and non-conformance incidents Political events product availability distance from source industry capacity technology change financial instability
- PC18..** CSR : total recordable incidents days away from work cases fatality and work safety initiatives Green initiative
- PC19..** Customer complaints : COPQ associated with product returns
- PC20..** if required , work with team to design an internal supplier certification program and determine the compliance requirements for all the suppliers

### *Evaluating supplier performance*

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

- PC21..** develop a supplier scorecard/mis/kpis system for evaluation of the suppliers performance for all the metrics in line with the prescribed qms and hse systems
- PC22..** if required , coordinate with internal it team and ensure integration of the above mentioned performance evaluation system into the information flow systems like sap/erp etc. to have a real time access to supplier performance status
- PC23..** once designed , discuss with sourcing / vendor development team about the evaluation system and based on their inputs , finalize the system
- PC24..** coordinate with the internal supplier quality team and vendor development/sourcing and get prepared a comprehensive supplier audit schedule for assessment
- PC25..** prepare the budget for the supplier quality assurance department activities with team and seek the approval of finance department and senior management
- PC26..** ensure the evaluation of suppliers through the decided methodology as per the schedule
- PC27..** ensure that the ppaps documents have been received for all the approved suppliers and are as per the qms guidelines
- PC28..** ensure the team has upgraded or downgraded the ratings of suppliers in the sap/erp system after the audit
- PC29..** based on the results obtained from supplier evaluation , convene meetings with the team and discuss about continuation/annulment of the supplier
- PC30..** communicate the decisions made to the sourcing / vendor development team and jointly implement the action plan

## Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** future business plans of the organization
- KU2.** products portfolio of the suppliers organization

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- KU3.** auditing methodology used for supplier evaluation
- KU4.** QMS standard procedures and guidelines followed by organization
- KU5.** supplier performance evaluation methodology
- KU6.** supplier contract management system followed in organization
- KU7.** policies and procedures followed by suppliers for HSE compliances
- KU8.** Tier-2 supplier base for the suppliers organization
- KU9.** information flow systems followed in suppliers organization
- KU10.** supplier performance metrics
- KU11.** supplier performance measurement process techniques like Supplier scorecard/MIS/KPIs etc.
- KU12.** supplier contract terms
- KU13.** PPAP documentation
- KU14.** cost of poor quality (COPQ) calculation methodology
- KU15.** supplier audit methodology
- KU16.** TS 16949/other QMS system guidelines
- KU17.** charge back rates
- KU18.** customs/import/other duties levied for overseas suppliers
- KU19.** product unit cost calculation systems followed by Sourcing team
- KU20.** composite score calculation technique
- KU21.** SCAR reporting format
- KU22.** QMS systems methodology of information flow
- KU23.** information systems like SAP , ERP etc.

## Generic Skills (GS)

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

- GS1.** communicate with Sourcing/Vendor development department for contract management and linking with performance metrics
- GS2.** communicate with team members for getting the progress for supplier quality assurance activities undertaken by each team member
- GS3.** communicate with Metallurgy and R&D department for various technical requirements
- GS4.** communicate with internal IT team for supplier performance data integration
- GS5.** conduct telecon / video conferences for discussion on countermeasures implementation if necessary with suppliers
- GS6.** communicate with Marketing/internal customers for suppliers material field failures/warranty issues etc. for suppliers performance measurement
- GS7.** communicate with senior management for support required for supplier quality assurance activities
- GS8.** decide the various performance metrics for supplier management among the team members and in coordination with Sourcing department
- GS9.** distribute workload among team members for evaluating suppliers performance
- GS10.** share operation knowledge with colleagues

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- GS11.** present in front of the top management the performance of the suppliers metrics wise for their review
- GS12.** understand the documentation done by supplier complying to TS 16949 and other QMS system guidelines (as applicable)
- GS13.** understand the various quality data for computation of COPQ
- GS14.** interpret the data recorded in various supplier performance measurement tools
- GS15.** interpret the information flow for QMS system followed in suppliers organization
- GS16.** analyze the various cost components of COPQ and their computation
- GS17.** action plans for resolution of problems (technical and non-technical), disruptions and delays
- GS18.** escalation procedures
- GS19.** to work with a fall back action plan in the event of any discrepancy
- GS20.** to think of new and effective methods to keep a check on the supplier performance
- GS21.** manage risk at suppliers organization in event of any natural/political/economic crisis situations
- GS22.** review the suppliers performance and decide the fall back action plan in case of any serious non-compliance issues
- GS23.** decide with respect to fall back action plan for QMS systems non-adherence by suppliers and seek support from top management , if required
- GS24.** discuss with Metallurgy and R&D department for development of outsourced parts/sub-assemblies using cost effective alternate material of construction
- GS25.** decide with Sourcing/Vendor development department the alternate supplier base for the outsourced parts/sub-assemblies

## Qualification Pack

### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Supplier contract management</i>	<b>8</b>	<b>25</b>	-	-
<b>PC1..</b> discuss with r&d , metallurgy department for defining the technical requirements for out sourced parts/sub-assemblies before identifying the key suppliers	1	3	-	-
<b>PC2..</b> ensure that the key suppliers for each part/sub-assembly are identified for all the manufacturing processes in coordination with sourcing/vendor development department	1	4	-	-
<b>PC3..</b> prepare a team of the various quality control deputy, assistant managers, qc inspectors etc. assigned for all the parts/sub-assemblies	1	3	-	-
<b>PC4..</b> ensure that the team is briefed about their individual roles and responsibilities	1	3	-	-
<b>PC5..</b> introduce the team to the sourcing/vendor development department team for better coordination	1	2	-	-
<b>PC6..</b> jointly decide the linkages in supplier contracts with the supplier performance management	1	3	-	-
<b>PC7..</b> provide the quality and operational metrics inputs to the sourcing/vendor development department for defining the contract terms	1	4	-	-
<b>PC8..</b> based on the market knowledge and specifications of the parts/subassemblies to be sourced , discuss in team and provide inputs for unit costs to sourcing/vendor development department	1	3	-	-
<i>Supplier performance metrics</i>	<b>12</b>	<b>24</b>	-	-
<b>PC9..</b> convene a meeting of team and the team from sourcing and vendor development/sourcing team to discuss and finalize the service level agreements (slas) for the supplier contracts	1	2	-	-
<b>PC10..</b> seek the approval of senior management for the finalized supplier contract guidelines	1	2	-	-

### Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC11..</b> discuss with team the various performance metrics to be developed for suppliers performance for following parameters:	1	2	-	-
<b>PC12..</b> Quality : 5S implementation Percentage of Non conformance Avg. Corrective actions /8D response time Avg. Corrective actions /8D resolution time Past due reports/8D s On-time reports/ 8Ds	1	2	-	-
<b>PC13..</b> Delivery : Percentage of On-time delivery Percentage of late deliveries Percentage of line items not shipped on time Percentage of line items shipped on time Actual v/s quoted lead time	1	2	-	-
<b>PC14..</b> Cost : Percentage of total cost reduction Y-O-Y Total cost reduction Y-O-Y	1	2	-	-
<b>PC15..</b> Responsiveness : Emergency requests for part change Emergency orders requested v/s shipped Compliance to payment terms Overall communications	1	2	-	-
<b>PC16..</b> Innovation : technical and process improvements best practice sharing Cost savings revenue enhancement:	1	2	-	-
<b>PC17..</b> Risk: Root cause and non-conformance incidents Political events product availability distance from source industry capacity technology change financial instability	1	2	-	-
<b>PC18..</b> CSR : total recordable incidents days away from work cases fatality and work safety initiatives Green initiative	1	2	-	-
<b>PC19..</b> Customer complaints : COPQ associated with product returns	1	2	-	-
<b>PC20..</b> if required , work with team to design an internal supplier certification program and determine the compliance requirements for all the suppliers	1	2	-	-
<i>Evaluating supplier performance</i>	<b>10</b>	<b>21</b>	-	-
<b>PC21..</b> develop a supplier scorecard/mis/kpis system for evaluation of the suppliers performance for all the metrics in line with the prescribed qms and hse systems	1	3	-	-

### Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC22..</b> if required , coordinate with internal it team and ensure integration of the above mentioned performance evaluation system into the information flow systems like sap/erp etc. to have a real time access to supplier performance status	1	2	-	-
<b>PC23..</b> once designed , discuss with sourcing / vendor development team about the evaluation system and based on their inputs , finalize the system	1	2	-	-
<b>PC24..</b> coordinate with the internal supplier quality team and vendor development/sourcing and get prepared a comprehensive supplier audit schedule for assessment	1	2	-	-
<b>PC25..</b> prepare the budget for the supplier quality assurance department activities with team and seek the approval of finance department and senior management	1	2	-	-
<b>PC26..</b> ensure the evaluation of suppliers through the decided methodology as per the schedule	1	2	-	-
<b>PC27..</b> ensure that the ppaps documents have been received for all the approved suppliers and are as per the qms guidelines	1	2	-	-
<b>PC28..</b> ensure the team has upgraded or downgraded the ratings of suppliers in the sap/erp system after the audit	1	2	-	-
<b>PC29..</b> based on the results obtained from supplier evaluation , convene meetings with the team and discuss about continuation/annulment of the supplier	1	2	-	-
<b>PC30..</b> communicate the decisions made to the sourcing / vendor development team and jointly implement the action plan	1	2	-	-
<b>NOS Total</b>	<b>30</b>	<b>70</b>	-	-



## Qualification Pack

### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	ASC/N6305
<b>NOS Name</b>	Evaluate and manage performance of suppliers
<b>Sector</b>	Automotive
<b>Sub-Sector</b>	Manufacturing Support
<b>Occupation</b>	Quality Assurance
<b>NSQF Level</b>	6
<b>Credits</b>	TBD
<b>Version</b>	1.0
<b>Last Reviewed Date</b>	23/08/2013
<b>Next Review Date</b>	30/07/2015
<b>NSQC Clearance Date</b>	

## Qualification Pack

### Assessment Guidelines and Assessment Weightage

#### Assessment Guidelines

1. Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Element/ Performance Criteria (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 Element/ PC.
2. The assessment for the theory part will be based on knowledge bank of questions created by the SSC.
3. Assessment will be conducted for all compulsory NOS, and where applicable, on the selected elective/option NOS/set of NOS.
4. Individual assessment agencies will create unique question papers for theory part for each candidate at each examination/training center (as per assessment criteria below).
5. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/ training center based on these criteria.
6. To pass the Qualification Pack assessment, every trainee should score the Recommended Pass % aggregate for the QP.
7. In case of unsuccessful completion, the trainee may seek reassessment on the Qualification Pack.

**Recommended Pass % aggregate for QP : 75**

#### Assessment Weightage

##### Compulsory NOS

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
ASC/N0002.Work effectively in a team	25	75	-	-	100	10
ASC/N0006.Maintain a safe and healthy working environment	25	75	-	-	100	10
ASC/N0022.Ensure implementation of 5S activities at the shop floor & the office area	29	71	-	-	100	10

### Qualification Pack

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
ASC/N6302.Monitor the quality of incoming materials	30	70	-	-	100	20
ASC/N6303.Inspect and qualify existing and new suppliers	25	75	-	-	100	20
ASC/N6304.Collaborate with suppliers for cost reduction and process improvement	30	70	-	-	100	15
ASC/N6305.Evaluate and manage performance of suppliers	30	70	-	-	100	15
<b>Total</b>	<b>194</b>	<b>506</b>	<b>-</b>	<b>-</b>	<b>700</b>	<b>100</b>

## Qualification Pack

### Acronyms

<b>NOS</b>	National Occupational Standard(s)
<b>NSQF</b>	National Skills Qualifications Framework
<b>QP</b>	Qualifications Pack
<b>TVET</b>	Technical and Vocational Education and Training

## Qualification Pack

### Glossary

<b>Sector</b>	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.
<b>Sub-sector</b>	Sub-sector is derived from a further breakdown based on the characteristics and interests of its components.
<b>Occupation</b>	Occupation is a set of job roles, which perform similar/ related set of functions in an industry.
<b>Job role</b>	Job role defines a unique set of functions that together form a unique employment opportunity in an organisation.
<b>Occupational Standards (OS)</b>	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.
<b>Performance Criteria (PC)</b>	Performance Criteria (PC) are statements that together specify the standard of performance required when carrying out a task.
<b>National Occupational Standards (NOS)</b>	NOS are occupational standards which apply uniquely in the Indian context.
<b>Qualifications Pack (QP)</b>	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.
<b>Unit Code</b>	Unit code is a unique identifier for an Occupational Standard, which is denoted by an 'N'
<b>Unit Title</b>	Unit title gives a clear overall statement about what the incumbent should be able to do.
<b>Description</b>	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.
<b>Scope</b>	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.

## Qualification Pack

<b>Knowledge and Understanding (KU)</b>	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.
<b>Organisational Context</b>	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.
<b>Technical Knowledge</b>	Technical knowledge is the specific knowledge needed to accomplish specific designated responsibilities.
<b>Core Skills/ Generic Skills (GS)</b>	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.
<b>Electives</b>	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.
<b>Options</b>	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.