





Press Shop Operator Level 4

QP Code: ASC/Q3402

NSQF Level: 4

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ASC/Q3402: Press Shop Operator Level 4

Brief Job Description

The Press Shop Operator is involved in operating the press machine, overseeing processes of blanking, drawing, etc., monitoring press operations and recording operational data, coordinating with die setter during die setting operation and assisting in running the press at optimum efficiency.

Personal Attributes

The individual should have good reading skills, writing and communication skills, ability to plan and prioritize, quality consciousness, safety orientation, dexterity, high precision and sensitivity to problem solving.

Applicable National Occupational Standards (NOS)

Compulsory NOS:

- 1. ASC/N0006: Maintain a safe and healthy working environment
- 2. ASC/N0008: Conduct regular cleaning and maintenance of the equipment
- 3. ASC/N0021: Maintain 5S at the work premises
- 4. ASC/N3402: Understand job requirements and related processes and equipment
- 5. ASC/N3403: Prepare the machine and load the raw materials, tools, bins, etc
- 6. ASC/N3404: Undertake press operations and run the press line at optimum efficiency
- 7. ASC/N3405: Coordinate with the die setter during die setting operation

Qualification Pack (QP) Parameters

Sector	Automotive
Sub-Sector	Manufacturing
Occupation	Pressing
Country	India
NSQF Level	4
Aligned to NCO/ISCO/ISIC Code	NCO-2015/7211.0101







Minimum Educational Qualification & Experience	10th Class with 2-3 years of experience Not applicable OR 10th Class OR 10th Class
Minimum Level of Education for Training in School	
Pre-Requisite License or Training	Press shop operations Different pressing processes used in the organization 5S & Safety
Minimum Job Entry Age	18 Years
Last Reviewed On	20/07/2013
Next Review Date	31/03/2020
NSQC Approval Date	20/07/2015
Version	1.0







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:







- **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 risksassociated with the tools/ equipment
- **KU6.** knowledge of personal hygiene and how an individual an 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.** informemployees 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







Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Identify and report the risks identified	8	23	-	-
PC1 Identify activities which can cause potential injury through sharp objects, burns, fall, electricity, gas leakages, radiation, poisonous fumes, chemicals ,loud noise	3	6	-	-
PC2. Inform the concerned authorities about the potential risks identified in the processes, workplace area/ layout, materials used etc	2	6	-	-
PC3. Inform the concerned authorities about machine breakdowns, damages which can potentially harm man/ machine during operations	2	6	-	-
PC4. Create awareness amongst other by sharing information on the identified risks	1	5	-	-
Create and sustain a Safe, clean and environment friendly work place	17	52	-	-
PC5 Follow the instructions given on the equipment manual describing the operating process of the equipments	3	7	-	-
PC6 Follow the Safety, Health and Environment related practices developed by the organization	3	8	-	-
PC7. Operate the machine using the recommended Personal Protective Equipments (PPE)	3	8	-	-
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	2	8	-	-
PC9. Maintain high standards of personal hygiene at the work place	2	7	-	-
PC10. Ensure that the waste disposal is done in the designated area and manner as per organization SOP.	3	8	-	-







Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
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	1	6	-	-
NOS Total	25	75	-	-







National Occupational Standards (NOS) Parameters

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







ASC/N0008: Conduct regular cleaning and maintenance of the equipment

Description

This NOS is about systematically arranging the equipment in proper area, cleaning the process equipment & auxiliaries on a regular basis and doing basic level maintenance of the equipment, recording any problems related to equipment working

Scope

The role holder will be responsible for

- Storing the equipment in the proper condition
- Regular cleaning and maintenance of equipment and work area

Elements and Performance Criteria

Storing equipment in proper condition

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

- **PC1..** arrange all equipment in a proper order as indicated in the equipment manual
- PC2.. store equipment auxiliaries and spare parts in proper designated areas
- **PC3..** clearly tag process related equipment parts/ spare parts as per part number or serial number so that sorting of equipment becomes easy
- **PC4.** cover equipment so that there is limited dust collection and moisture contact

Regular cleaning of the equipments and work area

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

- **PC5.** regularly clean the equipment and process auxiliaries to remove any dust, moisture, waste material which would have got collected on the equipment
- **PC6.** regularly open the equipment and clean the internal parts of the equipment
- **PC7.** regularly clean the working area under the process and create a healthy, clean and safe working environment

Conduct regular preventive maintenance of equipments

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

- **PC8..** check the working of all bearing, rollers, shafts etc and oil all moving parts of the equipment on a periodic basis
- **PC9..** check the working of non moving parts and periodically conductpreventive maintenance to prevent machine failure
- **PC10.** periodically check the equipment calibration and report any errors to the maintenance teams for rectification

Recording observations and preparing MIS

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

PC11. prepare periodic log sheets of equipment maintenance dates, maintenance schedules and maintenance activity conducted on the equipment







Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- **KU1.** relevant standards and procedures followed in the company for the process of maintenance and equipment storage
- **KU2.** functional processes like Procurement, Store management, inventory management, quality management and key contact points for query resolution
- **KU3.** basic level maintenance and cleaning techniques
- **KU4.** various solvents, chemicals, lubricants etc. used during the maintenance processes
- **KU5.** procedure for arranging the equipment and spare parts in the prescribed manner including tagging and numbering of machine parts & spares
- **KU6.** safety precautions to be taken during cleaning and maintenance activities

Generic Skills (GS)

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

- **GS1.** note equipment part codes, name tags etc. in the prescribed formats and records for the same
- **GS2.** note observations related to equipment performance, breakdown, cleaning and maintenance schedules etc. in the prescribed MIS format
- **GS3.** read equipment manuals and process documents to understand the equipment and processes better
- **GS4.** read instructions especially safety instructions related to equipment cleaning and maintenance
- **GS5.** discuss task lists and job requirements with co-workers
- **GS6.** effectively communicate information to team members
- **GS7.** listen and analyse any noise and vibrations in the equipment and report the same to the maintenance team for preventive action
- **GS8.** attentively listen with full attention and comprehend the information given by the speaker
- **GS9.** plan and organize the work order and jobs received from the Operator
- **GS10.** organize all process/ equipment manuals so that sorting/ accessing information is easy as per the part/ machine number in the specified format in the designated area
- **GS11.** use common sense and make judgments during day to day basis
- **GS12.** use reasoning skills to identify and resolve basic problems







Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Storing equipment in proper condition	7	30	-	-
PC1 arrange all equipment in a proper order as indicated in the equipment manual	2	8	-	-
PC2. . store equipment auxiliaries and spare parts in proper designated areas	2	8	-	-
PC3 clearly tag process related equipment parts/ spare parts as per part number or serial number so that sorting of equipment becomes easy	2	7	-	-
PC4. cover equipment so that there is limited dust collection and moisture contact	1	7	-	-
Regular cleaning of the equipments and work area	6	22	-	-
PC5. regularly clean the equipment and process auxiliaries to remove any dust, moisture, waste material which would have got collected on the equipment	2	8	-	-
PC6. regularly open the equipment and clean the internal parts of the equipment	2	7	-	-
PC7. regularly clean the working area under the process and create a healthy, clean and safe working environment	2	7	-	-
Conduct regular preventive maintenance of equipments	6	21	-	-
PC8 check the working of all bearing, rollers, shafts etc and oil all moving parts of the equipment on a periodic basis	2	7	-	-
PC9 check the working of non moving parts and periodically conductpreventive maintenance to prevent machine failure	2	7	-	-
PC10. periodically check the equipment calibration and report any errors to the maintenance teams for rectification	2	7	-	-
Recording observations and preparing MIS	1	7	-	-







Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC11. prepare periodic log sheets of equipment maintenance dates, maintenance schedules and maintenance activity conducted on the equipment	1	7	-	-
NOS Total	20	80	-	-







National Occupational Standards (NOS) Parameters

NOS Code	ASC/N0008
NOS Name	Conduct regular cleaning and maintenance of the equipment
Sector	Automotive
Sub-Sector	Manufacturing
Occupation	Welding
NSQF Level	3
Credits	TBD
Version	1.0
Last Reviewed Date	18/10/2016
Next Review Date	20/10/2018
NSQC Clearance Date	







ASC/N0021: Maintain 5S at the work premises

Description

This NOS is about ensuring all 5 S activities both at the shop floor and the office area to facilitate increase in work productivity

Elements and Performance Criteria

Ensure sorting

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

- **PC1..** follow the sorting process and check that the tools, fixtures & jigs that are lying on workstations are the ones in use and unnecessary items are not cluttering the workbenches or work surfaces.
- **PC2..** ensure segregation of waste in hazardous/ non hazardous waste as per the sorting work instructions
- **PC3..** follow the technique of waste disposal and waste storage in the proper bins as per sop
- **PC4..** segregate the items which are labelled as red tag items for the process area and keep them in the correct places
- **PC5.** sort the tools/ equipment/ fasteners/ spare parts as per specifications/ utility into proper trays, cabinets, lockers as mentioned in the 5s guidelines/ work instructions
- **PC6..** ensure that areas of material storage areas are not overflowing
- **PC7.** properly stack the various types of boxes and containers as per the size/ utility to avoid any fall of items/ breakage and also enable easy sorting when required
- **PC8.** return the extra material and tools to the designated sections and make sure that no additional material/ tool is lying near the work area
- **PC9.** follow the floor markings/ area markings used for demarcating the various sections in the plant as per the prescribed instructions and standards
- **PC10.** follow the proper labeling mechanism of instruments/ boxes/ containers and maintaining reference files/ documents with the codes and the lists

Ensure proper documentation and storage (organizing, streamlining)

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

- **PC11.** check that the items in the respective areas have been identified as broken or damaged
- **PC12.** follow the given instructions and check for labelling of fluids, oils. lubricants, solvents, chemicals etc. and proper storage of the same to avoid spillage, leakage, fire etc
- **PC13.** make sure that all material and tools are stored in the designated places and in the manner indicated in the 5s instructions

Ensure cleaning of self and the work place

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

- **PC14.** check whether safety glasses are clean and in good condition
- **PC15.** keep all outside surfaces of recycling containers are clean
- **PC16..** ensure that the area has floors swept, machinery clean and generally clean. in case of cleaning, ensure that proper displays are maintained on the floor which indicate potential safety hazards







- **PC17..** check whether all hoses, cabling & wires are clean, in goodcondition and clamped to avoid any mishap or mix up
- PC18.. ensure workbenches and work surfaces are clean and in good condition
- **PC19.** follow the cleaning schedule for the lighting system to ensure proper illumination
- **PC20.** store the cleaning material and equipment in the correct location and in good condition
- **PC21.** ensure self-cleanliness clean uniform, clean shoes, clean gloves, clean helmets, personal hygiene

Ensure sustenance

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

- PC22. follow the daily cleaning standards and schedules to create a clean working environment
- **PC23.** attend all training programs for employees on 5 s
- **PC24.** support the team during the audit of 5 s
- **PC25.** participate actively in employee work groups on 5s and encourage team members for active participation
- **PC26.** follow the guidelines for what to do and what not to do to build sustainability in 5s as mentioned in the 5s check lists/ work instructions

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
- **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.** 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/unwanted substances on the process/ environment/ machinery/ human body
- **KU10.** have knowledge of best ways of cleaning & 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.** read 5S instructions put up across the plant premises
- **GS4.** effectively communicate information to team members inform employees in the plant and concerned functions about 5S
- GS5. question the process head in order to understand the 5S related issues
- **GS6.** attentively listen with full attention and comprehend the information given by the speaker during 5S training programs
- **GS7.** use common sense and make judgments during day to day basis
- GS8. use reasoning skills to identify and resolve basic problems using 5S
- **GS9.** persuade co team members to follow 5 S
- **GS10.** ensure that the co team members understand the importance of using 5 S tool
- **GS11.** use innovative skills to perform and manage 5 S activities at the work desk and the shop floor
- **GS12.** exhibit inquisitive behaviour to seek feedback and question on the existing set patterns of work
- **GS13.** do what is right, not what is a popular practices
- GS14. follow shop floor rules& regulations and avoid deviations; make 5S an integral way of life
- **GS15.** ensure self-cleanliness on a daily basis
- **GS16.** demonstrate the will to keep the work area in a clean and orderly manner







Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Ensure sorting	10	30	-	-
PC1 follow the sorting process and check that the tools, fixtures & jigs that are lying on workstations are the ones in use and unnecessary items are not cluttering the workbenches or work surfaces.	1	3	-	-
PC2 ensure segregation of waste in hazardous/ non hazardous waste as per the sorting work instructions	1	3	-	-
PC3 follow the technique of waste disposal and waste storage in the proper bins as per sop	1	3	-	-
PC4 segregate the items which are labelled as red tag items for the process area and keep them in the correct places	1	3	-	-
PC5. sort the tools/ equipment/ fasteners/ spare parts as per specifications/ utility into proper trays, cabinets, lockers as mentioned in the 5s guidelines/ work instructions	1	3	-	-
PC6. . ensure that areas of material storage areas are not overflowing	1	3	-	<u>-</u>
PC7. properly stack the various types of boxes and containers as per the size/ utility to avoid any fall of items/ breakage and also enable easy sorting when required	1	3	-	-
PC8. return the extra material and tools to the designated sections and make sure that no additional material/ tool is lying near the work area	1	3	-	-
PC9. follow the floor markings/ area markings used for demarcating the various sections in the plant as per the prescribed instructions and standards	1	3	-	-
PC10. follow the proper labeling mechanism of instruments/ boxes/ containers and maintaining reference files/ documents with the codes and the lists	1	3	-	-







Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Ensure proper documentation and storage (organizing , streamlining)	3	9	-	-
PC11. check that the items in the respective areas have been identified as broken or damaged	1	3	-	-
PC12. follow the given instructions and check for labelling of fluids, oils. lubricants, solvents, chemicals etc. and proper storage of the same to avoid spillage, leakage, fire etc	1	3	-	-
PC13. make sure that all material and tools are stored in the designated places and in the manner indicated in the 5s instructions	1	3	-	-
Ensure cleaning of self and the work place	8	24	-	-
PC14. check whether safety glasses are clean and in good condition	1	3	-	-
PC15. keep all outside surfaces of recycling containers are clean	1	3	-	-
PC16 ensure that the area has floors swept, machinery clean and generally clean. in case of cleaning, ensure that proper displays are maintained on the floor which indicate potential safety hazards	1	3	-	-
PC17 check whether all hoses, cabling & wires are clean, in goodcondition and clamped to avoid any mishap or mix up	1	3	-	-
PC18 ensure workbenches and work surfaces are clean and in good condition	1	3	-	-
PC19. follow the cleaning schedule for the lighting system to ensure proper illumination	1	3	-	-
PC20. store the cleaning material and equipment in the correct location and in good condition	1	3	-	-
PC21. ensure self-cleanliness - clean uniform, clean shoes, clean gloves, clean helmets, personal hygiene	1	3	-	-
Ensure sustenance	4	12	-	-







Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC22. follow the daily cleaning standards and schedules to create a clean working environment	1	3	-	-
PC23. attend all training programs for employees on 5 s	0.5	2	-	-
PC24. support the team during the audit of 5 s	1	3	-	-
PC25. participate actively in employee work groups on 5s and encourage team members for active participation	0.5	2	-	-
PC26. follow the guidelines for what to do and what not to do to build sustainability in 5s as mentioned in the 5s check lists/ work instructions	1	2	-	-
NOS Total	25	75	-	-







National Occupational Standards (NOS) Parameters

NOS Code	ASC/N0021
NOS Name	Maintain 5S at the work premises
Sector	Automotive
Sub-Sector	Generic
Occupation	Generic
NSQF Level	4
Credits	TBD
Version	1.0
Last Reviewed Date	15/03/2014
Next Review Date	15/03/2016
NSQC Clearance Date	







ASC/N3402: Understand job requirements and related processes and equipment

Description

This NOS unit is about understanding the job requirement, what processes need to be executed, what equipment will be used for the project and what is the required output considering the standards specified

Scope

The Press shop operator will be responsible for

- Understanding the process and equipment requirements
- Escalations of any queries regarding the job The role holder will interact with the Assembly line, Tool & Die Room, Maintenance team and material management team

Elements and Performance Criteria

Understand the engineering drawings, sketches and work order

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

- **PC1.** . understand the work order (work output) required from the process and discuss the same with the operator
- **PC2..** refer all engineering drawings and sketches related to the work output to understand the measurement and shape of the required work output
- **PC3.** clearly understanding the does and donts of the manufacturing process as defined in sops/ work instructions or defined by supervisors

Escalations of gueries on the given job

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

- **PC4..** refer the queries to the operator if they cannot be resolved by the assistant press shop operator on own
- **PC5.** obtain help or advice from specialist if the problem is outside his/her area of competence or experience
- **PC6..** confirm self- understanding to the operator once the query is resolved so that all doubts & queries can be resolved before the actual process execution

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- **KU1.** relevant standards and procedures followed in the company
- **KU2.** different types of products manufactured by the company
- **KU3.** functional processes like Procurement, Store management, inventory management, quality management and key contact points for query resolution
- **KU4.** different types of pressing processes







- **KU5.** running of a press line, different types of presses that are used in the pressing process, including their designs, uses and basic repair and maintenance KB3. how to operate loading both in automatic and manual mode
- **KU6.** ability to visualize the final product output and hence decide on the key steps to be followed while loading
- **KU7.** dials/ indicators of press machine to ensure machine is working properly
- **KU8.** press defects and determine press acceptability to communicate with maintenance
- **KU9.** safety precautions to be taken for all types of press shop activities

Generic Skills (GS)

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

- **GS1.** prepare draft drawings for the final output product and share the same with the Welder/ operator
- **GS2.** note down observations (if any) related to the welding process and share the same with welder and supervisor
- **GS3.** read and interpret engineering drawing and sketches
- **GS4.** read equipment manuals and process documents to understand the equipment and processes better
- **GS5.** read internal information documents send by internal customers (other functions within the organization)
- **GS6.** discuss task lists, schedules and activities with the operator and supervisor
- **GS7.** effectively communicate with the team members
- **GS8.** question the operator/ Welding shop supervisor in order to understand the nature of the problem and to clarify queries
- **GS9.** attentively listen with full attention and comprehend the information given by the speaker
- **GS10.** plan and organize the work order and jobs received from the Operator
- **GS11.** organize all process/ equipment manuals so that sorting/ accessing information is easy
- **GS12.** ability to visualize the final job product after understanding the given drawing/ sketches
- **GS13.** co relate the type of job output required with the welding methodology to be used
- **GS14.** ability to identify the strengths and weakness of various welding process
- **GS15.** use common sense and make judgments during day to day basis
- **GS16.** use reasoning skills to identify and resolve basic problems
- **GS17.** follow instructions and work on areas of improvement identified
- **GS18.** complete the assigned tasks with minimum supervision
- **GS19.** complete the job defined by the welder/operator/supervisor within the timelines and quality norms







Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Understand the engineering drawings, sketches and work order	18	40	-	-
PC1. . understand the work order (work output) required from the process and discuss the same with the operator	6	14	-	-
PC2. . refer all engineering drawings and sketches related to the work output to understand the measurement and shape of the required work output	6	13	-	-
PC3. . clearly understanding the does and donts of the manufacturing process as defined in sops/work instructions or defined by supervisors	6	13	-	-
Escalations of queries on the given job	12	30	-	-
PC4. . refer the queries to the operator if they cannot be resolved by the assistant press shop operator on own	4	10	-	-
PC5. . obtain help or advice from specialist if the problem is outside his/her area of competence or experience	4	10	-	-
PC6 confirm self- understanding to the operator once the query is resolved so that all doubts & queries can be resolved before the actual process execution	4	10	-	-
NOS Total	30	70	-	-







National Occupational Standards (NOS) Parameters

NOS Code	ASC/N3402
NOS Name	Understand job requirements and related processes and equipment
Sector	Automotive
Sub-Sector	Manufacturing
Occupation	Pressing
NSQF Level	4
Credits	TBD
Version	1.0
Last Reviewed Date	20/07/2013
Next Review Date	31/12/2015
NSQC Clearance Date	20/08/2015







ASC/N3403: Prepare the machine and load the raw materials, tools, bins, etc

Description

This NOS is about supporting in preparing the press machine and loading the raw materials, tools, bins, etc.

Scope

The Press shop operator will be responsible for

- Understanding the process and equipment requirements
- Escalations of any queries regarding the job The role holder will interact with the Assembly line, Tool & Die Room, Maintenance team and material management team

Elements and Performance Criteria

Check the press machine as per the Standard Operating Procedures/ Internal Quality/ Control Panel

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

- **PC1..** barricade the complete press working area before die changeover
- PC2.. check accuracy of inputs to control panel
- **PC3.** check readiness of press for starting operations
- PC4.. check sheet metal coils and return if quality parameters not adhered to

Feed/ control the data in panel according to output/ product specifications

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

- **PC5..** check visual/manual while feeding the data and ensure accuracy of the same as per product specifications
- **PC6..** check process parameters and product specifications as per the control panel and record observations as required
- **PC7...** follow reaction plan in any abnormal situations as given in the control panel

Oversee loading/ unloading of work pieces

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

- **PC8..** oversee loading of coils/ blanks on the press line and unloading of the work pieces by the helper
- **PC9...** ensure no damage is done to the work pieces during loading/ unloading operations
- **PC10..** ensure application of rust preventive if so indicated

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- **KU1.** relevant standards and procedures followed in the company
- **KU2.** different types of products manufactured by the company







- **KU3.** quality norms prescribed by the organization for pressing operation procedures
- **KU4.** different types of pressing processes
- **KU5.** running of a press line, different types of presses that are used in the pressing process, including their designs, uses and basic repair and maintenance
- **KU6.** how to operate loading both in automatic and manual mode
- **KU7.** how to visualize the final product output and hence decide on the key steps to be followed while loading
- **KU8.** dials/ indicators of press machine to ensure machine is working properly
- **KU9.** press defects and determine press acceptability to communicate with maintenance
- **KU10.** safety precautions to be taken for all types of press shop activities

Generic Skills (GS)

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

- **GS1.** write basic level notes and observations
- **GS2.** write in at least one language
- **GS3.** read and interpret workplace related documentation
- **GS4.** read and interpret symbols given on equipment and work area
- **GS5.** read equipment manuals and process documents to understand equipments and processes better
- **GS6.** read internal information documents sent by internal customers (other functions within the organization)
- **GS7.** discuss task lists and job requirements with co-workers
- **GS8.** effectively communicate information to team members
- **GS9.** attentively listen with full attention and comprehend the information given by the speaker
- **GS10.** analyse information to choose the best solution and solve problems with
- **GS11.** respect to press machine operations
- **GS12.** judge when to ask for help from a superior
- **GS13.** plan and organize the activities/ work allocated by supervisor
- **GS14.** analyse information to arrive at solutions for problems
- **GS15.** refer problems outside area of responsibility to the appropriate person
- **GS16.** analyze the complexity of work to determine if it can be successfully carried out
- **GS17.** co relate the type of job output required with the press shop process/ methodology to be used
- **GS18.** use common sense and make judgments during day to day basis
- GS19. use reasoning skills to identify and resolve basic problems







Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Check the press machine as per the Standard Operating Procedures/ Internal Quality/ Control Panel	11	33	-	-
PC1. . barricade the complete press working area before die changeover	2	6	-	-
PC2 check accuracy of inputs to control panel	3	9	-	-
PC3. . check readiness of press for starting operations	3	9	-	-
PC4. . check sheet metal coils and return if quality parameters not adhered to	3	9	-	-
Feed/ control the data in panel according to output/ product specifications	8	25	-	-
PC5. . check visual/manual while feeding the data and ensure accuracy of the same as per product specifications	3	10	-	-
PC6 check process parameters and product specifications as per the control panel and record observations as required	3	10	-	-
PC7 follow reaction plan in any abnormal situations as given in the control panel	2	5	-	-
Oversee loading/ unloading of work pieces	6	17	-	-
PC8. . oversee loading of coils/ blanks on the press line and unloading of the work pieces by the helper	2	7	-	-
PC9. . ensure no damage is done to the work pieces during loading/ unloading operations	2	5	-	-
PC10 ensure application of rust preventive if so indicated	2	5	-	-
NOS Total	25	75	-	-







National Occupational Standards (NOS) Parameters

NOS Code	ASC/N3403
NOS Name	Prepare the machine and load the raw materials, tools, bins, etc
Sector	Automotive
Sub-Sector	Manufacturing
Occupation	Pressing
NSQF Level	4
Credits	NA
Version	1.0
Last Reviewed Date	20/07/2013
Next Review Date	31/12/2015
NSQC Clearance Date	20/08/2015







ASC/N3404: Undertake press operations and run the press line at optimum efficiency

Description

This NOS is about undertaking press operations and ensuring running of press line at optimum efficiency.

Scope

The Press shop operator will be responsible for

- Setting up and operating the press machine along with the supervisor
- Monitoring the press operations The role holder will interact with the Assembly line, Tool & Die Room, Maintenance team and material management team

Elements and Performance Criteria

Set up and operate the press machine

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

- **PC1..** setting up and initiation of the press machine
- **PC2..** operating the press machine and ensuing conformance to output/ product specifications

Monitor press operations functioning and ensure running of press line at maximum efficiency

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

- PC3.. pressing operations including blanking, drawing, etc. and monitor and oversee the same
- **PC4..** product specifications and verify that machine setups conform to specifications
- **PC5..** observe operations to detect machine malfunctions
- PC6.. checking press parts visually and keeping press parts in designated bins/ racks
- **PC7..** monitoring press operations and recording operational data as per the frequency in the control panel
- PC8.. understand the reaction plan in control panel for emergency/ abnormal situations
- **PC9...** understand the relevance of first and last piece observations to co-ordinate diemaintenance
- **PC10..** assist the supervisor in all aspects of the job to ensure that the press line runs at maximum efficiency

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- **KU1.** relevant standards and procedures followed in the company
- **KU2.** different types of products manufactured by the company
- KU3. quality norms prescribed by the organization for pressing operation procedures
- **KU4.** different types of pressing processes







- **KU5.** running of a press line, different types of presses that are used in the pressing process, including their designs, uses and basic repair and maintenance
- **KU6.** knowledge of cushion setting, clearance height settings, etc. as per output specifications
- **KU7.** dials/ indicators of press machine to ensure machine is working properly
- **KU8.** press defects and determine press acceptability
- **KU9.** safety precautions to be taken for all types of press shop activities

Generic Skills (GS)

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

- **GS1.** write basic level notes and observations
- **GS2.** enter, record, maintain information in written form with respect to press operations monitoring
- **GS3.** write in at least one language
- **GS4.** read and interpret workplace related documentation
- **GS5.** read and interpret symbols given on equipment and work area
- **GS6.** read equipment manuals and process documents to understand equipments and processes better
- **GS7.** read internal information documents sent by internal customers (other functions within the organization)
- **GS8.** read parameter reading/ indicators on monitoring panel
- **GS9.** discuss task lists and job requirements with co-workers
- **GS10.** effectively communicate information to team members
- **GS11.** guestion supervisor in order to understand the nature of the problem
- **GS12.** attentively listen with full attention and comprehend the information given by the speaker
- **GS13.** plan and organize the activities/ work allocated by supervisor
- **GS14.** manage and schedule multiple priorities and meet deadlines
- **GS15.** analyze information to arrive at solutions for problems
- **GS16.** refer problems outside area of responsibility to the appropriate person
- **GS17.** analyze the complexity of work to determine if it can be successfully carried out
- **GS18.** co relate the type of job output required with the press shop process/methodology to be used
- **GS19.** use common sense and make judgments during day to day basis
- **GS20.** use reasoning skills to identify and resolve basic problems







Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Set up and operate the press machine	6	18	-	-
PC1. . setting up and initiation of the press machine	3	9	-	-
PC2. . operating the press machine and ensuing conformance to output/ product specifications	3	9	-	-
Monitor press operations functioning and ensure running of press line at maximum efficiency	19	57	-	-
PC3. . pressing operations including blanking, drawing, etc. and monitor and oversee the same	3	9	-	-
PC4. . product specifications and verify that machine setups conform to specifications	2	7	-	-
PC5. . observe operations to detect machine malfunctions	2	7	-	-
PC6. . checking press parts visually and keeping press parts in designated bins/ racks	3	7	-	-
PC7. . monitoring press operations and recording operational data as per the frequency in the control panel	3	7	-	-
PC8 understand the reaction plan in control panel for emergency/ abnormal situations	2	7	-	-
PC9. . understand the relevance of first and last piece observations to co-ordinate diemaintenance	2	7	-	-
PC10. . assist the supervisor in all aspects of the job to ensure that the press line runs at maximum efficiency	2	6	-	-
NOS Total	25	75	-	-







National Occupational Standards (NOS) Parameters

NOS Code	ASC/N3404
NOS Name	Undertake press operations and run the press line at optimum efficiency
Sector	Automotive
Sub-Sector	Manufacturing
Occupation	Pressing
NSQF Level	4
Credits	TBD
Version	1.0
Last Reviewed Date	20/07/2013
Next Review Date	31/12/2015
NSQC Clearance Date	20/08/2015







ASC/N3405: Coordinate with the die setter during die setting operation

Description

This NOS is regarding supporting and coordinating with the Die Setter during die setting operation

Scope

The Press shop operator will be responsible for

 Coordinating with die setters for adjusting the die and recalibration The role holder will interact with the Assembly line, Tool & Die Room, and Maintenance team

Elements and Performance Criteria

Coordinate with Die Setter during die setting operations

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

- PC1.. coordinate with the die setter during die setting operation
- **PC2..** over see die setting to ensure loading/ unloading of dies and program setting on presses is as per the product specifications required
- **PC3.** follow up with the die setter in case of problems/ inability of die to meet the required specifications
- **PC4..** check if re-calibration/ revalidation is necessary in consultation with the supervisors
- **PC5..** co-ordinate preservation procedure for the dies removed from the machine before racking/ storing

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- **KU1.** relevant standards and procedures followed in the company
- **KU2.** different types of dies used by the company
- **KU3.** different types of pressing processes
- **KU4.** dies used, die setting and their working in pressing operations
- **KU5.** knowledge of cushion setting, clearance height settings, etc. as per output specifications
- **KU6.** knowledge of safety precautions to be taken for all types of press shop operations

Generic Skills (GS)

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

- **GS1.** write basic level notes and observations
- **GS2.** write in at least one language
- **GS3.** read and interpret workplace related documentation
- **GS4.** read and interpret symbols given on equipment and work area







- **GS5.** read equipment manuals and process documents to understand the equipment and processes better
- **GS6.** discuss task lists and job requirements with co-workers
- **GS7.** effectively communicate information to team members
- **GS8.** guestion die setter/ supervisor in order to understand the nature of the problem
- GS9. attentively listen with full attention and comprehend the information given by the speaker
- **GS10.** judge when to ask for help from a superior
- GS11. plan and organize the activities/ work allocated by supervisor
- **GS12.** refer problems outside area of responsibility to appropriate person
- GS13. analyse the complexity of work to determine if it can be successfully carried out
- **GS14.** co relate the type of job output required with the press shop process/ methodology to be used
- **GS15.** use common sense and make judgments during day to day basis
- GS16. use reasoning skills to identify and resolve basic problems







Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Coordinate with Die Setter during die setting ope	rations			
PC1. . coordinate with the die setter during die setting operation	6	17	-	-
PC2 over see die setting to ensure loading/ unloading of dies and program setting on presses is as per the product specifications required	6	17	-	-
PC3. . follow up with the die setter in case of problems/ inability of die to meet the required specifications	4	15	-	-
PC4. . check if re-calibration/ revalidation is necessary in consultation with the supervisors	4	13	-	-
PC5 co-ordinate preservation procedure for the dies removed from the machine before racking/ storing	5	13	-	-
NOS Total	25	75	-	-







National Occupational Standards (NOS) Parameters

NOS Code	ASC/N3405
NOS Name	Coordinate with the die setter during die setting operation
Sector	Automotive
Sub-Sector	Manufacturing
Occupation	Pressing
NSQF Level	4
Credits	TBD
Version	1.0
Last Reviewed Date	20/07/2013
Next Review Date	31/12/2015
NSQC Clearance Date	20/08/2015







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: 70

Assessment Weightage

Compulsory NOS

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
ASC/N0006.Maintain a safe and healthy working environment	25	75	-	-	100	15
ASC/N0008.Conduct regular cleaning and maintenance of the equipment	20	80	-	-	100	15
ASC/N0021.Maintain 5S at the work premises	25	75	-	-	100	10







National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
ASC/N3402.Understand job requirements and related processes and equipment	30	70	-	-	100	20
ASC/N3403.Prepare the machine and load the raw materials, tools, bins, etc	25	75	-	-	100	20
ASC/N3404.Undertake press operations and run the press line at optimum efficiency	25	75	-	-	100	10
ASC/N3405.Coordinate with the die setter during die setting operation	25	75	-	-	100	10
Total	175	525	-	-	700	100







Acronyms

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







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.
Organisational Context	Organisational context includes the way the organisation is structured and how it operates, including the extent of operative knowledge managers have of their relevant areas of responsibility.
Technical Knowledge	Technical knowledge is the specific knowledge needed to accomplish specific designated responsibilities.
Core Skills/ Generic Skills (GS)	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.
Electives	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.
Options	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.