



Junior Batching Plant Operator

QP Code: IES/Q0117

NSQF Level: 3

Infrastructure Equipment Skill Council || Infrastructure Equipment Skill Council, Avik Royale-First Floor
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Qualification Pack

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IES/Q0117: Junior Batching Plant Operator

Brief Job Description

A junior batching plant operator is responsible for assisting in making the concrete as per mix design supplied by the authorized concerned person. In addition to operating the plant, he will maintain adequate levels of all supplies and products.

Personal Attributes

This job requires the individual to be extremely careful and diligent and have high level of concentration. Hard work and strong work ethics courteous behavior with co-workers are equally desirable. He should also be physically agile, strong, have good eye sight and not suffer from colour-blindness.

Applicable National Occupational Standards (NOS)

Compulsory NOS:

1. [IES/N0149: Assist in carrying Pre-operation checks on a batching plant](#)
2. [IES/N0150: Assist in carrying out batching plant operations](#)
3. [IES/N0151: Assist in regular maintenance of the batching plant](#)
4. [IES/N7601: Comply with worksite health and safety guidelines](#)

Qualification Pack (QP) Parameters

Sector	Infrastructure Equipment
Sub-Sector	Equipment Operations
Occupation	Operator
Country	India
NSQF Level	3
Aligned to NCO/ISCO/ISIC Code	NCO-2004/NIL
Minimum Educational Qualification & Experience	8th Class with 2-3 Years of experience As helper in batching plant operations
Minimum Level of Education for Training in School	

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Pre-Requisite License or Training	Certification Training in concrete batching plant operations preferred
Minimum Job Entry Age	18 Years
Last Reviewed On	26/04/2016
Next Review Date	31/03/2020
NSQC Approval Date	09/10/2017
Version	1.0

Qualification Pack

IES/N0149: Assist in carrying Pre-operation checks on a batching plant

Description

This unit provides insight into assisting to carry out pre-operational checks to prepare the batching plant for a shift.

Scope

This unit/task covers the following: Pre-operation checks Reporting and documentation

Elements and Performance Criteria

Pre-operation Checks

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

- PC1.** assist in inspecting oil and filter on air compressor, drain tank manifolds and all water traps as per the procedures set by the manufacturer
- PC2.** check the oil level in all gear boxes, hydraulic unit, drum motor oil and autoroll as per instructions from the operator/supervisor
- PC3.** fill all the bins and silos as per instructions from the operator/ supervisor
- PC4.** check for tensions on all v-drive belts and other belts for wear and tear as per the instructions from the operator/ superviso
- PC5.** store the liquid admixtures as per the organizational standards to avoid contamination
- PC6.** check that admixture dispensers are in good working condition as stated by the operator/ supervisor
- PC7.** ensure that safety equipment is present and securely mounted as per the organizational standards
- PC8.** check for wiring damage and loose electrical fitting for the electric drive motors
- PC9.** turn off mixer motor before carrying out mixer cleaning or chipping
- PC10.** empty the weigh hoppers from the previous days operation
- PC11.** clean the area under plant for spillage and trace source
- PC12.** check conveyors, boom scrapers and bucket elevators for free running and wear, and adjust as per the instructions from the operators supervisors
- PC13.** check all hoppers and doors are in clean and efficient working order
- PC14.** check tightness of all hydraulic connections and the condition of flexible tubes
- PC15.** check and remove any cement or concrete build up in the mixer
- PC16.** check dust seals on cement hoppers for wear
- PC17.** check mixer drum for structural cracks or damage
- PC18.** ensure that before work, the machine should have an empty running

Reporting and documentation

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

- PC19.** assist in maintaining a check/maintenance logbook to record all activities performed before starting the batching plant

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PC20. report defects precisely to the operator/ supervisor

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** the organizations procedures and guidelines related to breakdown & maintenance services
- KU2.** the performance standards & procedures followed in the company
- KU3.** reporting structure in the company
- KU4.** location of tools
- KU5.** contact person in case of queries on procedure or products
- KU6.** location and process for storage and disposal of waste material
- KU7.** safety policy of the company
- KU8.** different types of batching plant and their use and function
- KU9.** introduction to weighing systems storage systems, water systems conveying systems admix systems, their use and function
- KU10.** different equipment in batching plant such as conveyors, dust collector storage bins, weigh hoppers, water storage tanks, admix system, pumps, mixers, components, and functions.
- KU11.** equipment operating systems such as hydraulic systems, electrical system lubricating systems, pneumatic systems, mechanical systems and fuel systems
- KU12.** synthetic, non-synthetic oils and admixtures
- KU13.** significance and methods of lubricating different parts of the concrete batching plant
- KU14.** earthing of plants to protect load cells
- KU15.** visual checks to identify damage, defects, cracks or leaks beforehand

Generic Skills (GS)

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

- GS1.** record any deviations/ incidents as per prescribed norms
- GS2.** read and comprehend basic english and regional language as applicable to read manuals of operations, guidelines, etc.
- GS3.** use correct technical terms while interacting with supervisor
- GS4.** assist in deciding when to conduct maintenance checks
- GS5.** work with operators, supervisors/ team mates to carry out work related tasks
- GS6.** provide service of the highest order to ensure customer satisfaction
- GS7.** judge when to seek assistance from the operator/supervisor
- GS8.** identify cause and effect relations in his area of work
- GS9.** analyse, evaluate and apply the information gathered from observation, experience, reasoning, or communication to act efficiently
- GS10.** record any deviations/ incidents as per prescribed norms
- GS11.** read and comprehend basic english and regional language as applicable to read manuals of operations, guidelines, etc.

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- GS12.** use correct technical terms while interacting with supervisor
- GS13.** assist in deciding when to conduct maintenance checks
- GS14.** work with operators, supervisors/ team mates to carry out work related tasks
- GS15.** provide service of the highest order to ensure customer satisfaction
- GS16.** judge when to seek assistance from the operator/supervisor
- GS17.** identify cause and effect relations in his area of work
- GS18.** analyse, evaluate and apply the information gathered from observation, experience, reasoning, or communication to act efficiently

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Pre-operation Checks</i>	10	22	-	-
PC1. assist in inspecting oil and filter on air compressor, drain tank manifolds and all water traps as per the procedures set by the manufacturer	1	1	-	-
PC2. check the oil level in all gear boxes, hydraulic unit, drum motor oil and autoroll as per instructions from the operator/supervisor	-	1	-	-
PC3. fill all the bins and silos as per instructions from the operator/ supervisor	1	1	-	-
PC4. check for tensions on all v-drive belts and other belts for wear and tear as per the instructions from the operator/ superviso	-	1	-	-
PC5. store the liquid admixtures as per the organizational standards to avoid contamination	1	2	-	-
PC6. check that admixture dispensers are in good working condition as stated by the operator/ supervisor	1	1	-	-
PC7. ensure that safety equipment is present and securely mounted as per the organizational standards	-	1	-	-
PC8. check for wiring damage and loose electrical fitting for the electric drive motors	1	1	-	-
PC9. turn off mixer motor before carrying out mixer cleaning or chipping	1	1	-	-
PC10. empty the weigh hoppers from the previous days operation	-	2	-	-
PC11. clean the area under plant for spillage and trace source	-	1	-	-
PC12. check conveyors, boom scrapers and bucket elevators for free running and wear, and adjust as per the instructions from the operators supervisors	1	2	-	-

Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC13. check all hoppers and doors are in clean and efficient working order	-	1	-	-
PC14. check tightness of all hydraulic connections and the condition of flexible tubes	1	1	-	-
PC15. check and remove any cement or concrete build up in the mixer	-	1	-	-
PC16. check dust seals on cement hoppers for wear	1	2	-	-
PC17. check mixer drum for structural cracks or damage	-	1	-	-
PC18. ensure that before work, the machine should have an empty running	1	1	-	-
<i>Reporting and documentation</i>	1	2	-	-
PC19. assist in maintaining a check/maintenance logbook to record all activities performed before starting the batching plant	-	1	-	-
PC20. report defects precisely to the operator/supervisor	1	1	-	-
NOS Total	11	24	-	-

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National Occupational Standards (NOS) Parameters

NOS Code	IES/N0149
NOS Name	Assist in carrying Pre-operation checks on a batching plant
Sector	Infrastructure Equipment
Sub-Sector	Equipment Operations
Occupation	Operator
NSQF Level	3
Credits	TBD
Version	1.0
Last Reviewed Date	26/04/2016
Next Review Date	30/04/2018
NSQC Clearance Date	26/10/2017

Qualification Pack

IES/N0150: Assist in carrying out batching plant operations

Description

This unit provides insight into activities that are required for operating a concrete batching plant.

Scope

This unit/task covers the following: Batching plant operations Safety during operations

Elements and Performance Criteria

Batching plant operations

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

- PC1.** assist in starting components in correct order as per instructions from the operator/supervisor
- PC2.** assist in monitoring and regulate materials such as proportions of aggregates, cement, water, and admixtures as per instructions from the operator/ supervisor
- PC3.** use the emergency stop button to disable all power to the batching plant in case of a crisis, as per instructions from the operator/supervisor
- PC4.** use the emergency stop button to disable all power to the batching plant in case of a crisis, as per instructions from the operator/supervisor
- PC5.** ensure that truck is properly positioned under sock to ensure correct direction of the drum
- PC6.** discharge batched concrete into delivery trucks/mixers as per instructions from the operator/supervisor
- PC7.** assist in shutting down procedures as per instructions from the operator/ supervisor

Safety during operations

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

- PC8.** wear dust masks when working around the plant
- PC9.** make positive eye contact with other equipment operators at the site before crossing in front of or behind the equipment
- PC10.** wear all PPE while sampling concrete and for all operations

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** the organizations procedures and guidelines related to breakdown & maintenance services
- KU2.** the performance standards & procedures followed in the company
- KU3.** reporting structure in the company
- KU4.** location of tools
- KU5.** contact person in case of queries on procedure or products
- KU6.** location and process for storage and disposal of waste material
- KU7.** safety policy of the company

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- KU8.** different types of mixers such as - non-tilting reversible drum concrete mixer - double conical tilting mixer - pan mixer - turbo pan mixer - single shaft/twin shaft compulsory mixer/pug mill
- KU9.** different types of batching equipment such as manual, semi-automatic and automatic
- KU10.** types of cements materials used
- KU11.** feeding methods for cement, flash into the silos
- KU12.** number and size of silos
- KU13.** different methods of feeding cement using bucket elevator, screw conveyor and pneumatic system
- KU14.** different admixtures that are added to concrete mixes, such as aerators, retarders super plasticizers, accelerators, colours water reducers fiber mesh etc.
- KU15.** types of control systems calibration/scada/automatic operations
- KU16.** basic tools such as screw driver, hammer, assorted wrenches, grease gun, hand scraper, tape measure, sledge hammer, multi-meter, shovel, etc.
- KU17.** the location and procedure of using the emergency stop button
- KU18.** basic procedures for operating a batching plant
- KU19.** response to emergencies e.g. correct way to use fire extinguisher

Generic Skills (GS)

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

- GS1.** record any deviations/ incidents as per prescribed norms
- GS2.** read and comprehend basic english and regional language as applicable to read manuals of operations, guidelines, etc
- GS3.** interpret stakes and signage on the worksite
- GS4.** use correct technical terms while interacting with operator/ supervisor
- GS5.** assess for any damage/faulty component in the batching plant and take action accordingly
- GS6.** work with supervisors/ team mates to carry out work related tasks
- GS7.** provide service of the highest order to ensure customer satisfaction
- GS8.** identify immediate or temporary solutions to resolve mechanical issues
- GS9.** judge when to seek assistance from operator/supervisor
- GS10.** identify cause and effect relations in his area of work
- GS11.** analyse, evaluate and apply the information gathered from observation, experience, reasoning, or communication to act efficiently
- GS12.** record any deviations/ incidents as per prescribed norms
- GS13.** read and comprehend basic english and regional language as applicable to read manuals of operations, guidelines, etc
- GS14.** interpret stakes and signage on the worksite
- GS15.** use correct technical terms while interacting with operator/ supervisor
- GS16.** assess for any damage/faulty component in the batching plant and take action accordingly
- GS17.** work with supervisors/ team mates to carry out work related tasks

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- GS18.** provide service of the highest order to ensure customer satisfaction
- GS19.** identify immediate or temporary solutions to resolve mechanical issues
- GS20.** judge when to seek assistance from operator/supervisor
- GS21.** identify cause and effect relations in his area of work
- GS22.** analyse, evaluate and apply the information gathered from observation, experience, reasoning, or communication to act efficiently

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Batching plant operations</i>	7	15	-	-
PC1. assist in starting components in correct order as per instructions from the operator/ supervisor	1	2	-	-
PC2. assist in monitoring and regulate materials such as proportions of aggregates, cement, water, and admixtures as per instructions from the operator/ supervisor	1	2	-	-
PC3. use the emergency stop button to disable all power to the batching plant in case of a crisis, as per instructions form the operator/supervisor	1	2	-	-
PC4. use the emergency stop button to disable all power to the batching plant in case of a crisis, as per instructions form the operator/supervisor	1	2	-	-
PC5. ensure that truck is properly positioned under sock to ensure correct direction of the drum	1	3	-	-
PC6. discharge batched concrete into delivery trucks/mixers as per instructions from the operator/ supervisor	1	2	-	-
PC7. assist in shutting down procedures as per instructions from the operator/ supervisor	1	2	-	-
<i>Safety during operations</i>	2	6	-	-
PC8. wear dust masks when working around the plant	-	2	-	-
PC9. make positive eye contact with other equipment operators at the site before crossing in front of or behind the equipment	1	2	-	-
PC10. wear all PPE while sampling concrete and for all operations	1	2	-	-
NOS Total	9	21	-	-

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National Occupational Standards (NOS) Parameters

NOS Code	IES/N0150
NOS Name	Assist in carrying out batching plant operations
Sector	Infrastructure Equipment
Sub-Sector	Equipment Operations
Occupation	Operator
NSQF Level	3
Credits	TBD
Version	1.0
Last Reviewed Date	26/04/2016
Next Review Date	30/04/2018
NSQC Clearance Date	26/10/2017

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IES/N0151: Assist in regular maintenance of the batching plant

Description

This unit provides insight into activities that are required for performing routine maintenance and troubleshooting on the batching plant.

Scope

This unit/task covers the following: Routine maintenance Basic diagnostics and troubleshooting Documentation and Reporting

Elements and Performance Criteria

Routine maintenance

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

- PC1.** clean drum mixer internally as per instructions from the operator/ supervisor
- PC2.** wash the batching plant externally with water to remove all built-up deposits as per instructions from the operator/ supervisor
- PC3.** lubricate the equipment in different parts as per instructions of the operator
- PC4.** replace defective components as per instructions from the operator/ supervisor
- PC5.** clean the rubber chute that discharges the cement into the mixer as per instructions from the operator/ supervisor
- PC6.** assist in performing basic housekeeping activities in the control room
- PC7.** adjust all belt wipers as per instructions from the operator/ supervisor
- PC8.** blow clean all air filters on air compressor and aeration blowers as per instructions from the operator/ supervisor
- PC9.** adjust tension of the chain and scoops unit as per instructions from the operator/ supervisor

Basic diagnostics and troubleshooting

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

- PC10.** turn off the mains power from panel completely before carrying out maintenance work
- PC11.** replace the defective parts are replaced immediately as per instructions from the operator/ supervisor
- PC12.** clean magnetic oil plugs during each oil change as per instructions from the operator/ supervisor
- PC13.** handle and dispose waste based on environmental guidelines at the work place

Reporting and Documentation

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

- PC14.** follow reporting procedures as laid down by the employer
- PC15.** report and escalate problems/ incidents as required in a timely manner

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

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- KU1.** the organizations procedures and guidelines related to breakdown & maintenance services
- KU2.** the performance standards & procedures followed in the company
- KU3.** reporting structure in the company
- KU4.** location of tools
- KU5.** contact person in case of queries on procedure or products
- KU6.** location and process for storage and disposal of waste material
- KU7.** safety policy of the company
- KU8.** different types of mixers such as - non-tilting reversible drum concrete mixer - double conical tilting mixer - pan mixer- turbo pan mixer- single shaft/twin shaft compulsory mixer/pug mill
- KU9.** different types of batching equipment such as manual, semi-automatic and automatic
- KU10.** types of cements materials used
- KU11.** number and size of silos
- KU12.** different methods of feeding cement using bucket elevator, screw conveyor and pneumatic system
- KU13.** different admixtures that are added to concrete mixes, such as aerators, retarders super plasticizers, accelerators, colours water reducers fiber mesh etc.
- KU14.** basic tools such as screw driver, hammer, assorted wrenches, grease gun, hand scraper, tape measure, sledge hammer, multi-meter, shovel, etc.
- KU15.** the location and procedure of using the emergency stop button
- KU16.** basic procedures for operating a batching plant
- KU17.** response to emergencies e.g. correct way to use fire extinguisher

Generic Skills (GS)

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

- GS1.** record any deviations/ incidents as per prescribed norms
- GS2.** read and comprehend basic english and regional language as applicable to read manuals of operations, guidelines, etc.
- GS3.** use correct technical terms while interacting with operator/ supervisor
- GS4.** assist in deciding when to conduct maintenance checks
- GS5.** work with supervisors/ team mates to carry out work related tasks
- GS6.** plan work according to the required schedule and location
- GS7.** provide service of the highest order to ensure customer satisfaction
- GS8.** judge when to seek assistance from operator/supervisor
- GS9.** identify cause and effect relations in his area of work
- GS10.** analyse, evaluate and apply the information gathered from observation, experience, reasoning, or communication to act efficiently
- GS11.** record any deviations/ incidents as per prescribed norms
- GS12.** read and comprehend basic english and regional language as applicable to read manuals of operations, guidelines, etc.
- GS13.** use correct technical terms while interacting with operator/ supervisor

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- GS14.** assist in deciding when to conduct maintenance checks
- GS15.** work with supervisors/ team mates to carry out work related tasks
- GS16.** plan work according to the required schedule and location
- GS17.** provide service of the highest order to ensure customer satisfaction
- GS18.** judge when to seek assistance from operator/supervisor
- GS19.** identify cause and effect relations in his area of work
- GS20.** analyse, evaluate and apply the information gathered from observation, experience, reasoning, or communication to act efficiently

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Routine maintenance</i>	3	8.5	-	-
PC1. clean drum mixer internally as per instructions from the operator/ supervisor	0.5	1	-	-
PC2. wash the batching plant externally with water to remove all built-up deposits as per instructions from the operator/ supervisor	-	1	-	-
PC3. lubricate the equipment in different parts as per instructions of the operator	-	1	-	-
PC4. replace defective components as per instructions from the operator/ supervisor	0.5	1	-	-
PC5. clean the rubber chute that discharges the cement into the mixer as per instructions from the operator/ supervisor	1	1	-	-
PC6. assist in performing basic housekeeping activities in the control room	-	1	-	-
PC7. adjust all belt wipers as per instructions from the operator/ supervisor	1	0.5	-	-
PC8. blow clean all air filters on air compressor and aeration blowers as per instructions from the operator/ supervisor	-	1	-	-
PC9. adjust tension of the chain and scoops unit as per instructions from the operator/ supervisor	-	1	-	-
<i>Basic diagnostics and troubleshooting</i>	1.5	3.5	-	-
PC10. turn off the mains power from panel completely before carrying out maintenance work	-	1	-	-
PC11. replace the defective parts are replaced immediately as per instructions from the operator/ supervisor	1	0.5	-	-
PC12. clean magnetic oil plugs during each oil change as per instructions from the operator/ supervisor	0.5	1	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC13. handle and dispose waste based on environmental guidelines at the work place	-	1	-	-
<i>Reporting and Documentation</i>	1.5	2	-	-
PC14. follow reporting procedures as laid down by the employer	1	1	-	-
PC15. report and escalate problems/ incidents as required in a timely manner	0.5	1	-	-
NOS Total	6	14	-	-

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National Occupational Standards (NOS) Parameters

NOS Code	IES/N0151
NOS Name	Assist in regular maintenance of the batching plant
Sector	Infrastructure Equipment
Sub-Sector	Equipment Operations
Occupation	Operator
NSQF Level	3
Credits	TBD
Version	1.0
Last Reviewed Date	26/04/2016
Next Review Date	30/04/2018
NSQC Clearance Date	26/10/2017

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IES/N7601: Comply with worksite health and safety guidelines

Description

This unit is about adhering to health and safety requirements at the worksite during equipment operations.

Scope

This unit/task covers the following: Worksite health and safety

Elements and Performance Criteria

Worksite health and safety

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

- PC1.** comply with safety, health, security and environment related regulations/ guidelines at the work site
- PC2.** use personal protective equipment (ppe) and other safety gear such as seat belt, body protection, respiratory protection, eye protection, ear protection and hand protection
- PC3.** follow safety measures during operations to ensure that the health and safety of self or others (including members of the public) is not at risk
- PC4.** carry out operations as per the manufacturers and worksite related health and safety guidelines
- PC5.** handle the transport, storage and disposal of hazardous materials and waste in compliance with worksite health, safety and environmental guidelines
- PC6.** follow safety regulations and procedures with regard to worksite hazards and risks
- PC7.** operate various grades of fire extinguishers, as applicable
- PC8.** support in administering basic first aid and report to concerned team members, as required, in case of an accident
- PC9.** respond promptly and appropriately to an accident/ incident or emergency situation, within limits of your role and responsibility

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** health, safety, environmental (hse) and security related policies/ guidelines of the organization and the worksite
- KU2.** the importance of complying with health, safety, environmental and security guidelines at the worksite and during operations
- KU3.** contact details of personnel responsible for health, safety and environment (hse) related matters
- KU4.** location of worksite storage, site team and safe assembly points
- KU5.** concerned personnel to reach out in case of emergencies and accidents/ incidents
- KU6.** reporting and documentation procedures for hse and security matters
- KU7.** manufacturers guidelines related to health and safety requirements

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- KU8.** common types of health, safety, environment and security risks related to the worksite and operations
- KU9.** types, use and importance of personal protective equipment (ppe) and other safety gear
- KU10.** safe working practices to avoid common hazards and risks
- KU11.** guidelines for transport, storage and disposal of hazardous materials and waste
- KU12.** types of common hazards and risks at the worksite including fire, electrical, gas emergencies, accidents, incidents, structure collapse, machine breakdown
- KU13.** knowledge of safe lockdown/ stop of machinery use in case of emergencies and incidents/ accidents
- KU14.** types of fire extinguishers and their use
- KU15.** common injuries and appropriate basic first aid treatment eg. electrical shock, bleeding, wounds, fractures, minor burns, eye injuries

Generic Skills (GS)

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

- GS1.** document and report any health and safety related incidents/ accidents
- GS2.** read and comprehend basic english to read manuals of operations
- GS3.** read all organizational and equipment related health and safety manuals and documents
- GS4.** read instructions, guidelines/procedures/rules related to the worksite and equipment operations
- GS5.** give clear instructions to co-workers, subordinates and other personnel
- GS6.** use correct technical terms while interacting with supervisor
- GS7.** make an appropriate timely decision in responding to emergencies/accidents in line with organizational/ worksite guidelines
- GS8.** use correct ppe and other safety gear while at the worksite
- GS9.** work with supervisors/ team mates to carry out work related tasks
- GS10.** plan work according to the required schedule and location
- GS11.** build and maintain positive and effective relationships with colleagues and customers
- GS12.** seek appropriate assistance from other sources to resolve problems
- GS13.** assess the intensity of the fire accident and operate fire extinguishers
- GS14.** analyse, evaluate and apply the information gathered from observation, experience, reasoning, or communication to act efficiently
- GS15.** document and report any health and safety related incidents/ accidents
- GS16.** read and comprehend basic english to read manuals of operations
- GS17.** read all organizational and equipment related health and safety manuals and documents
- GS18.** read instructions, guidelines/procedures/rules related to the worksite and equipment operations
- GS19.** give clear instructions to co-workers, subordinates and other personnel
- GS20.** use correct technical terms while interacting with supervisor
- GS21.** make an appropriate timely decision in responding to emergencies/accidents in line with organizational/ worksite guidelines

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- GS22.** use correct ppe and other safety gear while at the worksite
- GS23.** work with supervisors/ team mates to carry out work related tasks
- GS24.** plan work according to the required schedule and location
- GS25.** build and maintain positive and effective relationships with colleagues and customers
- GS26.** seek appropriate assistance from other sources to resolve problems
- GS27.** assess the intensity of the fire accident and operate fire extinguishers
- GS28.** analyse, evaluate and apply the information gathered from observation, experience, reasoning, or communication to act efficiently

Qualification Pack

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Worksite health and safety</i>	6	24	-	-
PC1. comply with safety, health, security and environment related regulations/ guidelines at the work site	-	2	-	-
PC2. use personal protective equipment (ppe) and other safety gear such as seat belt, body protection, respiratory protection, eye protection, ear protection and hand protection	1	3	-	-
PC3. follow safety measures during operations to ensure that the health and safety of self or others (including members of the public) is not at risk	1	3	-	-
PC4. carry out operations as per the manufacturers and worksite related health and safety guidelines	1	2	-	-
PC5. handle the transport, storage and disposal of hazardous materials and waste in compliance with worksite health, safety and environmental guidelines	1	3	-	-
PC6. follow safety regulations and procedures with regard to worksite hazards and risks	1	2	-	-
PC7. operate various grades of fire extinguishers, as applicable	-	3	-	-
PC8. support in administering basic first aid and report to concerned team members, as required, in case of an accident	1	3	-	-
PC9. respond promptly and appropriately to an accident/ incident or emergency situation, within limits of your role and responsibility	-	3	-	-
NOS Total	6	24	-	-

Qualification Pack

National Occupational Standards (NOS) Parameters

NOS Code	IES/N7601
NOS Name	Comply with worksite health and safety guidelines
Sector	Infrastructure Equipment
Sub-Sector	Equipment Operations
Occupation	Operator
NSQF Level	4
Credits	TBD
Version	1.0
Last Reviewed Date	31/03/2015
Next Review Date	31/03/2017
NSQC Clearance Date	18/06/2015

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 % : 70

Assessment Weightage

Compulsory NOS

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
IES/N0149.Assist in carrying Pre-operation checks on a batching plant	11	24	-	-	35	30
IES/N0150.Assist in carrying out batching plant operations	9	21	-	-	30	26
IES/N0151.Assist in regular maintenance of the batching plant	6	14	-	-	20	18

Qualification Pack

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
IES/N7601. Comply with worksite health and safety guidelines	6	24	-	-	30	26
Total	32	83	-	-	115	100

Acronyms

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

Qualification Pack

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.

Qualification Pack

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.