

Qualification Pack



Chief Miller

QP Code: FIC/Q1001

Version: 1.0

NSQF Level: 6

Food Industry Capacity & Skill Initiative || Shriram Bharatiya Kala kendra, 3rd floor, 1, Copernicus Marg, Mandi House, New Delhi
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FIC/Q1001: Chief Miller

Brief Job Description

A Chief Miller manages the milling process for all types of grains overseeing activities such as handling of various milling machineries, maintenance of process parameters, inspection of raw material and finished goods to achieve the desired quality and quantity of products.

Personal Attributes

A Chief Miller must have the ability to plan, organize, prioritize, calculate, concentrate and handle pressure. The individual must possess reading, writing and communication skills. In addition, the individual must have mechanical aptitude and trouble shooting skills.

Applicable National Occupational Standards (NOS)

Compulsory NOS:

1. [FIC/N1001: Prepare and maintain work area and process machineries for grain milling](#)
2. [FIC/N1002: Prepare for the milling process and manage it](#)
3. [FIC/N1003: Complete documentation and record keeping related to grain milling](#)
4. [FIC/N9001: Ensure food safety, hygiene and sanitation for processing food products](#)
5. [FIC/N9004: Manage and lead a team](#)

Qualification Pack (QP) Parameters

Sector	Food Processing
Sub-Sector	Food Grain Milling
Occupation	Processing
Country	India
NSQF Level	6
Aligned to NCO/ISCO/ISIC Code	NCO-2004/8273.10

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Minimum Educational Qualification & Experience	Graduate (Science (with Chemistry)) with 5-10 Years of experience Minimum 7 years experience in Food Grain Milling OR Diploma (Milling) with 5-10 Years of experience Minimum 7 years experience in Food Grain Milling
Minimum Level of Education for Training in School	
Pre-Requisite License or Training	1. Food standards of all grains milled 2. Operating different types of milling equipment 3. GMP 4. HACCP 5. QMS 6. IT systems and ERP 7. Bulk handling and silo storage / fumigation 8. Training in Food Safety Standards and Regulations (as per FSSAI) (Mandatory)
Minimum Job Entry Age	18 Years
Last Reviewed On	22/09/2015
Next Review Date	31/03/2022
Deactivation Date	31/03/2022
NSQC Approval Date	19/02/2016
Version	1.0
Reference code on NQR	2016/FI/FICSI/01507
NQR Version	1.0

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FIC/N1001: Prepare and maintain work area and process machineries for grain milling

Description

This unit is about preparing and maintaining work area and process machineries for the milling process.

Scope

This unit/task covers the following:

Elements and Performance Criteria

Prepare and maintain work area (for grain milling)

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

- PC1.** clean and maintain the cleanliness of the work area using approved sanitizers and keep it free from dust, waste, flies and pests
- PC2.** ensure that the work area is safe and hygienic for food processing
- PC3.** dispose waste materials as per defined SOPs and industry requirements

Prepare and maintain process machineries and tools (for grain milling)

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

- PC4.** check the working and performance of all machineries and tools used for the milling process such as destoners, de-huller, polisher, blender, pulverizer, stone mill / roller mill, screens and sieves, packaging machines, etc .
- PC5.** clean the machineries and tools used with approved sanitizers following the company specifications and standards
- PC6.** place the necessary tools required for process
- PC7.** attend to the minor repairs/ faults of all machines, if required

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** organization standards, process standards and procedures followed in the organisation
- KU2.** types of products produced by the organisation
- KU3.** code of business conduct
- KU4.** dress code to be followed
- KU5.** job responsibilities/duties and standard operating procedures
- KU6.** internal processes like procurement, store management, inventory management, quality management and key contact points for query resolution
- KU7.** provision of wages, working hours and accident compensation as per organisation policy
- KU8.** food safety and hygiene standards followed
- KU9.** types of products, materials and equipment required for cleaning and maintenance

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- KU10.** process and products to disinfect equipment/ tools
- KU11.** supplier/manufacturers instructions related to cleaning and maintenance
- KU12.** knowledge of food safety standards and regulations (as per FSSAI)
- KU13.** knowledge on legal regulations pertaining to work place like health and safety, recommended dosage for use of sanitizers, control of substances hazardous to health, handling/ storage/ disposal/ cautions of use of sanitizers and disinfectants, fire precautions, occurrences, hygiene practice, disposal of waste, environmental protection, etc.

Generic Skills (GS)

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

- GS1.** note the information communicated
- GS2.** note the raw materials used for production and the finished products produced
- GS3.** note the readings of the process parameters and provide necessary information to fill the process chart
- GS4.** note down observations (if any) related to the process
- GS5.** write information documents to internal departments/ internal teams
- GS6.** note down the data for online ERP or as per applicability in the organization
- GS7.** read and interpret the process required for producing various types of products
- GS8.** read and interpret and process flowchart for all products produced
- GS9.** read equipment manuals and process documents to understand the equipments operation and process requirement
- GS10.** read internal information documents sent by internal teams
- GS11.** discuss task lists, schedules and activities
- GS12.** effectively communicate with team members
- GS13.** question in order to understand the nature of the problem and to clarify queries
- GS14.** attentively listen and comprehend the information given by the speaker
- GS15.** communicate clearly on the issues being faced
- GS16.** analyse critical points in day to day tasks through experience and observation and identify control measures to solve the issue
- GS17.** handle issues in case the manager is not available (as per the authority matrix defined by the organization)
- GS18.** plan and organize the work order and jobs received
- GS19.** organize raw materials and packaging materials required for all products
- GS20.** plan and prioritize the work based on the instructions received
- GS21.** plan to utilise time and equipment's effectively
- GS22.** organize all process/ equipment manuals so as to access information easily
- GS23.** support the manager in scheduling tasks for helper(s)
- GS24.** understand customer requirements and their priority and respond as per their needs
- GS25.** support manager in solving problems by detailing out problems
- GS26.** discuss the possible solutions with the manager for problem solving

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- GS27.** apply domain information about maintenance processes and technical knowledge about tools and equipment
- GS28.** use common sense and make judgments on day to day basis
- GS29.** use reasoning skills to identify and resolve basic problems
- GS30.** use intuition to detect any potential problems which could arise during operations
- GS31.** use acquired knowledge of the process for identifying and handling issues

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Prepare and maintain work area (for grain milling)</i>	18	32	-	-
PC1. clean and maintain the cleanliness of the work area using approved sanitizers and keep it free from dust, waste, flies and pests	10	15	-	-
PC2. ensure that the work area is safe and hygienic for food processing	3	7	-	-
PC3. dispose waste materials as per defined SOPs and industry requirements	5	10	-	-
<i>Prepare and maintain process machineries and tools (for grain milling)</i>	17	33	-	-
PC4. check the working and performance of all machineries and tools used for the milling process such as destoners, de-huller, polisher, blender, pulverizer, stone mill / roller mill, screens and sieves, packaging machines, etc .	5	10	-	-
PC5. clean the machineries and tools used with approved sanitizers following the company specifications and standards	5	10	-	-
PC6. place the necessary tools required for process	2	3	-	-
PC7. attend to the minor repairs/ faults of all machines, if required	5	10	-	-
NOS Total	35	65	-	-

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National Occupational Standards (NOS) Parameters

NOS Code	FIC/N1001
NOS Name	Prepare and maintain work area and process machineries for grain milling
Sector	Food Processing
Sub-Sector	Food Grain Milling
Occupation	Processing
NSQF Level	6
Credits	TBD
Version	1.0
Last Reviewed Date	22/09/2015
Next Review Date	31/03/2022
Deactivation Date	31/03/2022
NSQC Clearance Date	19/02/2016

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FIC/N1002: Prepare for the milling process and manage it

Description

This unit is about preparing for the milling process to produce various products from grains such as rice, pulse, wheat, etc.

Scope

This unit/task covers the following:

Elements and Performance Criteria

Plan production (for grain milling)

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

- PC1.** check the availability of raw materials, packaging materials, equipment availability and manpower
- PC2.** plan daily production sequence based on: types and varieties of grains to be milled process requirement for each variety of grain common milling process for various varieties of products avoiding clog after each product using same machinery for various varieties of products maximum capacity utilization of machineries process stage and process time for each product efficient utilization of resources/manpower prioritizing urgent orders
- PC3.** calculate the batch size based on the production order and machine capacity
- PC4.** calculate percentages yield based on the variety and quality of raw material
- PC5.** calculate raw material requirement (considering the process loss) to produce required quantity of finished product(s)
- PC6.** calculate raw materials, packaging materials and manpower requirement for completing the order

Plan equipment utilization and manpower (for grainmilling)

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

- PC7.** check the working and performance of each equipment required for milling process
- PC8.** calculate the process time for effective utilization of machineries
- PC9.** plan batch size considering full capacity utilization of equipments
- PC10.** plan to utilize equipments for multiple products without affecting the quality of the finished products, and to optimize production and saving energy
- PC11.** allot responsibilities/ work to assistants and helpers

Organize raw material and equipments for carrying out the milling process

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

- PC12.** organise raw materials required for the batch/order from internal or external warehouse
- PC13.** check and ensure the variety and grade of raw material taken for production
- PC14.** check the conformance of raw material quality to organisation standards, through physical parameters and by referring the quality analysis report from the supplier / internal lab analysis report
- PC15.** ensure working and performance of required machineries and tools

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Manage the milling process

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

- PC16.** change production/process flow chart on day-to-basis, based on production plan
- PC17.** co-ordinate with inter department team and ensure continuous supply of raw materials, packaging materials and man power
- PC18.** ensure breakdowns are attended immediately to reduce the down time
- PC19.** ensure on-line production samples are taken following SOP, analyzed and reported immediately
- PC20.** make necessary changes in process/production based on quality report to enhance yield
- PC21.** take appropriate corrective and preventive actions in case of any nonconformance related to product and process and ensure its immediate implementation
- PC22.** authorize removal of unused/worn out/out-dated process machineries from production line and make provisions for installing new/latest machineries
- PC23.** check and analyze new machineries for food safety and hazards
- PC24.** carry out trials on new machineries and analyze its performance and suitability for the organisation

Carry out maintenance of grain milling unit and equipments

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

- PC25.** ensure maintenance of milling unit is in safe and hygienic condition
- PC26.** ensure post production cleaning of work area, machineries, equipment and tools using recommended cleaning agents and sanitizers
- PC27.** ensure repairs/faults of all machines (if any) are attended immediately
- PC28.** ensure periodic (daily/weekly/monthly/quarterly/half yearly/annual) maintenance of all machines and equipment following the SOP or following suppliers instructions/manuals
- PC29.** plan fumigation of grain mill, arrange for fumigation by communicating with internal department/external agencies and carry out fumigation of entire plant at scheduled time through fumigation technicians

Handle training and certifications

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

- PC30.** provide training to employees on process, quality, GMP), GHP, HACCP, occupational health and safety, handling storage and distribution (stock rotation based on FEFO/FIFO), etc
- PC31.** handle legal issues related to food laws and regulations in co-ordination with quality team
- PC32.** handle quality management system audits for certifications like ISO, HACCP , etc.

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** organization standards, process standards and procedures followed in the organisation
- KU2.** types of products produced by the organisation
- KU3.** code of business conduct
- KU4.** dress code to be followed
- KU5.** job responsibilities/duties and standard operating procedures

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- KU6.** internal processes like procurement, store management, inventory management, quality management and key contact points for query resolution
- KU7.** provision of wages, working hours and accident compensation as per organisation policy
- KU8.** food safety and hygiene standards followed
- KU9.** types and varieties of raw materials (various grains) and products obtained from each of the raw materials
- KU10.** production process, process parameters for production/process of various types and varieties of grains
- KU11.** types of machineries used for milling various products and machineries used in the organisation
- KU12.** handling all types of machineries
- KU13.** maintenance of process machineries, equipments and tools
- KU14.** supplier/manufacturers instructions related to machineries
- KU15.** planning production schedule
- KU16.** basic mathematics to be able to calculate
- KU17.** calculation of raw materials, packaging materials for planned quantity of finished product
- KU18.** quality parameters, basic food microbiology and quality assessment based on physical parameters
- KU19.** types and category of packaging materials, packaging machineries
- KU20.** storage procedures for raw materials, packaging materials and finished goods
- KU21.** cleaning procedures like clean-in-place (CIP) and clean-out-place (COP)
- KU22.** knowledge on sanitizers and disinfectants and its handling and storing methods
- KU23.** handling non-conforming products
- KU24.** handling quality management system audits
- KU25.** food laws and regulations on product, packaging and labelling
- KU26.** food safety and hygiene
- KU27.** GMP
- KU28.** HACCP

Generic Skills (GS)

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

- GS1.** note the information communicated
- GS2.** note the raw materials used for production and the finished products produced
- GS3.** note the readings of the process parameters and provide necessary information to fill the process chart
- GS4.** note down observations (if any) related to the process
- GS5.** write information documents to internal departments/ internal teams
- GS6.** note down the data for online ERP or as per applicability in the organization
- GS7.** read and interpret the process required for producing various types of products
- GS8.** read and interpret and process flowchart for all products produced

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- GS9.** read equipment manuals and process documents to understand the equipments operation and process requirement
- GS10.** read internal information documents sent by internal teams
- GS11.** discuss task lists, schedules and activities
- GS12.** effectively communicate with team members
- GS13.** question in order to understand the nature of the problem and to clarify queries
- GS14.** attentively listen and comprehend the information given by the speaker
- GS15.** communicate clearly on the issues being faced
- GS16.** analyse critical points in day to day tasks through experience and observation and identify control measures to solve the issue
- GS17.** handle issues in case the manager is not available (as per the authority matrix defined by the organization)
- GS18.** plan and organize the work order and jobs received
- GS19.** organize raw materials and packaging materials required for all products
- GS20.** plan and prioritize the work based on the instructions received
- GS21.** plan to utilise time and equipment's effectively
- GS22.** organize all process/ equipment manuals so as to access information easily
- GS23.** support the manager in scheduling tasks for helper(s)
- GS24.** understand customer requirements and their priority and respond as per their needs
- GS25.** support manager in solving problems by detailing out problems
- GS26.** discuss the possible solutions with the manager for problem solving
- GS27.** apply domain information about maintenance processes and technical knowledge about tools and equipment
- GS28.** use common sense and make judgments on day to day basis
- GS29.** use reasoning skills to identify and resolve basic problems
- GS30.** use intuition to detect any potential problems which could arise during operations
- GS31.** use acquired knowledge of the process for identifying and handling issues

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Plan production (for grain milling)</i>	7	18	-	-
PC1. check the availability of raw materials, packaging materials, equipment availability and manpower	1	2	-	-
PC2. plan daily production sequence based on: types and varieties of grains to be milled process requirement for each variety of grain common milling process for various varieties of products avoiding cip after each product using same machinery for various varieties of products maximum capacity utilization of machineries process stage and process time for each product efficient utilization of resources/manpower prioritizing urgent orders	2	8	-	-
PC3. calculate the batch size based on the production order and machine capacity	1	2	-	-
PC4. calculate percentages yield based on the variety and quality of raw material	1	2	-	-
PC5. calculate raw material requirement (considering the process loss) to produce required quantity of finished product(s)	1	2	-	-
PC6. calculate raw materials, packaging materials and manpower requirement for completing the order	1	2	-	-
<i>Plan equipment utilization and manpower (for grainmilling)</i>	3.5	6.5	-	-
PC7. check the working and performance of each equipment required for milling process	1	2	-	-
PC8. calculate the process time for effective utilization of machineries	1	2	-	-
PC9. plan batch size considering full capacity utilization of equipments	0.5	0.5	-	-
PC10. plan to utilize equipments for multiple products without affecting the quality of the finished products, and to optimize production and saving energy	0.5	0.5	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC11. allot responsibilities/ work to assistants and helpers	0.5	1.5	-	-
<i>Organize raw material and equipments for carrying out the milling process</i>	4	6	-	-
PC12. organise raw materials required for the batch/order from internal or external warehouse	1	1	-	-
PC13. check and ensure the variety and grade of raw material taken for production	0.5	1.5	-	-
PC14. check the conformance of raw material quality to organisation standards, through physical parameters and by referring the quality analysis report from the supplier / internal lab analysis report	1.5	1.5	-	-
PC15. ensure working and performance of required machineries and tools	1	2	-	-
<i>Manage the milling process</i>	9.5	15.5	-	-
PC16. change production/process flow chart on day-to-basis, based on production plan	1	2	-	-
PC17. co-ordinate with inter department team and ensure continuous supply of raw materials, packaging materials and man power	1	2	-	-
PC18. ensure breakdowns are attended immediately to reduce the down time	1	2	-	-
PC19. ensure on-line production samples are taken following SOP, analyzed and reported immediately	1	1	-	-
PC20. make necessary changes in process/production based on quality report to enhance yield	1.5	1.5	-	-
PC21. take appropriate corrective and preventive actions in case of any nonconformance related to product and process and ensure its immediate implementation	1.5	1.5	-	-
PC22. authorize removal of unused/worn out/outdated process machineries from production line and make provisions for installing new/latest machineries	0.5	1.5	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC23. check and analyze new machineries for food safety and hazards	1	2	-	-
PC24. carry out trials on new machineries and analyze its performance and suitability for the organisation	1	2	-	-
<i>Carry out maintenance of grain milling unit and equipments</i>	7	13	-	-
PC25. ensure maintenance of milling unit is in safe and hygienic condition	0.5	1.5	-	-
PC26. ensure post production cleaning of work area, machineries, equipment and tools using recommended cleaning agents and sanitizers	2	3	-	-
PC27. ensure repairs/faults of all machines (if any) are attended immediately	2	4	-	-
PC28. ensure periodic (daily/weekly/monthly/quarterly/half yearly/annual) maintenance of all machines and equipment following the SOP or following suppliers instructions/manuals	1.5	2.5	-	-
PC29. plan fumigation of grain mill, arrange for fumigation by communicating with internal department/external agencies and carry out fumigation of entire plant at scheduled time through fumigation technicians	1	2	-	-
<i>Handle training and certifications</i>	4	6	-	-
PC30. provide training to employees on process, quality, GMP), GHP, HACCP, occupational health and safety, handling storage and distribution (stock rotation based on FEFO/FIFO), etc	1	3	-	-
PC31. handle legal issues related to food laws and regulations in co-ordination with quality team	1.5	1.5	-	-
PC32. handle quality management system audits for certifications like ISO, HACCP , etc.	1.5	1.5	-	-
NOS Total	35	65	-	-

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National Occupational Standards (NOS) Parameters

NOS Code	FIC/N1002
NOS Name	Prepare for the milling process and manage it
Sector	Food Processing
Sub-Sector	Food Grain Milling
Occupation	Processing
NSQF Level	6
Credits	TBD
Version	1.0
Last Reviewed Date	22/09/2015
Next Review Date	31/03/2022
Deactivation Date	31/03/2022
NSQC Clearance Date	19/02/2016

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FIC/N1003: Complete documentation and record keeping related to grain milling

Description

This unit is about documenting and maintaining records on raw materials, process and finished products related to grain milling.

Scope

This unit/task covers the following:

Elements and Performance Criteria

Document and maintain records of raw materials (for grain milling)

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

- PC1.** document and maintain record of details of raw materials and packaging materials like name of raw materials, type and variety, vendor/supplier details, season, grown area, quantity, receiving date, receiving date/ date of manufacture, expiry date, supplier quality document, quality parameters of all raw materials, internal quality analysis report etc, as per organisation standards
- PC2.** document and maintain record on observations (if any) related to raw materials and packaging materials
- PC3.** load the raw materials details in ERP for future reference
- PC4.** verify the documents and track from finished product to raw materials, in case of quality concerns and during quality management system audits

Document and maintain records of production schedule and process parameters (for grain milling)

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

- PC5.** document and maintain records of production plan with details such as product details, production sequence, equipments and machinery details, efficiency and capacity utilization of equipment
- PC6.** document and maintain records of process details such as type of raw material used, process parameters (temperature, time, etc. as applicable) for entire production in process chart or production log for all products produced
- PC7.** document and maintain records of batch size, production yield, and wastage of raw materials, energy utilization and final products produced
- PC8.** document and maintain record of observations (if any) or deviations related to process and production
- PC9.** load the production plan and process details in ERP for future reference
- PC10.** verify documents and track from finished product to ingredients, in case of quality concerns and for quality management system audits

Document and maintain records of the finished products (for grain milling)

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

- PC11.** document and maintain records of the types of finished products produced

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- PC12.** document and maintain records of the finished products details such as batch number, time of packing, date of manufacture, date of expiry, other label details, primary, secondary and tertiary packaging materials for all finished products, storage conditions etc, as per organisation standards
- PC13.** document and maintain record of observations or deviations (if any) related to finished products
- PC14.** load the finished product details in ERP for future reference
- PC15.** verify the documents and track from finished product to ingredients, in case of quality concerns and for quality management system audits

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** organization standards, process standards and procedures followed in the organisation
- KU2.** types of products produced by the organisation
- KU3.** code of business conduct
- KU4.** dress code to be followed
- KU5.** job responsibilities/duties and standard operating procedures
- KU6.** internal processes like procurement, store management, inventory management, quality management and key contact points for query resolution
- KU7.** provision of wages, working hours and accident compensation as per organisation policy
- KU8.** food safety and hygiene standards followed
- KU9.** documentation system followed in the organization such as production chart, process chart and finished goods chart
- KU10.** details to be recorded on raw materials and finished products
- KU11.** details to be recorded and maintained on production plan and process parameters
- KU12.** methods to document and maintain records of observations (if any) related to raw materials, process and finished products

Generic Skills (GS)

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

- GS1.** note the information communicated
- GS2.** note the raw materials used for production and the finished products produced
- GS3.** note the readings of the process parameters and provide necessary information to fill the process chart
- GS4.** note down observations (if any) related to the process
- GS5.** write information documents to internal departments/ internal teams
- GS6.** note down the data for online ERP or as per applicability in the organization
- GS7.** read and interpret the process required for producing various types of products
- GS8.** read and interpret and process flowchart for all products produced

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- GS9.** read equipment manuals and process documents to understand the equipments operation and process requirement
- GS10.** read internal information documents sent by internal teams
- GS11.** discuss task lists, schedules and activities
- GS12.** effectively communicate with team members
- GS13.** question in order to understand the nature of the problem and to clarify queries
- GS14.** attentively listen and comprehend the information given by the speaker
- GS15.** communicate clearly on the issues being faced
- GS16.** analyse critical points in day to day tasks through experience and observation and identify control measures to solve the issue
- GS17.** handle issues in case the manager is not available (as per the authority matrix defined by the organization)
- GS18.** plan and organize the work order and jobs received
- GS19.** organize raw materials and packaging materials required for all products
- GS20.** plan and prioritize the work based on the instructions received
- GS21.** plan to utilise time and equipment's effectively
- GS22.** organize all process/ equipment manuals so as to access information easily
- GS23.** support the manager in scheduling tasks for helper(s)
- GS24.** understand customer requirements and their priority and respond as per their needs
- GS25.** support manager in solving problems by detailing out problems
- GS26.** discuss the possible solutions with the manager for problem solving
- GS27.** apply domain information about maintenance processes and technical knowledge about tools and equipment
- GS28.** use common sense and make judgments on day to day basis
- GS29.** use reasoning skills to identify and resolve basic problems
- GS30.** use intuition to detect any potential problems which could arise during operations
- GS31.** use acquired knowledge of the process for identifying and handling issues

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Document and maintain records of raw materials (for grain milling)</i>	15	10	-	-
PC1. document and maintain record of details of raw materials and packaging materials like name of raw materials, type and variety, vendor/supplier details, season, grown area, quantity, receiving date, receiving date/ date of manufacture, expiry date, supplier quality document, quality parameters of all raw materials, internal quality analysis report etc, as per organisation standards	6	4	-	-
PC2. document and maintain record on observations (if any) related to raw materials and packaging materials	3	2	-	-
PC3. load the raw materials details in ERP for future reference	3	2	-	-
PC4. verify the documents and track from finished product to raw materials, in case of quality concerns and during quality management system audits	3	2	-	-
<i>Document and maintain records of production schedule and process parameters (for grain milling)</i>	30	20	-	-
PC5. document and maintain records of production plan with details such as product details, production sequence, equipments and machinery details, efficiency and capacity utilization of equipment	6	4	-	-
PC6. document and maintain records of process details such as type of raw material used, process parameters (temperature, time, etc. as applicable) for entire production in process chart or production log for all products produced	9	6	-	-
PC7. document and maintain records of batch size, production yield, and wastage of raw materials, energy utilization and final products produced	6	4	-	-
PC8. document and maintain record of observations (if any) or deviations related to process and production	3	2	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC9. load the production plan and process details in ERP for future reference	3	2	-	-
PC10. verify documents and track from finished product to ingredients, in case of quality concerns and for quality management system audits	3	2	-	-
<i>Document and maintain records of the finished products (for grain milling)</i>	15	10	-	-
PC11. document and maintain records of the types of finished products produced	2	1	-	-
PC12. document and maintain records of the finished products details such as batch number, time of packing, date of manufacture, date of expiry, other label details, primary, secondary and tertiary packaging materials for all finished products, storage conditions etc, as per organisation standards	4	3	-	-
PC13. document and maintain record of observations or deviations (if any) related to finished products	3	2	-	-
PC14. load the finished product details in ERP for future reference	3	2	-	-
PC15. verify the documents and track from finished product to ingredients, in case of quality concerns and for quality management system audits	3	2	-	-
NOS Total	60	40	-	-

Qualification Pack

National Occupational Standards (NOS) Parameters

NOS Code	FIC/N1003
NOS Name	Complete documentation and record keeping related to grain milling
Sector	Food Processing
Sub-Sector	Food Grain Milling
Occupation	Processing
NSQF Level	6
Credits	TBD
Version	1.0
Last Reviewed Date	22/09/2015
Next Review Date	31/03/2022
Deactivation Date	31/03/2022
NSQC Clearance Date	19/02/2016

Qualification Pack

FIC/N9001: Ensure food safety, hygiene and sanitation for processing food products

Description

This unit is about maintaining food safety, hygiene and sanitation in work area and processing unit for processing food products

Elements and Performance Criteria

Perform safety and sanitation related functions (for processing food products)

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

- PC1.** comply with food safety and hygiene procedures followed in the organization
- PC2.** ensure personal hygiene by use of gloves, hairnets, masks, ear plugs, goggles, shoes, etc.
- PC3.** ensure hygienic production of food by inspecting raw materials, ingredients, finished products etc. for compliance to physical, chemical and microbiological parameters
- PC4.** pack products in appropriate packaging materials, label and store them in designated area, free from pests, flies and infestations
- PC5.** clean, maintain and monitor food processing equipment periodically, using it only for the specified purpose
- PC6.** use safety equipment such as fire extinguisher, eye wash unit, first aid kit when required
- PC7.** follow housekeeping practices by having designated area for machines/tools
- PC8.** follow industry standards like GMP, HACCP and product recall process
- PC9.** attend training on hazard management to understand types of hazards such as physical, chemical and biological hazards and measures to control and prevent them
- PC10.** Identify, document and report problems such as rodents and pests to management
- PC11.** conduct workplace checklist audit before and after work to ensure safety and hygiene
- PC12.** document and maintain raw material, packaging material, process and finished products for the credibility and effectiveness of the food safety control system

Apply food safety practices (for processing food products)

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

- PC13.** determine the quality of food using criteria such as odour, appearance, taste and best before date, and take immediate measures to prevent spoilage
- PC14.** store raw materials, finished products and allergens separately to prevent cross contamination
- PC15.** label raw materials and finished products and store them in different storage areas according to safe food practices
- PC16.** follow stock rotation based on FEFO/FIFO

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** organization standards, process standards and procedures followed in the organisation

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- KU2.** types of products produced by the organisation
- KU3.** code of business conduct
- KU4.** dress code to be followed
- KU5.** job responsibilities/duties and standard operating procedures
- KU6.** internal processes such as procurement, store management, inventory management, quality management and key contact points for query resolution
- KU7.** provision of wages, working hours as per organisation policy
- KU8.** food safety and hygiene standards followed
- KU9.** possible physical, chemical and biological hazards and methods of prevention of various hazards
- KU10.** personal hygiene requirement
- KU11.** different types of sanitizers used for process area, equipment and the procedure to use them
- KU12.** knowledge on food safety standards and regulations (as per fssai)
- KU13.** quality parameters and quality assessment based on physical parameters, basic food microbiology
- KU14.** labelling/marketing requirements for raw materials, finished goods, stored materials, packaging materials and their designated storage area
- KU15.** cleaning and sanitation of equipment and work area
- KU16.** CIP and COP methods and procedures
- KU17.** storage norms for raw materials, packaging material and finished products
- KU18.** stock rotation of ingredients and finished products based on FEFO/FIFO
- KU19.** method of maintaining safety check lists for all machineries
- KU20.** GHP
- KU21.** GMP
- KU22.** HACCP

Generic Skills (GS)

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

- GS1.** note the information communicated by the supervisor
- GS2.** note the raw materials used for production and the finished products produced
- GS3.** note the readings of the process parameters and provide necessary information to fill the process chart
- GS4.** note down observations (if any) related to the process
- GS5.** write information documents to internal departments/ internal teams
- GS6.** note down the data for online ERP or as per applicability in the organization
- GS7.** read and interpret the process required for producing various types of products
- GS8.** read and interpret and process flowchart for all products produced
- GS9.** read equipment manuals and process documents to understand the equipment operation and process requirement
- GS10.** read internal information documents sent by internal teams

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- GS11.** discuss task lists, schedules and activities with the supervisor
- GS12.** effectively communicate with the team members
- GS13.** question the supervisor in order to understand the nature of the problem and to clarify queries
- GS14.** attentively listen and comprehend the information given by the speaker
- GS15.** communicate clearly with the supervisor and cross department teams on the issues faced during process
- GS16.** analyse critical points in day to day tasks through experience and observation and identify control measures to solve the issue
- GS17.** handle issues in case the supervisor is not available (as per the authority matrix defined by the organization)
- GS18.** plan and organize the work order and jobs received from the supervisor
- GS19.** organize raw materials and packaging materials required for all products following the instruction provided by the supervisor
- GS20.** plan and prioritize the work based on the instructions received from the supervisor
- GS21.** plan to utilise time and equipment's effectively
- GS22.** organize all process/ equipment manuals so as to access information easily
- GS23.** support the supervisor in scheduling tasks for helper(s)
- GS24.** understand customer requirements and their priority and respond as per their needs
- GS25.** support supervisor in solving problems by detailing out problems
- GS26.** discuss the possible solutions with the supervisor for problem solving
- GS27.** apply domain information about maintenance processes and technical knowledge about tools and equipment
- GS28.** use common sense and make judgments on day to day basis
- GS29.** use reasoning skills to identify and resolve basic problems
- GS30.** use intuition to detect any potential problems which could arise during operations
- GS31.** use acquired knowledge of the process for identifying and handling issues

Qualification Pack

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Perform safety and sanitation related functions (for processing food products)</i>	25	50	-	-
PC1. comply with food safety and hygiene procedures followed in the organization	2	3	-	-
PC2. ensure personal hygiene by use of gloves, hairnets, masks, ear plugs, goggles, shoes, etc.	1	5	-	-
PC3. ensure hygienic production of food by inspecting raw materials, ingredients, finished products etc. for compliance to physical, chemical and microbiological parameters	2	3	-	-
PC4. pack products in appropriate packaging materials, label and store them in designated area, free from pests, flies and infestations	4	6	-	-
PC5. clean, maintain and monitor food processing equipment periodically, using it only for the specified purpose	2	3	-	-
PC6. use safety equipment such as fire extinguisher, eye wash unit, first aid kit when required	4	6	-	-
PC7. follow housekeeping practices by having designated area for machines/tools	2	3	-	-
PC8. follow industry standards like GMP, HACCP and product recall process	4	6	-	-
PC9. attend training on hazard management to understand types of hazards such as physical, chemical and biological hazards and measures to control and prevent them	1	4	-	-
PC10. Identify, document and report problems such as rodents and pests to management	1	4	-	-
PC11. conduct workplace checklist audit before and after work to ensure safety and hygiene	1	4	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC12. document and maintain raw material, packaging material, process and finished products for the credibility and effectiveness of the food safety control system	1	3	-	-
<i>Apply food safety practices (for processing food products)</i>	10	15	-	-
PC13. determine the quality of food using criteria such as odour, appearance, taste and best before date, and take immediate measures to prevent spoilage	2	3	-	-
PC14. store raw materials, finished products and allergens separately to prevent cross contamination	2	3	-	-
PC15. label raw materials and finished products and store them in different storage areas according to safe food practices	2	3	-	-
PC16. follow stock rotation based on FEFO/FIFO	4	6	-	-
NOS Total	35	65	-	-

Qualification Pack

National Occupational Standards (NOS) Parameters

NOS Code	FIC/N9001
NOS Name	Ensure food safety, hygiene and sanitation for processing food products
Sector	Food Processing
Sub-Sector	Fruits and Vegetables
Occupation	Generic
NSQF Level	4
Credits	TBD
Version	1.0
Last Reviewed Date	30/09/2021
Next Review Date	30/07/2024
Deactivation Date	30/07/2024
NSQC Clearance Date	30/09/2021

Qualification Pack

FIC/N9004: Manage and lead a team

Description

Manage the team on day to day basis, ensuring their deployment, motivating them by involving them in various engagement initiatives at the work area, helping them improve the skills levels and managing their grievances in the best possible manner in order to maximize the people productivity

Elements and Performance Criteria

Manage and lead a team

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

- PC1.** ensure that the team is aware of the schedule and job expectations on a daily basis
- PC2.** involve the team in regular meetings to communicate information intended for them
- PC3.** ensure communication to the team on any changes in policies/ processes by the organization through required verbal/ written mechanisms
- PC4.** ensure participation of the team in various engagement initiatives organized by the organization
- PC5.** counsel and address issues among the team for any work related issues
- PC6.** support the manager in deployment of the team as per production schedule and the organizational norms and guidelines
- PC7.** ensure periodic training of the team and support the team by delivering trainings
- PC8.** share knowledge of processes, techniques and products with the team to enhance their skill levels
- PC9.** provide feedback to the manager pertaining to performance of the team

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** organizations standards of performance, services and products
- KU2.** relevant hr policies and processes followed by the organization
- KU3.** knowledge of organizational norms and guidelines
- KU4.** how and when to measure performance of the team
- KU5.** how to share feedback with team members
- KU6.** applicable legislation relating to the workplace (for example health and safety, workplace regulations, use of work equipment, handling/ storage/ disposal/ cautions of use of products, fire precautions, hygiene practice, disposal of waste, environmental protection)

Generic Skills (GS)

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

- GS1.** note the information communicated

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- GS2.** note the raw materials used for production and the finished products produced
- GS3.** note the readings of the process parameters and provide necessary information to fill the process chart
- GS4.** note down observations (if any) related to the process
- GS5.** write information documents to internal departments/ internal teams
- GS6.** note down the data for online ERP or as per applicability in the organization
- GS7.** read and interpret the process required for producing various types of products
- GS8.** read and interpret and process flowchart for all products produced
- GS9.** read equipment manuals and process documents to understand the equipments operation and process requirement
- GS10.** read internal information documents sent by internal teams
- GS11.** discuss task lists, schedules and activities
- GS12.** effectively communicate with team members
- GS13.** question in order to understand the nature of the problem and to clarify queries
- GS14.** attentively listen and comprehend the information given by the speaker
- GS15.** communicate clearly on the issues being faced
- GS16.** analyze critical points in day to day tasks through experience and observation and identify control measures to solve the issue
- GS17.** handle issues in case the manager is not available (as per the authority matrix defined by the organization)
- GS18.** plan and organize the work order and jobs received
- GS19.** organize raw materials and packaging materials required for all products
- GS20.** plan and prioritize the work based on the instructions received
- GS21.** plan to utilize time and equipment's effectively
- GS22.** organize all process/ equipment manuals so as to access information easily
- GS23.** support the manager in scheduling tasks for helper(s)
- GS24.** understand customer requirements and their priority and respond as per their needs
- GS25.** support manager in solving problems by detailing out problems
- GS26.** discuss the possible solutions with the manager for problem solving
- GS27.** apply domain information about maintenance processes and technical knowledge about tools and equipment
- GS28.** use common sense and make judgments on day to day basis
- GS29.** use reasoning skills to identify and resolve basic problems
- GS30.** use intuition to detect any potential problems which could arise during operations SB16.use acquired knowledge of the process for identifying and handling issues
- GS31.** use acquired knowledge of the process for identifying and handling issues

Qualification Pack

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Manage and lead a team</i>	35	65	-	-
PC1. ensure that the team is aware of the schedule and job expectations on a daily basis	4	8	-	-
PC2. involve the team in regular meetings to communicate information intended for them	4	8	-	-
PC3. ensure communication to the team on any changes in policies/ processes by the organization through required verbal/ written mechanisms	4	8	-	-
PC4. ensure participation of the team in various engagement initiatives organized by the organization	4	8	-	-
PC5. counsel and address issues among the team for any work related issues	4	8	-	-
PC6. support the manager in deployment of the team as per production schedule and the organizational norms and guidelines	4	6	-	-
PC7. ensure periodic training of the team and support the team by delivering trainings	3	7	-	-
PC8. share knowledge of processes, techniques and products with the team to enhance their skill levels	4	6	-	-
PC9. provide feedback to the manager pertaining to performance of the team	4	6	-	-
NOS Total	35	65	-	-

Qualification Pack

National Occupational Standards (NOS) Parameters

NOS Code	FIC/N9004
NOS Name	Manage and lead a team
Sector	Food Processing
Sub-Sector	Fruits and Vegetables, Food Grain Milling (including oilseeds), Dairy Products, Meat and Poultry, Fish and Sea Food, Bread and Bakery, Alcoholic Beverages, Aerated Water/Soft Drinks, Soya Food, Packaged Foods
Occupation	GENERIC
NSQF Level	6
Credits	TBD
Version	1.0
Last Reviewed Date	29/07/2021
Next Review Date	29/07/2024
Deactivation Date	29/07/2024
NSQC Clearance Date	29/07/2021

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.

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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.

Minimum Aggregate Passing % at QP Level : 70

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

Assessment Weightage

Compulsory NOS

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
FIC/N1001.Prepare and maintain work area and process machineries for grain milling	35	65	-	-	100	15
FIC/N1002.Prepare for the milling process and manage it	35	65	-	-	100	20
FIC/N1003.Complete documentation and record keeping related to grain milling	60	40	-	-	100	25
FIC/N9001.Ensure food safety, hygiene and sanitation for processing food products	35	65	-	-	100	15
FIC/N9004.Manage and lead a team	35	65	-	-	100	25
Total	200	300	-	-	500	100

Qualification Pack

Acronyms

NOS	National Occupational Standard(s)
NSQF	National Skills Qualifications Framework
QP	Qualifications Pack
TVET	Technical and Vocational Education and Training
CIP	Clean In Place
COP	Clean Out Of Place
ERP	Enterprise Resource Planning
FIFO	First In First Out
FEFO	First Expiry First Out
FSSAI	Food Safety and Standards Authority of India
GMP	Good Manufacturing Practices
GHP	Good Hygiene Practices
HACCP	Hazard Analysis and Critical Control Point

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.

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Knowledge and Understanding (KU)	<p>Knowledge and Understanding (KU) are statements which together specify the technical, generic, professional and organisational specific knowledge that an individual needs in order to perform to the required standard.</p>
Organisational Context	<p>Organisational context includes the way the organisation is structured and how it operates, including the extent of operative knowledge managers have of their relevant areas of responsibility.</p>
Technical Knowledge	<p>Technical knowledge is the specific knowledge needed to accomplish specific designated responsibilities.</p>
Core Skills/ Generic Skills (GS)	<p>Core skills or Generic Skills (GS) are a group of skills that are the key to learning and working in today's world. These skills are typically needed in any work environment in today's world. These skills are typically needed in any work environment. In the context of the OS, these include communication related skills that are applicable to most job roles.</p>
Electives	<p>Electives are NOS/set of NOS that are identified by the sector as contributive to specialization in a job role. There may be multiple electives within a QP for each specialized job role. Trainees must select at least one elective for the successful completion of a QP with Electives.</p>
Options	<p>Options are NOS/set of NOS that are identified by the sector as additional skills. There may be multiple options within a QP. It is not mandatory to select any of the options to complete a QP with Options.</p>