



Federal Democratic Republic of Ethiopia
OCCUPATIONAL STANDARD

COFFEE ROASTING AND GROUNDING

NTQF Level II and III



*Ministry of Education
July 2013*

Introduction

Ethiopia has embarked on a process of reforming its TVET-System. Within the policies and strategies of the Ethiopian Government, technology transformation – by using international standards and international best practices as the basis, and, adopting, adapting and verifying them in the Ethiopian context – is a pivotal element. TVET is given an important role with regard to technology transfer. The new paradigm in the outcome-based TVET system is the orientation at the current and anticipated future demand of the economy and the labor market.

The Ethiopia Occupational Standards (EOS) is the core element of the Ethiopian National TVET-Strategy and an important factor within the context of the National TVET-Qualification Framework (NTQF). They are national Ethiopian standards, which define the occupational requirements and expected outcome related to a specific occupation without taking TVET delivery into account.

This document details the mandatory format, sequencing, wording and layout for the Ethiopia Occupational Standard which comprised of Units of Competence.

A Unit of Competence describes a distinct work activity. It is documented in a standard format that comprises:

- Occupational title and NTQF level
- Unit title
- Unit code
- Unit descriptor
- Elements and Performance criteria
- Variables and Range statement
- Evidence guide

Together all the parts of a Unit of Competence guide the assessor in determining whether the candidate is competent.

The ensuing sections of this EOS document comprise a description of the occupation with all the key components of a Unit of Competence:

- chart with an overview of all Units of Competence for the respective level including the Unit Codes and the Unit Titles
- contents of each Unit of Competence (competence standard)
- occupational map providing the Technical and Vocational Education and Training (TVET) providers with information and important requirements to consider when designing training programs for this standards and for the individual, a career path

UNIT OF COMPETENCE CHART

Occupational Standard: Coffee Roasting and Grounding		
Occupational Code: IND CRG		
<i>NTQF Level II</i>		
<u>IND CRG2 01 0613</u> Work Effectively in the Coffee Roasting and Grounding Industry	<u>IND CRG2 02 0613</u> Participate in Environmentally Sustainable Work Practices	<u>IND CRG2 03 0613</u> Handle Coffee Bean in a Storage Area
<u>IND CRG2 04 0613</u> Pre-process Raw Materials	<u>IND CRG2 05 0613</u> Understand Coffee Roasting and Grounding Operations Technologies	<u>IND CRG2 06 0613</u> Clean and Sanitize Equipment
<u>IND CRG2 07 0613</u> Manufacture Coffee (Roast and Ground)	<u>IND CRG2 08 0613</u> Manufacturing Instant Coffee	<u>IND CRG2 09 0312</u> Perform Basic Tests
<u>IND CRG2 10 0613</u> Operate a Packaging Process	<u>IND CRG2 11 0613</u> Conduct Routine Maintenance	<u>IND CRG2 12 0613</u> Operate a Process Control Interface
<u>IND CRG2 13 0613</u> Implement Coffee Monitoring Measures	<u>IND CRG2 14 0613</u> Use Numerical Applications in the Workplace	<u>IND CRG2 15 0613</u> Create, Produce and Check Documentation
<u>IND CRG2 16 0613</u> Use Info Technology Devices in the Workplace	<u>IND CRG2 17 0613</u> Manage the impact of change on own work	<u>IND CRG2 18 0613</u> Implement the food safety program and procedures
<u>IND CRG2 19 0613</u> Participate in work place communications	<u>IND CRG2 20 0613</u> Work in team environment	<u>IND CRG2 21 0613</u> Develop Business Practice
<u>IND CRG2 22 0613</u> Standardize and Sustain 3S		

NTQF Level III

<p><u>IND CRG3 01 0613</u> Apply Raw Materials, Ingredient and Process Knowledge to Production Problems</p>	<p><u>IND CRG3 02 0613</u> Program/Operate Green Coffee Beans Grading Equipment</p>	<p><u>IND CRG3 03 0613</u> Develop and Adjust a Production Schedule</p>
<p><u>IND CRG3 04 0613</u> Set up a Production and Packaging Line for Operation</p>	<p><u>IND CRG3 05 0613</u> Demonstrate Knowledge of Coffee Roasting and Grinding Principles</p>	<p><u>IND CRG3 06 0613</u> Identify Cultural Requirements for Coffee Flavors/Tastes</p>
<p><u>IND CRG3 07 0613</u> Identify Equipment Faults</p>	<p><u>IND CRG3 08 0613</u> Apply Competitive Manufacturing Practices</p>	<p><u>IND CRG3 09 0613</u> Establish Compliance Requirements for Work Area</p>
<p><u>IND CRG3 10 0613</u> Monitor Storage Facilities</p>	<p><u>IND CRG3 11 0613</u> Analyze Cupping Taste</p>	<p><u>IND CRG3 12 0613</u> Operate Interrelated Processes in a Production System</p>
<p><u>IND CRG3 13 0613</u> Deliver and Monitor a Service to Customers</p>	<p><u>IND CRG3 14 0613</u> Use Structured Problem Solving Tools</p>	<p><u>IND CRG3 15 0613</u> Contribute to Development of Plant Documentation</p>
<p><u>IND CRG3 16 0613</u> Monitor the Implementation of Quality and Food Safety Programs</p>	<p><u>IND CRG3 17 0613</u> Control contaminants and allergens in the workplace</p>	<p><u>IND CRG3 18 0613</u> Operate interrelated processes in a packaging system</p>
<p><u>IND CRG3 19 0613</u> Monitor Implementation of Work plan/Activities</p>	<p><u>IND CRG3 20 0613</u> Apply quality Control</p>	<p><u>IND CRG3 21 0613</u> Lead Workplace Communication</p>
<p><u>IND CRG3 22 0613</u> Lead Small Teams</p>	<p><u>IND CRG3 23 0613</u> Improve Business Practice</p>	<p><u>IND CRG3 24 0613</u> Prevent and Eliminate MUDA</p>

NTQF Level II

Occupational Standard: Coffee Roasting and Grounding Level II	
Unit Title	Work Effectively in the Coffee Roasting and Grounding Industry
Unit Code	<u>IND CRG2 01 0613</u>
Unit Descriptor	This unit of competency covers the skills and knowledge required to work effectively in the Coffee Roasting and Grounding industry by applying an understanding of the structure of the industry, workplace policies and procedures, and conditions relevant to their employment.

Elements	Performance Criteria
1. Overview the Coffee Roasting and Grounding industry	<p>1.1 Sectors of the coffee roasting and grounding industry are identified.</p> <p>1.2 Key sector representatives and their roles are identified.</p> <p>1.3 Relevant legislation and guidelines common to employment in sector are identified.</p> <p>1.4 Types of employment in the coffee roasting and grounding industry are identified and key responsibilities described.</p>
2. Identify key production processes and supply chains	<p>2.1 Raw materials used in the workplace and their source are identified.</p> <p>2.2 Range of products produced in the workplace is identified.</p> <p>2.3 Workplace production processes are identified for converting materials into products.</p> <p>2.4 Supply chains for products are identified.</p>
3. Carry out work responsibilities according to policies and procedures	<p>3.1 Information on conditions of employment, company policies and procedures is identified.</p> <p>3.2 Policies and procedures are applied when carrying out work role.</p> <p>3.3 Rights, responsibilities and legal obligations are identified</p> <p>3.4 Key personnel and their roles are identified.</p> <p>3.5 Employability skills required for working effectively are identified and applied.</p> <p>3.6 Consequences of not following workplace environmental and safety policies and practices are identified.</p>
4. Take responsibility for own skill development	<p>4.1 Skills required for work role are identified and own ability assessed to determine learning needs.</p> <p>4.2 Opportunities for skill development are identified and participated in.</p> <p>4.3 Responsibility is taken for own work tasks and role.</p> <p>4.4 Own work is monitored against workplace standards and areas for improvement identified and acted upon.</p>

	4.5 Problem solving strategies are used to address problems, inconsistencies or concerns when fulfilling work role.
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Variable	Range
Supply chains	May Include: <ul style="list-style-type: none"> • concept of product flow from raw materials to production, distribution, marketing and sales • customers and suppliers
Conditions of employment	May include: <ul style="list-style-type: none"> • pay and conditions • leave arrangements • reporting and timekeeping responsibilities • terms of employment, including permanent, casual and probationary periods • disciplinary procedures • staff facilities and amenities
Policies and procedures	May include: <ul style="list-style-type: none"> • Work is carried out in accordance with company policies and procedures, regulatory and licensing requirements, legislative requirements and industrial awards and agreements.
Key personnel	May include: <ul style="list-style-type: none"> • human resource personnel responsible for recruitment, training, pay and conditions issues • relevant site and operations managers • supervisors/team leaders • industrial/work area representatives
Employability skills	May include: <ul style="list-style-type: none"> • ability to work in teams • ability to solve problems • ability to communicate in the workplace • using initiative and enterprise • using technology • ability to plan and organise • ability to manage self • ability to learn work-related skills and knowledge
Company policies and procedures	May include: <ul style="list-style-type: none"> • codes of practice and general employment policies and procedures in areas, such as • sexual harassment • EEO/affirmative action • anti-discrimination • racial vilification • workplace bullying

Problem solving strategies	<p>May include:</p> <ul style="list-style-type: none"> • asking questions • reporting or referring to appropriate personnel • asking for help or support • referring to standard operating procedures • consideration of options and accessing information
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Evidence Guide	
Critical Aspects of Competency	<p>Must confirm appropriate knowledge and skills to:</p> <ul style="list-style-type: none"> • recognise key industry sectors • identify workplace practices and processes • describe concepts of supply chains • identify relevant legislation Identify expectations and responsibilities of the work role • identify organisational products and processes • identify location of operations
Underpinning Knowledge	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • workplace structure and key personnel • rights and responsibilities of employees as defined in employment conditions • company policies and procedures relating to work responsibilities, including areas covered by legislation and related responsibilities • appropriate personal conduct in a work area, including minimum clothing and personal hygiene standards when entering and move in around a Coffee Roasting and Grounding area in order to protect both employees and product safety, and behaving appropriately towards others in the work area • industrial representation arrangements • site security arrangements, including responsibility to report when coming on and off site • site layout, including main facilities, such as canteens, parking areas, storage areas, processing and packing areas and location of emergency exits and assembly areas the main products/product range produced in the workplace • stages and processes used to manufacture and package products personal reporting roles and responsibilities
Underpinning Skills	<p>Demonstrate skills to:</p> <ul style="list-style-type: none"> • identify and access information on conditions of employment and workplace policies and procedures (information may be provided imprint, audio-visual and/or verbal formats) • identify and locate materials/storage areas in the work place, relevant to work role, such as locating tank farms and other bulk storage elocutions and identifying special storage conditions (e.g. hazardous goods and temperature controlled stores areas)

	<ul style="list-style-type: none"> • identify and locate production and packing processes/main work areas in the workplace • model appropriate behaviour when interacting with others and moving around the workplace • explain employee's responsibilities • explain the dispute resolution procedures in the workplace • explain the flow of product from receive to sale in own workplace • explain the nature and role of work instructions and Standard Operating Procedures (SOPs) • explain the principles of Equal Employment Opportunity (EEO) and policies to prevent sexual harassment follow relevant workplace policies • identify and explain the relevance of occupational health and safety(OHS) and regulatory requirements for food industry employees • identify and explain workplace employment conditions • identify relevant workplace requirements, policies and procedures and explain their implications for trainees • list the markets where the company's products are distributed name the products produced in own workplace • outline enterprise ethical standards and requirements for interacting with other employees and staff • relate to others in an effective and non-discriminatory way showing mutual respect • apply environmental practices • use oral communication skills/language competence to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor • work cooperatively within a culturally diverse workforce
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Coffee Roasting and Grinding Level II	
Unit Title	Participate in Environmentally Sustainable Work Practices
Unit Code	IND CRG2 02 0613
Unit Descriptor	This competency covers the outcomes required to effectively measure current resource use and carry out improvements including those reducing negative environmental impacts of work practices.

Elements	Performance Criteria
1. Identify current resource use and environmental issues	1.1 Workplace environmental and resource efficiency issues are identified. 1.2 Resources used in own work role are identified. 1.3 Current usage of resources is measured and recorded using appropriate techniques . 1.4 Workplace environmental hazards are identified and reported to appropriate personnel.
2. Comply with environmental regulations	2.1 Procedures are followed to ensure compliance 2.2 Environmental incidents are reported to appropriate personnel
3. Seek opportunities to improve environmental practices and resource efficiency	3.1 Enterprise plans are followed to improve environmental practices and resource efficiency. 3.2 Suggestions are made for improvements to workplace practices in own work area.

Variable	Range
Environmental and resource efficiency issues	May include: <ul style="list-style-type: none"> • Minimisation of waste, through implementation of the waste management hierarchy • Efficient and effective use of energy and other resources • seeking alternative sources of energy • efficient use of materials and appropriate disposal of waste • use of controls to minimise the risk of environmental damage from hazardous substances • efficient water use • reducing emissions • life cycle analysis applied to issues such as energy supply, materials, transport, production
Measure	May include: <ul style="list-style-type: none"> • counting the number of items entering/leaving a work area • reading indicators in the work area • obtaining relevant information from support personnel • other simple means

Appropriate techniques	<p>May include:</p> <ul style="list-style-type: none"> • material fed to/consumed by plant/equipment • plant meters and gauges • job cards • examination of invoices from suppliers • measurements made under different conditions • examination of relevant information and data
Procedures	<p>May include:</p> <ul style="list-style-type: none"> • All operations are performed in accordance with procedures including all relevant workplace procedures, work instructions, temporary instructions and relevant industry and government codes and standards.
Compliance	<p>May includes</p> <ul style="list-style-type: none"> • Compliance meeting relevant federal, state and local government laws, by-laws, regulations and mandated codes of practice. It also includes any codes and standards that the enterprise applies voluntarily
Incidents	<p>May include:</p> <ul style="list-style-type: none"> • breaches or potential breaches of regulations • Occurrences outside of standard procedure which may lead to lower environmental performance
Enterprise plans	<p>May include:</p> <ul style="list-style-type: none"> • documented policies and procedures • work plans to minimise waste, increase efficiency of water/energy use, minimise environmental hazards
Suggestions	<p>May include:</p> <ul style="list-style-type: none"> • prevent and minimise environmental risks and maximise opportunities • reduce emissions of greenhouse gases • reduce use of non-renewable resources • improve energy efficiency • increase use of renewable, recyclable, reusable and recoverable resources • reduce waste • increasing the reusability/recyclability of wastes/products • reduce water usage and/or water wastage

Evidence Guide	
Critical Aspects of Competency	<p>Must confirm appropriate knowledge and skills to:</p> <ul style="list-style-type: none"> • identify and measure resources used in their job • identify situations likely to lead to an environmental incident • Follow procedures related to environmental performance • work is routinely to procedures • The minimum of resources is used consistent with the job requirements, good practice and the procedures.

Underpinning Knowledge	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • have a basic understanding of sustainability • know the environmental hazards/risks, resource use and inefficiencies associated with own workplace (at an appropriate level) • know the relevant environmental and resource efficiency systems and procedures for own work area • know the impact of laws and regulations to a level relevant to the work context
Underpinning Skills	<p>Demonstrate skills to:</p> <ul style="list-style-type: none"> • report as required by procedures • follow procedures and instructions and respond to change • ask questions and seek clarifications relating to work requirements
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	<p>Competence may be assessed through:</p> <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Coffee Roasting and Grounding Level II	
Unit Title	Handle Coffee Bean in a Storage Area
Unit Code	IND CRG2 03 0613
Unit Descriptor	This unit of competency covers the skills and knowledge required to handle Coffee Bean in a storage area, including taking samples, segregating and moving Coffee Bean in a manner that minimizes dust and moisture and exposure to pests.

Elements	Performance Criteria
1. Sample Coffee Bean for testing	<p>1.1 Representative samples of coffee bean are taken for testing according to regulatory requirements</p> <p>1.2 Samples are prepared for dispatch, including labeling and packaging according to enterprise requirements</p>
2. Move Coffee Bean into and out of storage	<p>2.1 Coffee bean is correctly identified for handling and storage facility</p> <p>2.2 Appropriate silo types and handling equipment are selected for various coffee beans in relation to their storage characteristics and flow properties</p> <p>2.3 Coffee bean is segregated according to type, variety and quality characteristics according to enterprise requirements and appropriate records kept</p> <p>2.4 Measures are taken to minimize pest infestation</p> <p>2.5 Coffee bean is moved into and out of storage according to Occupational Health and Safety (OHS) requirements</p> <p>2.6 Coffee bean is regularly checked during movement for contamination</p> <p>2.7 Storage and handling equipment are thoroughly cleaned after emptying</p> <p>2.8 Temporary storages are dismantled according to enterprise requirements and storage characteristics</p> <p>2.9 Suitable measures are implemented to minimize the effect of desiccant dusts on the flow properties</p>

Variable	Range
Samples for testing	<p>May include:</p> <ul style="list-style-type: none"> • moisture • insects (live and dead) • weed and other commodity seeds • other foreign matter • cracked Coffee Bean • weather affected Coffee Bean • Coffee Bean size and weight

	<ul style="list-style-type: none"> • disease identification • germination
Storage facility	<p>May include:</p> <ul style="list-style-type: none"> • all types of temporary and permanent storage
Handling equipment	<p>May include:</p> <ul style="list-style-type: none"> • silo conveyors • elevators • chutes • augers
Coffee Beans	<p>May include:</p> <ul style="list-style-type: none"> • Green Coffee Beans
Coffee Bean movements	<p>May include:</p> <ul style="list-style-type: none"> • receipt • despatch • aeration • treatment and/or blending of Coffee Bean grades
Policies and procedures	<p>May include:</p> <ul style="list-style-type: none"> • All work is carried out according to company policies and procedures, regulatory and licensing requirements, legislative requirements, and industrial awards and agreements
Sampling and analysis equipment	<p>May include:</p> <ul style="list-style-type: none"> • all testing apparatus • sampling, measuring and sieving equipment • operational charts • calibration and identification samples • enterprise/client instructions
Other equipment	<p>May include:</p> <ul style="list-style-type: none"> • computing equipment used by enterprise • Two way radio/telephone • Trucks • Front end loaders/ Forklift • wall charts and other visual recording methods • warning devices • ventilation/aeration equipment
Equipment checks	<p>May include:</p> <ul style="list-style-type: none"> • Mechanical units integral to Coffee Bean handling equipment, such as gear boxes, bearings and oil levels
Other personnel	<p>May include:</p> <ul style="list-style-type: none"> • other operators at storage site • truck drivers • silo operators • weighbridge operators • associated office personnel
Documentation	<p>May include:</p> <ul style="list-style-type: none"> • quantities and grades stored • Coffee Bean movements and cartage documentation

	<ul style="list-style-type: none"> • weigh tally sheets • equipment and operations log sheets • stock checks
Potential emergency situations	<p>May include:</p> <ul style="list-style-type: none"> • inclement weather during operations • machinery breakdowns • power outages • storm damage to equipment and site

Evidence Guide	
Critical Aspects of Competency	<p>Must confirm appropriate knowledge and skills to:</p> <ul style="list-style-type: none"> • take required samples • conduct pre-start checks on machinery and equipment used for Coffee Bean storage and transfers • start, operate, monitor and adjust process equipment • recognise different Coffee Bean types and varieties • check Coffee Bean for pest and other contamination • take corrective action in response to typical faults and inconsistencies • complete workplace records as required • apply safe work practices and identify OHS hazards and controls • safely shut down equipment • Apply food safety procedures to work practices where Coffee Bean is intended for human consumption.
Underpinning Knowledge	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • Coffee Bean hygiene and sealing requirements • Coffee Bean varieties and types • segregation requirements to maintain integrity and quality of Coffee Bean • flow of Coffee Bean in storage area from receipt to despatch • typical storage equipment faults and related causes, including signs and symptoms of faulty equipment and early warning signs of potential problems • contamination/food safety risks associated with the Coffee Bean storage process and related control measures • OHS hazards and controls, including the limitations of protective clothing and equipment relevant to the work process • requirements of different shutdowns as appropriate to the Coffee Bean storage process and workplace requirements, including emergency and routine shutdowns and procedures to follow in the event of a power outage • isolation, lock out and tag out procedures and responsibilities • environmental issues and controls relevant to the Coffee Bean storage process

	<ul style="list-style-type: none"> • basic operating principles of process control, where relevant, including the relationship between control panels and systems and the physical equipment • sampling and testing associated with process monitoring and control where relevant • routine maintenance procedures where relevant • cleaning and sanitation procedures where relevant 		
Underpinning Skills	<p>Demonstrate skills to:</p> <ul style="list-style-type: none"> • access workplace information to identify Coffee Bean storage requirements • select, fit and use personal protective clothing and/or equipment • confirm supply of necessary materials and services • start, operate, monitor and adjust equipment used to move and store Coffee Bean to achieve required outcomes • monitor supply and flow of materials to and from the Coffee Bean cleaning process • take corrective action in response to out-of-specification results • respond to and/or report equipment failure within level of responsibility • locate emergency stop functions on equipment • follow isolation and lock out/tag out procedures as required to take Coffee Bean cleaning process and related equipment off-line in preparation for cleaning and/or maintenance within level of responsibility • conduct pre-operational checks, start up, and safely and effectively operate and shut down equipment, including emergency shutdown procedures • coordinate with others on site • position initial load for even Coffee Bean distribution • safe and correct use of mobile and other equipment • dismantling of temporary storage of the type used by enterprise • maintain work area to meet housekeeping standards • use process control systems according to enterprise procedures • collect samples and conduct tests according to enterprise procedures • conduct routine maintenance according to enterprise procedures • clean and sanitise equipment according to enterprise procedures • use oral communication skills/language competence to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor • work cooperatively within a culturally diverse workforce 		
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Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Coffee Roasting and Grounding Level II	
Unit Title	Pre-Process Raw Materials
Unit Code	IND CRG2 04 0613
Unit Descriptor	This unit of competency covers the skills and knowledge required to set up, operate, adjust and shut down preparation and pre-processing of raw materials.

Elements	Performance Criteria
1. Prepare for pre-processing	<p>1.1 Materials are confirmed and available to meet operating requirements.</p> <p>1.2 Cleaning and maintenance requirements and status are identified and confirmed.</p> <p>1.3 Machine components and related attachments are fitted and adjusted to meet operating requirements.</p> <p>1.4 Processing/operating parameters are entered as required to meet safety and production requirements.</p> <p>1.5 Equipment performance is checked and adjusted as required.</p> <p>1.6 Pre-start checks are carried out as required by workplace requirements.</p>
2. Operate and monitor the pre-processing process	<p>2.1 The process is started and operated according to work place policies and procedures.</p> <p>2.2 Equipment is monitored to identify variation in operating conditions.</p> <p>2.3 Variation in equipment operation is identified and maintenance requirements are reported according to work place reporting requirements.</p> <p>2.4 The process is monitored to confirm that specifications are met.</p> <p>2.5 Out-of-specification product/process outcomes are identified, rectified and/or reported to maintain the process within specification.</p> <p>2.6 The work area is maintained according to housekeeping standards.</p> <p>2.7 Work is conducted in accordance with work place environmental guide lines.</p> <p>2.8 Work place records are maintained according to work place recording requirements.</p>

3. Shut down the pre-processing process	<p>3.1 The appropriate shutdown procedure is identified.</p> <p>3.2 The process is shut down according to workplace procedures.</p> <p>3.3 Maintenance requirements are identified and reported according to workplace reporting requirements.</p>
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Variable	Range
Services/Materials	May include: <ul style="list-style-type: none"> • power • steam • water • vacuum • compressed and instrumentation air
Pre-processing methods	May include: <ul style="list-style-type: none"> • Cleaning • Sorting • Grading • fully or semi-automated peeling • other specialist processes
Workplace information/records	May include: <ul style="list-style-type: none"> • Standard Operating Procedures (SOPs) • specifications • production schedules and instructions • manufacturers' advice • standard forms and reports
Policies and procedures	May include: <ul style="list-style-type: none"> • Work is carried out according to:- • company policies and procedures • regulatory and licensing requirements • legislative requirements and • industrial awards and agreements
Legislative requirements	May include: <ul style="list-style-type: none"> • Legislative requirements are typically reflected in procedures and specifications. Legislation relevant to this industry includes: • the Food Standards Code, including labelling, weights and measures legislation • legislation covering food safety, environmental management, OHS, anti-discrimination and equal opportunity
Shutdown procedures	May include: <ul style="list-style-type: none"> • cleaning (in some cases cleaning may be carried out by a dedicated cleaning crew)
Operation of equipment and processes	May require: <ul style="list-style-type: none"> • The use of process control panels and systems

Evidence Guide	
Critical Aspects of Competency	<p>Must confirm appropriate knowledge and skills to:</p> <ul style="list-style-type: none"> • conduct pre-start checks on machinery used for preparation of raw materials • start, operate, monitor and adjust process equipment to achieve required quality outcomes • take corrective action in response to typical faults and inconsistencies • complete workplace records as required • apply safe work practices and identify OHS hazards and controls • safely shut down equipment • Apply food safety procedures.
Underpinning Knowledge	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • purpose and basic principles of pre-processing used • basic operating principles of equipment, such as main equipment components, status and purpose of guards, equipment operating capacities and applications, and the purpose and location of sensors and related feedback instrumentation • the flow of the process and the effect of product output on downstream processes • quality characteristics to be achieved at the pre-processing stage • effect of raw material characteristics on process performance • operating requirements and parameters and corrective action required where operation is outside specified operating parameters • typical equipment faults and related causes, including signs and symptoms of faulty equipment and early warning signs of potential problems • techniques used to monitor the process, such as inspecting, measuring and testing as required by the process • inspection or test points (control points) in the process and the related procedures and recording requirements • contamination/food safety risks associated with pre-processing and related control measures • common causes of variation and corrective action required • Operational Health and Safety (OHS) hazards and controls, including limitations of protective clothing and equipment relevant to the work process • requirements of different shutdowns as appropriate to the process and workplace production requirements, including emergency and routine shutdowns and procedures to follow in the event of a power outage

	<ul style="list-style-type: none"> • isolation, lock out and tag out procedures and responsibilities • product/process changeover procedures and responsibilities • procedures and responsibility for reporting production and performance information • environmental issues and controls relevant to the process, including waste/rework collection and handling procedures related to the process • basic operating principles of process control, where relevant, including the relationship between control panels and systems and the physical equipment • sampling and testing associated with process monitoring and control where relevant • routine maintenance procedures where relevant • cleaning and sanitation procedures where relevant
Underpinning Skills	<p>Demonstrate skills to:</p> <ul style="list-style-type: none"> • access workplace information to identify processing requirements • select, fit and use personal protective clothing and/or equipment • confirm supply of necessary materials and services • conduct pre-start checks, such as inspecting equipment condition to identify any signs of wear, selecting appropriate settings and/or related parameters, cancelling isolation or lockouts as required, confirming that equipment is clean and correctly configured for processing requirements, positioning sensors and controls correctly, ensuring any scheduled maintenance has been carried out, and confirming that all safety guards are in place and operational • load or transfer materials to pre-processing equipment • start, operate and adjust process equipment to achieve required outcomes, including monitoring control points and conducting inspections as required to confirm process remains within specification • monitor supply and flow of materials to and from the process • take corrective action in response to out-of-specification results • respond to and/or report equipment failure within level of responsibility • locate emergency stop functions on equipment • follow isolation and lock out/tag out procedures as required to take process and related equipment off-line in preparation for cleaning and/or maintenance within level of responsibility • demonstrate batch/product changeovers

	<ul style="list-style-type: none"> • complete workplace records as required • maintain work area to meet housekeeping standards • use process control systems according to enterprise procedures • collect samples and conduct tests according to enterprise procedures • conduct routine maintenance according to enterprise procedures • clean and sanitise equipment according to enterprise procedures • use oral communication skills/language competence to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor • work cooperatively within a culturally diverse workforce
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Coffee Roasting and Grounding Level II	
Unit Title	Understand Coffee Roasting and Grounding Operations and Technologies
Unit Code	<u>IND CRG2 05 0613</u>
Unit Descriptor	This unit of competency covers the overall knowledge of coffee roasting and grounding operations, a coffee processing employee requires to operate safely and effectively in a coffee production.

Elements	Performance Criteria
1. Locate coffee blending, roasting and grounding departments, walkways, storage and assembly areas	<p>1.1 Raw materials receive and storage areas are located.</p> <p>1.2 Control rooms and other main operator stations are located.</p> <p>1.3 Coffee blending, roasting and grounding areas are located.</p> <p>1.4 Additive storage is located.</p> <p>1.5 Support services, including maintenance, administration, laboratory and quality assurance, and information technology departments are located.</p> <p>1.6 Finished coffee products storage and dispatch areas are located.</p> <p>1.7 Walkways and emergency assembly areas are located.</p>
2. Describe flow of product through Roasting & Grounding and purpose of each stage in the production process	<p>2.1 Main raw materials and source are described.</p> <p>2.2 Receive processes including weighing, volume and quality checks are described.</p> <p>2.3 Coffee blending, roasting and grounding process are described.</p> <p>2.4 Batching and blending processes, including recipe, micronutrients and additives are described.</p> <p>2.5 Post-roasting and grounding processes are described.</p> <p>2.6 Labeling and packing operations are described.</p>
3. Describe range of Roasting and Grounding Coffee, their purpose and target varieties	<p>3.1 Differences in varieties, flavor and taste of roasted and grounding coffee are identified.</p> <p>3.2 Target varieties of green coffee beans for coffee roasting and grounding products are identified.</p> <p>3.3 Benefits of roasted and grounded coffee are described to producers.</p>
4. Describe main risks to coffee roasting and grounding operations	<p>4.1 Explain importance of dust control and dust control procedures are explained.</p> <p>4.2 Explain importance of typical Pest control and pest control procedures are explained.</p>

	<p>4.3 Additives requiring special safety and handling procedures are identified.</p> <p>4.4 Main risks to quality, including contamination, incorrect recipe adherence, incorrect sequencing and product transference, incorrect labeling and packaging are described.</p> <p>4.5 Environmental procedures are identified for roasting and grounding operations.</p>
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Variable	Range
Coffee blending, roasting and grounding departments/area	<p>May include:</p> <ul style="list-style-type: none"> • road and rail Coffee Bean receive, including weighbridges, general inwards goods receive • bulk and packaged raw materials storage • roasting and grounding , batch and mixing, Blending, production areas • maintenance • administration • laboratory and quality assurance • information technology • bulk and packaged finished products storage • road and rail despatch
Coffee products	<p>May include:</p> <ul style="list-style-type: none"> • Regular coffee i.e. Roasted/and Grounded coffee) • Instant coffee • Coffee extracts, essences • Flavour Coffee
Coffee blending, roasting and grounding process	<p>May includes:</p> <ul style="list-style-type: none"> • batching and blending of components, including any micronutrients and other additives • steam conditioning or hot drying • Caffeine Extraction • Roasting • Cooling • Destining • Equilibration • Grounding • Water extraction • Spray drying or Freeze drying • quality checking • labelling • packing and despatch
Target varieties	<p>May include:</p> <ul style="list-style-type: none"> • Coffee Arabica • Coffee varieties from different region/area

Typical pests	<p>May include:</p> <ul style="list-style-type: none"> • rodents • birds • insects • Coffee Leaf Miner (CLM) • Nematodes(N) • Green Scale (GS) • Hemispherical Scale(HS) • Mealy Bugs(MB) • Aphids(A)
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Evidence Guide	
Critical Aspects of Competency	<p>Must confirm appropriate knowledge and skills to:</p> <ul style="list-style-type: none"> • identify and locate departments, major walkways and assembly areas in the Coffee blending, roasting and grounding production process • describe the major steps in the Coffee blending, roasting and grounding production process • describe Coffee products and purposes, basic role of additives, typical target varieties • Identify major risk factors including dust, pests, contamination and incorrect adherence to recipes.
Underpinning Knowledge	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • purpose and basic principles of each part of the Coffee blending, roasting and grounding production process • range of raw materials and typical sourcing • Coffee product range and target varieties • basic operating principles of equipment and main equipment components • basic operating principles of process control, including the relationship between control rooms and panels and the physical equipment • the flow of the Coffee blending, roasting and grounding production process • quality characteristics and uses of finished Coffee product • operating requirements and parameters and corrective action required where operation is outside specified operating parameters • methods used to monitor the Coffee blending, roasting and grounding process, such as inspecting, measuring and testing as required by the process • contamination risks and related controls • OHS hazards and controls, including dust, contamination and materials requiring special handling procedures and emergency assembly areas
Underpinning Skills	<p>Demonstrate skills to:</p> <ul style="list-style-type: none"> • access workplace information to identify processing requirements

	<ul style="list-style-type: none"> • read diagrams and sketches • use oral communication skills/language competence to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor • work cooperatively within a culturally diverse workforce
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Coffee Roasting and Grounding Level II	
Unit Title	Clean and Sanitize Equipment
Unit Code	IND CRG2 06 0613
Unit Descriptor	This unit of competency covers the purpose and effect of cleaning, sanitation and related procedures for Roasting, Blending & Grounding production equipment. This is an operational/Specialist unit. This unit should be selected where the operator is primarily responsible for cleaning and/or where they require a more detailed knowledge of cleaning and sanitation processes to carry out cleaning responsibilities This unit applies to both wet and dry cleaning methods.

Elements	Performance Criteria
1. Prepare for cleaning	<p>1.1 Cleaning/sanitizing agents and services are made available and ready for use.</p> <p>1.2 Workplace information about cleaning and sanitizing equipment is identified.</p> <p>1.3 Equipment is cleared of product and/or packaging consumables in preparation for cleaning.</p> <p>1.4 Equipment is rendered safe to clean.</p>
2. Clean and sanitize equipment to meet workplace requirements	<p>2.1 Equipment is cleaned and sanitized according to workplace procedure and requirements.</p> <p>2.2 Cleaning and sanitizing chemical is used according to workplace procedure and requirements.</p> <p>2.3 Equipment is inspected to confirm operating condition and cleanliness.</p> <p>2.4 Unacceptable equipment condition is identified and reported according to workplace procedures.</p> <p>2.5 Cleaning equipment and chemicals are stored according to workplace procedures.</p> <p>2.6 Waste from cleaning process is disposed of according to work place procedures.</p> <p>2.7 Equipment is restored to operating order.</p>

Variable	Range
Services	<p>May include:</p> <ul style="list-style-type: none"> • power • water • steam • compressed and instrumentation air
Workplace information	<p>May include:</p> <ul style="list-style-type: none"> • work instructions/Standard Operating Procedures (SOPs) • specifications • production and cleaning schedules

	<ul style="list-style-type: none"> • labels and codes • safety signs and symbols • Materials Safety Data Sheets (MSDS) • standard forms • written or verbal instruction
Workplace procedures	<p>May include:</p> <ul style="list-style-type: none"> • Carried out in accordance with company procedures, licensing requirements, legislative requirements, and industrial awards and agreements.
Cleaning and sanitizing chemicals	<p>May Include:</p> <ul style="list-style-type: none"> • pre-mixed or manually mixed
Preparing/restoring equipment	<p>May include:</p> <ul style="list-style-type: none"> • simple dismantling and reassembling of equipment parts • basic isolation • covering of motors and instrumentation
Inspecting cleaning effectiveness	<p>May include:</p> <ul style="list-style-type: none"> • carrying out a visual inspection

Evidence Guide	
Critical Aspects of Competency	<p>Must confirm appropriate knowledge and skills to:</p> <ul style="list-style-type: none"> • prepare equipment for cleaning • prepare and use chemicals according to safe work requirements • clean and sanitize equipment to meet work standards • monitor cleaning and report or address any non-compliances • dispose of waste according to environmental guidelines • complete required documentation • apply safe work practices and identify OHS hazards and controls • apply food safety procedures
Underpinning Knowledge	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • The purpose of cleaning and sanitation and importance in maintaining food safety • Functions of cleaners, sanitizers and related equipment • Safe work procedures, including appropriate signage of cleaning activities, safe handling and storage of cleaners and sanitizers used, safety when using cleaning methods, such as hot water and steam hoses, and status and purpose of safety guards • Purpose and limitations of protective clothing and equipment • Cleaning and sanitation requirements relating to work responsibilities, including the need for different levels of cleaning where relevant • Procedures for preparing cleaners and sanitizers as required

	<ul style="list-style-type: none"> • Cleaning methods to be followed relating to work responsibilities • other work areas/operators who need to be consulted/advised on timing of cleaning • Methods used to render equipment safe to clean, including understanding the status and purpose of equipment guards, relevant lock out/tag out and isolation procedures and related equipment settings for both cleaning and operating as required • procedures for conducting cleaning and sanitizing • Types of waste generated by the cleaning process and related collection, treatment and disposal requirements • Potential environmental impact of incorrect waste handling • Inspection, cleaning and storage requirements of cleaning equipment used • Inspection points and methods for confirming the effectiveness of cleaning and sanitation, including visual inspection, and where required, recording of cleaning conducted • Inspection requirements to confirm equipment condition, including acceptable equipment condition, ability to identify faulty or unacceptable equipment and take required corrective action • Recording requirements and responsibilities • Routine maintenance procedures where relevant • Sampling methods and test procedures where relevant
Underpinning Skills	<p>Demonstrate skills to:</p> <ul style="list-style-type: none"> • Access workplace information, such as the cleaning schedule to identify cleaning requirements • Select, fit and use personal protective clothing and/or equipment • Confirm supply of necessary cleaning and sanitizing equipment and services • Select and prepare cleaners and sanitizers as required according to workplace procedures • Prepare equipment for cleaning, such as rendering equipment safe to clean, clearing product and waste materials, covering motors and instrumentation where steam or water hoses are used, and simple dismantling of equipment parts • Advise any affected work areas/operators of cleaning progress to coordinate timely completion with minimal disruption to production • Clean and sanitize equipment as required according to workplace procedures and cleaning schedule • Return equipment to operating order (this may involve basic assembly of equipment parts)

	<ul style="list-style-type: none"> • Inspect equipment to identify equipment condition and cleanliness • Locate emergency stop functions on equipment • Report and/or correct unacceptable equipment condition • Maintain housekeeping standards • Prepare cleaners and sanitizers as required • Store cleaners, sanitizers and related equipment as required • Carry out relevant checks and inspections • Maintain work area to meet housekeeping standards • Conduct routine maintenance according to enterprise procedures • Take samples and conduct tests according to enterprise procedures • Record cleaning and sanitation information according to enterprise procedures • Use oral communication skills/language competence to fulfill the job role as specified by the organization, including questioning, active listening, asking for clarification and seeking advice from supervisor • Work cooperatively within a culturally diverse workforce
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Coffee Roasting and Grounding Level II	
Unit Title	Manufacture Coffee (Roast and Ground)
Unit Code	IND CRG2 07 0613
Unit Descriptor	This unit of competency covers the skills and knowledge required to set up, operate, adjust and shut down a blending, roasting and grinding process.

Elements	Performance Criteria
1. Prepare the blending, roasting and grinding process for operation	<p>1.1 Materials are confirmed and available to meet production specifications/ operating requirements.</p> <p>1.2 Cleaning and maintenance requirements and status are identified and confirmed.</p> <p>1.3 Machine components and related attachments are fitted and adjusted to meet operating requirements.</p> <p>1.4 Processing/operating parameters are entered as required to meet safety and production requirements.</p> <p>1.5 Materials, ingredients, product and/or consumables are loaded or positioned as required to meet production requirements.</p> <p>1.6 Services are confirmed as available and ready for operation.</p> <p>1.7 Equipment performance is checked and adjusted as required.</p> <p>1.8 The process is set to meet production specifications.</p> <p>1.9 Pre-start checks are carried out as required by workplace requirements.</p>
2. Operate and monitor the blending, roasting and grinding process	<p>2.1 The roasting and grinding process is started up and operated according to company/workplace procedures.</p> <p>2.2 Ingredients are delivered to the blender in the required quantities and sequence to meet recipe specifications.</p> <p>2.3 Green beans are blended and roasted according to product and recipe specifications.</p> <p>2.4 The process is monitored to confirm that ingredients are blended to meet specifications.</p> <p>2.5 Roasted beans are ground to product specifications.</p> <p>2.6 Control points are monitored to confirm product meets specification.</p> <p>2.7 Ground and roasted product meets specifications.</p> <p>2.8 Equipment is monitored to identify variation in operating conditions.</p>

	<p>2.9 Variation in equipment operation is identified and maintenance requirements are reported according to workplace reporting requirements.</p> <p>2.10 Equipment is monitored to confirm operating condition.</p> <p>2.11 Out-of-specification product, process and equipment performance are identified, rectified and/or reported to maintain the process within specification.</p> <p>2.12 The work area is maintained according to housekeeping standards.</p> <p>2.13 Work is conducted according to environmental standards/Workplace environmental guidelines.</p>
3. Shut down the grinding and roasting process	<p>3.1 The appropriate shutdown procedure is identified.</p> <p>3.2 The process is shut-down according to company/workplace procedures.</p> <p>3.3 Waste generated by the process is collected, treated and disposed or recycled according to company procedures.</p> <p>3.4 Maintenance requirements are identified and reported according to workplace reporting requirements.</p>
4. Record information	<p>4.1 Workplace information and test results are recorded in the appropriate format.</p> <p>4.2 Workplace records are maintained according to workplace recording requirements.</p>

Variable	Range
Materials	May include: <ul style="list-style-type: none"> • varieties of green coffee beans • process and packaging consumables
Legislative requirements	May includes: <ul style="list-style-type: none"> • the Food Standards Code, including labelling, weights and measures legislation • legislation covering food safety, environmental management, OHS, anti-discrimination and equal opportunity • Special product requirements include: • Halals and Kosher licence
Services	May include: <ul style="list-style-type: none"> • Power • Steam • Water • Vacuum • Compressed and instrumentation air
Equipment	May include: <ul style="list-style-type: none"> • Roasters • Grinding/milling system

	<ul style="list-style-type: none"> • Blenders • Transfer and storage systems • Color meters • Destines/ destines
Process operation and monitoring functions	<p>May include:</p> <ul style="list-style-type: none"> • manual or involve the use of a process control system
Policy and procedure	<p>May include:</p> <ul style="list-style-type: none"> • Regulatory and licensing requirements • Legislative requirements • Industrial awards and agreements
Control points	<p>May include:</p> <ul style="list-style-type: none"> • Food safety (critical) • Quality and regulatory control points • Inspections points
Confirming equipment status	<p>May include:</p> <ul style="list-style-type: none"> • Checking that hygiene and sanitation standards are met • All safety systems • Equipment is operational.
Monitoring the process	<p>May include:</p> <ul style="list-style-type: none"> • use of production data such as performance control charts
Work is carried out	<p>May include:</p> <ul style="list-style-type: none"> • moving vehicles • equipment
Shutdown procedures	<p>May include:</p> <ul style="list-style-type: none"> • cleaning(in some cases cleaning may be carried out by a dedicated cleaning crew)
Work	<p>May include:</p> <ul style="list-style-type: none"> • exposure to chemicals • dangerous or hazardous substances
Information systems	<p>May include:</p> <ul style="list-style-type: none"> • print • screen base
Workplace information	<p>May include:</p> <ul style="list-style-type: none"> • Standard Operating Procedures (SOPs), • specifications, • production schedules and instructions • batch/recipe instructions • Manufacturers' advice • Standard forms and reports

Evidence Guide	
Critical Aspects of Competency	<p>Must confirm appropriate knowledge and skills to:</p> <ul style="list-style-type: none"> • Conduct pre-start checks on machinery used for blending, roasting and grinding • Start, operate, monitor and adjust process equipment to achieve required quality outcomes

	<ul style="list-style-type: none"> • Take corrective action in response to typical faults and inconsistencies • Complete workplace records as required • Apply safe work practices and identify OHS hazards and controls • Safely shut down equipment • Apply food safety procedures to work practice 		
Underpinning Knowledge	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • Key features of the roasting and grinding process • Purpose of each stage in the roasting and grinding process and links to other related stages and processes • Purpose and basic principles of the process, including the method and sequence of ingredient addition required to achieve required blend characteristics • Varieties and characteristics of green beans used • Effect of green bean types on flavor profile • Effect of each stage on quality of end product • Effect of the grinding, blending and roasting process on the end product • Effect of raw material characteristics on grinding, blending and roasting process performance • Process specifications, procedures and operating parameters for the manufacture of roast and ground coffee. This may include: <ul style="list-style-type: none"> ➤ blending ➤ roasting and grinding • production requirements and schedules • equipment and instrumentation components, purpose, capabilities and operation • basic operating principles of process control system where relevant • services required and action to take if services are not available • significance and methods of monitoring control points within the process • common causes of variation and corrective action required • OHS hazards and controls • lock out and tag out procedures • procedures for diagnosing, rectifying and reporting faults • environmental aspects, impacts and controls • shut down and cleaning requirements associated with changeovers and types of shut downs • waste disposal and recycling principles and procedures • quality characteristics and uses of roasting, blending and grinding process outputs • Recording requirements and procedures • The flow of the grinding, blending and roasting process and the effect of product output on downstream processes 		
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	<ul style="list-style-type: none"> • operating requirements and parameters and corrective action required where operation is outside specified operating parameters • Typical equipment faults and related causes, including signs and symptoms of faulty equipment and early warning signs of potential problems • Techniques used to monitor the production process, such as inspecting, measuring and testing as required by the process • Inspection or test points (control points) in the process and the related procedures and recording requirements Contamination/food safety risks associated with the grinding, blending and roasting process and related control measures <ul style="list-style-type: none"> ➤ cleaning and sanitation procedures ➤ sampling and testing procedures ➤ routine maintenance procedures
Underpinning Skills	<p>Demonstrate skills to:</p> <ul style="list-style-type: none"> • Access workplace information to identify production requirements • Confirm supply of necessary materials and services • Liaise with other work areas. This may include storage and packaging areas • select, fit and use personal protective clothing and/or equipment • Confirm equipment status and condition of equipment set-up and start up equipment • Monitor roasting equipment to maintain roasted product within specification. This may include monitoring for: <ul style="list-style-type: none"> ➤ Temperature ➤ Roasting times ➤ Level of product in roast coffee silo/site ➤ Water quench quantity ➤ Roast bean color • Monitor Grinding equipment to maintain ground product within specification. This may include monitoring for: <ul style="list-style-type: none"> ➤ Weight ➤ Density ➤ Particle size distribution • monitor supply and flow of materials to and from the grinding process • Take corrective action in response to out-of specification results or non-compliance • Report and/or record corrective action as required • Monitor supply and flow of materials to and from the process • Sort, collect, treat, recycle or dispose of waste • Conduct product/batch/line changeovers

	<ul style="list-style-type: none"> • complete workplace records as required • shut down equipment in response to an emergency situation • shut down equipment in response to routine shut down requirements • conduct pre-start checks, such as inspecting equipment condition to identify any signs of wear, selecting appropriate settings and/or related parameters, cancelling isolation or lock outs as required, confirming that equipment is clean and correctly configured for processing requirements, positioning sensors and controls correctly, ensuring any scheduled maintenance has been carried out, and confirming that all safety guards are in place and operational • prepare equipment for cleaning • maintain workplace records • maintain work area to meet housekeeping standards • locate emergency stop functions on equipment • follow isolation and lock out/tag out procedures as required to take process and related equipment off-line in preparation for cleaning and/or maintenance within level of responsibility • collect samples and conduct tests according to enterprise procedures • conduct routine maintenance according to enterprise procedures • clean and sanitise equipment according to enterprise procedures • use oral communication skills/language competence to fulfill the job role as specified by the organization, including questioning, active listening, asking for clarification and seeking advice from supervisor • work cooperatively within a culturally diverse workforce to: <ul style="list-style-type: none"> ➢ Clean and sanitize of equipment ➢ Take samples and conduct tests ➢ Carry out routine maintenance
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Coffee Roasting and Grinding Level II	
Unit Title	Manufacturing Instant Coffee
Unit Code	IND CRG2 08 0613
Unit Descriptor	This is a specialist unit that has been developed for coffee processing sector. It covers the preparation and operation of the instant coffee manufacturing process.

Elements	Performance Criteria
1. Prepare the instant coffee process for operation	<p>1.1 Materials are confirmed and available to meet productions pacifications.</p> <p>1.2 Services are confirmed as available and ready for operation.</p> <p>1.3 Equipment is checked to confirm readiness for use.</p> <p>1.4 The process is set to meet production specifications.</p>
2. Operate and monitor the instant coffee process	<p>2.1 The instant coffee manufacturing process is started up according to company procedures.</p> <p>2.2 Soluble coffee solids are extracted, aroma is recovered and coffee liquor is concentrated and dried according to company procedures.</p> <p>2.3 Control points are monitored to confirm product meets specification.</p> <p>2.4 Instant coffee is manufactured to specification.</p> <p>2.5 Equipment is monitored to confirm operating condition.</p> <p>2.6 Out-of-specification product, process and equipment performance are identified, rectified and/or reported.</p> <p>2.7 Waste generated by the process is monitored and cleared as required.</p>
3. Shut down the process and clean equipment	<p>3.1 The process is shutdown according to company procedures.</p> <p>3.2 Equipment is prepared for cleaning.</p> <p>3.3 Equipment is cleaned to meet production and hygiene requirements.</p> <p>3.4 Waste generated by both the process and cleaning procedures is collected, treated and disposed or recycled according to company procedures.</p>
4. Record information	<p>4.1 Workplace information and test results are recorded in the appropriate format.</p>

Variable	Range
Materials	May include ground/milled coffee beans, process and packaging consumables

Production equipment	May include <ul style="list-style-type: none"> extraction, concentration/evaporation, and drying equipment
Services	may include <ul style="list-style-type: none"> power, steam, water, vacuum, compressed and instrumentation air
Confirming equipment	May involves: <ul style="list-style-type: none"> checking that hygiene and sanitation standards are met, all safety guards are in place and equipment is operational
Control points	May include: <ul style="list-style-type: none"> Those key points in a work process that must be monitored and controlled. This includes food safety (critical), quality and regulatory control points as well as inspections points
Monitoring the process	may involve: <ul style="list-style-type: none"> the use of production data such as performance control charts
Process operation and monitoring functions	may be : <ul style="list-style-type: none"> manual or involve the use of a process control system
Police and procedure	May include: <ul style="list-style-type: none"> Work is carried out in accordance with company procedures, legislative requirements and industrial arrangements
Workplace information	May include <ul style="list-style-type: none"> Standard Operating Procedures (SOPs), specifications, production schedules and batch/recipe instructions
Work	May include: <ul style="list-style-type: none"> is carried out in the presence of moving vehicles and equipment exposure to chemicals, dangerous or hazardous substances
Information systems	may be: <ul style="list-style-type: none"> print or screen based

Evidence Guide	
Critical Aspects of Competency	<p>Must confirm appropriate knowledge and skills to:</p> <ul style="list-style-type: none"> Conduct pre-start checks on machinery used for Instant coffee manufacturing Start, operate, monitor and adjust process equipment to achieve required quality outcomes Take corrective action in response to typical faults and inconsistencies Complete workplace records as required Apply safe work practices and identify OHS hazards and controls Safely shut down equipment Apply food safety procedures to work practice

Underpinning Knowledge	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • key features of the instant coffee manufacturing process • purpose of each stage in the process and links to related stages • effect of quality of ground coffee on process outcomes • effect of each stage on the quality of end product • quality parameters for instant coffee <ul style="list-style-type: none"> ➢ density ➢ color ➢ flavor ➢ texture • process specifications, procedures and operating parameters for manufacturing instant coffee <ul style="list-style-type: none"> ➢ blending ➢ evaporation ➢ extraction and spray drying • equipment and instrumentation components capabilities, purpose and operation • basic operating principles of process control system where relevant • services • significance and methods of monitoring control points within the process • common causes of variation and corrective action required • OHS hazards and controls • lock out and tag out procedures • procedures for diagnosing, rectifying and reporting faults • environmental aspects, impacts and controls • shut down and cleaning requirements associated with changeovers and types of shut downs • cleaning and sanitation procedures for evaporation equipment and extraction cells • OHS requirements for handling acid and caustic solutions used in cleaning • waste handling requirements and procedures • recording requirements and procedures <ul style="list-style-type: none"> ➢ sampling and testing procedures ➢ routine maintenance procedures
Underpinning Skills	<p>Demonstrate skills to:</p> <ul style="list-style-type: none"> • access workplace information to identify production requirements • confirm supply of necessary materials and services • select fit and use personal protective clothing and or equipment • Liaise with other work areas. This may include storage and packaging areas • Confirm equipment status and condition of equipment. set-up and start up equipment (cont.)

	<ul style="list-style-type: none"> • Monitor extraction equipment to identify out -of-specification results on non-compliance. <ul style="list-style-type: none"> ➢ the relationship between feed water temperature, pressure and time ➢ product consistency, solids ➢ concentration, sedimentation, solids yield determination • Out -of-specification results on noncompliance. This may include monitoring for <ul style="list-style-type: none"> ➢ liquor quality ➢ degree of sedimentation ➢ operating parameters of centrifugal clarifier ➢ flow rate, temperature, solids • Monitor drying equipment to identify out –of specification results on non-compliance. <ul style="list-style-type: none"> ➢ flow rates ➢ temperature ➢ chamber vacuum ➢ bed shaking speed • take corrective action in response to out-of specification • results or non-compliance • report and/or record corrective action as required • monitor supply and flow of materials to and from the process • sort, collect, treat, recycle or dispose of waste • conduct product/batch/line changeovers shut down equipment in response to an emergency situation • shut down equipment in response to routine shut down requirements • prepare equipment for cleaning • clean extraction cells and evaporation equipment. This may involve using caustic solution in manual /automatic mode and acid rinses for the extraction equipment • maintain workplace records • maintain work area to meet housekeeping standards <ul style="list-style-type: none"> ➢ take samples and conduct tests ➢ carry out routine maintenance
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Coffee Roasting and Grounding Level II	
Unit Title	Perform Basic Tests
Unit Code	IND CRG2 09 0312
Unit Descriptor	This unit of competency covers the ability to perform tests and measurements using standard methods with access to readily available advice from supervisors.

Elements	Performance Criteria
1. Interpret test requirements	<p>1.1 Test request is reviewed to identify samples to be tested, test method and equipment involved</p> <p>1.2 Hazards and enterprise controls associated with the sample, preparation methods, reagents and/or equipment are identified</p> <p>1.3 Typical tests carried out by laboratory/ field assistants are identified</p>
2. Prepare sample	<p>2.1 Sample description is recorded and compared with specification, discrepancies are recorded and reported</p> <p>2.2 Sample is prepared in accordance with appropriate standard methods</p>
3. Check equipment before use	<p>3.1 Test equipment is set up in accordance with test method</p> <p>3.2 Pre-use and safety checks are performed in accordance with enterprise procedures and manufacturer's instructions</p> <p>3.3 Faulty or unsafe equipment is identified and reported to appropriate personnel</p> <p>3.4 Calibration status of equipment is checked and any out of calibration items are reported to appropriate personnel</p>
4. Perform tests on samples	<p>4.1 Sample and standards to be tested are identified, prepared and weighed or measured</p> <p>4.2 Tests are conducted in accordance with enterprise procedures</p> <p>4.3 Data is recorded in accordance with enterprise procedures</p> <p>4.4 Calculations on data are performed as required</p> <p>4.5 Out of specification or atypical results is/are identified and reported promptly to appropriate personnel</p> <p>4.6 Equipment is shut down in accordance with operating procedures</p>
5. Maintain a safe work environment	<p>5.1 Established safe work practices and personal protective equipment are used to ensure personal safety and that of other laboratory personnel</p> <p>5.2 The generation of wastes and minimizing environmental impacts is minimized</p>

	<p>5.3 Safe disposal of laboratory and hazardous wastes is ensured</p> <p>5.4 Equipment and reagents are cleaned, cared for and stored as required</p>
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Variable	Range
Hazards	<p>May include:</p> <ul style="list-style-type: none"> • electric shock • biohazards, such as microbiological organisms and agents associated with soil, air, water, blood and blood products, and human or animal tissue and fluids • solar radiation, dust and noise • chemicals, such as sulphuric acid, fluorides and hydrocarbons • aerosols • sharps, broken glassware and hand tools • flammable liquids • dry ice and liquid nitrogen • fluids under pressure • sources of ignition • occupational overuse syndrome, slips, trips and falls • manual handling, working at heights and working in confined spaces • crushing, entanglement and cuts associated with moving machinery or falling objects
Enterprise controls to address hazards	<p>May include:</p> <ul style="list-style-type: none"> • use of MSDS • use of signage, barriers and service isolation tags • use of personal protective equipment, such as hard hats, hearing protection, sunscreen lotion, gloves, safety glasses, goggles, face guards, coveralls, gowns, body suits, respirators and safety boots • use of appropriate equipment, such as biohazard containers and cabinets and laminar flow cabinets • recognising and observing hazard warnings and safety signs • labelling of samples, reagents, aliquot samples and hazardous materials • handling and storage of all hazardous materials and equipment in accordance with labelling, MSDS and manufacturer's instructions, and enterprise procedures and regulations • cleaning and decontaminating equipment and work areas regularly using recommended procedures • following established manual handling procedures for tasks involving manual handling

<p>Typical tests carried out by laboratory/ field assistants</p>	<p>May include:</p> <ul style="list-style-type: none"> • visual/optical tests of appearance, colour, texture, identity, turbidity, refractive index (alcohol content and Baume/Brix) • physical tests: <ul style="list-style-type: none"> ➢ density, specific gravity and compacted density ➢ moisture content and water activity ➢ particle size, particle shape and size distribution • chemical tests: <ul style="list-style-type: none"> ➢ gravimetric ➢ colorimetric ➢ Electrical Conductivity (EC) and pH ➢ specific ions using dipsticks and kits ➢ nutrients (e.g. nitrates and orthophosphates) using basic kits ➢ ashes, including sulphated ashes • biological/environmental tests: <ul style="list-style-type: none"> ➢ pH, Oxygen Reduction Potential (ORP), Dissolved Oxygen (DO) and (EC) ➢ E coli using test kits ➢ surface hygiene/presence of microbes • packaging tests: <ul style="list-style-type: none"> ➢ tearing resistance, moisture resistance, bursting strength and impact resistance ➢ permeability and/or leakage • mechanical tests: <ul style="list-style-type: none"> ➢ Emerson class concrete slump
<p>Preparation of samples</p>	<p>May include:</p> <ul style="list-style-type: none"> • sub-sampling or splitting using procedures, such as riffing, coning and quartering, manual and mechanical splitters • diluting samples • physical treatments, such as aching, dissolving, filtration, sieving, centrifugation and combination • moulding, casting or cutting specimens
<p>Standards</p>	<p>May include:</p> <ul style="list-style-type: none"> • Ethiopian code of Good Manufacturing Practice for medicinal products (GMP) • calibration and maintenance schedules • enterprise recording and reporting procedures • equipment manuals • equipment start-up, operation and shutdown procedures • MSDS and safety procedures • material, production and product specifications • national measurement regulations and guidelines • principles of Good Laboratory Practice (GLP) • production and laboratory schedules • quality manuals • Standard Operating Procedures (SOPs)

Minimizing environmental impacts	<p>May include:</p> <ul style="list-style-type: none"> • recycling of non-hazardous waste, such as chemicals, batteries, plastic, metals and glass • appropriate disposal of hazardous waste • correct disposal of excess sample/test material • correct storage and handling of hazardous chemicals
Common measuring equipment	<p>May include:</p> <ul style="list-style-type: none"> • dimension apparatus • DO and EC • analogue and digital meters and charts/recorders • basic chemical and biological test kits • dipsticks and site test kits (e.g. HACK) • timing devices • temperature measuring devices, such as thermometers and thermocouples
Occupational Health and Safety (OHS) and environmental management requirements	<p>May include:</p> <ul style="list-style-type: none"> • all operations must comply with enterprise OHS and environmental management requirements, which may be imposed through state/territory or federal legislation - these requirements must not be compromised at any time • all operations assume the potentially hazardous nature of samples and require standard precautions to be applied • where relevant, users should access and apply current industry understanding of infection control issued by the Concerned body of Health
Concepts of metrology	<p>May include:</p> <ul style="list-style-type: none"> • that all measurements are estimates • measurements belong to a population of measurements of the measured parameters • repeatability • precision • accuracy • significant figures • sources of error • uncertainty • traceability
Measurements	<p>May include:</p> <ul style="list-style-type: none"> • simple ground surveys • meteorological parameters, such as wind direction/strength, rainfall, maximum/minimum temperature, humidity and solar radiation • simple background radiation survey • production/process parameters, such as temperature, flow and pressure • gas levels in a confined space

Evidence Guide			
Critical Aspects of Competency	Must confirm appropriate knowledge and skills to: <ul style="list-style-type: none"> • accurately interpret enterprise procedures or standard methods • complete all tests within the required timeline without sacrificing safety, accuracy or quality • demonstrate close attention to the accuracy and precision of measurements and the data obtained • maintain the security, integrity and traceability of all samples, data/results and documentation 		
Underpinning Knowledge	Demonstrate knowledge of: <ul style="list-style-type: none"> • concepts of metrology • the International System of units (SI) • purpose of test • principles of the standard method • pre-use equipment checks • relevant standards/specifications and their interpretation • sources of uncertainty in measurement and methods for control • enterprise and/or legal traceability requirements • interpretation and recording of test result, including simple calculations • procedures for recognition/reporting of unexpected or unusual results • relevant health, safety and environment requirements 		
Underpinning Skills	Demonstrate skills to: <ul style="list-style-type: none"> • interpreting enterprise procedure or standard methods accurately • using safety information, such as material safety data sheets (MSDS) and performing procedures safely • checking test equipment before use • completing all tests within required timeline without sacrificing safety, accuracy or quality • calculating, recording and presenting results accurately and legibly • maintaining security, integrity and traceability of all samples, data/results and documentation • cleaning and maintaining equipment 		
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.		
Methods of Assessment	Competence may be assessed through: <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration 		
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.		
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Occupational Standard: Coffee Roasting and Grounding Level II	
Unit Title	Operate a Packaging Process
Unit Code	IND CRG2 10 0613
Unit Descriptor	This unit of competency covers the skills and knowledge required to set up, operate, adjust and shut down a packaging process or sub-system

Elements	Performance Criteria
1. Prepare the equipment and process for operation	<p>1.1 Packaging components/consumables, materials and items to be packaged are confirmed and available to meet operating requirements.</p> <p>1.2 Cleaning and maintenance requirements and status are identified and confirmed.</p> <p>1.3 Machine components and related attachments are fitted and adjusted to meet operating requirements.</p> <p>1.4 Operating parameters are entered as required to meet safety and production requirements.</p> <p>1.5 Materials, product and packaging components/consumables are loaded or positioned as required to meet packaging requirements.</p> <p>1.6 Equipment performance is checked and adjusted as required.</p> <p>1.7 Pre-start checks are carried out as required by workplace requirements.</p>
2. Operate and monitor the process	<p>2.1 The process is started and operated according to workplace procedures.</p> <p>2.2 Equipment is monitored to identify variation in operating conditions.</p> <p>2.3 Variation in equipment operation is identified and maintenance requirements are reported according to workplace reporting requirements.</p> <p>2.4 The process is monitored to confirm that specifications are met.</p> <p>2.5 Out-of-specification process outcomes are identified, rectified and/or reported to maintain the process within specification.</p> <p>2.6 The work area is maintained according to housekeeping standards.</p> <p>2.7 Work is conducted in accordance with workplace environmental guidelines.</p> <p>2.8 Workplace records are maintained according to workplace recording requirements.</p>

3. Shut down the process	<p>3.1 The appropriate shutdown procedure is identified</p> <p>3.2 The process is shut down according to workplace procedures</p> <p>3.3 Maintenance requirements are identified and reported according to workplace reporting requirements</p>
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Variable	Range
Packaging	May include: <ul style="list-style-type: none"> • vacuum packing • one way valve packing • Aluminum foil packing • Aluminum can packing • modified atmosphere packaging (MAP) • blister packaging or over wrapping
Legislative requirements	May include: <ul style="list-style-type: none"> • the Food Standards Code, including labeling, weights and measures legislation • legislation covering food safety, environmental management, OHS, anti-discrimination and equal opportunity
Typical equipment	May include: <ul style="list-style-type: none"> • conveyor systems • filling • sealing • wrapping • thermo-form equipment • case packers • bundlers • ink jet coders • labelers • palletizes • shrink wrappers • strappers
Operation of equipment and processes	May include: <ul style="list-style-type: none"> • the use of process control panels and systems
Workplace information	May include: <ul style="list-style-type: none"> • Standard Operating Procedures (SOPs) • specifications • production schedules and instructions • manufacturers' advice • standard forms and reports
Shutdown procedures	May include: <ul style="list-style-type: none"> • cleaning (in some cases cleaning may be carried out by a dedicated cleaning crew)

Policies and procedures	<p>May include:</p> <ul style="list-style-type: none"> • Work is carried out according to company policies and procedures, regulatory and licensing requirements, legislative requirements, and industrial awards and agreements
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Evidence Guide	
Critical Aspects of Competency	<p>Must confirm appropriate knowledge and skills to:</p> <ul style="list-style-type: none"> • conduct pre-start checks on machinery used for packing • start, operate, monitor and adjust process equipment to achieve required quality outcomes • take corrective action in response to typical faults and inconsistencies • complete workplace records as required • apply safe work practices and identify OHS hazards and controls • safely shut down equipment • apply food safety procedures
Underpinning Knowledge	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • purpose and basic principles of the packaging process, including the purpose and characteristics required of packaging materials used and the principles of the packaging process used (where methods involve vacuum or map packaging, it includes an understanding of the effect of modified atmosphere on product shelf-life) • product and packaging coding requirements and related legal requirements, including product weight • basic operating principles of equipment, such as main equipment components, status and purpose of guards, equipment operating capacities and applications, and the purpose and location of sensors and related feedback instrumentation • services required and action to take if services are not available • the flow of processes supplying the packaging process and the effect of outputs on downstream processes • quality characteristics required of the packaging process, such as seal integrity requirements • effect of variation in inputs, such as packaging components/consumables, materials and/or services, on process performance • operating requirements and parameters and corrective action required where operation is outside specified operating parameters, including restart procedures following a crash or jam up • typical equipment faults and related causes, including signs and symptoms of faulty equipment and early warning signs of potential problems

	<ul style="list-style-type: none"> • methods used to monitor the packaging process, such as visual inspecting, and measuring and testing as required by the process • inspection or test points (control points) in the process and the related procedures and recording requirements • contamination/food safety risks related to stages in the packaging process and related control measures • common causes of variation and corrective action required • Occupational Health and Safety (OHS) hazards and controls • requirements of different shutdowns as appropriate to the packaging process, including emergency and routine shutdowns and procedures to follow in the event of a power outage, and conducting basic equipment referencing where required • product/package changeover procedures and responsibilities • isolation, lock out and tag out procedures and responsibilities • procedures and responsibility for reporting production and performance information • environmental issues and controls relevant to the process, including waste/rework collection and handling procedures related to the process • basic operating principles of process control, where relevant, including the relationship between control panels and systems and the physical equipment • routine maintenance procedures where relevant • packaging integrity testing where relevant • cleaning and sanitation procedures where relevant
Underpinning Skills	<p>Demonstrate skills to:</p> <ul style="list-style-type: none"> • access workplace information to identify packaging requirements • select, fit and use personal protective clothing and/or equipment • confirm supply of necessary packaging components/consumables, materials and services • conduct pre-start checks, such as inspecting equipment condition to identify any signs of wear, setting coders and printers, selecting appropriate equipment settings and/or related parameters, cancelling isolation or lockouts as required, confirming that equipment is clean and correctly configured for packaging requirements, positioning sensors and controls correctly, ensuring any scheduled maintenance has been completed, and confirming that all safety guards are in place and operational

	<ul style="list-style-type: none"> • start, operate, monitor and adjust packaging equipment to achieve required outcomes., such as packaging components/consumables and/or product, and monitoring control points (e.g. weights, codes, placement, glue temperatures, alignment and appearance, configuration and seal integrity) as required to confirm process remains within specification • monitor supply and flow of materials to and from the process • take corrective action in response to out-of-specification results • respond to and/or report equipment failure within level of responsibility • locate emergency stop functions on equipment • follow isolation and lock out/tag out procedures as required to take packaging equipment off-line in preparation for cleaning and/or maintenance within level of responsibility • demonstrate batch/process changeovers • complete workplace records as required • maintain work area to meet housekeeping standards • use process control systems according to enterprise procedures • integrity testing of packaging according to enterprise procedures • carry out routine maintenance according to enterprise procedures • clean and sanitize equipment according to enterprise procedures • use oral communication skills/language competence to fulfill the job role as specified by the organization, including questioning, active listening, asking for clarification and seeking advice from supervisor • work cooperatively within a culturally diverse workforce
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Coffee Roasting and Grinding Level II	
Unit Title	Conduct Routine Maintenance
Unit Code	IND CRG2 11 0613
Unit Descriptor	This unit of competency covers the skills and knowledge required to inspect equipment and carry out routine maintenance and/or adjustment using a limited range of hand tools.

Elements	Performance Criteria
1. Conduct routine inspection of plant and equipment	<p>1.1 Equipment is inspected to identify signs of wear.</p> <p>1.2 Nature of maintenance requirement is assessed.</p>
2. Prepare to conduct routine maintenance	<p>2.1 Maintenance task is assessed to determine tools and services required.</p> <p>2.2 Equipment is prepared for maintenance.</p> <p>2.3 Hand tools are selected according to task requirements.</p> <p>2.4 Tools are checked before use and unsafe and/or faulty items are reported within standard procedures.</p> <p>2.5 Maintenance is planned and scheduled in consultation with affected work areas to minimize disruption to production.</p>
3. Carry out routine maintenance	<p>3.1 Routine maintenance on equipment is carried out according to workplace procedures.</p> <p>3.2 Maintenance activities are reported according to workplace reporting requirements.</p>
4. Complete maintenance tasks	<p>4.1 Equipment is returned to operating order.</p> <p>4.2 Tools and materials are stored according to workplace procedures.</p> <p>4.3 Relevant personnel are notified of maintenance completion.</p> <p>4.4 Housekeeping standards are maintained.</p> <p>4.5 Work is conducted in accordance with workplace environmental guidelines.</p>

Variable	Range
Typical routine maintenance tasks	<p>May include:</p> <ul style="list-style-type: none"> • replacement of consumable components, such as O-rings, hoses, filters and other 'bolt-on/bolt-off' equipment parts • lubrication of equipment and maintenance of fluid levels • simple adjustment, alignment or attachment of equipment components, parts, guides and sensors • clearing blocked nozzles, such as glue nozzles

	<ul style="list-style-type: none"> • positioning/attaching equipment components • carrying out basic maintenance on video inkjet machines
Inspections of equipment	<p>May include:</p> <ul style="list-style-type: none"> • informally or as part of a structured program associated with proactive maintenance
Tools and materials	<p>May include:</p> <ul style="list-style-type: none"> • a limited range of hand tools, such as spanners and screwdrivers, grease guns, Allen keys and measuring and alignment equipment • Materials may include: • lubricants and consumables for video inkjet printers
Routine maintenance	Is carried out according to company policies and procedures, licensing requirements, legislative requirements and industrial awards and agreements
Workplace reporting	<p>May include:</p> <ul style="list-style-type: none"> • Standard Operating Procedures (SOPs) • specifications • production log books • routine maintenance schedules • manufacturers' advice and condition monitoring information

Evidence Guide	
Critical Aspects of Competency	<p>Must confirm appropriate knowledge and skills to:</p> <ul style="list-style-type: none"> • identify routine maintenance tasks for machine or equipment • monitor operation and identify need for maintenance tasks • schedule maintenance tasks and communicate requirements with affected personnel • select and use appropriate hand tools to undertake routine maintenance • assess readiness for returning machine or equipment to operation or referring for further attention • complete maintenance documentation • Apply safe work practices and identify OHS hazards and controls.
Underpinning Knowledge	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • system in place to manage maintenance of plant and equipment in the workplace, including programs, such as responsive, preventative and proactive maintenance as appropriate • responsibilities for participating in the maintenance program, including scope of operator responsibilities, roles of others involved in plant and equipment maintenance and procedures for raising maintenance orders where requirements are outside operator role • basic operating principles of equipment to be maintained • signs and symptoms of faulty equipment and early warning signs of potential problems

	<ul style="list-style-type: none"> • basic checks used to confirm the nature of maintenance requirements, including distinguishing between mechanical and electrical faults and identifying probable causes or conditions that may increase maintenance requirements of equipment used • procedures for issuing, maintaining and storing tools used • safe use of hand tools and measuring instrumentation relevant to maintenance responsibilities • lubrication requirements, including requirements to use food grade lubricants as required and consequences of using incorrect type or amount of lubricants • safe work procedures, including appropriate signage of maintenance activities as required, use of appropriate personal protective clothing and equipment, and awareness of safety hazards and controls relating to maintenance tasks • methods used to render equipment safe to work on or clean including lock out/tag out and isolation procedures (in some cases this may involve liaising with other maintenance operators) • procedures and inspections to be carried out to confirm that equipment is in operating order and all parts are accounted for • food safety risks arising from poor personal hygiene, cleaning and housekeeping practices and procedures associated with routine maintenance • maintenance planning, scheduling and recording procedures
Underpinning Skills	<p>Demonstrate skills to:</p> <ul style="list-style-type: none"> • access workplace information such as the equipment history, faults or difficulties • select, fit and use personal protective clothing and/or equipment • inspect equipment for signs of wear, such as visual inspections to detect leaks, listening for unusual noises and/or vibrations • identify and describe maintenance requirements, including the ability to assess the urgency of the maintenance issue, recognise common types of maintenance requirements and run basic checks according to workplace procedures to confirm the need for and type of maintenance support required • take action to address maintenance requirements, such as carrying out routine maintenance within level of skill and responsibility and/or reporting outstanding maintenance to appropriate personnel using the required forms or request system

	<ul style="list-style-type: none"> • plan and schedule maintenance within level of responsibility, such as consulting affected personnel and/or work areas on timing and notifying of maintenance progress • prepare equipment and work area for routine maintenance, including cleaning equipment prior to carrying out maintenance and confirming that equipment is safe to work on, and simple isolation or tag out of equipment as required by workplace procedure • select and use hand tools as required to carry out maintenance task • select relevant parts and materials as required to carry out maintenance task • carry out routine maintenance tasks according to workplace procedures • on completion of maintenance tasks, return equipment to operational order, including confirming that all equipment parts, nuts and bolts are accounted for and correctly tightened, and where required, cleaning and sanitising equipment • store tools in designated location, including basic tool maintenance, such as oiling • complete records of maintenance as required • maintain work area to meet housekeeping standards • use oral communication skills/language competence to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor • work cooperatively within a culturally diverse workforce
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Coffee Roasting and Grinding Level II	
Unit Title	Operate a Process Control Interface
Unit Code	IND CRG2 12 0613
Unit Descriptor	This unit of competency covers the skills and knowledge required to operate a computer-based interface to modify and/or interrogate a control system.

Elements	Performance Criteria
1. Navigate the process control interface	<p>1.1 The readiness of the control interface and related components for operation are confirmed.</p> <p>1.2 Hardware provided is used to operate the interface.</p> <p>1.3 Page links are used to move between screens.</p> <p>1.4 Messages and alarms are acknowledged.</p> <p>1.5 Required information is accessed from screen displays.</p> <p>1.6 Computer based Interface system malfunctions are recorded and reported in accordance with workplace procedures.</p>
2. Use interface system to operate and maintain a process within required parameters	<p>2.1 Individual items of equipment and/or processes are started, monitored and shutdown using the control interface.</p> <p>2.2 Equipment is selected, status altered and settings entered to meet operating requirements.</p> <p>2.3 Sequences are activated to initiate process operation.</p> <p>2.4 Equipment giving a bad signal or bad measurements is recognized and responsive action taken.</p>
3. Analyses data to predict and control performance	<p>3.1 Trends are selected and analyzed to identify performance patterns.</p> <p>3.2 Causes of abnormal or unacceptable performance are identified and corrective action taken.</p> <p>3.3 Information is recorded as required.</p>

Variable	Range
Information accessed	<p>May include:</p> <ul style="list-style-type: none"> • graphics, trends • parameter settings • alarms • individual plant item status
Computer-based interface	<p>May include:</p> <ul style="list-style-type: none"> • computer processor • monitor • keyboards

	<ul style="list-style-type: none"> • track ball • mouse • storage devices • printers (It is linked to the process control system)
Policies and procedures	<p>May include:</p> <ul style="list-style-type: none"> • Work is carried out in accordance with company policies and procedures, manufacturers' recommendations, legislative requirements, codes of practice and industrial awards and agreements
Workplace information	<p>May include:</p> <ul style="list-style-type: none"> • Standard Operating Procedures (SOPs) • manufacturers' specifications

Evidence Guide	
Critical Aspects of Competency	<p>Must confirm appropriate knowledge and skills to:</p> <ul style="list-style-type: none"> • operate and navigate interface to access, retrieve, enter and store work data • start, operate, monitor and shut down process equipment • control and adjust equipment using control interface to achieve production requirements • recognise faults and inconsistencies and take corrective action • complete workplace records as required • Apply safe work practices and identify OHS hazards and controls.
Underpinning Knowledge	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • processes and equipment being controlled, including required processing sequences • operating principles of process control and interface system, including the relationship between control panels, systems and the physical equipment, and where relevant understanding of the operating conditions required for accurate information input from sensors and related instrumentation • action required to respond to error messages and alarms • typical faults that can occur when operating a process control interface and corrective action required • performance data collected by the control interface system and its application to troubleshoot performance, including the ability to identify and investigate related trend data to track cause and effect • recording requirements and responsibilities
Underpinning Skills	<p>Demonstrate skills to:</p> <ul style="list-style-type: none"> • use all hardware components to operate the control interface • navigate the system to locate and use information required, including moving between screens and locating relevant performance data

	<ul style="list-style-type: none"> • operate the control system using the interface, including start up and shut down equipment components and change set points as required • locate sensors and instrumentation providing input signals to the control system and confirm operating order within level of responsibility • recognise and respond to error messages and alarms as required • access relevant performance data using the control system, including locating and interpreting performance trend information • record log information using the interface system according to enterprise procedures • use oral communication skills/language competence to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor • work cooperatively within a culturally diverse workforce
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Coffee Roasting and Grounding Level II	
Unit Title	Implement Coffee Monitoring Measures
Unit Code	IND CRG2 13 0613
Unit Descriptor	This unit involves the skills and knowledge required to implement coffee monitoring measures within coffee storage facilities in accordance with workplace procedures, including installing and checking coffee quality control equipment, and monitoring the quality of stored commodities in accordance with workplace requirements.

Elements	Performance Criteria
1. Install coffee quality control equipment	<p>1.1 Procedures for maintaining the quality of stored coffee are identified from work plans and considering climatic conditions, types of storage and general work place environment.</p> <p>1.2 Aeration equipment (where required) is installed to workplace and site requirements to maintain appropriate coffee temperature and moisture content.</p> <p>1.3 Inspection/sampling equipment and procedures are confirmed and implemented in accordance with workplace procedures.</p> <p>1.4 Equipment is checked to ensure correct set-up and operation.</p> <p>1.5 Equipment is maintained in accordance with workplace requirements and manufacturer's instructions.</p> <p>1.6 Rectification of faults in equipment is undertaken in accordance with workplace procedures.</p>
2. Monitor the quality of stored commodities	<p>2.1 Stored commodities and associated facilities are inspected for signs of damage or potential for damage.</p> <p>2.2 Required repairs to facilities are reported to appropriate personnel for action.</p> <p>2.3 Monitoring for pest infestations and climatic contamination/damage to coffee is regularly completed in accordance with workplace sampling/inspection procedures.</p> <p>2.4 Results of inspections sampling/ process are recorded and reported in accordance with workplace procedures.</p> <p>2.5 Follow-up action to protect coffee quality is undertaken in accordance with workplace procedures.</p>

Variable	Range
Problems identified in commodities and facilities	May Include: <ul style="list-style-type: none"> • presence of water or water damage • presence and activity of pests

	<ul style="list-style-type: none"> • dead vertebrate pests in stored coffee • damage or deterioration of storage facility • storm damage • inappropriate coffee temperature and moisture levels
Work	<p>May Include:</p> <ul style="list-style-type: none"> • in a range of work environments • by day or night
Types of storage and environment	<p>May Include:</p> <ul style="list-style-type: none"> • permanent and/or temporary storage • fixed and/or portable commodity handling equipment • site buildings • haulage vehicles • rail loops • walkways and access points in buildings and facilities • site surroundings
Workplace environment	<p>May Include:</p> <ul style="list-style-type: none"> • equipment • goods • products • materials and vehicular traffic
Coffee aeration	<p>May Include:</p> <ul style="list-style-type: none"> • set-up, maintenance, operational control and dismantling of equipment
Personal protective equipment	<p>May Include:</p> <ul style="list-style-type: none"> • gloves • safety headwear and footwear • safety glasses • two-way radios • protective clothing • respirators and fume/dust masks • high visibility clothing
Workplaces	<p>May Include:</p> <ul style="list-style-type: none"> • large, medium or small worksites
Requirements for work	<p>May Include:</p> <ul style="list-style-type: none"> • site restrictions and procedures • licensing requirements • use of safety and personal protective equipment • communications/recording equipment • authorities and permits • emergency procedures
Customers	<p>May Include:</p> <ul style="list-style-type: none"> • internal or external
Inspection/sampling processes	<p>May Include:</p> <ul style="list-style-type: none"> • turning • visual inspection • hand sampling • coffee sieves

	<ul style="list-style-type: none"> • robes and spears • trapping
Hazards in the work area	<p>May Include:</p> <ul style="list-style-type: none"> • chemicals and pesticides • dangerous or hazardous substances • stationary and moving equipment, parts and materials • noise, light, energy sources • electrical equipment • humidity, air temperature, radiant heat • debris on floor and faulty equipment
Communication in the work area	<p>May Include:</p> <ul style="list-style-type: none"> • phone • fax • email/internet • Electronic Data Interchange (EDI) • RF systems and oral, aural or signed communications
Consultative processes	<p>May Include:</p> <ul style="list-style-type: none"> • workplace personnel • supervisors and managers • existing and potential customers/clients • manufacturers of pesticides • suppliers and contractors • union representatives • industrial relations and OHS specialists • maintenance, professional or technical staff
Depending on the type of organization concerned and the local terminology used, workplace procedures	<p>May Include:</p> <ul style="list-style-type: none"> • company procedures • workplace procedures • organisational procedures • established or standard procedures
Information/documents	<p>May Include:</p> <ul style="list-style-type: none"> • operations manuals, job specifications and procedures • induction documentation • competency standards and training materials • manufacturers specifications and instructions • material safety data sheets • workplace operating procedures and policies • supplier and/or client instructions • Ethiopian and international standards, criteria and certification requirements • codes of practice including the National Standards for Manual Handling and the Industry Safety Code • relevant regulations including the ADG Code • award, workplace bargaining agreement, other industrial arrangements • OHS procedures • quality assurance and emergency procedures

Applicable regulations and legislation	<p>May Include:</p> <ul style="list-style-type: none"> • relevant codes and regulations pertaining to coffee storage • legislation regarding the use of fumigants/poisons • ADG Code and regulations pertaining to the storage and handling of dangerous and hazardous goods • relevant state/territory OHS legislation • relevant state/territory environmental protection legislation • relevant Ethiopian and international standards and certification requirements • workplace relations regulations including equal opportunity, equal employment opportunity and affirmative action legislation • workers compensation regulations
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Evidence Guide	
Critical Aspects of Competency	<p>Must confirm appropriate knowledge and skills to:</p> <ul style="list-style-type: none"> • satisfy all of the requirements of the elements and performance criteria of this unit and include demonstration of applying: <ul style="list-style-type: none"> ➢ the underpinning knowledge and skills ➢ relevant legislation and workplace procedures • other relevant aspects of the range statement
Underpinning Knowledge	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • Regulations relevant to the implementation of coffee monitoring measures in coffee storage facilities • Relevant OHS and environmental protection procedures and guidelines • Workplace procedures and policies for the implementation of coffee monitoring measures • Problems that may occur when implementing coffee monitoring measures and appropriate action that can be taken to resolve the problems • Equipment applications, capacities, configurations, safety hazards and control mechanisms • Classification procedures • Emergency response procedures • Storage and safe handling procedures • Procedures for environmental control and disposal activities • Site layout and obstacles
Underpinning Skills	<p>Demonstrate skills to:</p> <ul style="list-style-type: none"> • Communicate effectively with others when implementing coffee monitoring measures • Read and interpret instructions, procedures, information and labels relevant to the implementation of coffee monitoring measures

	<ul style="list-style-type: none"> • Interpret and follow operational instructions and prioritise work • Complete documentation related to the implementation of coffee monitoring measures • Operate electronic communication equipment to required protocol • Work collaboratively with others when implementing coffee monitoring measures • Adapt appropriately to cultural differences in the workplace, including modes of behaviour and interactions with others • Promptly report and/or rectify any identified problems, faults or malfunctions that may occur when implementing coffee monitoring measures in accordance with regulatory requirements and workplace procedures • Implement contingency plans for unanticipated situations that may arise when implementing coffee monitoring measures • Apply precautions and required action to minimise, control or eliminate hazards that may exist during the implementation of coffee monitoring measures • Plan own work including predicting consequences and identifying improvements • Monitor work activities in terms of planned schedule • Modify activities depending on differing operational contingencies, risk situations and environments • Work systematically with required attention to detail without injury to self or others, or damage to goods or equipment • Operate and adapt to differences in equipment in accordance with standard operating procedures • Set up and maintain coffee protection equipment • Identify, select and efficiently and effectively use equipment needed when implementing coffee monitoring measures • Select and use required personal protective equipment conforming to industry and OHS standards
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Coffee Roasting and Grinding Level II	
Unit Title	Use Numerical Applications in the Workplace
Unit Code	IND CRG2 14 0613
Unit Descriptor	This is unit of competency covers the skills and knowledge required to apply basic mathematical functions of addition, subtraction, multiplication and division to undertake workplace calculations or to estimate approximate answers when exact calculations are not required.

Elements	Performance Criteria
1. Apply basic mathematical concepts to calculate workplace information	1.1 Calculation requirements are identified and appropriate method is selected. 1.2 Information is obtained from relevant sources and interpreted correctly. 1.3 Calculations results are undertaken using addition, subtraction, multiplication and division to support work role.
2. Apply basic mathematical concepts to estimate workplace information	2.1 Estimation requirements are identified and appropriate estimation method is selected. 2.2 Data is obtained from relevant sources and interpreted correctly. 2.3 Estimations are made to meet work requirements.

Variable	Range
Calculations	May include: <ul style="list-style-type: none"> the use of whole numbers, decimals, fractions and percentages Calculations may be made: <ul style="list-style-type: none"> manually or using calculators and other measuring instruments as appropriate to the task
Numerical information	May include: <ul style="list-style-type: none"> simple run charts and graphs
Results	may or may not be recorded depending on workplace requirements
Estimations	May include: <ul style="list-style-type: none"> observations of other amounts or measurements supplied data, such as volume or weight information on packaging of raw materials
Conversion charts	May include: <ul style="list-style-type: none"> Conversion charts are those in common use in the workplace

Evidence Guide	
Critical Aspects of Competency	Must confirm appropriate knowledge and skills to: <ul style="list-style-type: none"> identify calculation or estimation requirements

	<ul style="list-style-type: none"> • carry out calculations involving basic addition, subtraction, division and multiplication • where estimations are used, estimated amounts must be consistent with process or product specification and demonstrate knowledge of measurement units used in the workplace • Use estimation techniques to check calculated results and workplace data.
Underpinning Knowledge	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • mathematical processes, including addition, subtraction, multiplication and division • application of calculation and estimation techniques to meet work requirements • units of measurement used in the workplace, including whole numbers, fractions and decimals (to one decimal point) (this may include use of conversion charts) • representation of numerical information relevant to work requirements, such as charts, graphs and tables • recording requirements and responsibilities where relevant
Underpinning Skills	<p>Demonstrate skills to:</p> <ul style="list-style-type: none"> • identify whether a calculation or estimation is required to meet workplace requirements • carry out calculations involving basic addition, subtraction, division and multiplication to support work role (this may involve use of a calculator and conversion tables where required) • use estimation techniques to check quantities, ratios, speed and other required data estimates • use estimation techniques to check calculated results and workplace data • record calculations and measurement information accurately according to enterprise procedures • use oral communication skills/language competence to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor • work cooperatively within a culturally diverse workforce
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	<p>Competence may be assessed through:</p> <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Coffee Roasting and Grounding Level II	
Unit Title	Create, Produce and Check Documentation
Unit Code	IND CRG2 15 0613
Unit Descriptor	This unit involves the skills and knowledge required to complete and or evaluate import and documentation, and check documentation in accordance with the requirements of related workplace procedures consultative process communication in the work area.

Elements	Performance Criteria
1. Identify procedures required for documentation for import/export of goods	<p>1.1 Documents required for import/export of goods are identified.</p> <p>1.2 Required documents are sourced.</p> <p>1.3 Content requirements for each section of the documentation are applied.</p> <p>1.4 Timelines for completion of documents are identified and noted.</p> <p>1.5 Requirements for permits and other documentation (e.g. Quarantine) are identified and implications noted.</p> <p>1.6 Procedures for obtaining clearances including authority to deal.</p> <p>1.7 Delivered into Home Consumption authorization and Export Declaration Numbers (EDN) are identified and followed in accordance with the requirements of customers and related legislation and workplace procedures.</p> <p>1.8 Letters of credit are identified and implications of each noted.</p> <p>1.9 Assistance is sought as required in identifying required documents and to commence processes of assessing or completing these documents.</p> <p>1.10 Lodge all documentation if required by legislation (e.g. CITES).</p>
2. Complete documentation to meet legislative and workplace requirements	<p>2.1 Content requirements for each section of the documentation are identified and applied in accordance with the requirements of Customs and related legislation and workplace procedures.</p> <p>2.2 Workplace procedures for authorizations are followed.</p> <p>2.3 Data entry for documents is completed.</p> <p>2.4 Problems arising in completing required documents are identified and assistance sought to resolve these in accordance with the requirements of Customs and related legislation and work procedures.</p>

	<p>2.5 Actions are taken to meet deadlines.</p> <p>2.6 Assistance is sought as required in completing required documents.</p>
3. Check documentation to ensure it meets legislative requirements	<p>3.1 Documents are collated and checked before forwarding to supervisor, manager or more senior personnel for checking within designated timelines in accordance with the requirements of customs and related legislation and workplace procedures</p> <p>3.2 Declarations are checked to ensure they meet the requirements of customs and related legislation and workplace procedures</p> <p>3.3 Letters of credit are checked to ensure they meet commercial, transport and overseas requirements</p> <p>3.4 Dangerous goods documentation is checked in accordance with the requirements of customs and related legislation and workplace procedures</p> <p>3.5 Any revisions to documents are finalized and rechecked by self and supervisor, manager or more senior personnel prior to lodgment</p>
4. Lodge documentation for processing	<p>4.1 Documents are forwarded to relevant personnel in accordance with the requirements of Customs and related legislation and workplace procedures</p> <p>4.2 Documents are filed, stored and retained in accordance with the requirements of customs and related legislation and workplace procedures</p>

Variable	Range
Customers	may be internal or external
Workplace procedures	may include <ul style="list-style-type: none"> • company procedures • enterprise procedures • organisational and established procedures
Consultative processes	may involve: <ul style="list-style-type: none"> • other employees and supervisors • suppliers, customers and clients • relevant authorities and institutions • management and union representatives • industrial relations and OHS specialists • other maintenance, professional or technical staff
Workplaces	may comprise large, medium or small worksites
Work	may be conducted in a range of work environments by day or night
Information/documents	may include <ul style="list-style-type: none"> • goods identification numbers and codes

	<ul style="list-style-type: none"> manifests, barcodes, and container identification/serial number relevant Customs legislation, related legislation including quarantine legislation, environment and conservation legislation and Australian and international codes of practice and regulations relevant to import/export of cargo Australian and international standards, regulations and codes of practice for the handling and transport of dangerous goods and hazardous substances dangerous goods declarations and material safety data
Cargo	<p>may include:</p> <ul style="list-style-type: none"> goods with specialist requirements, including temperature controlled goods and dangerous goods personal effects consignments imported/exported by parcels post consignments imported/exported by air freight consignments imported/exported by sea freight wildlife or wildlife products (living or non-living) goods with specialist requirements, including temperature controlled goods and dangerous goods
Hazards in the work area	may include exposure to chemicals, dangerous or hazardous substances, movements of equipment, goods and materials
Communication in the work area	<p>may include:</p> <ul style="list-style-type: none"> phone Electronic Data Interchange (EDI) fax email internet radio and oral, aural or signed communications

Evidence Guide	
Critical Aspects of Competency	<p>Must confirm appropriate knowledge and skills to:</p> <ul style="list-style-type: none"> identifying procedures required for documentation for import/export of goods completing and checking documentation and records to meet relevant Customs legislation and related legislation and workplace requirements providing customer/client service and work effectively with others selecting and using appropriate workplace colloquial and technical language and communication
Underpinning Knowledge	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> Ethiopian and international standards, codes and regulations relevant to the import and export of cargo and freight

	<ul style="list-style-type: none"> • Relevant OHS and environmental protection procedures and guidelines • Workplace procedures and policies for the completion of import and export documentation • Focus of operation of work systems, equipment, management and site operating systems for completing import/export cargo and freight documentation • Problems that may occur when completing import and export documentation and appropriate action that can be taken to resolve the problems • The Customs Act 1901 and related legislation • Documentation requirements for the import and export of cargo and freight
Underpinning Skills	<p>Demonstrate skills to:</p> <ul style="list-style-type: none"> • Communicate effectively with others when completing import and export documentation • Read and comprehend simple statements in English • Read and interpret instructions, procedures and labels relevant to the import and export of cargo and freight • Complete and/or assess accuracy of import and export documentation • Work collaboratively with others when completing import and export documentation • Adapt appropriately to cultural differences in the workplace, including modes of behaviour and interactions with others • Promptly report and/or rectify any identified problems when completing and/ or assessing import and export documentation in accordance with regulatory requirements and workplace procedures • Monitor work activities in terms of planned schedule • Modify activities depending on differing operational contingencies, risk situations and environments • Operate and adapt to differences in equipment in accordance with standard operating procedures • Select and use relevant communications, computing and office equipment when completing import and export documentation
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	<p>Competence may be assessed through:</p> <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Coffee Roasting and Grinding Level II	
Unit Title	Use Info Technology Devices in the Workplace
Unit Code	IND CRG2 16 0613
Unit Descriptor	This unit of competency covers the skills and knowledge required to identify, collect and provide information to convey meaning to others.

Elements	Performance Criteria
1. Provide and apply information to suit workplace and audience requirements	<p>1.1 Information requirements for work operations are identified.</p> <p>1.2 Information is collected and assessed.</p> <p>1.3 Information is selected and structured in a logical way to convey meaning to others.</p> <p>1.4 Appropriate methods are used to communicate effectively with others.</p>
2. Respond to information requests	<p>2.1 Information requests are processed promptly and courteously.</p> <p>2.2 Effective listening and verbal communication skills are applied to obtain information.</p> <p>2.3 The nature of requests is clarified.</p> <p>2.4 Appropriate information is provided in response to requests.</p> <p>2.5 Information is provided in a form appropriate to the enquirer.</p> <p>2.6 Requests are referred to the appropriate personnel where they fall outside area of responsibility.</p>
3. Use and maintain workplace information	<p>3.1 A range of information sources is accessed to support work requirements.</p> <p>3.2 Information is recorded in appropriate formats according to workplace reporting requirements.</p> <p>3.3 Work is conducted in accordance with workplace environmental guidelines.</p> <p>3.4 Information is analyzed to meet work requirements.</p> <p>3.5 Effective listening and verbal communication skills are applied to exchange information.</p>

Variable	Range
Information to be accessed/conveyed	<p>may include:</p> <ul style="list-style-type: none"> • symbols • charts • signs

	<ul style="list-style-type: none"> • data • instructions • pictures and diagrams as relevant to own work • Standard Operating Procedures (SOPs) • specifications • production schedules and instructions • signs and symbols • Materials Safety Data Sheets (MSDS) • manufacturers' advice • standard forms and reports
Interactive communication processes	<p>May include:</p> <ul style="list-style-type: none"> • active listening • turn taking • questioning and tolerating the views of others • seeking and providing constructive feedback
Typical subjects for communication	<p>May include:</p> <ul style="list-style-type: none"> • work functions • shift handovers • company policies and codes of practice • rights and responsibilities • procedures • employment conditions and entitlements
Recording and/or accessing information electronically	<p>May include:</p> <ul style="list-style-type: none"> • Recording and/or accessing information electronically does not require an understanding of the programs used and the function involves limited interaction, such as simple keyboard operations.

Evidence Guide	
Critical Aspects of Competency	<p>Must confirm appropriate knowledge and skills to:</p> <ul style="list-style-type: none"> • use, interpret and apply work-related information presented in a variety of forms • select and apply communication methods to present information to others • respond to information requests • Record and maintain information in required work formats.
Underpinning Knowledge	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • communication channels, including consultative arrangements established in the workplace • common colloquial and technical terms relating to work function • sources of information and advice relating to work responsibilities • methods and technologies used to access, record and store workplace information, including print, and screen-based systems as relevant to the workplace

	<ul style="list-style-type: none"> • presentation techniques to convey information on a range of typical workplace subjects appropriate to the audience • recognition of different personal communication styles and appropriate communication options • recognition of cultural diversity as appropriate in the workplace • reporting roles and responsibilities • interpersonal skills including active listening, questioning, seeking and responding to feedback • basic meeting procedures to identify and achieve meeting/discussion outcomes
Underpinning Skills	<p>Demonstrate skills to:</p> <ul style="list-style-type: none"> • identify and access information to undertake work responsibilities • seek information from people in the workplace to support work roles and responsibilities • ascertain or clarify information requirements by asking questions • prepare simple written or verbal presentations that structure and present information in a logical sequence • present information appropriate to audience and information purpose, such as use of graphs and/or diagrams as appropriate (the audience may include people from diverse cultural backgrounds and with people with limited ability to speak or understand English) • participate with others to achieve work outcomes using interactive communication processes • participate in group discussions and processes as required, including demonstrating active listening skills and participating constructively in discussions • respect and, where appropriate, represent the views of others • record information in required format/s • apply effective listening, questioning and verbal skills • apply reading and writing skills to the level required by work operations • work cooperatively within a culturally diverse workforce
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	<p>Competence may be assessed through:</p> <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Coffee Roasting and Grinding Level II	
Unit Title	Manage the Impact of Change on Own Work
Unit Code	IND CRG2 17 0613
Unit Descriptor	This unit covers the skills needed by an employee in a competitive manufacturing organization which requires the employee to participate in and manage the impact of the implementation of competitive manufacturing initiatives on their own work life.

Elements	Performance Criteria
1. Examine the impact of change on own work practices	<p>1.1 Changes to work flow are examined.</p> <p>1.2 Changes to equipment/process/physical environment are examined.</p> <p>1.3 Changes to work relationship with team members and other teams are examined.</p> <p>1.4 Changes to data collection needs are examined.</p> <p>1.5 Changed work is examined for impacts on health, safety and environment.</p> <p>1.6 Changes to quality requirements are examined.</p> <p>1.7 Any additional individual skill needs are identified.</p> <p>1.8 Other areas requiring assistance are identified.</p>
2. Implement change	<p>2.1 Changes which may have adverse impact change with team leader are reviewed.</p> <p>2.2 Changes are adapted to individual work practice.</p> <p>2.3 Assistance in gathering/processing data is sought as required.</p> <p>2.4 The data collection/processing is implemented and actions on resulting information taken in accordance with procedures.</p> <p>2.5 Assistance/training is sought to meet needs caused by change.</p>
3. Implement continuous improvement	<p>3.1 All changes are critically examined.</p> <p>3.2 Impacts of changes both up and down the immediate value chain are identified.</p> <p>3.3 Areas for continues improvement are identified.</p> <p>3.4 Recommendations for improvement are made in accordance with procedures.</p>

Variable	Range
Managing impact of change	May include: <ul style="list-style-type: none"> • All Elements may be undertaken individually or as part of a team and may require assistance from the team leader for areas outside the employee's range of responsibility and authority
Procedures	May included: <ul style="list-style-type: none"> • Procedures include all work instructions, standard operating procedures, formulas/recipes, batch sheets, temporary instructions and similar instructions provided for the smooth running of the plant. They may be written, verbal, computer based or in some other form. • For the purposes of this Training Package, 'procedures' also includes good operating practice as may be defined by industry codes of practice (e.g. Good Manufacturing Practice (GMP), Responsible Care) and government regulations.
Value chain	May include: <ul style="list-style-type: none"> • Competitive manufacturing organisations encompass the entire production system, beginning with the customer, and include the product sales outlet, the final assembler, product design, raw material mining and processing and all tiers of the value chain (sometimes called the supply chain). Any truly 'competitive' system is highly dependent on the demands of its customers and the reliability of its suppliers. No implementation of competitive manufacturing can reach its full potential without including the entire 'enterprise' in its planning
Continuous improvement	May include: <ul style="list-style-type: none"> • Continuous improvement (also called kaizen) - the philosophy of continual improvement, that every process can and should be continually evaluated and improved in terms of time required, resources used, resultant quality, and other aspects relevant to the process.
Competitive manufacturing	May include: <ul style="list-style-type: none"> • lean manufacturing • agile manufacturing • preventative and predictive maintenance approaches • monitoring and data gathering systems such as Systems Control and Data Acquisition (SCADA) software, Enterprise Resource Planning (ERP) systems, Manufacturing Resource Planning (MRP), and proprietary systems such as SAP • statistical process control systems including six sigma and three sigma • Just In Time (JIT), kanban and other pull related manufacturing control systems • supply, value, and demand chain monitoring and analysis

	<ul style="list-style-type: none"> • Other continuous improvement systems. • Competitive manufacturing should be interpreted so as to take into account the stage of implementation of competitive manufacturing approaches, the enterprise's size and work organisation, culture, regulatory environment and manufacturing sector
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Evidence Guide	
Critical Aspects of Competency	Must confirm appropriate knowledge and skills to: <ul style="list-style-type: none"> • Evidence of commitment to a range of initiatives should be available.
Underpinning Knowledge	Demonstrate knowledge of: <ul style="list-style-type: none"> • current process and principles of operation • sources of data on the process/plant and possible applications to information • methods of determining own skill needs and developing skills required • Health, Safety and Environment (HSE) principles as relevant to own job • basic continuous improvement principles
Underpinning Skills	Demonstrate skills to: <ul style="list-style-type: none"> • analysis • communication • problem solving • reading and interpreting • teamwork
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Coffee Roasting and Grinding Level II	
Unit Title	Implement the Food Safety Program and Procedures
Unit Code	IND CRG2 18 0613
Unit Descriptor	This unit of competency covers the skills and knowledge required maintaining personal hygiene and conduct food handling, housekeeping and waste disposal related to work tasks and responsibilities where work involves operation of production and/or packaging equipment and processes.

Elements	Performance Criteria
1. Implement the food safety program	<p>1.1 Food handling requirements are identified.</p> <p>1.2 Food handling is carried out according to the food safety program.</p> <p>1.3 Food safety hazards are controlled as required by the food safety procedure.</p> <p>1.4 Where food safety control requirements are not met, the incident is promptly reported and corrective action is taken.</p> <p>1.5 Food safety information is recorded to meet requirements of the food safety program.</p> <p>1.6 The workplace is maintained in a clean and tidy order to meet workplace standards.</p> <p>1.7 Work is conducted in accordance with workplace Environmental guidelines.</p>
2. Participate in maintaining and improving food safety	<p>2.1 Work area, materials, equipment and product are routinely monitored to ensure compliance with food safety requirements</p> <p>2.2 Processes, practices or conditions which could result in a food safety breach are identified and reported according to workplace reporting requirements</p> <p>2.3 Corrective action is taken in accordance with the food safety program</p> <p>2.4 Food safety issues are raised with designated personnel</p>
3. Comply with personal hygiene standards	<p>3.1 Personal hygiene meets the requirements of the food safety program</p> <p>3.2 Health conditions and/or illness are reported as required by the food safety program</p> <p>3.3 Appropriate clothing and footwear are worn for the food handling task and meets the requirements of the food safety program</p> <p>3.4 Movement around the workplace is complied with the food safety program</p>

Variable	Range
Food handling	<p>May include:</p> <ul style="list-style-type: none"> • food receipt and storage • food preparation • cooking, holding, cooling, chilling and reheating • packaging, disposal
Food safety hazard	<p>May include:</p> <ul style="list-style-type: none"> • biological, chemical or physical agent in, or condition of, food that has the potential to cause an adverse health effect
Examples of a breach of food safety procedures	<p>could include:</p> <ul style="list-style-type: none"> • failure to check delivery temperatures of potentially hazardous chilled food • failure to place temperature-sensitive food in temperature controlled storage conditions promptly • failure to wash hands when required • use of cloths for unsuitable purposes
A food safety program	<p>May include:</p> <ul style="list-style-type: none"> • Food safety hazards that may be reasonably expected to occur in all food handling operations of the food business. The food safety program and related procedures must comply with legal requirements of the food safety standards and must be communicated to all food handlers. Where no food safety program is in place, food safety requirements may be specified in general operating procedures
Workplace information	<p>May include:</p> <ul style="list-style-type: none"> • food safety program • Standard Operating Procedures (SOPs) • specifications • log sheets • written or verbal instruction
Products/materials handled and stored	<p>May include:</p> <ul style="list-style-type: none"> • raw materials • ingredients • consumables • part-processed product • finished product • cleaning materials
Monitoring	<p>May include:</p> <ul style="list-style-type: none"> • taking temperatures • collecting samples • conducting visual inspections • conducting other tests as required

Hygiene requirements	<p>May include:</p> <ul style="list-style-type: none"> • The food safety program. At a minimum this must meet legal requirements as set out by the concerned body and/or state or territory legislation/regulations
Reporting of health conditions and illnesses requirements	<p>May include:</p> <ul style="list-style-type: none"> • The food safety program. At a minimum this must meet legal requirements as set out by the concerned body and/or state or territory legislation/regulations
Appropriate clothing and footwear	<p>May include:</p> <ul style="list-style-type: none"> • purpose designed overalls or uniforms • hair-nets • beard snoods • gloves and overshoes
Responsibility for monitoring food safety	<p>May include:</p> <ul style="list-style-type: none"> • food safety procedures and taking corrective action relates to own tasks and responsibilities and occurs in the context of the food safety program in the workplace

Evidence Guide	
Critical Aspects of Competency	<p>Must confirm appropriate knowledge and skills to:</p> <ul style="list-style-type: none"> • identify own responsibilities with regard to food safety • identify food safety risks in the workplace and the control measures used to manage them • apply control measures in own work • monitor compliance with food safety standards • identify and act on non-compliances and participate in improving safety • maintain required standards of personal hygiene • complete workplace records as required • apply safe work practices and identify OHS hazards and controls • apply food safety procedures
Underpinning Knowledge	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • sources of information and expertise on procedures and responsibilities for food safety relating to own work • basic concepts of HACCP-based food safety, including identification of hazards that are likely to occur, establishing appropriate methods of control and confirming that controls are met • food safety management arrangements in the workplace, including awareness of food safety legislation, workplace policies and procedures to implement responsibilities, understanding the relationship between the quality system and food safety program, personnel responsible for developing and implementing the food safety program, the role of internal and external auditors as appropriate, procedures followed to investigate contamination events, and performance improvement processes

	<ul style="list-style-type: none"> • awareness of common microbiological, physical and chemical hazards related to the foods handled in the work area, including the types of hazards likely to occur, the conditions under which they occur, possible consequences and control methods to prevent occurrence • basic understanding of the properties, handling and storage requirements of ingredients, materials and products handled and used • suitable standard for materials, measuring devices, equipment and utensils used in the work area • food safety requirements related to work responsibilities, including personal hygiene, requirements and procedures to report illness and safe food handling practices for own work • methods used to monitor that food safety is under control, including the purpose of sampling and taking measurements, such as temperature and pH, and conducting inspections and tests
Underpinning Skills	<p>Demonstrate skills to:</p> <ul style="list-style-type: none"> • action required in the event of non-compliance (corrective action is typically described in the food safety program and/or related workplace information) • purpose of keeping records and the recording requirements of the food safety program • methods used in the workplace to isolate or quarantine food which may be unsafe • product and ingredient traceability procedures, such as product recall where required by work responsibilities • clothing and footwear requirements for working in and/or moving between food handling areas • personal clothing maintenance, laundering and storage requirements • appropriate bandages and dressings to be used when undertaking food handling • housekeeping requirements and responsibilities relating to own work, and use and storage of housekeeping/cleaning equipment where relevant • procedures to follow in the event of pest sighting or discovery of infestation • purpose and importance of cleaning and sanitation procedures • waste collection, recycling and handling procedures relevant to own work responsibilities • cleaning and sanitation procedures where relevant • impact of rework handling/addition on food safety where relevant • sampling and test methods where relevant

Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Coffee Roasting and Grounding Level II	
Unit Title	Participate in Workplace Communication
Unit Code	IND CRG2 19 0613
Unit Descriptor	This unit covers the knowledge, skills and attitudes required to gather, interpret and convey information in response to workplace requirements.

Elements	Performance Criteria
1. Obtain and convey workplace information	<p>1.1 Specific and relevant information is accessed from appropriate sources.</p> <p>1.2 Effective questioning , active listening and speaking skills are used to gather and convey information.</p> <p>1.3 Appropriate medium is used to transfer information and ideas.</p> <p>1.4 Appropriate non- verbal communication is used.</p> <p>1.5 Appropriate lines of communication with supervisors and colleagues are identified and followed.</p> <p>1.6 Defined workplace procedures for the location and storage of information are used.</p> <p>1.7 Personal interaction is carried out clearly and concisely.</p>
2. Participate in workplace meetings and discussions	<p>2.1 Team meetings are attended on time.</p> <p>2.2 Own opinions are clearly expressed and those of others are listened to without interruption.</p> <p>2.3 Meeting inputs are consistent with the meeting purpose and established protocols.</p> <p>2.4 Workplace interactions are conducted in a courteous manner.</p> <p>2.5 Questions about simple routine workplace procedures and matters concerning working conditions of employment are asked and responded to.</p> <p>2.6 Meetings outcomes are interpreted and implemented.</p>
3. Complete relevant work related documents	<p>3.1 Range of forms relating to conditions of employment is completed accurately and legibly.</p> <p>3.2 Workplace data is recorded on standard workplace forms and documents.</p> <p>3.3 Basic mathematical processes are used for routine calculations.</p> <p>3.4 Errors in recording information on forms/ documents are identified and properly acted upon.</p> <p>3.5 Reporting requirements to supervisor are completed according to organizational guidelines.</p>

Variable	Range
Appropriate sources	May include but not limited to: <ul style="list-style-type: none"> • Team members • Suppliers • Trade personnel • Local government and Industry bodies
Medium	May include but not limited to: <ul style="list-style-type: none"> • Memorandum • Circular • Notice • Information discussion • Follow-up or verbal instructions • Face to face communication
Storage	May include but not limited to: <ul style="list-style-type: none"> • Manual filing system • Computer-based filing system
Protocols	May include but not limited to: <ul style="list-style-type: none"> • Observing meeting • Compliance with meeting decisions • Obeying meeting instructions
Workplace interactions	May include but not limited to: <ul style="list-style-type: none"> • Face to face • Telephone • Electronic and two way radio • Written including electronic, memos, instruction and forms, non-verbal including gestures, signals, signs and diagrams
Forms	May include but not limited to: <ul style="list-style-type: none"> • Personnel forms, telephone message forms, safety reports

Evidence Guide	
Critical Aspects of Competency	Demonstrates skills and knowledge to: <ul style="list-style-type: none"> • Prepare written communication following standard format of the organization • Access information using communication equipment • Make use of relevant terms as an aid to transfer information effectively • Convey information effectively adopting the formal or informal communication
Underpinning Knowledge	Demonstrate knowledge of: <ul style="list-style-type: none"> • Effective communication • Different modes of communication • Written communication • Organizational policies • Communication procedures and systems • Technology relevant to the enterprise and the individual's work responsibilities

Underpinning Skills	<p>Demonstrate skills to:</p> <ul style="list-style-type: none"> • Follow simple spoken language • Perform routine workplace duties following simple written notices • Participate in workplace meetings and discussions • Complete work related documents • Estimate, calculate and record routine workplace measures • Do basic mathematical processes of addition, subtraction, division and multiplication • relate to people of social range in the workplace • Gather and provide information in response to workplace Requirements
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	<p>Competence may be assessed through:</p> <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Coffee Roasting and Grounding Level II	
Unit Title	Work in Team Environment
Unit Code	IND CRG2 20 0613
Unit Descriptor	This unit covers the skills, knowledge and attitudes to identify role and responsibility as a member of a team.

Elements	Performance Criteria
1. Describe team role and scope	<p>1.1 The role and objective of the team are identified from available sources of information.</p> <p>1.2 Team parameters, reporting relationships and responsibilities are identified from team discussions and appropriate external sources.</p>
2. Identify own role and responsibility within team	<p>2.1 Individual role and responsibilities within the team environment are identified.</p> <p>2.2 Roles and responsibility of other team members are identified and recognized.</p> <p>2.3 Reporting relationships within team and external to team are identified.</p>
3. Work as a team member	<p>3.1 Effective and appropriate forms of communications used and interactions undertaken with team members who contribute to known team activities and objectives.</p> <p>3.2 Effective and appropriate contributions are made to complement team activities and objectives, based on individual skills and competencies and workplace context.</p> <p>3.3 Protocols are observed in reporting using standard operating procedures.</p> <p>3.4 Contribute to the development of team work plans based on an understanding of team's role and objectives and individual competencies of the members.</p>

Variable	Range
Role and objective of team	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • Work activities in a team environment with enterprise or specific sector • Limited discretion, initiative and judgment maybe demonstrated on the job, either individually or in a team environment
Sources of information	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • Standard operating and/or other workplace procedures • Job procedures • Machine/equipment manufacturer's specifications and instructions • Organizational or external personnel

	<ul style="list-style-type: none"> • Client/supplier instructions • Quality standards • OHS and environmental standards
Workplace context	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • Work procedures and practices • Conditions of work environments • Legislation and industrial agreements • Standard work practice including the storage, safe handling and disposal of chemicals • Safety, environmental, housekeeping and quality guidelines

Evidence Guide	
Critical Aspects of Competency	<p>Demonstrates skills and knowledge to:</p> <ul style="list-style-type: none"> • Operate in a team to complete workplace activity • Work effectively with others • Convey information in written or oral form • Select and use appropriate workplace language • Follow designated work plan for the job • Report outcomes
Underpinning Knowledge	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • Communication process • Team structure • Team roles • Group planning and decision making
Underpinning Skills	<p>Demonstrate skills to:</p> <ul style="list-style-type: none"> • Communicate appropriately, consistent with the culture of the workplace
Resource Implications	<p>Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.</p>
Methods of Assessment	<p>Competence may be assessed through:</p> <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	<p>Competence may be assessed in the work place or in a simulated work place setting.</p>

Occupational Standard: Coffee Roasting and Grinding Level II	
Unit Title	Develop Business Practice
Unit Code	IND CRG2 21 0613
Unit Descriptor	This unit specifies the outcomes required to establish a business operation from a planned concept. It includes researching the feasibility of establishing a business operation, planning the setting up of the business, implementing the plan and reviewing operations once commenced.

Elements	Performance Criteria
1. Identify business opportunity	<p>1.1 Business opportunities are investigated and identified.</p> <p>1.2 Feasibility study is undertaken to determine likely business viability.</p> <p>1.3 Market research on product or service is undertaken.</p> <p>1.4 Assistance with feasibility study of specialist and relevant parties is sought as required.</p> <p>1.5 Impact of emerging or changing technology including e-commerce, on business operations is evaluated.</p> <p>1.6 Practicability of business opportunity is assessed in line with perceived risks, returns sought and resources available.</p> <p>1.7 Business plan is completed for operation.</p>
2. Identify personal business skills	<p>2.1 Financial and business skills available are identified and taken into account when business opportunities are researched.</p> <p>2.2 Personal skills/attributes are assessed and matched against those perceived as necessary for a particular business opportunity.</p> <p>2.3 Business risks are identified and assessed according to resources available and personal preferences.</p>
3. Plan for establishment of business operation	<p>3.1 Business structure and operations are determined and documented.</p> <p>3.2 Procedures are developed and documented to guide operations.</p> <p>3.3 Financial backing is secured for business operation</p> <p>3.4 Business legal and regulatory requirements are identified and complied.</p> <p>3.5 Human and physical resources required to commence business operation are determined.</p> <p>3.6 Recruitment strategies are developed and implemented.</p>

4. Implement establishment plan	<p>4.1 Marketing of business operation is undertaken.</p> <p>4.2 Physical and human resources are obtained to implement business operation.</p> <p>4.3 Operational unit is established to support and coordinate business operation.</p> <p>4.4 Monitoring process is developed and implemented for managing operation.</p> <p>4.5 Legal documents are carefully maintained and relevant records are kept and updated to ensure validity and accessibility.</p> <p>4.6 Contractual procurement rights for goods and services including contracts with relevant people, negotiated and secured as required in accordance with the business plan.</p> <p>4.7 Options for leasing/ownership of business premises identified and contractual arrangements are completed in accordance with the business plan.</p>
5. Review implementation process	<p>5.1 Review process for implementation of business operation is developed and implemented.</p> <p>5.2 Improvements in business operation and associated management process are identified.</p> <p>5.3 Identified improvements are implemented and monitored for effectiveness.</p>

Variable	Range
Business opportunities	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • expected financial viability • skills of operator • amount and types of finance available • returns expected or required by owners • likely return on investment • finance required • lifestyle issues
Business viability	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • opportunities available • market competition • timing/ cyclical considerations • skills available • resources available • location and/ or premises available • risk related to a particular business opportunity, especially • in regard to Occupational Health and Safety and • environmental considerations
Specialist and relevant parties	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • Chamber of commerce

	<ul style="list-style-type: none"> • Financial planners and financial institution representatives, business planning specialists and marketing specialists • accountants • lawyers and providers of legal advice • government agencies • industry/trade associations • online gateways • business brokers/business consultants
Personal skills/attributes	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • technical and/ or specialist skills • business knowledge and skills • entrepreneurship and willingness to take risks
Business risks	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • occupational health and safety and environmental considerations • relevant legislative requirements • security of investment • market competition • security of premises/ location • supply and demand • resources available
Human and physical resources	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • software and hardware • office premises • communications equipment • specialist services through outsourcing, contracting and consultancy • staff • vehicles
Operational unit	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • office location staffed with required personnel and equipped to service and support business • home-based site or other location such as leased or owned property
Legal documents	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • partnership agreements, constitution documents, statutory books for companies (Register of Members, Register of Directors and Minute Books), Certificate of Incorporation, Franchise Agreements and financial documentation, appropriate software for financial records • recordkeeping including personnel, financial, taxation, OHS and environmental
Contracts with relevant people	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • owners, suppliers, employees, landlords, agents, distributors, customers or any person with whom the business has, or seeks to have, a performance-based relationship

Evidence Guide	
Critical Aspects of Competency	<p>Demonstrates skills and knowledge in:</p> <ul style="list-style-type: none"> • that a business operation has been planned and implemented from initial research into feasibility of the business and completion of the plan, through to implementing the plan and commencing operations • the ability to evaluate the results of research and assess the likely viability and practicability of a business opportunity, taking into account the current business/market climate and resources available
Underpinning Knowledge	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • Federal and regional government legislative requirements affecting business operations, especially in regard to Occupational Health and Safety (OHS), Equal Employment Opportunity (EEO), industrial relations and anti-discrimination • Technical or specialist skills relevant to the business operation • Financing options • Business systems and operations • Relevant marketing, management, sales and financial concepts • Methods for researching business opportunities • Principles of risk management relevant to the business • Methods of identifying relevant specialist services to complement the business • Forms and administrative systems • Services available and charges • Planning and control systems (sales, • Advertising and promotion, distribution and logistics • Financial recording systems • Legal rights and responsibilities • Record keeping duties • Operational factors relating to the business (provision of professional services, products)
Underpinning Skills	<p>Demonstrate skills of:</p> <ul style="list-style-type: none"> • Literacy skills to interpret legal requirements, company policies and procedures and immediate, day-to-day demands • Marketing skills • Business planning skills • Entrepreneurial skills • Problem-solving skills • OHS skills • Time management skills • Belief in services and products offered by the business

	<ul style="list-style-type: none"> • Communication skills including questioning, clarifying, reporting, and giving and receiving constructive feedback • Technical and analytical skills to interpret business documents, reports and financial statements and projections • Ability to relate to people from a range of social, cultural and ethnic backgrounds and physical and mental abilities • Problem solving skills to develop contingency plans • Using computers and software packages to record and manage data and to produce reports • Literacy skills to enable interpretation of business information, numeracy skills for data analysis to aid research • Research skills to identify a business opportunity and to conduct a feasibility study • Analytical skills to assess personal attributes and to identify business risks • Observation skills for identifying appropriate people, resources and to monitor work
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Coffee Roasting and Grounding Level II	
Unit Title	Standardize and Sustain 3S
Unit Code	IND CRG2 22 0613
Unit Descriptor	This unit of competence covers the knowledge, skills and attitudes required by worker to standardize and sustain 3S to his/her workplace. It covers responsibility for the day- to-day operations of the workplace and ensuring that continuous improvements of Kaizen elements are initiated and institutionalized.

Elements	Performance Criteria
1. Prepare for work.	<p>1.1 Work instructions are used to determine job requirements, including method, material and equipment.</p> <p>1.2 Job specifications are read and interpreted following working manual.</p> <p>1.3 OHS requirements, including dust and fume collection, breathing apparatus and eye and ear personal protection needs are observed throughout the work.</p> <p>1.4 Safety equipment and tools are identified and checked for safe and effective operation.</p> <p>1.5 Tools and equipment are prepared and used to implement 3S.</p>
2. Standardize 3S.	<p>2.1 Plan is prepared and used to standardize 3S activities.</p> <p>2.2 Tools and techniques to standardize 3S are prepared and implemented based on relevant procedures.</p> <p>2.3 Checklists are followed for standardize activities and reported to relevant personnel.</p> <p>2.4 The workplace is kept to the specified standard.</p> <p>2.5 Problems are avoided by standardizing activities.</p>
3. Sustain 3S.	<p>3.1 Plan is prepared and followed to standardize 3S activities.</p> <p>3.2 Tools and techniques to sustain 3S are discussed, prepared and implemented based on relevant procedures.</p> <p>3.3 Workplace is inspected regularly for compliance to specified standard and sustainability of 3S techniques.</p> <p>3.4 Workplace is cleaned up after completion of job and before commencing next job or end of shift.</p> <p>3.5 Situations are identified where compliance to standards is unlikely and actions specified in procedures are taken.</p>

	<p>3.6 Improvements are recommended to lift the level of compliance in the workplace.</p> <p>3.7 Checklists are followed to sustain activities and reported to relevant personnel.</p> <p>3.8 Problems are avoided by sustaining activities.</p>
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Variable	Range
OHS requirements	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • Are to be in accordance with legislation/ regulations/codes of practice and enterprise safety policies and procedures. This may include protective clothing and equipment, use of tooling and equipment, workplace environment and safety, handling of material, use of fire fighting equipment, enterprise first aid, hazard control and hazardous materials and substances. • Personal protective equipment is to include that prescribed under legislation/regulations/codes of practice and workplace policies and practices. • Safe operating procedures are to include, but are not limited to the conduct of operational risk assessment and treatments associated with workplace organization. • Emergency procedures related to this unit are to include but may not be limited to emergency shutdown and stopping of equipment, extinguishing fires, enterprise first aid requirements and site evacuation.
Safety equipment and tools	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • dust masks / goggles • glove • working cloth • first aid • safety shoes
Tools and equipment	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • paint • hook • sticker • signboard • nails • shelves • chip wood • sponge • broom • pencil • shadow board/ tools board
Tools and techniques	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • 5S Job Cycle Charts • Visual 5S • The Five Minute 5S

	<ul style="list-style-type: none"> • Standardization level checklist • 5S checklist • The five Whys and one How approach(5W1H) • Suspension • Incorporation • Use Elimination
Relevant procedures	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • Assign 3S responsibilities • Integrate 3S duties into regular work duties • Check on 3S maintenance level • OHS measures such as signage, symbols / coding and labeling of workplace and equipment • Creating conditions to sustain your plans • Roles in implementation
Reporting	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • verbal responses • data entry into enterprise database • brief written reports using enterprise report formats
Relevant personnel	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • supervisors, managers and quality managers • administrative, laboratory and production personnel • internal/external contractors, customers and suppliers
Tools and techniques	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • 5S slogans • 5S posters • 5S photo exhibits and storyboards • 5S newsletter • 5S maps • 5S pocket manuals • 5S department/benchmarking tours • 5S months • 5S audit • Awarding system • Big cleaning day • Patrolling system may include: <ul style="list-style-type: none"> ➢ Top management Patrol ➢ 5S Committee members and Promotion office Patrol ➢ Mutual patrol ➢ Self-patrol ➢ Checklist patrol ➢ Camera patrol

Evidence Guide	
Critical Aspects of Competence	<p>Demonstrates skills and knowledge to:</p> <ul style="list-style-type: none"> • Discuss the relationship between Kaizen elements. • Standardize and sustain 3S activities by applying appropriate tools and techniques.

Underpinning Knowledge and Attitudes	<p>Demonstrates knowledge of:</p> <ul style="list-style-type: none"> • Elements of Kaizen • Ways to improve Kaizen elements • Benefits of improving kaizen elements • Relationship between Kaizen elements • The fourth pillar of 5S • Benefits of standardizing and sustaining 3S • Procedures for standardizing and sustaining 3S activities • Tools and techniques to sustain 3S • Relevant Occupational Health and Safety (OHS) and environment requirements • Plan and report • Method of communication
Underpinning Skills	<p>Demonstrates skills of:</p> <ul style="list-style-type: none"> • improving Kaizen elements by applying 5S • standardizing and sustaining procedures and techniques to avoid problems • technical drawing • procedures to standardizing 3S activities • analyzing and preparing shop layout of the workplace • standardizing and sustaining checklists • preparing and implementing tools and techniques to sustain 3S • working with others • reading and interpreting documents • observing situations • solving problems by applying 5S • communication skills • preparing labels, slogans, etc. • gathering evidence by using different means • using Kaizen board properly in accordance the procedure • reporting activities and results using report formats
Resources Implication	<p>Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.</p>
Methods of Assessment	<p>Competence may be assessed through:</p> <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	<p>Competence may be assessed in the work place or in a simulated work place setting.</p>

NTQF Level III

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Occupational Standard: Coffee Roasting and Grinding Level III	
Unit Title	Apply Raw Materials, Ingredient and Process Knowledge to Production Problems
Unit Code	IND CRG3 01 0613
Unit Descriptor	This unit of competency covers skills and knowledge required to apply knowledge of ingredients and processes to troubleshoot typical problems that occur in preparing, processing and/or packaging product.

Elements	Performance Criteria
1. Identify and respond to non-conforming ingredients/raw materials	<p>1.1 Non-conformance in raw materials/ingredients is identified and reported according to workplace reporting requirements.</p> <p>1.2 Causes of non-conformance are investigated and reported according to workplace reporting requirements.</p> <p>1.3 Corrective action is determined and implemented within level of responsibility and workplace policy and procedures.</p> <p>1.4 Action is taken to prevent recurrence of non-conformance.</p> <p>1.5 Action is reported according to workplace reporting requirements.</p> <p>1.6 Action is taken in typical processing and related techniques to minimize problems.</p>
2. Identify and respond to non-conforming product and processes	<p>2.1 Processing parameters, stages and changes which occur during processing are monitored.</p> <p>2.2 Non-conformance in processing, handling and/or storage is identified and corrective action taken according to workplace legislative requirements.</p> <p>2.3 Causes of non-conformance relating to processing, handling and/or storage are investigated and reported according to workplace reporting requirements.</p> <p>2.4 Corrective action is determined and implemented within level of responsibility and workplace procedures.</p> <p>2.5 Action is taken to prevent recurrence of non-conformance.</p> <p>2.6 Action is reported according to workplace reporting requirements.</p> <p>2.7 Work is conducted in accordance with workplace environmental guidelines.</p>

Variable	Range
Ingredients/raw materials	<p>May include:</p> <ul style="list-style-type: none"> Ingredients/raw materials are those used to manufacture product

Policies and procedures	Work is carried out according to company procedures, regulatory and licensing requirements, legislative requirements, and industrial awards and agreements.
Typical processing and related techniques	May include: <ul style="list-style-type: none"> • raw materials/ingredient dispensing • preparation • mixing and blending • conditioning • primary and further processing • wrapping • packing and storage
Typical process parameters	May include: <ul style="list-style-type: none"> • temperature • time, pressure and flow rate
Legislative requirements	May include: <ul style="list-style-type: none"> • Legislative requirements are typically reflected in procedures and specifications. Legislation relevant to this industry includes: • The Food Standards Code, including labeling, weights and measures legislation • Legislation covering food safety, environmental management, Occupational Health and Safety (OHS), anti-discrimination and equal opportunity
Problem minimization	May include: <ul style="list-style-type: none"> • Where recurrence of a problem cannot be prevented, procedures should be established to minimize the likelihood of recurrence and to identify any further incidents

Evidence Guide	
Critical Aspects of Competency	Must confirm appropriate knowledge and skills to: <ul style="list-style-type: none"> • describe required quality characteristics for raw materials and ingredients • describe required processes to achieve production specifications • identify common non-conforming materials and ingredients and causes • identify common non-conforming processes and causes • determine and undertake corrective action for non-conformances • complete workplace documentation and report non-conformances • apply food safety procedures
Underpinning Knowledge	Demonstrate knowledge of: <ul style="list-style-type: none"> • basic composition and function of each main raw material/ingredient used, such as awareness of ingredient grades or types • common causes of contamination/unacceptable quality of raw materials/ ingredients

	<ul style="list-style-type: none"> • methods used to confirm quality standard, such as accessing information (e.g. certificates of analysis and/or laboratory clearance information) • the effect of variation in raw materials/ingredients on processing stages and final product outcome, including factors likely to cause variation, and scope to adjust or correct for variation at each processing stage appropriate handling and storage requirements for raw materials/ingredients and final product, and the effect of failing to meet required storage conditions • the changes and reactions that occur through processing stages, including the signs and symptoms of poor/unacceptable processing or equipment operation • factors that affect the shelf-life of product • the inter-relationships between processing stages and the effect of variation in processing parameters on process outcome and on final product, including factors likely to cause variation, and scope to adjust or correct for variation at subsequent process stages • procedures for identifying and isolating non-conforming product • troubleshooting information and techniques • procedures and related documentation required to amend or introduce a new method or procedure, such as short term procedures for amending or updating specifications and processing parameters • reporting requirements and responsibilities • test methods to confirm raw material/ingredient and/or final product quality characteristics where relevant
Underpinning Skills	<p>Demonstrate skills to:</p> <ul style="list-style-type: none"> • identify requirements of ingredient/raw material characteristics within level of responsibility • follow procedures to identify, remove/isolate and report nonconforming ingredients/materials and/or product according to workplace reporting requirements • determine likely causes of non-conformance of ingredients/raw materials • recognize indicators of unacceptable or non-conforming processing, handling and/or storage outcomes • act promptly to identify, remove/isolate and report nonconforming product and/or processes • access and apply workplace information relating to process troubleshooting • investigate non-conformance to determine likely causes and report findings to appropriate personnel • identify action required to correct non-conformance and implement within level of responsibility

	<ul style="list-style-type: none"> • identify action required to prevent or minimize and control recurrence of non-conformance and implement within level of responsibility • complete workplace records, including reporting nonconformance and documenting corrective actions according to work place recording procedures • conduct tests to confirm raw material/ingredient and/or final product quality characteristics according to enterprise procedures • use oral communication skills/language competence to fulfill the job role as specified by the organization, including questioning, active listening, asking for clarification and seeking advice from supervisor • work cooperatively within a culturally diverse workforce
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Coffee Roasting and Grounding Level III	
Unit Title	Program/Operate Green Coffee Beans Grading Equipment
Unit Code	IND CRG3 02 0613
Unit Descriptor	This unit of competency covers the skills and knowledge required to program grading equipment to identify key characteristics of fresh produce and sort accordingly.

Elements	Performance Criteria
1. Confirm produce grading specifications	<p>1.1 Features of the grading equipment and process are described according to policy and procedure.</p> <p>1.2 Characteristics of produce are examined and purpose for grading confirmed.</p> <p>1.3 Customer and packaging requirements are confirmed.</p> <p>1.4 Specifications for grading are determined.</p>
2. Program grading equipment	<p>2.1 Specifications are entered into computer to set grading parameters Computer program or equipment components are used effectively to enable a variety of grading outcomes to be achieved.</p> <p>2.2 Program or equipment operation is tested or monitored to ensure standards are achieved.</p> <p>2.3 Problems or inconsistencies in grading outcomes are investigated to determine cause and corrective action implemented.</p> <p>2.4 Documentation is completed and records of grading specifications for customer are recorded.</p>

Variable	Range
Equipment	<p>May include:</p> <ul style="list-style-type: none"> • cameras • infra-red lights • lasers • temperature gauges and conveyor belts
Policies and procedures	<p>May include:</p> <ul style="list-style-type: none"> • Product packaging and related work processes are consistent with company policies and procedures, regulatory and licensing requirements, legislative requirements, and industrial awards and agreements and takes account of Occupational Health and Safety (OHS) and environmental impact
Grading purpose	<p>May include:</p> <ul style="list-style-type: none"> • singulation • rotation • sorting and quality control

Evidence Guide			
Critical Aspects of Competency	<p>Must confirm appropriate knowledge and skills to:</p> <ul style="list-style-type: none"> • analyse grading requirements and confirm specifications for grading equipment • determine grading specifications for a variety of outcomes • use computing or mechanical technology to achieve grading specifications • verify program specifications for required outcomes • Analyse non-conformances and grading problems and determine probable cause. 		
Underpinning Knowledge	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • grading equipment processes and technologies • characteristics of produce used for grading and the process of identification • factors that influence grading outcomes • typical problems that occur in the grading process, and likely cause and appropriate response options 		
Underpinning Skills	<p>Demonstrate skills to:</p> <ul style="list-style-type: none"> • identify characteristics of produce used to determine grading requirements • use computer software or mechanical equipment to establish and set grading specifications • identify and apply the quality assurance systems in place to ensure that grading meets customer requirements • identify problems that occur in the grading process and investigate likely causes • determine appropriate corrective action to prevent grading non conformance • describe the purpose of grading and processes implemented by grading equipment to achieve specific grading outcomes • identify typical problems that occur in the grading process, and outline likely causes and appropriate response options within level of responsibility • use oral communication skills/language competence to fulfil the job roles specified by the organization including questioning, active listening, asking for clarification and seeking advice from supervisor • work cooperatively within a culturally diverse workforce 		
Resource Implications	<p>Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.</p>		
Methods of Assessment	<p>Competence may be assessed through:</p> <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning 		
Context of Assessment	<p>Competence may be assessed in the work place or in a simulated work place setting.</p>		
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Occupational Standard: Coffee Roasting and Grinding Level III	
Unit Title	Develop and Adjust a Production Schedule
Unit Code	IND CRG3 03 0613
Unit Descriptor	This unit refers to the scheduling of production to meet operational requirements. It aims at ensuring that operators identify resource requirements, and document, monitor and adjust schedules in response to operational variations.

Elements	Performance Criteria
1. Identify resources to meet production requirements.	1.1 Demand for product is determined. 1.2 Information on orders, stocks and delivery is accessed and verified. 1.3 Material requirements are determined. 1.4 Human resource requirements are determined. 1.5 Health, safety or environment issues are determined in meeting requirements.
2. Develop schedules	2.1 Production priorities are determined. 2.2 Production opportunities ('windows') are identified 2.3 Production functions are identified 2.4 Production schedules are developed in accordance with procedures taking account of safety requirements. 2.5 Production schedules are communicated and distributed to appropriate personnel
3. Monitor production schedules	3.1 Production output is monitored against schedule. 3.2 Variations between production and schedule are identified. 3.3 Operational variation is recorded and discussed with appropriate personnel. 3.4 Possible cause of variation is identified.
4. Adjust schedules.	4.1 Schedules are adjusted in response to operational variation. 4.2 Schedules are adjusted in response to unexpected events. 4.3 Adjusted/amended schedules are distributed to appropriate personnel. 4.4 Product output is maintained in accordance with production and health, safety and environment requirements

Variable	Range
Indicative information sources and resources	May include: <ul style="list-style-type: none"> • customer requirements • organizational plans, policies and procedures • production schedules, run plans • resource utilisation actual and targets

Functions	<p>May include</p> <ul style="list-style-type: none"> • regular planning operations • Communication with all relevant personnel, including management and administration. Unit content areas include responses to: <ul style="list-style-type: none"> • immediate production needs • future production needs • Reworking requirements.
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Evidence Guide	
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Critical Aspects of Competency	<p>Must confirm appropriate knowledge and skills to:</p> <ul style="list-style-type: none"> • identify resource requirements • Record, monitor and adjust schedules in response to operational requirements. • Consistent performance should be demonstrated. For example, look to see that: <ul style="list-style-type: none"> • resource requirements are correctly identified in accordance with production requirements • schedules are planned for the most effective and efficient manner to meet operational requirements • schedules allow for Safety, Health and Environmental (HSE) issues and reinforce HSE priorities • timelines are adhered to • schedules are adjusted and resource requirements amended in response to operational variations • Variations to schedules are communicated and documented appropriately.
Underpinning Knowledge	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • production objectives, priorities, targets and resource requirements • customer and quality requirements • process and plant operational requirements • hazards associated with the process • awareness of the hierarchy of control in controlling the hazards • impact of adjustments on process/plant efficiencies and production outcomes/targets • safety implications for schedule/schedule changes • planning, sequencing, monitoring and reviewing steps • company policies and procedures
Underpinning Skills	<p>Demonstrate skills to:</p> <ul style="list-style-type: none"> • Identify production objective, priorities, targets and resource requirements • Identify customer and quality requirements • Identify and access process and plant operational requirement • Explain hazards associated with the process • Explain safety implications for schedule/schedule changes

	<ul style="list-style-type: none"> • Explain planning, sequencing, monitoring and reviewing steps • Identify safety implications for schedule/schedule changes
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Coffee Roasting and Grounding Level III	
Unit Title	Set up a Production and Packaging Line for Operation
Unit Code	IND CRG3 04 0613
Unit Descriptor	This unit of competency covers the skills and knowledge required to set up multiple production or packaging processes and/or conduct multiple process changeovers for operation by others.

Elements	Performance Criteria
1. Prepare for line setup	<p>1.1 Materials are confirmed and available to meet production requirements</p> <p>1.2 Equipment and related accessories are confirmed, available and fit for use to meet production requirements</p> <p>1.3 Tools and equipment required for line setup are made available, operational and fit for use</p> <p>1.4 Processing parameters and settings are identified to meet production or packaging requirements</p>
2. Set up the line for operation	<p>2.1 Cleaning requirement and maintenance requirements and status are identified and confirmed</p> <p>2.2 Equipment is inspected to confirm condition</p> <p>2.3 Machine settings are selected or Equipment adjusted as required to meet safety and production requirements</p> <p>2.4 Processing or packaging parameters are entered as required to meet production requirements</p> <p>2.5 Equipment performance is checked and adjusted as required</p> <p>2.6 Pre-start checks are carried out as required by workplace legislative requirements</p> <p>2.7 Line setup is completed to match production or packaging schedule and operating requirements</p> <p>2.8 The line is ready and safe to operate and any equipment requirements are reported according to workplace reporting requirements</p> <p>2.9 Work is conducted in accordance with workplace environmental guidelines/Information</p> <p>2.10 Relevant personnel are notified of setup completion</p>

Variable	Range
Confirming cleaning requirements and status	<p>may involve:</p> <ul style="list-style-type: none"> accessing cleaning records

Equipment adjustment	may limited use of hand tools within level of responsibility
Legislative requirements	May include: <ul style="list-style-type: none"> • the Food Standards Code, including labeling, weights admeasures legislation • legislation covering food safety, environmental management, OHS, anti-discrimination and equal opportunity
Workplace reporting	may include: <ul style="list-style-type: none"> • Standard Operating Procedures (SOPs) • specifications • production schedules and instructions • standard forms and reports
Policies and procedures	Work is carried out according to company procedures, regulatory and licensing requirements, legislative requirements, and industrial awards and agreements

Evidence Guide	
Critical Aspects of Competency	Must confirm appropriate knowledge and skills to: <ul style="list-style-type: none"> • conduct pre-start checks on machinery used for production to determine cleaning, maintenance and operation readiness • determine production parameters and requirements • set up line according to production requirements take corrective action in response to typical faults and inconsistencies • complete workplace records and communicate line status with other personnel as required • apply safe work practices and identify OHS hazards and controls • safely shut down equipment & apply food safety procedures.
Underpinning Knowledge	Demonstrate knowledge of: <ul style="list-style-type: none"> • basic operating principles of equipment and related accessories, including equipment adjustment points, range and location/alignment requirements of sensors and related feedback instruments, and status and purpose of guards • operating capacities of equipment used in the work area, such as different types of equipment and/or components as required by processing operations • nature of setup/changeover requirements, such as product compatibility and related cleaning requirements, impact of variation in materials or product on setup requirements, equipment and/or attachment changeovers related to given products • typical equipment faults and related causes, including signs and symptoms of faulty equipment and early warning signs of potential problems

	<ul style="list-style-type: none"> • pre-start checks required by setup/changeover • related processes and personnel dependent on line setup, and communication responsibilities • isolation, lock out and tag out procedures and responsibilities • OHS hazards and controls procedures and responsibility for reporting equipment performance information • basic operating principles of process control, where relevant, including the relationship between control panels and systems and the physical equipment • routine maintenance requirements and procedures where relevant
Underpinning Skills	<p>Demonstrate skills to:</p> <ul style="list-style-type: none"> • access production/packing schedule and related information to identify line setup/changeover requirements, such as checking product sequencing and compatibility, confirming that the required cleaning and/or sanitation has occurred and required packaging components and consumables are available as appropriate select, fit and use personal protective clothing and/or equipment • confirm supply of necessary equipment and related attachments, materials and services for production • confirm supply of necessary equipment and services to carry out setup operations • set and/or adjust equipment to meet production/packaging requirements, including selecting the required parameters or equipment settings, and changing processing set points as required • position safety guards and cancel isolation/lockouts ready for operation • confirm that sensors and related feedback instruments are correctly positioned and operational • operate equipment to confirm equipment setup and make final adjustments as required • time setup activities to meet production requirements • advise affected work areas/personnel of completion of setup • maintain work area to meet housekeeping standards • load and/or position materials/ingredients/product and/or packaging consumables according to enterprise procedures • use the control panel/system to set and adjust equipment components according to enterprise procedures • conduct routine maintenance according to enterprise procedures • use oral communication skills/language competence to fulfill the job role as specified by the organization, including questioning, active listening, asking for clarification and seeking advice from supervisor

	<ul style="list-style-type: none"> • work cooperatively within a culturally diverse workforce
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Coffee Roasting and Grounding Level III	
Unit Title	Demonstrate Knowledge of Coffee Roasting and Grounding Principles
Unit Code	IND CRG3 05 0613
Unit Descriptor	This unit of competency covers the coffee Substance knowledge required by coffee roasting and grounding operators who are required to liaise with nutritionists, other technical and professional staff and customers.

Elements	Performance Criteria
1. Identify substance purpose of coffee product	<p>1.1 Target varieties of green coffee bean for coffee product are identified.</p> <p>1.2 Production purpose of coffee increasing and range of desired products are identified.</p> <p>1.3 Coffee bean size, quality and other factors affecting tastiness for target customers are identified.</p> <p>1.4 Impact of coffee on customers taste and preference is identified.</p>
2. Identify key quality factors affecting coffee production performance	<p>2.1 Coffee safety requirements for target varieties and phase of coffee production are identified.</p> <p>2.2 Type and proportion of raw materials in coffee production and their effect on customers taste and preference are identified.</p> <p>2.3 The purpose of additives on customers' preference and taste and coffee production quality are identified.</p> <p>2.4 Effects of coffee processing on coffee quality and customers taste and preference are identified.</p> <p>2.5 Substitution guidelines, including the effect of substitution on coffee production performance, are understood.</p>

Variable	Range
Target varieties	may include: <ul style="list-style-type: none"> • Coffee Arabica • Coffee Robusta • Coffee varieties from different region/area
Coffee production	May include:: <ul style="list-style-type: none"> • Regular coffee i.e. Roasted/and Grounded coffee) • Instant coffee, coffee extracts and essences

Evidence Guide	
Critical Aspects of Competency	must confirm appropriate knowledge and skills to: <ul style="list-style-type: none"> • identify and interpret customer requirements from coffee production

	<ul style="list-style-type: none"> relate coffee roasting, blending and grounding type to customers preference and taste and production requirements requirements of coffee production
Underpinning Knowledge	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> Typical substance requirements of coffee supported by coffee production. Knowledge would be restricted to standard daily requirements of main coffee groups (proteins, carbohydrates etc.) how substance needs of target customers may vary according to gender, health, pregnancy, lactation, age, season, geography, production purpose and form of production factors affecting customers' acceptance of coffee, including tastiness and presentation range of raw materials typically used in coffee production, regarding two varieties of green coffee beans impact of operator controlled factors on coffee quality, including temperatures, moisture, sizing, sieving and liquid additions impacts of coffee on customers preference and taste, including positive effects on customers taste and effects of incorrect taste/aroma on customers safety, customers performance and export contamination
Underpinning Skills	<p>Demonstrate skills to:</p> <ul style="list-style-type: none"> access and interpret workplace information, including Standard Operating Procedures (SOPs), labels, recipes, customer supplied information and Material Data Safety Sheets (MSDS) use and application of workplace terminology sequence information against production processes assess quality standards identify resources in the enterprise for further information, including nutritionists, other technical and professional specialist and reference materials
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	<p>Competence may be assessed through:</p> <ul style="list-style-type: none"> Interview / Written Test Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Coffee Roasting and Grounding Level III	
Unit Title	Identify Cultural Requirements for Coffee Flavors/Tastes
Unit Code	IND CRG3 06 0613
Unit Descriptor	This unit of competency covers the skills and knowledge required to identify cultural, religious and dietary considerations when preparing coffee products or determining the suitability of coffee products to meet specific customer needs.

Elements	Performance Criteria
1. Identify cultural and religious requirements of customers	<p>1.1 Cultural and religious practices and events that influence coffee production requirements are identified.</p> <p>1.2 Coffee production methods and coffee products that process for cultural and religious practices and events are identified.</p> <p>1.3 The suitability of current coffee production methods and current coffee products are assessed against cultural and religious requirements.</p> <p>1.4 If required, alternative processes and products are identified.</p>
2. Identify Coffee beverage requirements of customers	<p>2.1 A range of specific Coffee beverage requirements and their impact on coffee production are identified.</p> <p>2.2 Coffee products that provide for coffee beverage requirements are identified.</p> <p>2.3 The suitability of current coffee production methods and current coffee products are assessed against coffee beverage requirements.</p> <p>2.4 If required alternative processes and products are identified.</p>
3. Identify common Coffee-related allergies	<p>3.1 Common coffee-related allergies are identified.</p> <p>3.2 Risk assessment is made of current products and processes against common allergies Coffee-related according to workplace policy and procedure.</p> <p>3.3 Procedures are identified to avoid contamination with common allergens.</p>

Variable	Range
Specific cultural and religious needs	<p>May include:</p> <ul style="list-style-type: none"> • Coffees prepared to cultural and religious Coffee beverage laws • national and regional Coffee products • Coffees that mark significant events • feasting • fasting

Specific Coffee beverage needs	May include: <ul style="list-style-type: none"> • Decaffeination • Caffeine Free
Legislative requirements	May include: <ul style="list-style-type: none"> • the Coffee Standards, Code including labelling, weights and measures legislation • legislation covering Coffee safety, environmental management, Occupational Health and Safety (OHS), anti-discrimination and equal opportunity
Common allergies	May include : <ul style="list-style-type: none"> • Normal roasted Coffee • Instant Coffee
Policies and procedures	May include: <ul style="list-style-type: none"> • Work is carried out according to company policies and procedures, regulatory and licensing requirements, legislative requirements, and industrial awards and agreements

Evidence Guide	
Critical Aspects of Competency	must confirm appropriate knowledge and skills to: <ul style="list-style-type: none"> • identify the Coffee products commonly associated cultural, religious and Coffee beverage requirements • identify Coffee processes commonly associated cultural religious and Coffee beverage requirements • Identify common Coffee allergens and contamination risks in the production process
Underpinning Knowledge	Demonstrate knowledge of: <ul style="list-style-type: none"> • ingredients available products Coffee production processes
Underpinning Skills	Demonstrate skills to: <ul style="list-style-type: none"> • use communication skills to interpret customer requests and suggest appropriate products that meet customer requirements • access information on cultural, religious and Coffee beverage needs • apply product knowledge to determine appropriate Coffee products and processes to comply with cultural, religious or Coffee beverage considerations
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Coffee Roasting and Grinding Level III	
Unit Title	Identify Equipment Faults
Unit Code	IND CRG3 07 0613
Unit Descriptor	This unit requires the application of planning, technical knowledge and skills to check and isolate routine and non-routine equipment faults used in production and report on the status of equipment. It applies to all sectors of the industry This competency is typically performed by operators demonstrating some relevant theoretical knowledge and using a range of well-developed skills requiring some discretion and judgment.

Elements	Performance Criteria
1. Identify scope of operational check.	<p>1.1 Tools and equipment components and operating systems are identified and classified.</p> <p>1.2 Appropriate tests and procedures are matched to the equipment operating systems.</p> <p>1.3 Special test procedures and parameters are identified in manufacturer's specifications and procedures.</p> <p>1.4 The operating principles of hydraulic, pneumatic, mechanical and electrical/electronic systems are explained as related to workplace equipment.</p> <p>1.5 Measures are implemented to control identified hazards in line with procedures and duty of care.</p> <p>1.6 Checks on the physical condition of equipment are observed and undertaken as per procedures.</p> <p>1.7 Preliminary observations/data is recorded</p> <p>1.8 Test procedures are discussed with appropriate personnel and necessary permission is obtained where required.</p>
2. Plan operational checks.	<p>2.1 Specifications and notes are checked from preliminary observations and areas to be clarified are identified.</p> <p>2.2 Testing sequence/s noting areas is/are planned where results and observations should be recorded.</p> <p>2.3 Safe area for testing is identified.</p> <p>2.4 Arrangements for any additional resources (including other employees) are made.</p>
3. Check unit through full operational range.	<p>3.1 Testing, observing relevant safety and operational requirements are undertaken.</p> <p>3.2 Results and findings are confirmed.</p>

4. Identify fault and/or formulate recommendations.	<p>4.1 Impact of fault on work schedule is identified.</p> <p>4.2 Proposals for equipment repair are recorded based on faults found, cost/time implications and workplace approval systems.</p> <p>4.3 Report is explained to relevant workplace personnel including any options and recommendations.</p> <p>4.4 Repairs are undertaken where appropriate in accordance with procedures.</p>
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Variable	Range
Tools and equipment	<p>May Include:</p> <ul style="list-style-type: none"> • hand tools specific for the task • product testing equipment (e.g. flow meter, scales, tape measure, micrometer, calliper, ultrasonic thickness) • machinery measuring equipment (e.g. vibration meter, tachometer, current tester, thermal imaging, temperature gauge) • Measuring and aligning equipment.
Procedures	<p>May include:</p> <ul style="list-style-type: none"> • Procedures mean all relevant workplace procedures, work instructions, temporary instructions, standard operating procedures, plant description manuals, manufacturer's instructions, specifications, service manuals, machine circuit diagrams for hydraulic/pneumatic and electrical/electronic circuits and relevant industry and government codes and standards.
Hazards	<p>May include:</p> <ul style="list-style-type: none"> • rotating and moving machinery • process materials, solids, fluids and gases under pressure or flowing • temporary connections or by-passes • electrical, hydraulic or pneumatic energy sources • Out-of-specification operation.
Data and Records	<p>May Include :</p> <ul style="list-style-type: none"> • plant data • log sheets • operational and performance reports • physical aspects such as noise, smell, feel and pressure condition monitoring information • planned maintenance schedules and procedures.
Problems/faults	<p>May Include:</p> <ul style="list-style-type: none"> • out-of-specification product or variations • response of equipment to materials variations • new or changed materials • changed equipment settings (e.g. higher speed or throughput)

	<ul style="list-style-type: none"> • equipment in need of maintenance • Procedures requiring update or modification.
Variables	<p>May Include:</p> <ul style="list-style-type: none"> • equipment performance (e.g. speed, output, variations) • equipment component performance • sequences and timing of operations • Materials changes (desired and not desired).

Evidence Guide

Critical Aspects of Competency	<p>Must confirm appropriate knowledge and skills to:</p> <ul style="list-style-type: none"> • understand the procedures and know the importance of critical operational systems • Recognise potential situations requiring action and then implement appropriate action. • early warning signs of equipment in need of attention/with potential problems are recognised • appropriate tests are undertaken and tests are analysed appropriately • proposals for equipment repair are based upon the most appropriate and cost effective method to return equipment to full performance in a timely manner • Items initiated are followed through until final resolution has occurred.
Underpinning Knowledge	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • functions and troubleshooting of internal components and their problems • routine and non-routine causes of equipment failures and the service conditions which may increase maintenance • maintenance techniques, (e.g. reactive maintenance, predictive and preventative operational maintenance) • appropriate testing procedures and use of equipment for a range of equipment faults • operating principles for mechanical, hydraulic, pneumatic, electrical/electronic systems • urgency and timeliness factors in planning maintenance activities in relation to production requirements • Collection, analysis and reporting of data.
Underpinning Skills	<p>Demonstrate skills to:</p> <ul style="list-style-type: none"> • identify and select testing methods based on cost and time effectiveness • conduct inspections, checks and tests on equipment as appropriate • read and interpret circuit diagrams for mechanical, hydraulic, pneumatic and electrical/electronic operating systems • use technical information and manufacturer information to locate relevant data

	<ul style="list-style-type: none"> • interpret technical specifications and manufacturer instructions • ensure workplace is safe for testing and maintenance of equipment • identify hazards of the materials and process • implement appropriate procedures for hazard control • use PPE, safely handle products and materials, read relevant safety information • Apply safety precautions appropriate to the task.
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Coffee Roasting and Grinding Level III	
Unit Title	Apply Competitive Manufacturing Practices
Unit Code	IND CRG3 08 0613
Unit Descriptor	This unit covers the skills needed to implement basic improvement practices within a competitive manufacturing organization. The unit focuses on bringing together the basic concepts and the holistic application of these basic concepts and processes to manufacturing. It would typically be carried out working as part of a team.

Elements	Performance Criteria
1. Focus on the basic competitive manufacturing concepts	1.1 Customers and their needs/requirements are identified in the competitive manufacturing 1.2 Suppliers are identified 1.3 Value contributions are identified along the chain 1.4 Methods of increasing own contribution are identified and recommended to the value chain
2. Improve the product/process value	2.1 Customer features/benefits in the product are identified 2.2 Items which contribute to those features/benefits are identified 2.3 Things which do not contribute to customer benefits/features are identified 2.4 Methods of increasing features/benefits are recommended
3. Use competitive manufacturing tools	3.1 Appropriate tools are selected for the job/process 3.2 The tool is applied to the job/process 3.3 The job/process is monitored and adjustments are made to improve it in accordance with procedures 3.4 Own skill requirements are identified and skill development is sought if required

Variable	Range
Customer	May Include: <ul style="list-style-type: none"> • Interpreted to be an internal customer, but typically the benefits to the final customer should be used as the basis for the identification of waste. • The operator does not need to interface directly with the external customer, but should be provided with sufficient information to enable them to identify customer benefits and features. • Supplier may be interpreted to be an internal supplier, but typically the external supplier and their abilities should be known.

	<ul style="list-style-type: none"> The operator does not need to interface directly with the external supplier, but should be provided with sufficient information to enable them to identify supplier abilities.
Competitive manufacturing	<p>May Include:</p> <ul style="list-style-type: none"> lean manufacturing agile manufacturing preventative and predictive maintenance approaches monitoring and data gathering systems such as <ul style="list-style-type: none"> ➤ Systems Control and Data Acquisition (SCADA) software, ➤ Enterprise Resource Planning (ERP) systems, ➤ Manufacturing Resource Planning (MRP), and ➤ proprietary systems such as SAP statistical process control systems including six sigma and three sigma Just In Time (JIT), kanban and other pull related manufacturing control systems Supply, value, and demand chain monitoring and analysis other continuous improvement systems. Competitive manufacturing should be interpreted so as to take into account the stage of implementation of competitive manufacturing approaches, the size of the enterprise, the work organization, culture, regulatory environment and manufacturing sector.
Tools	<p>May include:</p> <ul style="list-style-type: none"> to mean the tools of competitive manufacturing such as 5S, 6 s , continuous improvement, cause effect diagrams
Procedures	<p>May Include:</p> <ul style="list-style-type: none"> All work instructions, standard operating procedures, formulas/recipes, batch sheets, temporary instructions and similar instructions provided for the smooth running of the plant. They may be written, verbal, computer based or in some other form. For the purposes of this Training Package, 'procedures' also includes good operating practice as may be defined by industry codes of practice (e.g. Good Manufacturing Practice (GMP), Responsible Care) and government regulations.

Evidence Guide	
Critical Aspects of Competency	<p>Demonstrate skills and knowledge of:</p> <ul style="list-style-type: none"> There should be evidence of the individual's contribution to the value chain and willing application of competitive manufacturing to their job.
Underpinning Knowledge	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> the customers and the benefits they derive from the products the suppliers and their capabilities product waste

	<ul style="list-style-type: none"> • relevant tools for their job and how to apply them • factors impacting on the product, process and waste, particularly those wholly or partially under their control (and how to control them)
Underpinning Skills	<p>Demonstrate skills to:</p> <ul style="list-style-type: none"> • analysis • communication • planning • teamwork • problem solving
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	<p>Competence may be assessed through:</p> <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Coffee Roasting and Grounding Level III	
Unit Title	Establish Compliance Requirements for Work Area
Unit Code	IND CRG3 09 0613
Unit Descriptor	This unit of competency covers the skills and knowledge required to identify compliance requirements that apply to work operations in own work area.

Elements	Performance Criteria
1. Identify compliance requirements	<p>1.1 Existing operating procedures and specifications are reviewed to identify compliance requirements.</p> <p>1.2 Enquires are made to supervisors and specialist staff within the workplace to identify compliance requirements.</p> <p>1.3 Information is accessed from external organizations and regulatory authorities to determine compliance requirements.</p> <p>1.4 The purpose and scope of compliance requirement are identified.</p>
2. Establish compliance arrangements in work area	<p>2.1 Compliance requirement is confirmed and communicated to other staff in work area.</p> <p>2.2 Briefings, training and other support are sought from internal and external support staff.</p> <p>2.3 Procedures for achieving and monitoring compliance in work area are identified in operating procedures.</p> <p>2.4 Procedures to follow for non-compliance event are identified.</p>

Variable	Range
Compliance	May relate to requirements of OHS, food safety and environmental management
Information collection methods	Include: <ul style="list-style-type: none"> • observation • production data • review of workplace records • accessing relevant technical information

Evidence Guide	
Critical Aspects of Competency	Must confirm appropriate knowledge and skills to: <ul style="list-style-type: none"> • identify compliance requirements and procedures for own work area identify the purpose compliance and consequences of noncompliance • identify and act issues which may affect establishing an effective compliance framework in work area • Document compliance outcomes.

Underpinning Knowledge	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • the purpose and intent of compliance • compliance policies and requirements relevant to own work area • workplace information and related information management systems • data assessment methods relevant to monitoring compliance of own work area • purpose and responsibilities for maintaining records
Underpinning Skills	<p>Demonstrate skills to:</p> <ul style="list-style-type: none"> • review operating procedures, specifications and other workplace data • identify internal and external support personnel • identify and locate required information to identify compliance requirements of own work area • identify procedures to follow for non-compliance events • use oral communication skills/language competence to fulfill the job role as specified by the organization, including questioning, active listening, asking for clarification and seeking advice from supervisor • work cooperatively within a culturally diverse workforce
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	<p>Competence may be assessed through:</p> <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Coffee Roasting and Grinding Level III	
Unit Title	Monitor Storage Facilities
Unit Code	IND CRG3 10 0613
Unit Descriptor	This unit involves the skills and knowledge required to monitor storage facilities in accordance with workplace requirements including determining site functions and operations; monitoring storage operations in accordance with workplace procedures; and taking appropriate action in response to identified discrepancies, changes to storage requirements, or breaches in operational procedures.

Elements	Performance Criteria
1. Determine site functions and operations	<p>1.1 Layout of storage facilities, work flow and activities undertaken in each zone are identified.</p> <p>1.2 Storage type facilities, their purpose and (any) associated risk factors are identified.</p> <p>1.3 Inventory lists are accessed through record management system.</p> <p>1.4 Storage separations and co-storage applications are identified.</p>
2. Monitor storage operations	<p>2.1 Inventory data is confirmed to match goods/freight and applicable storage requirements.</p> <p>2.2 Storage areas are supervised to ensure movement of personnel and goods/freight is in accordance with workplace procedures.</p> <p>2.3 Storage facilities are checked to ensure appropriate operational capacity and work environment.</p> <p>2.4 Integrity of goods/materials, group of goods and characteristics of good are monitored to ensure appropriate quality is maintained.</p> <p>2.5 Discrepancies/changes to storage requirements and/or inventory lists are noted and action undertaken in accordance with workplace procedures.</p> <p>2.6 Appropriate action(s) are initiated in response to breaches of operational procedures or to an emergency/incident.</p> <p>2.7 Operational actions and investigative outcomes documents are documented in accordance with workplace procedures.</p>

Variable	Range
Work	May Include: <ul style="list-style-type: none"> • in a range of work environments • by day or night

Storage types	<p>May Include:</p> <ul style="list-style-type: none"> • bin/binning systems • rack refrigeration/freezers/cold rooms • marked floor space • containers • racks and racking systems • block/stacks • pallets
Hazards/risks in the work area	<p>May Include:</p> <ul style="list-style-type: none"> • hazardous or dangerous materials • contamination of, or from, materials being handled • noise, light, energy sources • stationary and moving machinery, parts or components • service lines • spills, leakages, ruptures • dust/vapours • oil or water on floor • a fire or explosion • damaged packaging or pallets • debris on floor • faulty racking • poorly stacked pallets • faulty equipment
Inventory systems	<p>May Include:</p> <ul style="list-style-type: none"> • automated • manual • paper-based • computerised • microfiche
Goods	<p>May Include:</p> <ul style="list-style-type: none"> • special handling, location, storage and/or packaging requirements, including temperature controlled goods and dangerous goods
Storage requirements	<p>May Include:</p> <ul style="list-style-type: none"> • restricted spaces • site restrictions and procedures • use of safety and personal protective equipment • communications equipment • specialized lifting and/or handling equipment • incident/accident breakdown procedures • additional gear and equipment • noise restrictions • hours of operations • authorities and permits
Storage areas	<p>May Include:</p> <ul style="list-style-type: none"> • large, medium or small worksites

Workplace procedures	<p>May Include:</p> <ul style="list-style-type: none"> • company procedures • enterprise procedures • organizational procedures and established procedures
Work Environment	<p>May Include:</p> <ul style="list-style-type: none"> • restricted spaces • exposed conditions • controlled or open environments • environments involving the movement of equipment, goods, materials and/or vehicular traffic
Categories or groups of products/stock	<p>May Include:</p> <ul style="list-style-type: none"> • small parts • overseas export • dangerous goods • temperature controlled stock and fragile goods
The characteristics of products/stock	<p>May Include:</p> <ul style="list-style-type: none"> • small parts • toxicity • flammability • form • weight • size • state • perish ability • fragility and security risk
Information/documents	<p>May Include:</p> <ul style="list-style-type: none"> • goods identification numbers and codes • manifests, picking slips, merchandise transfers, stock requisitions and bar codes • codes of practice and regulations relevant to workplace operations • Ethiopian and international regulations and codes of practice for the handling, stacking and transport of dangerous goods and hazardous substances • operations manuals, job specifications and induction documentation • manufacturers specifications for equipment • workplace procedures and policies • supplier and/or client instructions • dangerous goods declarations and material safety data sheets (where applicable) • award, enterprise bargaining agreement, other industrial arrangements • relevant Ethiopian standards and certification requirements • quality assurance procedures • emergency procedures

Modes of transfer	May Include: <ul style="list-style-type: none"> • manual or motorized
Labeling systems	May Include: <ul style="list-style-type: none"> • batch code • bar code • identification numbering systems • serial numbers • symbols for safe handling • ADG and HAZCHEM Codes
Communication in the work area	May Include: <ul style="list-style-type: none"> • phone • Electronic Data Interchange (EDI) • fax • email • internet • RF systems • oral, aural or signed communications
Personal protective equipment	May Include: <ul style="list-style-type: none"> • gloves • safety headwear and footwear • safety glasses • two-way radios • high visibility clothing
Consultative processes	May Include: <ul style="list-style-type: none"> • other employees and supervisors • suppliers, customers and clients • relevant authorities and institutions • management and union representatives • industrial relations and OHS specialists • other maintenance, professional or technical staff
Applicable regulations and legislation	May Include: <ul style="list-style-type: none"> • codes and regulations relevant to the monitoring of storage facilities • Ethiopian and international regulations and codes of practice for the storage of dangerous goods and hazardous substances, including: <ul style="list-style-type: none"> • Ethiopian Dangerous Goods Code • Ethiopian Explosives Code • licence, patent or copyright arrangements • water and road use and licence arrangements • export/import/quarantine/bond requirements • marine orders • relevant state/territory OHS and environmental protection legislation • workplace relations regulations • workers compensation regulations

Evidence Guide	
Critical Aspects of Competency	Demonstrate skills and knowledge of: <ul style="list-style-type: none"> • relevant legislation and workplace procedures • other relevant aspects of the range statement
Underpinning Knowledge	Demonstrate knowledge of: <ul style="list-style-type: none"> • Ethiopian codes and regulations, permit and license requirements relevant to the workplace activities • Relevant OHS and environmental protection procedures and guidelines • Workplace procedures and policies relevant to the monitoring of storage facilities • Focus of operation of work systems, equipment, management and site operating systems • Information on various categories or groups of products including their key characteristics and hazards and the special handling, stacking and storage requirements for each • Types of storage areas and related equipment appropriate for different types of goods • Equipment applications, capacities, configurations, safety hazards and control mechanisms • Requirements for workplace documentation reports and records • Problems that may occur when monitoring storage facilities and appropriate action that can be taken Site layout • Housekeeping standards and procedures required in the workplace
Underpinning Skills	Demonstrate skills to: <ul style="list-style-type: none"> • Communicate effectively with others when monitoring storage facilities • Read and interpret instructions, procedures, information and signs relevant to the monitoring of storage facilities • Complete documentation related to the monitoring of storage facilities • Work collaboratively with others when monitoring storage facilities • Adapt appropriately to cultural differences in the workplace, including modes of behaviour and interactions with others • Promptly report and/or rectify any identified problems, faults or malfunctions when monitoring storage facilities in accordance with regulatory requirements and workplace procedures • Implement contingency plans for unplanned events related to the monitoring of storage facilities • Apply precautions and required action to minimize, control or eliminate hazards that may exist during work activities

	<ul style="list-style-type: none"> • Modify activities depending on differing operational contingencies, risk situations and environments • Modify activities depending on differing operational contingencies, risk situations and environments • Work systematically with required attention to detail without injury to self or others, or damage to goods or equipment • Operate and adapt to differences in equipment in accordance with standard operating procedures • Use information on products and stock to determine, plan and organize processes used for the monitoring of storage facilities • Select and use relevant communications, computing and office equipment when monitoring storage facilities • Monitor performance of equipment • Select and use required personal protective equipment conforming to industry and OHS standards
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Coffee Roasting and Grinding Level III	
Unit Title	Analyze Cupping Taste
Unit Code	IND CRG3 11 0613
Unit Descriptor	This unit of competency covers the ability to perform tests and measurements using standard methods with access to give advice to basic cupping taster.

Elements	Performance Criteria
1. Interpret test requirements	<p>1.1 Review test request to identify samples to be tested, test method and equipment involved.</p> <p>1.2 Hazards and enterprise controls associated with the sample, preparation methods, reagents and/or equipment are identified.</p>
2. Prepare sample	<p>2.1 Sample description is recorded, and compared with specification, and discrepancies are recorded and reported.</p> <p>2.2 Sample is prepared in accordance with appropriate standard methods.</p>
3. Check equipment before use	<p>3.1 Test equipment is set up in accordance with test method.</p> <p>3.2 Pre-use and safety checks are performed in accordance with enterprise procedures and manufacturer's instructions.</p> <p>3.3 Faulty or unsafe equipment is identified and reported to appropriate personnel.</p> <p>3.4 Calibration status of equipment is checked and any out of calibration items are reported to appropriate personnel.</p>
4. Perform tests on samples	<p>4.1 Samples and standards to be tested are identified, prepared and weighed or measured.</p> <p>4.2 Tests are conducted in accordance with enterprise procedures.</p> <p>4.3 Data is recorded in accordance with enterprise procedures.</p> <p>4.4 Calculations on data are performed as required.</p> <p>4.5 Out of specification or atypical results is/are identified and reported promptly to appropriate personnel.</p> <p>4.6 Equipment is shut down in accordance with operating procedures.</p>
5. Maintain a safe work environment	<p>5.1 Established safe work practices and personal protective equipment are used to ensure personal safety and that of other laboratory personnel.</p> <p>5.2 The generation of wastes and environmental impacts is minimized.</p> <p>5.3 Safe disposal of laboratory and hazardous wastes is ensured.</p>

	5.4 Equipment and reagents are cleaned, cared for and stored as required.
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Variable	Range
Common measuring equipment	<p>May include:</p> <ul style="list-style-type: none"> • dimension apparatus • Agtron meter/colour identifier • Laboratory roaster • Grinder • Heater • Weighing scale(Digital) • analogue and digital meters and charts/recorders • timing devices • temperature measuring devices, such as thermometers and thermocouples • Other coffee laboratory equipment
Standards, codes, procedures and/or enterprise requirements	<p>May include:</p> <ul style="list-style-type: none"> • Ethiopian and international standards, • calibration and maintenance schedules • enterprise recording and reporting procedures • equipment manuals • equipment start up, operation and shutdown procedures • MSDS and safety procedures • material, production and product specifications • national measurement regulations and guidelines • principles of Good Laboratory Practice (GLP) • production and laboratory schedules • quality manuals & Standard Operating Procedures (SOPs)
Typical tests carried out by laboratory/field assistants	<p>May include:</p> <ul style="list-style-type: none"> • visual/optical tests of appearance, colour, texture, identity, turbidity, refractive index (Caffeine content and Baume/Brix) • physical tests: <ul style="list-style-type: none"> ➢ density, specific gravity and compacted density ➢ moisture content and water activity ➢ particle size, particle shape and size distribution • chemical tests: <ul style="list-style-type: none"> ➢ gravimetric ➢ colorimetric ➢ pH ➢ Nutrients (Chemical composition i.e. Caffeine...) • biological/environmental tests: <ul style="list-style-type: none"> ➢ pH, oxygen reduction potential (ORP) ➢ surface hygiene/presence of microbes • packaging tests: <ul style="list-style-type: none"> ➢ tearing resistance, bursting strength, moisture resistance and impact resistance ➢ permeability and/or leakage

Codes of practice	Where reference is made to industry codes of practice, and/or Ethiopian/international standards, it is expected the latest version will be used
Concepts of metrology	May include: <ul style="list-style-type: none"> • that all measurements are estimates • measurements belong to a population of measurements of the measured parameters • repeatability • precision • accuracy • significant figures • sources of error • uncertainty • traceability
Preparation of samples	May include: <ul style="list-style-type: none"> • sub-sampling or splitting using procedures • physical treatments, such as dissolving, filtration, sieving, centrifugation and combination
Measurements	May include: <ul style="list-style-type: none"> • simple ground surveys • simple background radiation survey • production/process parameters, such as temperature, flow and pressure • gas levels in a confined space
Hazards	May include: <ul style="list-style-type: none"> • electric shock • biohazards, such as microbiological organisms and agents associated with soil, air, water, blood and blood products, and human or animal tissue and fluids • solar radiation, dust and noise • aerosols • sharps, broken glassware and hand tools • flammable liquids • fluids under pressure • sources of ignition • occupational overuse syndrome, slips, trips and falls • manual handling, working at heights and working in confined spaces • crushing, entanglement and cuts associated with moving machinery or falling objects
Enterprise controls to address hazards	May include: <ul style="list-style-type: none"> • use of MSDS • use of signage, barriers and service isolation tags • use of personal protective equipment, such as hard hats, hearing protection, gloves, safety glasses, goggles, face guards, coveralls, gowns, body suits, respirators and safety boots

	<ul style="list-style-type: none"> • use of appropriate equipment, such as biohazard containers and cabinets and laminar flow cabinets • recognising and observing hazard warnings and safety signs • labelling of samples, reagents, aliquoted samples and hazardous materials • handling and storage of all hazardous materials and equipment in accordance with labelling, MSDS and manufacturer's instructions, and enterprise procedures and regulations • cleaning and decontaminating equipment and work areas regularly using recommended procedures • following established manual handling procedures for tasks involving manual handling
Minimizing environmental impacts	<p>May involve:</p> <ul style="list-style-type: none"> • recycling of non-hazardous waste, such as chemicals, batteries, plastic, metals and glass • appropriate disposal of hazardous waste • correct disposal of excess sample/test material • correct storage and handling of hazardous chemicals
Occupational Health and Safety (OHS) and environmental management requirements	<p>May include:</p> <ul style="list-style-type: none"> • all operations must comply with enterprise OHS and environmental management requirements, which may be imposed through state/territory or federal legislation - these requirements must not be compromised at any time • all operations assume the potentially hazardous nature of samples and require standard precautions to be applied

Evidence Guide	
Critical Aspects of Competency	<p>Demonstrate skills and knowledge of:</p> <ul style="list-style-type: none"> • accurately interpret enterprise procedures or standard methods • complete all tests within the required timeline without sacrificing safety, accuracy or quality • demonstrate close attention to the accuracy and precision of measurements and the data obtained • Maintain the security, integrity and traceability of all samples, data/results and documentation.
Underpinning Knowledge	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • concepts of metrology • the International System of units (SI) • purpose of test • principles of the standard method • pre-use equipment checks • relevant standards/specifications and their interpretation • sources of uncertainty in measurement and methods for control • enterprise and/or legal traceability requirements

	<ul style="list-style-type: none"> • interpretation and recording of test result, including simple calculations • procedures for recognition/reporting of unexpected or unusual results • relevant health, safety and environment requirements
Underpinning Skills	<p>Demonstrate skills to:</p> <ul style="list-style-type: none"> • interpreting enterprise procedure or standard methods accurately • using safety information, such as material safety data sheets (MSDS) and performing procedures safely • checking test equipment before use • completing all tests within required timeline without sacrificing safety, accuracy or quality • calculating, recording and presenting results accurately and legibly • maintaining security, integrity and traceability of all samples, data/results and documentation • cleaning and maintaining equipment
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	<p>Competence may be assessed through:</p> <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Coffee Roasting and Grinding Level III	
Unit Title	Operate Interrelated Processes in a Production System
Unit Code	IND CRG3 12 0613
Unit Descriptor	This unit of competency covers the skills and knowledge required to set up, operate and adjust interrelated processes in a production system.

Elements	Performance Criteria
1. Prepare the production system for operation	<p>1.1 Equipment, materials and services are confirmed and available to meet production requirements.</p> <p>1.2 Cleaning requirements and equipment status are identified and confirmed.</p> <p>1.3 Machine settings are selected or adjusted as required to meet safety and production requirements.</p> <p>1.4 Processing/operating parameters are entered as required to meet production requirements.</p> <p>1.5 Materials, ingredients and/or product are loaded or positioned as required to meet production legislative requirements.</p> <p>1.6 Pre-start checks are carried out as required by workplace requirements.</p> <p>1.7 Equipment performance is checked and adjusted as required.</p> <p>1.8 Equipment is ready and safe to operate.</p>
2. Operate and monitor the production system	<p>2.1 The system is started up and operated according to company procedures.</p> <p>2.2 System equipment components are monitored to identify variation in operating conditions.</p> <p>2.3 Variation in equipment operation is identified and maintenance requirements are reported according to workplace reporting requirements.</p> <p>2.4 The operation system is monitored to confirm that specifications are met.</p> <p>2.5 Out-of-specification product/process outcomes are identified, rectified and/or reported to maintain the process within specification.</p> <p>2.6 The work area is maintained according to housekeeping standards.</p> <p>2.7 Work is conducted in accordance with workplace environmental guidelines.</p>

3. Hand over production system operation	<p>3.1 Workplace records are maintained according to workplace recording requirements.</p> <p>3.2 Handover is carried out according to workplace procedures.</p> <p>3.3 Process operators are aware of system and related equipment status at completion of handover.</p>
4. Shut down the production system	<p>4.1 The appropriate shutdown procedure is identified.</p> <p>4.2 The system is shut down according to workplace procedures.</p> <p>4.3 Maintenance requirements are identified and reported.</p>
5. Contribute to continuous improvement of the production system	<p>5.1 System performance is reviewed against output plan/targets.</p> <p>5.2 Opportunities for system improvement are identified and investigated.</p> <p>5.3 Proposals for improvement are developed and implemented within company planning arrangements, authority levels and according to company police and procedures.</p>

Variable	Range
Confirming cleaning requirements and status	<p>May Include:</p> <ul style="list-style-type: none"> accessing cleaning records
Legislative requirements	<p>May Include:</p> <ul style="list-style-type: none"> the Food Standards Code, including labelling, weights and measures legislation legislation covering food safety, environmental management, OHS, anti-discrimination and equal opportunity
Legislative requirements	<p>May Include:</p> <ul style="list-style-type: none"> the Food Standards Code, including labelling, weights and measures legislation legislation covering food safety, environmental management, OHS, anti-discrimination and equal opportunity
Operation and monitoring of equipment and system processes	<p>May Include:</p> <ul style="list-style-type: none"> the use of control panels and systems
Systems	<p>May Include a series of interrelated processes that must be coordinated and concurrently operated to produce the required outcome</p>
System operation	<p>May Include coordination of operators of system components</p>

Handovers	May Include in person or via recording/communication systems according to workplace arrangements
Shutdown procedures	May Include cleaning (in some cases cleaning may be carried out by a dedicated cleaning crew)
Workplace information	May Include: <ul style="list-style-type: none"> • Standard Operating Procedures (SOPs) • specifications • production schedules and instructions • performance records and reports
Policies and procedures	May include work is carried out according to company procedures, regulatory and licensing requirements, legislative requirements, and industrial awards and agreements

Evidence Guide	
Critical Aspects of Competency	Demonstrate skills and knowledge of: <ul style="list-style-type: none"> • conduct pre-start checks on production system components • confirm machine setup is ready to achieve production requirements • correctly use required personal protective equipment • start, operate, monitor and adjust process equipment throughout the system to achieve required quality outcomes • identify system problems and take corrective action • conduct operational handovers • shut down system • identify and investigate opportunities for operational improvements within areas of responsibility • complete workplace records as required • apply safe work practices and identify OHS hazards and controls • safely shut down equipment • Apply food safety procedures
Underpinning Knowledge	Demonstrate knowledge of: <ul style="list-style-type: none"> • purpose and basic principles of the production system, including the system process flow, the interrelationships of each process to identify the impact of variation on related processes, and optimization options • basic operating principles of equipment and related accessories used by the system, including equipment adjustment points, status and purpose of guards, and range and location/alignment requirements of sensors and related feedback instruments • operating capacities of equipment used in the system, such as different types of equipment and/or components as required by processing/packaging operations • related systems and responsibilities for interaction, such as related production systems, services supply, packaging/ware housing, maintenance, laboratory/quality assurance and planning and scheduling

	<ul style="list-style-type: none"> • product characteristics and common types of variation in materials and/or ingredients used, including the effect of variation on each stage of the system and scope to adjust or correct • typical production related problems, including equipment faults, common causes and warning signs, incorrect or poor supply of materials, incorrect settings and poor operator control • relevant procedures, specifications and operating parameters for the system and the individual processes • isolation, lock out and tag out procedures and responsibilities • hazards, risks, controls and methods for monitoring processes within the system, including Occupational Health and Safety (OHS), food safety, quality and environmental hazards and risks • workplace system and approach to equipment maintenance • process improvement procedures and related consultative arrangements • troubleshooting procedures and problem solving techniques • communication responsibilities to inform related work areas/support functions and other shifts of operational status and production issues • procedures and responsibility for reporting production and performance information
Underpinning Skills	<p>Demonstrate skills to:</p> <ul style="list-style-type: none"> • access production schedule and related information to identify system output and operating requirements, such as planning daily production schedules and/or modifying plans to respond to operating conditions and customer requirements • liaise with relevant work areas to confirm and/or secure necessary materials, services, equipment and labour to meet production requirements • confirm supply of necessary equipment and related attachments, materials and services • select, fit and use personal protective clothing and/or equipment • set and/or adjust equipment to meet process output requirements, including inspecting equipment condition to identify any signs of wear, confirming selection of appropriate settings and/or related parameters, ensuring that isolation or lock outs are cancelled as required, confirming that equipment is clean and correctly configured for processing requirements, positioning sensors and controls correctly, ensuring any scheduled maintenance has been carried out, and confirming that all safety guards are in place and operational (checks may be done by the

	<p>system operator or involve observing/supporting others setting and adjusting equipment and conducting pre-start checks)</p> <ul style="list-style-type: none"> • load and/or position materials, ingredients and/or product as required • operate and monitor the production system, such as use of a process control system and/or observing/supporting others to follow correct operating procedures • monitor materials flow and work-in-progress through the system • confirm that the system operates within specified parameters and inspection/ control points are monitored • determine responses to out-of-specification results or non-conformance within level of responsibility • monitor operating efficiencies of the system, including recognition of signs and symptoms of faulty equipment and early warning signs of other potential problems • investigate, resolve and/or report problems and faults • plan scheduled events to minimize disruption to production • conduct/coordinate product or batch changeovers • conduct/coordinate shift handovers • review and maintain procedures to support system improvements • maintain work area to meet housekeeping standards • use oral communication skills/language competence to fulfil the job role as specified by the organization, including questioning, active listening, asking for clarification and seeking advice from supervisor • work cooperatively within a culturally diverse workforce
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Coffee Roasting and Grinding Level III	
Unit Title	Deliver and Monitor a Service to Customers
Unit Code	IND CRG3 13 0613
Unit Descriptor	This unit applies to individuals who are skilled operators and apply a broad range of competencies in various work contexts. They may exercise discretion and judgment using appropriate theoretical knowledge of customer service to provide technical advice and support to customers over either a short or long term interaction.

Elements	Performance Criteria
1. Identify customer needs	<p>1.1 Appropriate interpersonal skills are used to accurately identify and clarify customer needs and expectations.</p> <p>1.2 Customers' needs area assessed for urgency to determine priorities for service delivery in accordance with organizational requirements.</p> <p>1.3 Effective communication is used to inform customers about available choices for meeting their needs and assist in the selection of preferred options.</p> <p>1.4 Limitations are identified in addressing customer needs and seek appropriate assistance from designated individuals.</p>
2. Deliver a service to customers	<p>2.1. Prompt service is provided to customers to meet identified needs in accordance with organizational requirements.</p> <p>2.2. Appropriate rapport is established and maintained with customers to ensure completion of quality service delivery.</p> <p>2.3. Customer complaints are sensitively and courteously handled in accordance with organizational requirements.</p> <p>2.4. Assistance is provided or responded to customers with specific needs in accordance with organizational requirements.</p> <p>2.5. Available opportunities are identified and used to promote and enhance services and products to customers.</p>
3. Monitor and report on service delivery	<p>3.1 Customer satisfaction with service delivery is regularly reviewed using verifiable evidence in accordance with organizational requirements.</p> <p>3.2 Opportunities are identified to enhance the quality of service and products, and pursue within organizational requirements.</p> <p>3.3 Procedural aspects of service delivery are monitored for effectiveness and suitability to customer requirements.</p> <p>3.4 Customer feedback and use are regularly sought to improve the provision of products and services.</p>

	<p>3.5 Evidence of customer satisfaction in decisions is incorporated to modify products or services, ensuring they are within organizational requirements.</p> <p>3.6 Reports are ensured to be clear, detailed and contain recommendations focused on critical aspects of service delivery.</p>
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Variable	Range
Appropriate interpersonal skills	<p>May Include:</p> <ul style="list-style-type: none"> • listening actively to what the customer is communicating • providing an opportunity for the customer to confirm their request • questioning to clarify and confirm customer needs • seeking feedback from the customer to confirm understanding of needs • summarizing and paraphrasing to check understanding of customer message • using appropriate body language
Customer needs and expectations	<p>May Include:</p> <ul style="list-style-type: none"> • accuracy of information • advice or general information • complaints • fairness/politeness • further information • making an appointment • prices/value • purchasing organization's products and services • returning organization's products and services • specific information
Customers	<p>May Include:</p> <ul style="list-style-type: none"> • corporate customers • individual members of the organization • individual members of the public • internal or external and other agencies
Organizational requirements	<p>May Include:</p> <ul style="list-style-type: none"> • access and equity principles and practice • anti-discrimination and related policy • defined resource parameters • goals, objectives, plans, systems and processes • legal and organizational policies, guidelines and requirements • OHS policies, procedures and programs • payment and delivery options • pricing and discount policies • quality and continuous improvement processes and standards

	<ul style="list-style-type: none"> • quality assurance and/or procedures manuals • replacement and refund policy and procedures • who is responsible for products or services
Effective communication	<p>May Include:</p> <ul style="list-style-type: none"> • giving customers full attention • maintaining eye contact, except where eye contact may be culturally inappropriate • speaking clearly and concisely • using active listening techniques • using appropriate language and tone of voice • using clear written information/communication • using non-verbal communication e.g. body language, personal presentation (for face-to-face interactions) • using open and/or closed questions
Designated individuals	<p>May Include:</p> <ul style="list-style-type: none"> • colleagues • customers • line management • supervisor
Customer complaints	<p>May Include:</p> <ul style="list-style-type: none"> • administrative errors such as incorrect invoices or prices • customer satisfaction with service quality • damaged goods or goods not delivered • delivery errors • product not delivered on time • service errors • warehouse or store room errors such as incorrect product delivered
Specific needs of customers	<p>May Include:</p> <ul style="list-style-type: none"> • age • beliefs/values • culture • disability • gender • language • religious/spiritual observances
Opportunities to promote and enhance services and products	<p>May Include:</p> <ul style="list-style-type: none"> • extending time lines • packaging procedures • procedures for delivery of goods • returns policy • system for recording complaints • updating customer service charter
Verifiable evidence	<p>May Include:</p> <ul style="list-style-type: none"> • customer satisfaction questionnaires • audit documentation and reports • quality assurance data

	<ul style="list-style-type: none"> • returned goods • lapsed customers • service calls and complaints
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Evidence Guide	
Critical Aspects of Competency	<p>Must confirm appropriate knowledge and skills to:</p> <ul style="list-style-type: none"> • identifying needs and priorities of customers • distinguishing between different levels of customer satisfaction • treating customers with courtesy and respect • responding to and reporting on, customer feedback • knowledge of organizational policy and procedures for customer service
Underpinning Knowledge	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • anti-discrimination legislation • ethical principles • codes of practice • privacy laws • financial legislation • Occupational Health and Safety (OHS) • organizational policy and procedures for customer service including handling customer complaints • service standards and best practice models • public relations and product promotion • Techniques for dealing with customers, including customers with specific needs.
Underpinning Skills	<p>Demonstrate skills to:</p> <ul style="list-style-type: none"> • literacy skills to read and understand a variety of texts; to prepare general information and papers according to target audience; and to edit and proofread texts to ensure clarity of meaning and accuracy of grammar and punctuation • technology skills to select and use technology appropriate to a task • communication skills to monitor and advise on customer service strategies • problem-solving skills to deal with customer enquiries or complaints • Analytical skills to identify trends and positions of products and services.
Resource Implications	<p>Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.</p>
Methods of Assessment	<p>Competence may be assessed through:</p> <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	<p>Competence may be assessed in the work place or in a simulated work place setting.</p>

Occupational Standard: Coffee Roasting and Grounding Level III	
Unit Title	Use Structured Problem Solving Tools
Unit Code	IND CRG3 14 0613
Unit Descriptor	This competency covers the solving of process and other problems, beyond those associated directly with the process unit/equipment, using structured process improvement tools to identify improvements and/or solve problems.

Elements	Performance Criteria
1. Identify the problem.	<p>1.1 Variances are identified from normal operating parameters and product quality.</p> <p>1.2 The extent, cause and nature of the problem are defined by observation and investigation.</p> <p>1.3 The problem is stated and specified clearly.</p>
2. Determine fundamental cause of problem.	<p>2.1. Possible causes are identified based on experience and the use of problem solving tools/analytical techniques.</p> <p>2.2. Possible cause statements are developed.</p> <p>2.3. Fundamental cause is identified.</p>
3. Determine corrective action.	<p>3.1 All possible options are considered for resolution of the problem and hazards</p> <p>3.2 Strengths and weaknesses of possible options are considered.</p> <p>3.3 Corrective action is determined to remove the problem and possible future causes.</p> <p>3.4 Implementation plans identifying measurable objectives, resource needs and timelines are developed in accordance with safety and operating procedures.</p> <p>3.5 Recommendations are developed for ongoing monitoring and testing.</p>
4. Communicate recommendations.	<p>4.1 Report on recommendations is prepared.</p> <p>4.2 Recommendations are presented to appropriate personnel.</p> <p>4.3 Recommendations are followed up if required</p>

Variable	Range
Problems	<p>May include:</p> <ul style="list-style-type: none"> • non- routine process and quality problems • equipment selection, availability and failure • teamwork and work allocation problems • safety and emergency situations and incidents
Hazards	<p>May include:</p> <ul style="list-style-type: none"> • leaks • spillages

	<ul style="list-style-type: none"> equipment hazards that can occur during the walk-through of a plant
Procedures	<p>May include:</p> <ul style="list-style-type: none"> All operations are performed in accordance with procedures. Procedures include all relevant workplace procedures, work instructions, temporary instructions and relevant industry and government codes and standards.

Evidence Guide	
Critical Aspects of Competency	<p>Must confirm appropriate knowledge and skills to:</p> <ul style="list-style-type: none"> relevant equipment and operational processes enterprise policies and procedures enterprise goals, targets and measures enterprise quality, OHS and environmental requirements principles of decision-making strategies and techniques enterprise information systems and data collation Industry codes and standards.
Underpinning Knowledge	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> priority requirements measurable objectives resource requirements methods for reaching objectives timelines coordination and feedback requirements safety requirements risk assessment environmental requirements
Underpinning Skills	<p>Demonstrate skills to:</p> <ul style="list-style-type: none"> brainstorming fishbone diagrams/cause and effect diagrams process logic/process requirements logic tree similarity/difference analysis Pareto analysis force field/SWOT analysis flow charts control charts, run charts and graphs Scatter grams.
Resource Implications	<p>Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.</p>
Methods of Assessment	<p>Competence may be assessed through:</p> <ul style="list-style-type: none"> Interview / Written Test Observation / Demonstration with Oral Questioning
Context of Assessment	<p>Competence may be assessed in the work place or in a simulated work place setting.</p>

Occupational Standard: Coffee Roasting and Grinding Level III	
Unit Title	Contribute to Development of Plant Documentation
Unit Code	IND CRG3 15 0613
Unit Descriptor	This unit of competency covers the development of relevant plant documentation and systems in response to identified information requirements including the development and/or amendment of workplace documents, procedures and record keeping systems.

Elements	Performance Criteria
1. Identify information need/deficiency .	1.1 The information requirements of the organization are determined. 1.2 Current documentation is evaluated. 1.3 Information need/deficiency is recognized. 1.4 The problem in the exiting documentation is identified. 1.5 Information requirements are discussed with appropriate personnel.
2. Develop/revise plant documentation.	2.1. Information need is specified and objectives are set/prioritized 2.2. Existing documentation/records is/are analyzed in accordance with specified requirements. 2.3. Documentation is developed/ amended as a draft in accordance with specifications to standard format. 2.4. Documentation is issued to appropriate personnel for review. 2.5. Documentation is edited and amended in accordance with review requirements. 2.6. Documentation is completed to satisfy the initial identified need/deficiency.
3. Communicate changes to plant documentation.	3.1 Documentation is explained and communicated to all relevant personnel. 3.2 Documentation is distributed to all appropriate personnel. 3.3 Implementation of documentation is evaluated. 3.4 Documents are amended if required.
4. Identify information need/deficiency .	4.1 The information requirements of the organization are determined. 4.2 Current documentation is evaluated. 4.3 Information need/deficiency is recognized. 4.4 Information requirements are discussed with appropriate personnel.

Variable	Range
Documentation	<p>May Include:</p> <ul style="list-style-type: none"> • maintenance logs • non-compliance reports • incidence and accident reports • permits • Schematics/ process flows/ engineering drawings. • job cards • standard operating procedures • work instructions • operating manuals • quality procedures • training program contents • materials safety data sheets
Problems	<p>May include:</p> <ul style="list-style-type: none"> • inaccurate source documents • out-of-date source documents • source documents too technical/lacking detail/of wrong focus • Prioritizing of document drafting with other work.
Procedures	<p>May Include:</p> <ul style="list-style-type: none"> • All operations are performed in accordance with procedures. • Procedures include all relevant workplace procedures, work instructions, temporary instructions and relevant industry and government codes and standards.

Evidence Guide	
Critical Aspects of Competency	<p>Must confirm appropriate knowledge and skills to:</p> <ul style="list-style-type: none"> • information required is researched, and intended use is taken into account • documentation is completed accurately, concisely and in accordance with requirements • completed documentation is easily understood by the recipient • information is communicated in the appropriate manner • Communication distinguishes between relevant and peripheral issues
Underpinning Knowledge	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • information systems • procedures • equipment • Relevant documentation sufficient to be able to develop or amend company documentation. • relevant OHS • environmental requirements

Underpinning Skills	Demonstrate skills to: <ul style="list-style-type: none"> • plan own work, including predicting consequences and identifying improvements • Identify and describe own role and role of other employees.
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Coffee Roasting and Grinding Level III	
Unit Title	Monitor the Implementation of Quality and Food Safety Programs
Unit Code	IND CRG3 16 0613
Unit Descriptor	This unit of competency covers the skills and knowledge required to provide a leadership role in supporting day-to-day implementation of the food safety/quality programs in a work area. It also involves supporting others to implement the requirements of the food safety/quality procedures.

Elements	Performance Criteria
1. Ensure others in the work area are able to meet quality and food safety requirements	<p>1.1 Hazard control and clothing and equipment appropriate to work requirements are made available, functional and correctly fitted.</p> <p>1.2 Information on food safety/quality responsibilities and procedures is made current, accessible and communicated to others in the work area.</p> <p>1.3 Information about identified hazards and the outcomes of risk assessment and risk control procedures is made accessible and communicated to others in the work area.</p> <p>1.4 Food safety/quality hazards and control measures used in the work area can be identified by those in the work area.</p> <p>1.5 Monitoring and coaching support is made available to support individuals/groups to implement quality and safe food handling procedures.</p> <p>1.6 Training needs are identified and addressed within level of work responsibility.</p>
2. Monitor observance of quality standards and food safety programs in the work area	<p>2.1. Work procedures in the work area are clearly defined, documented and followed.</p> <p>2.2. Deviation from identified procedures is identified, reported and addressed within level of work responsibility.</p> <p>2.3. Personal behavior is made consistent with workplace policies and procedures that support food safety and quality.</p> <p>2.4. Food safety and/or quality hazards are identified and reported according to workplace procedures.</p> <p>2.5. Food safety and quality information are recorded to meet workplace reporting requirements.</p> <p>2.6. The work area is maintained according to housekeeping standards.</p> <p>2.7. Work is conducted in accordance with workplace environmental guidelines.</p>

3. Take corrective action in response to quality and food safety non-compliance	<p>3.1 Workplace procedures for responding to quality and food safety non-compliance are promptly implemented.</p> <p>3.2 Hazardous events are investigated to identify cause.</p> <p>3.3 Control measures are implemented to prevent recurrence and minimize risks of hazardous events.</p>
4. Maintain and improve quality and food safety in the work area	<p>4.1 Processes or conditions which could result in a breach of food safety procedures or quality specifications are identified, assessed, removed or/and reported within level of responsibility and according to workplace procedure.</p> <p>4.2 Risk assessments are conducted and appropriate control measures are identified and implemented in the work area.</p> <p>4.3 Recommendations arising from risk assessments are implemented within level of work responsibility.</p> <p>4.4 Inadequacies in control measures are identified and reported according to company reporting requirements.</p> <p>4.5 Matters raised relating to quality/food safety are promptly resolved and/or referred to appropriate personnel.</p> <p>4.6 The work group is consulted and advised of quality/food safety matters relevant to work role.</p> <p>4.7 Opportunities are identified and raised for improving food safety and quality with relevant personnel.</p> <p>4.8 Procedures are developed or revised to support effective control of quality and food safety hazards.</p> <p>4.9 Quality/food safety records are reviewed to ensure they are complete and meet the quality standard food safety program and legal requirements.</p>

Variable	Range
Responsibility for identifying breaches of food safety procedures	<p>May Include:</p> <ul style="list-style-type: none"> In the context of the food safety program and within scope of responsibility
Food safety program	<p>May Include:</p> <ul style="list-style-type: none"> reasonably expected to occur in all food handling operations of the food business The food safety program and related procedures must comply with legal requirements of the food safety standards and must be communicated to all food handlers. Where no food safety program is in place, food safety requirements may be specified in general operating procedures
Monitoring	<p>May Include:</p> <ul style="list-style-type: none"> taking temperatures collecting samples

	<ul style="list-style-type: none"> • conducting visual inspections • additional testing as required
Work responsibilities	<p>May Include:</p> <ul style="list-style-type: none"> • Work responsibilities may include formal or informal responsibility for modeling appropriate quality/food safety policies and procedures and providing a support role to others in the work area
Personal hygiene requirements	<p>May Include:</p> <ul style="list-style-type: none"> • Minimum personal hygiene requirements are specified by the food safety program. At a minimum this must meet legal requirements as set out in the Food Safety Standard 3.2.2, Division 4:14 and/or state or territory legislation/regulations
Quality systems	<p>May Include:</p> <ul style="list-style-type: none"> • externally accredited, such as an ISO system, or • internally designed and managed
Workplace information	<p>May Include:</p> <ul style="list-style-type: none"> • food safety and quality policies and programs • Standard Operating Procedures (SOPs) • specifications • log sheets • written or verbal instruction incorporating food safety and quality requirements
Record keeping	<p>May Include:</p> <ul style="list-style-type: none"> • customer, legal and food safety program requirements
Reporting of health conditions and illnesses	<p>May Include:</p> <ul style="list-style-type: none"> • Reporting of health conditions and illnesses requirements are specified by the food safety program. At a minimum this must meet legal requirements as set out in Food Safety Standard 3.2.2, Division 4:13 and/or state or territory legislation/regulations
Operator responsibilities	<p>May Include:</p> <ul style="list-style-type: none"> • The operator at this level may not have direct responsibility for overseeing the training/development of team members. At a minimum they must be able to identify development needs of others in the work area and refer this information to the relevant personnel. • The operator at this level may not have responsibility for independently assessing risks and determining the effectiveness of control measures. However, they would be expected to observe day-to-day effectiveness and participate in assessment and review processes. Responsibilities at this level may include facilitating consultation processes within level of responsibility
Responsibility for identifying non-compliance against quality standards	<p>May Include:</p> <ul style="list-style-type: none"> • On the context of defined standards or specifications and relates to work area

Incidents	<p>May Include:</p> <ul style="list-style-type: none"> • a situation where the safe limits or parameters identified by the food safety program are not met • a situation where the quality limits or parameters identified in specifications or processing instructions are not met
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Evidence Guide	
Critical Aspects of Competency	<p>Must confirm appropriate knowledge and skills to:</p> <ul style="list-style-type: none"> • describe quality and food safety program, risks and control measures of the work area • confirm that control measures are in place and that personnel in the work area are equipped and informed to implement programs • identify, address and follow up on non-compliances • identify causes of non-compliances • conduct risk assessments and recommend responsive action • provide support to others to implement the programs • complete and maintain documentation
Underpinning Knowledge	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • sources of information and expertise on procedures and responsibilities for food safety relevant to the workplace • principles of a HACCP-based approach to managing food safety, including identifying hazards that are likely to occur, establishing appropriate methods of control and confirming that controls are met • basic concepts of quality assurance including hazards, risk assessment and control methods • company programs and systems in place to manage and support quality and food safety in the workplace, which may involve separate or integrated programs, including systems for maintaining and updating documents, such as operating procedures and specifications • clothing and footwear requirements for working in and/or moving between food handling areas, including personal clothing maintenance, laundering and storage requirements • appropriate bandages and dressings to be used when undertaking food handling • housekeeping requirements and responsibilities relating to own work, where relevant this includes use and storage of housekeeping/cleaning equipment • procedures to follow in the event of pest sighting or discovery of infestation • purpose and importance of cleaning and sanitation procedures • legal obligations for food safety and quality, including an awareness of government legislation and customer requirements

	<ul style="list-style-type: none"> • food safety and quality responsibilities and requirements relating to the work area • awareness of common micro biological, physical and chemical hazards related to the foods handled in the work area, including the types of hazards likely to occur, the conditions under which they occur, possible consequences and control methods to prevent occurrence • suitable standard for materials, measuring devices, equipment and utensils used in the work area • properties of food and ingredients used that affect food safety, including an understanding of related storage, processing and handling requirements • current technical and process knowledge required to participate in investigations of food safety/quality hazards, risks and incidents within level of responsibility, including an understanding of common micro biological, physical and chemical hazards, related control methods and the way changes in equipment and/or processing methods can affect food safety and quality outcomes • procedures for identifying unsafe and/or non-conforming product, including control points and evidence of out-of-specification product or materials • sampling procedures, test methods and inspections • options for responding to non-compliance, including legal responsibility, risk management and cost/implications of different responses and level of responsibility for decision making • methods used in the workplace to isolate or quarantine food which may be unsafe • waste collection, recycling, handling and disposal, including handling/disposal requirements for different types of waste, such as hazardous waste where relevant • traceability and recall procedures within level of responsibility • documentation system and procedures, including record keeping to meet both company and legal requirements, procedures for developing and/or reviewing workplace procedures, and document control systems used in the workplace • auditing arrangements, roles and responsibilities as they relate to own work responsibilities, such as internal and external audit processes • appropriate communication skills and techniques to convey information on quality and food safety requirements to others in the workplace • cleaning and sanitation procedures where relevant • impact of rework handling/addition on food safety where relevant
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	<ul style="list-style-type: none"> • sampling and test methods where relevant • facilitation and consultation techniques where relevant
Underpinning Skills	<p>Demonstrate skills to:</p> <ul style="list-style-type: none"> • access, interpret and communicate information about the food safety program, quality requirements and related procedures to others in the work area • demonstrate two-way communication, including active listening and responding constructively to feedback • provide access to and maintain current food safety/quality documentation • model safe food handling and quality practices and procedures to achieve required outcomes, including demonstrating: <ul style="list-style-type: none"> • work procedures that meet the requirements of quality and food safety • cleaning and sanitizing equipment • sampling and testing as appropriate according to quality and food safety requirements • maintaining personal hygiene • wearing appropriate clothing and footwear as required by the work task • following procedures when moving within and between work areas • reporting health conditions and illnesses according to workplace procedures • handling, cleaning and storing equipment, utensils and packaging materials as appropriate • identify control points in the work area and demonstrate monitoring techniques used (control points include critical, quality and regulatory control points) • support others to meet quality standards and follow food safety procedures by ensuring that all personnel in the work area receive the information required and have the necessary skills and equipment to carry out their responsibilities • identify, report and/or address food safety/quality non-compliance in an appropriate and timely manner within level of responsibility • determine when and how to make adjustments to maintain output within level of responsibility • identify, report and/or address food safety/quality training and development needs of others in the work area • ensure that appropriate and timely action is taken in response to non-compliance • handle and dispose of out-of-specification or contaminated food, waste and recyclable material according to food safety program as this requirement relates to own work responsibility

	<ul style="list-style-type: none"> • participate in investigations of non-compliance and risk assessment processes • participate in consultation processes to improve quality and food safety outcomes in the workplace • review practice and procedures to implement recommendations arising from risk assessments and/or improvement proposals within level of responsibility, such as collecting and analyzing food safety/quality records, reviewing operating procedures and communicating changes to others in the work area • ensure that housekeeping standards are maintained and that equipment is in operational order, such as participating in the management of equipment calibration • monitor the recording of quality and food safety information to confirm that records accurately reflect performance and meet the requirements of the food safety and quality programs • participate in food recall procedures as required, within level of responsibility • facilitate consultation processes according to enterprise procedures • lead investigations of quality and food safety incidents according to enterprise procedures • work cooperatively within a culturally diverse workforce
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Coffee Roasting and Grinding Level III	
Unit Title	Control Contaminants and Allergens in the Workplace
Unit Code	<u>IND CRG3 17 0613</u>
Unit Descriptor	This unit of competency covers the skills and knowledge required to examine the risk of contaminants and allergens in a food production workplace and assess and implement control measures designed to manage risks.

Elements	Performance Criteria
1. Assess risk of physical contamination	<p>1.1 Types and sources of physical contamination in the workplace are identified.</p> <p>1.2 Risks to operations, product and consumer are identified.</p> <p>1.3 Control measures are identified to eliminate or reduce risks of physical contamination.</p> <p>1.4 Workplace procedures and practices are assessed to determine level of risk for physical contaminants and opportunities for improvement identified.</p>
2. Assess risk of chemical contamination	<p>2.1. Types and sources of chemical contamination in the workplace are identified.</p> <p>2.2. Risks to operations, product and consumer are identified.</p> <p>2.3. Control measures to eliminate or reduce risks of chemical contamination are identified.</p> <p>2.4. Workplace procedures and practices are assessed to determine level of risk for chemical contaminants and opportunities for improvement identified.</p>
3. Assess risk of microbiological contamination	<p>3.1 Types and sources of microbiological contamination in the workplace are identified.</p> <p>3.2 Risks to operations, product and consumer are identified.</p> <p>3.3 Control measures are identified to eliminate or reduce risks of microbiological contamination.</p> <p>3.4 Workplace procedures and practices are assessed to determine level of risk for microbiological contaminants and opportunities for improvement identified.</p>
4. Assess risk of allergens in the workplace	<p>4.1 Types and sources of allergens are identified.</p> <p>4.2 Risks to operations, product and consumer are identified.</p> <p>4.3 Control measures are identified to eliminate or reduce risks of allergens.</p> <p>4.4 Workplace procedures and practices are assessed to determine level of risk for allergens and opportunities for improvement identified.</p>

5. Implement control measures to manage contaminants and allergens	<p>5.1 Control measures are implemented as part of work operations</p> <p>5.2 Emergency procedures and conditions for implementation are identified</p> <p>5.3 Reporting and documentation associated with controls are identified and undertaken as required</p> <p>5.4 Work is conducted in accordance with workplace environmental guidelines</p>
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Variable	Range
Physical contaminants	<p>May Include:</p> <ul style="list-style-type: none"> • the raw material source • processing systems • processing equipment • housekeeping standards • Sources of contamination include: • employees (e.g. hair, bandaids, glasses, jewellery and coins or other contaminants, such as dirt, pests, food and raw materials) • maintenance and cleaning procedures (e.g. metal shavings, grease from equipment, nuts and bolts, dirty equipment from previous products and glass breakages) • packaging materials (e.g. ink, dye, staples, paper, cardboard and plastic) • pests (e.g. evidence of rodents gnawing on packages, rodent hair, droppings and debris) • incorrectly labelled or packaged raw materials • industrial sabotage (e.g. tampering anywhere through the production process) • accumulation of dusts from unclean environments
Control measures for physical contaminants	<p>May include:</p> <ul style="list-style-type: none"> • use of personal protective equipment • clothing standards (e.g. enclosed hair and no jewellery) • metal detectors • rulings against glass in production or packaging areas • covering of raw materials and equipment • maintenance, cleaning and housekeeping programs • inspection schedules • reporting requirements and procedures • emergency procedures
Chemical contaminants	<p>May include:</p> <ul style="list-style-type: none"> • unwanted chemicals remaining on food preparation surfaces (e.g. cleaning chemicals) • chemicals remaining in food material after processing • too much or the wrong chemical added during manufacture • insecticide, pesticides, herbicides and antibiotics that build up during the growth cycle of the food source

Control measures for chemical contaminants	<p>May Include:</p> <ul style="list-style-type: none"> • storing chemicals away from food production areas • using correct containers for storing and dispensing chemicals • correctly labelling chemicals in containers • calculating and applying correct quantities • ensuring chemical record sheets are filled in correctly
Control measures for biological contaminants	<p>May include:</p> <ul style="list-style-type: none"> • temperature and climate controls • personal hygiene standards • storage and processing conditions • chemical controls • housekeeping standards and pest controls
Microbiological contaminants	<p>May include:</p> <ul style="list-style-type: none"> • fungi • yeasts • moulds • viruses and bacteria
Allergens	<p>May include:</p> <ul style="list-style-type: none"> • food substances, such as nuts, milk products • pollen and grain

Evidence Guide			
Critical Aspects of Competency	<p>Must confirm appropriate knowledge and skills to:</p> <ul style="list-style-type: none"> • identify potential physical, chemical and microbiological contaminants in the workplace and their likely sources • identify risks associated with these contaminants and the control measures to manage risks • describe allergens and control measures that relate to workplace • identify workplace procedures to control risks and assess effectiveness in practice • Implement workplace control measures. 		
Underpinning Knowledge	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • the purpose and intent of food safety legislation and control measures • roles and responsibilities for development and maintenance of the control measures • food processing methods used in the workplace or work area and the risks of contamination • sources of technical expertise on contaminants and allergens • the role of control measures in the food safety program • documentation and recording requirements to support communication and monitoring of the food safety program, including procedures for maintaining and updating relevant documents, such as operating procedures 		
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	<ul style="list-style-type: none"> • main types of food safety contamination likely to occur given the type of product and processing methods used • acceptable control methods for the hazards identified and required corrective action when control requirements are not met • validation and verification processes and techniques and responsibilities
Underpinning Skills	<p>Demonstrate skills to:</p> <ul style="list-style-type: none"> • identify the types of physical, chemical and microbiological contaminants and allergens that present a risk in the workplace • identify sources of risks • examine control measures • describe the appropriate monitoring requirements for each risk, including the method or procedure to be followed, the frequency and timing, the person responsible, and the information to be recorded (procedures to be followed would typically be specified in the form of a Standard Operating Procedure (SOP) or work instruction) • describe corrective action requirements in the event that acceptable limits or requirements of controls are not met • develop or review documentation relating to the food safety program, such as process flow diagrams, hazard analysis charts and tables, support program requirements, data analysis reports, corrective action reports and verification reports • use oral communication skills/language competence to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor • communicate food safety responsibilities within level of responsibility • work cooperatively within a culturally diverse workforce
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	<p>Competence may be assessed through:</p> <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Coffee Roasting and Grounding Level III	
Unit Title	Operate Interrelated Processes in a Packaging System
Unit Code	IND CRG3 18 0613
Unit Descriptor	This unit of competency covers the skills and knowledge required to set up, operate and adjust interrelated processes in a packaging system.

Elements	Performance Criteria
1. Prepare the packaging system for operation	<p>1.1 Equipment, materials and services are confirmed and available to meet packaging requirements.</p> <p>1.2 Cleaning requirements and equipment status are identified and confirmed.</p> <p>1.3 Machine settings are selected or adjusted as required to meet safety and production requirements.</p> <p>1.4 Operating parameters are entered as required to meet production requirements.</p> <p>1.5 Product and/or packaging components and consumables are loaded or positioned as required to meet packaging requirements.</p> <p>1.6 Pre-start checks are carried out as required by workplace requirements.</p> <p>1.7 Equipment performance is checked and adjusted as required.</p> <p>1.8 Equipment is ready and safe to operate.</p>
2. Operate and monitor the packaging system	<p>2.1 The system is started up and operated according to company policy and procedures.</p> <p>2.2 System equipment components are monitored to identify variation in operating conditions.</p> <p>2.3 Variation in equipment operation is identified and maintenance requirements are reported according to workplace reporting requirements.</p> <p>2.4 The system is monitored to confirm that packaging specifications are met.</p> <p>2.5 Out-of-specification product/packaging outcomes are identified, rectified and/or reported to maintain the process within specification.</p> <p>2.6 The work area is maintained according to housekeeping standards.</p> <p>2.7 Work is conducted in accordance with workplace environmental guidelines.</p>

3. Hand over packaging system operation	<p>3.1 Workplace records are maintained according to workplace recording requirements.</p> <p>3.2 Handover is carried out according to workplace procedures.</p> <p>3.3 Process operators are aware of system and related equipment status at completion of handover.</p>
4. Shut down the packaging system	<p>4.1 The appropriate shutdown procedure is identified.</p> <p>4.2 The system is shut down according to workplace procedures.</p> <p>4.3 Maintenance requirements are identified and reported.</p>
5. Contribute to continuous improvement of the system	<p>5.1 System performance is reviewed against output plan/targets.</p> <p>5.2 Opportunities for system improvement are identified and investigated.</p> <p>5.3 Proposals are developed for improvement and implemented within company planning arrangements, authority levels and according to company procedures.</p>

Variable	Range
Operation and monitoring of equipment and system processes	<p>May Include:</p> <ul style="list-style-type: none"> the use of control panels and systems
Legislative requirements	<p>May Include:</p> <ul style="list-style-type: none"> the Food Standards Code, including labelling, weights and measures legislation legislation covering food safety, environmental management, OHS, anti-discrimination and equal opportunity
Policies and procedures	<p>May Include:</p> <ul style="list-style-type: none"> Work is carried out according to company procedures, regulatory and licensing requirements, legislative requirements, and industrial awards and agreements
System operation	<p>May Include:</p> <ul style="list-style-type: none"> Series of interrelated processes that must be coordinated and concurrently operated to produce the required outcome. System operation may involve: coordination of operators of system components
Handovers	<p>May Include:</p> <ul style="list-style-type: none"> in person or via recording/communication systems according to workplace arrangements
Shutdown procedures	<p>May Include:</p> <ul style="list-style-type: none"> cleaning (in some cases cleaning may be carried out by a dedicated cleaning crew)

Workplace information	<p>May Include:</p> <ul style="list-style-type: none"> • Standard Operating Procedures (SOPs) • specifications • production schedules and instructions • performance records and reports
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Evidence Guide	
Critical Aspects of Competency	<p>Demonstrate skills and knowledge of:</p> <ul style="list-style-type: none"> • conduct pre-start checks on packaging system components • confirm machine set up is ready to achieve packing requirements • correctly use required personal protective equipment • start, operate, monitor and adjust process equipment throughout the system to achieve required quality outcomes • identify system problems and take corrective action • conduct operational handovers • shut down system • identify and investigate opportunities for operational improvements within areas of responsibility • complete workplace records as required • apply safe work practices and identify OHS hazards and controls • safely shut down equipment • Apply food safety procedures.
Underpinning Knowledge	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • purpose and basic principles of the packaging system, including the process flow and the interrelationships of each previous processes that can affect packaging outcomes, packaging technology, and packaging equipment components • basic operating principles of equipment and related accessories used by the system, including equipment adjustment points, status and purpose of guards, and range and location/alignment requirements of sensors and related feedback instruments • operating capacities of equipment used in the system, such as different types of equipment and/or components as required by processing/packaging operations • related systems and responsibilities for interaction, such as related production and further packaging/storage stages, services supply, maintenance, laboratory/quality assurance and planning and scheduling • technical knowledge of product/packaging characteristics and the main factors that impact on shelf-life • typical packaging related problems, including equipment faults, common causes and warning signs, incorrect or poor supply of materials and finished product, incorrect settings and poor operator control

	<ul style="list-style-type: none"> • relevant procedures, specifications and operating parameters for the system and the individual processes • isolation, lock out and tag out procedures and responsibilities • hazards, risks, controls and methods for monitoring processes within the system, including Occupational Health and Safety (OHS), food safety, quality and environmental hazards and risks • workplace system and approach to equipment maintenance • process improvement procedures and related consultative arrangements • troubleshooting procedures and problem solving techniques • communication responsibilities to inform related work areas/support functions and other shifts of operational status and production issues • procedures and responsibility for reporting production and performance information
Underpinning Skills	<p>Demonstrate skills to:</p> <ul style="list-style-type: none"> • access production/packaging schedule and related information to identify packaging output and operating requirements, such as establishing daily packaging priorities and/or modifying plans to respond to customer requirements • liaise with relevant work areas to confirm and/or secure necessary materials, services, equipment and labour to meet production requirements • confirm supply of necessary equipment and related attachments, materials and services • select, fit and use personal protective clothing and/or equipment • set and/or adjust equipment to meet packaging requirements, such as inspecting equipment condition to identify any signs of wear, confirming selection of appropriate settings and/or related parameters, ensuring that isolation or lock outs are cancelled as required, confirming that equipment is clean and correctly configured for packaging requirements, positioning sensors and controls correctly, ensuring any scheduled maintenance has been carried out, and confirming that all safety guards are in place and operational (checks may be done by the system operator or involve observing/supporting others setting and adjusting equipment and conducting pre-start checks) • load and/or position product, packaging components and consumables as required • operate and monitor the packaging system, such as use of a process control system and/or observing/supporting others to follow correct operating procedures

	<ul style="list-style-type: none"> • monitor materials flow and work-in-progress to and from the packaging system • confirm that the packaging system operates within specified parameters and inspection/control points are monitored • determine responses to out-of-specification packaging or non-conformance within level of responsibility • monitor operating efficiencies of the system, including recognition of signs and symptoms of faulty equipment and early warning signs of other potential problems • investigate, resolve and/or report problems and faults • plan scheduled events to minimize disruption to production • conduct/coordinate product/packaging changeovers • conduct/coordinate shift handovers • review and maintain procedures to support system improvements • maintain work area to meet housekeeping standards • use oral communication skills/language competence to fulfil the job role as specified by the organization, including questioning, active listening, asking for clarification and seeking advice from supervisor • work cooperatively within a culturally diverse workforce
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Coffee Roasting and Grounding Level III	
Unit Title	Monitor Implementation of Work Plan/Activities
Unit Code	IND CRG3 19 0613
Unit Descriptor	This unit covers competence required to oversee and monitor the quality of work operations within an enterprise. This unit may be carried out by team leaders or supervisors.

Elements	Performance Criteria
1. Monitor and improve workplace operations	<p>1.1 Efficiency and service levels are monitored on an ongoing basis.</p> <p>1.2 Operations in the workplace support overall enterprise goals and quality assurance initiatives.</p> <p>1.3 Quality problems and issues are promptly identified and adjustments are made accordingly.</p> <p>1.4 Procedures and systems are changed in consultation with colleagues to improve efficiency and effectiveness.</p> <p>1.5 Colleagues are consulted about ways to improve efficiency and service levels.</p>
2. Plan and organise workflow	<p>2.1 Current workload of colleagues is accurately assessed.</p> <p>2.2 Work is scheduled in a manner which enhances efficiency and customer service quality.</p> <p>2.3 Work is delegated to appropriate people in accordance with principles of delegation.</p> <p>2.4 Workflow is assessed against agreed objectives and timelines and colleagues are assisted in prioritisation of workload.</p> <p>2.5 Input is provided to appropriate management regarding staffing needs.</p>
3. Maintain workplace records	<p>3.1 Workplace records are accurately completed and submitted within required timeframes.</p> <p>3.2 Where appropriate completion of records is delegated and monitored prior to submission.</p>
4. Solve problems and make decisions	<p>4.1 Workplace problems are promptly identified and considered from an operational and customer service perspective.</p> <p>4.2 Short term action is initiated to resolve the immediate problem where appropriate.</p> <p>4.3 Problems are analysed for any long term impact and potential solutions are assessed and actioned in consultation with relevant colleagues.</p> <p>4.4 Where problem is raised by a team member, they are encouraged to participate in solving the problem.</p> <p>4.5 Follow up action is taken to monitor the effectiveness of solutions in the workplace.</p>

Variable	Range
Problems	May include but not limited to: <ul style="list-style-type: none"> • difficult customer service situations • equipment breakdown/technical failure • delays and time difficulties • competence
Workplace records	May include but is not limited to: <ul style="list-style-type: none"> • staff records and regular performance reports

Evidence Guide	
Critical Aspects of Competency	Demonstrates skills and knowledge in: <ul style="list-style-type: none"> • ability to effectively monitor and respond to a range of common operational and service issues in the workplace • understanding of the role of staff involved in workplace monitoring • knowledge of quality assurance, principles of workflow planning, delegation and problem solving
Underpinning Knowledge	Demonstrate knowledge of: <ul style="list-style-type: none"> • roles and responsibilities in monitoring work operations • overview of leadership and management responsibilities • principles of work planning and principles of delegation • typical work organization methods appropriate to the sector • quality assurance principles and time management • problem solving and decision making processes • industrial and/or legislative issues which affect short term work organization as appropriate to industry sector
Underpinning Skills	Demonstrate skills to: <ul style="list-style-type: none"> • monitor and improve workplace operations • plan and organize workflow • maintain workplace records
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Coffee Roasting and Grinding Level III	
Unit Title	Apply Quality Control
Unit Code	IND CRG3 20 0613
Unit Descriptor	This unit covers the knowledge, attitudes and skills required in applying quality control in the workplace.

Elements	Performance Criteria
1. Implement quality standards	<p>1.1 Agreed quality standard and procedures are acquired and confirmed.</p> <p>1.2 Standard procedures are introduced to organizational staff/personnel.</p> <p>1.3 Quality standard and procedures documents are provided to employees in accordance with the organization policy.</p> <p>1.4 Standard procedures are revised / updated when necessary.</p>
2. Assess quality of service delivered	<p>2.1 Services delivered are quality checked against organization quality standards and specifications.</p> <p>2.2 Service delivered are evaluated using the appropriate evaluation quality parameters and in accordance with organization standards.</p> <p>2.3 Causes of any identified faults are identified and corrective actions are taken in accordance with organization policies and procedures.</p>
3. Record information	<p>3.1 Basic information on the quality performance is recorded in accordance with organization procedures.</p> <p>3.2 Records of work quality are maintained according to the requirements of the organization.</p>
4. Study causes of quality deviations	<p>4.1 Causes of deviations from final outputs or services are investigated and reported in accordance with organization procedures.</p> <p>4.2 Suitable preventive action is recommended based on organization quality standards and identified causes of deviation from specified quality standards of final service or output.</p>
5. Complete documentation	<p>5.1 Information on quality and other indicators of service performance is recorded.</p> <p>5.2 All service processes and outcomes are recorded.</p>

Variable	Range
Quality check	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • Check against design / specifications • Visual inspection and Physical inspection

Quality standards	May include but not limited to: <ul style="list-style-type: none"> • Materials • Components • Process • Procedures
Quality parameters	May include but not limited to: <ul style="list-style-type: none"> • Standard Design / Specifications • Material Specification
Quality check	May include but not limited to: <ul style="list-style-type: none"> • Check against design / specifications • Visual inspection and Physical inspection

Evidence Guide	
Critical Aspects of Competency	Demonstrates skills and knowledge to: <ul style="list-style-type: none"> • Check completed work continuously against organization standard • Identify and isolate faulty or poor service • Check service delivered against organization standards • Identify and apply corrective actions on the causes of identified faults or error • Record basic information regarding quality performance • Investigate causes of deviations of services against standard • Recommend suitable preventive actions
Underpinning Knowledge	Demonstrates knowledge of: <ul style="list-style-type: none"> • Relevant quality standards, policies and procedures • Characteristics of services • Safety environment aspects of service processes • Evaluation techniques and quality checking procedures • Workplace procedures and reporting procedures
Underpinning Skills	Demonstrates skills to: <ul style="list-style-type: none"> • interpret work instructions, specifications and standards appropriate to the required work or service • carry out relevant performance evaluation • maintain accurate work records • meet work specifications and requirements • communicate effectively within defined workplace procedures
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Coffee Roasting and Grinding Level III	
Unit Title	Lead Workplace Communication
Unit Code	<u>IND CRG3 21 0613</u>
Unit Descriptor	This unit covers the knowledge, attitudes and skills needed to lead in the dissemination and discussion of information and issues in the workplace.

Elements	Performance Criteria
1. Communicate information about workplace processes	1.1 Appropriate communication method is selected. 1.2 Multiple operations involving several topics areas are communicated accordingly. 1.3 Questions are used to gain extra information. 1.4 Correct sources of information are identified. 1.5 Information is selected and organized correctly. 1.6 Verbal and written reporting is undertaken when required. 1.7 Communication skills are maintained in all situations.
2. Lead workplace discussion	2.1 Response to workplace issues is sought. 2.2 Response to workplace issues are provided immediately. 2.3 Constructive contributions are made to workplace discussions on such issues as production, quality and safety. 2.4 Goals/objectives and action plan undertaken in the workplace are communicated.
3. Identify and communicate issues arising in the workplace	3.1 Issues and problems are identified as they arise. 3.2 Information regarding problems and issues are organized coherently to ensure clear and effective communication. 3.3 Dialogue is initiated with appropriate staff/personnel. 3.4 Communication problems and issues are raised as they arise.

Variable	Range
Methods of communication	May include but not limited to: <ul style="list-style-type: none"> • Non-verbal gestures • Verbal • Face to face • Two-way radio • Speaking to groups • Using telephone • Written • Using Internet • Cell phone

Evidence Guide	
Critical Aspects of Competency	<p>Demonstrates skills and knowledge to:</p> <ul style="list-style-type: none"> • Deal with a range of communication/information at one time • Make constructive contributions in workplace issues • Seek workplace issues effectively • Respond to workplace issues promptly • Present information clearly and effectively written form • Use appropriate sources of information • Ask appropriate questions • Provide accurate information
Underpinning Knowledge	<p>Demonstrates knowledge of:</p> <ul style="list-style-type: none"> • Organization requirements for written and electronic communication methods • Effective verbal communication methods
Underpinning Skills	<p>Demonstrates skills to:</p> <ul style="list-style-type: none"> • Organize information • Understand and convey intended meaning • Participate in variety of workplace discussions • Comply with organization requirements for the use of written and electronic communication methods
Resource Implications	<p>Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.</p>
Methods of Assessment	<p>Competence may be assessed through:</p> <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	<p>Competence may be assessed in the work place or in a simulated work place setting.</p>

Occupational Standard: Coffee Roasting and Grounding Level III	
Unit Title	Lead Small Teams
Unit Code	IND CRG3 22 0613
Unit Descriptor	This unit covers the skills, knowledge and attitudes required to determine individual and team development needs and facilitate the development of the work group.

Elements	Performance Criteria
1. Provide team leadership	<p>1.1 Learning and development needs are systematically identified and implemented in line with organizational requirements.</p> <p>1.2 Learning plan to meet individual and group training and developmental needs is collaboratively developed and implemented.</p> <p>1.3 Individuals are encouraged to self-evaluate performance and identify areas for improvement.</p> <p>1.4 Feedback on performance of team members is collected from relevant sources and compared with established team learning process.</p>
2. Foster individual and organizational growth	<p>2.1 Learning and development program goals and objectives are identified to match the specific knowledge and skills requirements of Competence standards.</p> <p>2.2 Learning delivery methods are appropriate to the learning goals, the learning style of participants and availability of equipment and resources.</p> <p>2.3 Workplace learning opportunities and coaching/ mentoring assistance are provided to facilitate individual and team achievement of competencies.</p> <p>2.4 Resources and timelines required for learning activities are identified and approved in accordance with organizational requirements.</p>
3. Monitor and evaluate workplace learning	<p>3.1 Feedback from individuals or teams is used to identify and implement improvements in future learning arrangements.</p> <p>3.2 Outcomes and performance of individuals/teams are assessed and recorded to determine the effectiveness of development programs and the extent of additional support.</p> <p>3.3 Modifications to learning plans are negotiated to improve the efficiency and effectiveness of learning.</p> <p>3.4 Records and reports of competence are maintained within organizational requirement.</p>

4. Develop team commitment and cooperation	<p>4.1 Open communication processes to obtain and share information is used by team.</p> <p>4.2 Decisions are reached by the team in accordance with its agreed roles and responsibilities.</p> <p>4.3 Mutual concern and camaraderie are developed in the team.</p>
5. Facilitate accomplishment of organizational goals	<p>5.1 Team members actively participated in team activities and communication processes.</p> <p>5.2 Teams' members developed individual and joint responsibility for their actions.</p> <p>5.3 Collaborative efforts are sustained to attain organizational goals.</p>

Variable	Range
Learning and development needs	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • Coaching, mentoring and/or supervision • Formal/informal learning program • Internal/external training provision • Work experience/exchange/opportunities • Personal study • Career planning/development • Performance appraisals • Workplace skills assessment • Recognition of prior learning
Organizational requirements	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • Quality assurance and/or procedures manuals • Goals, objectives, plans, systems and processes • Legal and organizational policy/guidelines and requirements • Safety policies, procedures and programs • Confidentiality and security requirements • Business and performance plans • Ethical standards • Quality and continuous improvement processes and standards
Feedback on performance	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • Formal/informal performance appraisals • Obtaining feedback from supervisors and colleagues • Obtaining feedback from clients • Personal and reflective behavior strategies • Routine and organizational methods for monitoring service delivery
Learning delivery methods	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • On the job coaching or mentoring • Problem solving • Presentation/demonstration

	<ul style="list-style-type: none"> • Formal course participation • Work experience and Involvement in professional networks • Conference/seminar attendance and induction
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Evidence Guide	
Critical Aspects of Competency	<p>Demonstrates skills and knowledge to:</p> <ul style="list-style-type: none"> • identify and implement learning opportunities for others • give and receive feedback constructively • facilitate participation of individuals in the work of the team • negotiate learning plans to improve the effectiveness of learning • prepare learning plans to match skill needs • access and designate learning opportunities
Underpinning Knowledge	<p>Demonstrates knowledge of:</p> <ul style="list-style-type: none"> • coaching and mentoring principles • how to work effectively with team members who have diverse work styles, aspirations, cultures and perspective • how to facilitate team development and improvement • methods and techniques for eliciting and interpreting feedback • methods for identifying and prioritizing personal development opportunities and options • career paths and competence standards in the industry
Underpinning Skills	<p>Demonstrates skills to:</p> <ul style="list-style-type: none"> • read and understand a variety of texts, prepare general information and documents according to target audience; spell with accuracy; use grammar and punctuation effective relationships and conflict management • receive feedback and report, maintain effective relationships and conflict management • organize required resources and equipment to meet learning needs • provide support to colleagues • organize information; assess information for relevance and accuracy; identify and elaborate on learning outcomes • facilitation skills to conduct small group training sessions • relate to people from a range of social, cultural, physical and mental backgrounds
Resource Implications	<p>Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.</p>
Methods of Assessment	<p>Competence may be assessed through:</p> <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	<p>Competence may be assessed in the work place or in a simulated work place setting.</p>

Occupational Standard: Coffee Roasting and Grounding Level III	
Unit Title	Improve Business Practice
Unit Code	IND CRG3 23 0613
Unit Descriptor	This unit covers the skills, knowledge and attitudes required in promoting, improving and growing business operations.

Elements	Performance Criteria
1. Diagnose the business	1.1 Data required for diagnosis is determined and acquired. 1.2 Competitive advantage of the business is determined from the data. 1.3 SWOT analysis of the data is undertaken.
2. Benchmark the business	2.1 Sources of relevant benchmarking data are identified. 2.2 Key indicators for benchmarking are selected in consultation with key stakeholders. 2.3 Like indicators of own practice are compared with benchmark indicators. 2.4 Areas for improvement are identified.
3. Develop plans to improve business performance	3.1 A consolidated list of required improvements is developed. 3.2 Cost-benefit ratios for required improvements are determined. 3.3 Work flow changes resulting from proposed improvements are determined. 3.4 Proposed improvements are ranked according to agreed criteria. 3.5 An action plan is developed and agreed to implement the top ranked improvements. 3.6 Organizational structures are checked to ensure they are suitable.
4. Develop marketing and promotional plans	4.1 The practice vision statement is reviewed. 4.2 Practice objectives are developed/ reviewed. 4.3 Target markets are identified/ refined. 4.4 Market research data is obtained. 4.5 Competitor analysis is obtained. 4.6 Market position is developed/ reviewed. 4.7 Practice brand is developed. 4.8 Benefits of practice/practice products/services are identified. 4.9 Promotion tools are selected/ developed.

5. Develop business growth plans	<p>5.1 Plans are developed to increase <i>yield per existing client</i>.</p> <p>5.2 Plans are developed to add new clients.</p> <p>5.3 Proposed plans are ranked according to agreed criteria.</p> <p>5.4 An action plan is developed and agreed to implement the top ranked plans.</p> <p>5.5 Practice work practices are reviewed to ensure they support growth plans.</p>
6. Implement and monitor plans	<p>6.1 Implementation plan is developed in consultation with all relevant stakeholders.</p> <p>6.2 Indicators of success of the plan are agreed.</p> <p>6.3 Implementation is monitored against agreed indicators.</p> <p>6.4 Implementation is adjusted as required.</p>

Variable	Range
Data required includes:	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • organization capability • appropriate business structure • level of client service which can be provided • internal policies, procedures and practices • staff levels, capabilities and structure • market, market definition • market changes/market segmentation • market consolidation/fragmentation • revenue • level of commercial activity • expected revenue levels, short and long term • revenue growth rate • break even data • pricing policy • revenue assumptions • business environment • economic conditions • social factors • demographic factors • technological impacts • political/legislative/regulative impacts • competitors, competitor pricing and response to pricing • competitor marketing/branding • competitor products
Competitive advantage	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • services/products • fees • location and timeframe

SWOT analysis	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • internal strengths such as staff capability, recognized quality • internal weaknesses such as poor morale, under-capitalization, poor technology • external opportunities such as changing market and economic conditions • external threats such as industry fee structures, strategic alliances, competitor marketing 		
Key indicators	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • salary cost and staffing • personnel productivity (particularly of principals) • profitability • fee structure • client base • size staff/principal and overhead/overhead control 		
Organizational structures	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • Legal structure (partnership, Limited Liability Company, etc.) • organizational structure/hierarchy • reward schemes 		
Objectives should be 'SMART'	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • S: Specific • M: Measurable • A: Achievable • R: Realistic • T: Time defined 		
Market research data	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • data about existing clients • data about possible new clients • data from internal sources • data from external sources such as: <ul style="list-style-type: none"> ➢ trade associations/journals ➢ Yellow Pages small business surveys ➢ libraries ➢ Internet ➢ Chamber of Commerce ➢ client surveys ➢ industry reports and secondary market research • primary market research such as: <ul style="list-style-type: none"> ➢ telephone surveys ➢ personal interviews and mail surveys 		
Competitor analysis	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • competitor offerings • competitor promotion strategies and activities • competitor profile in the market place 		
Market position	<p>May include but not limited to:</p>		
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<p>should include data on:</p>	<ul style="list-style-type: none"> • product • the good or service provided • product mix • the core product - what is bought • the tangible product - what is perceived • the augmented product - total package of consumer • features/benefits • product differentiation from competitive products • new/changed products • Price and pricing strategies (cost plus, supply/demand, ability to pay, etc.) • Pricing objectives (profit, market penetration, etc.) • cost components • market position • distribution strategies • marketing channels • promotion • promotional strategies • target audience • communication and promotion budget 		
<p>Practice brand</p>	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • practice image • practice logo/letter head/signage • phone answering protocol • facility decor • slogans • templates for communication/invoicing • style guide • writing style • AIDA (attention, interest, desire, action) 		
<p>Benefits</p>	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • features as perceived by the client • benefits as perceived by the client 		
<p>Promotion tools</p>	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • networking and referrals • seminars • advertising • press releases • publicity and sponsorship • brochures • newsletters (print and/or electronic) • websites • direct mail and telemarketing/cold calling 		
<p>Yield per existing client</p>	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • raising charge out rates/fees • packaging fees • reduce discounts and sell more services to existing clients 		
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Evidence Guide	
Critical Aspects of Competency	Demonstrates skills and knowledge in: <ul style="list-style-type: none"> • ability to identify the key indicators of business performance • ability to identify the key market data for the business • knowledge of a wide range of available information sources • ability to acquire information not readily available within a business • ability to analyze data and determine areas of improvement • ability to negotiate required improvements to ensure implementation • ability to evaluate systems against practice requirements and form recommendations and/or make recommendations • ability to assess the accuracy and relevance of information
Underpinning Knowledge	Demonstrates knowledge of: <ul style="list-style-type: none"> • data analysis • communication skills • computer skills to manipulate data and present information • negotiation skills • problem solving • planning skills • marketing principles • ability to acquire and interpret relevant data • current product and marketing mix • use of market intelligence • development and implementation strategies of promotion and growth plans
Underpinning Skills	Demonstrates skill in: <ul style="list-style-type: none"> • data analysis and manipulation • ability to acquire and interpret required data, current practice systems and structures and sources of relevant benchmarking data • applying methods of selecting relevant key benchmarking indicators • communication skills • working and consulting with others when developing plans for the business • planning skills, negotiation skills and problem solving • using computers to manipulate, present and distribute information
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Coffee Roasting and Grinding Level III	
Unit Title	Prevent and Eliminate MUDA
Unit Code	IND CRG3 24 0613
Unit Descriptor	This unit of competence covers the knowledge, skills and attitude required by a worker to prevent and eliminate MUDA/wastes in his/her their workplace. It covers responsibility for the day-to-day operation of the work and ensures Kaizen elements are continuously improved and institutionalized.

Elements	Performance Criteria
1. Prepare for work.	<p>1.1 Work instructions are used to determine job requirements, including method, material and equipment.</p> <p>1.2 Job specifications are read and interpreted following working manual.</p> <p>1.3 OHS requirements, including dust and fume collection, breathing apparatus and eye and ear personal protection needs are observed throughout the work.</p> <p>1.4 Appropriate material is selected for work.</p> <p>1.5 Safety equipment and tools are identified and checked for safe and effective operation.</p>
2. Identify MUDA.	<p>2.1 Plan of MUDA identification is prepared and implemented.</p> <p>2.2 Causes and effects of MUDA are discussed.</p> <p>2.3 Tools and techniques are used to draw and analyze current situation of the work place.</p> <p>2.4 Wastes/MUDA are identified and measured based on relevant procedures.</p> <p>2.5 Identified and measured wastes are reported to relevant personnel.</p>
3. Eliminate wastes/MUDA.	<p>3. 1. Plan of MUDA elimination is prepared and implemented.</p> <p>3. 2. Necessary attitude and the ten basic principles for improvement are adopted to eliminate waste/MUDA.</p> <p>3. 3. Tools and techniques are used to eliminate wastes/MUDA based on the procedures and OHS.</p> <p>3. 4. Wastes/MUDA are reduced and eliminated in accordance with OHS and organizational requirements.</p> <p>3. 5. Improvements gained by elimination of waste/MUDA are reported to relevant bodies.</p>

<p>4. Prevent occurrence of wastes/MUDA.</p>	<p>4.1 Plan of MUDA prevention is prepared and implemented.</p> <p>4.2 Standards required for machines, operations, defining normal and abnormal conditions, clerical procedures and procurement are discussed and prepared.</p> <p>4.3 Occurrences of wastes/MUDA are prevented by using visual and auditory control methods.</p> <p>4.4 Waste-free workplace is created using 5W and 1H sheet.</p> <p>4.5 The completion of required operation is done in accordance with standard procedures and practices.</p> <p>4.6 The updating of standard procedures and practices is facilitated.</p> <p>4.7 The capability of the work team that aligns with the requirements of the procedure is ensured.</p>
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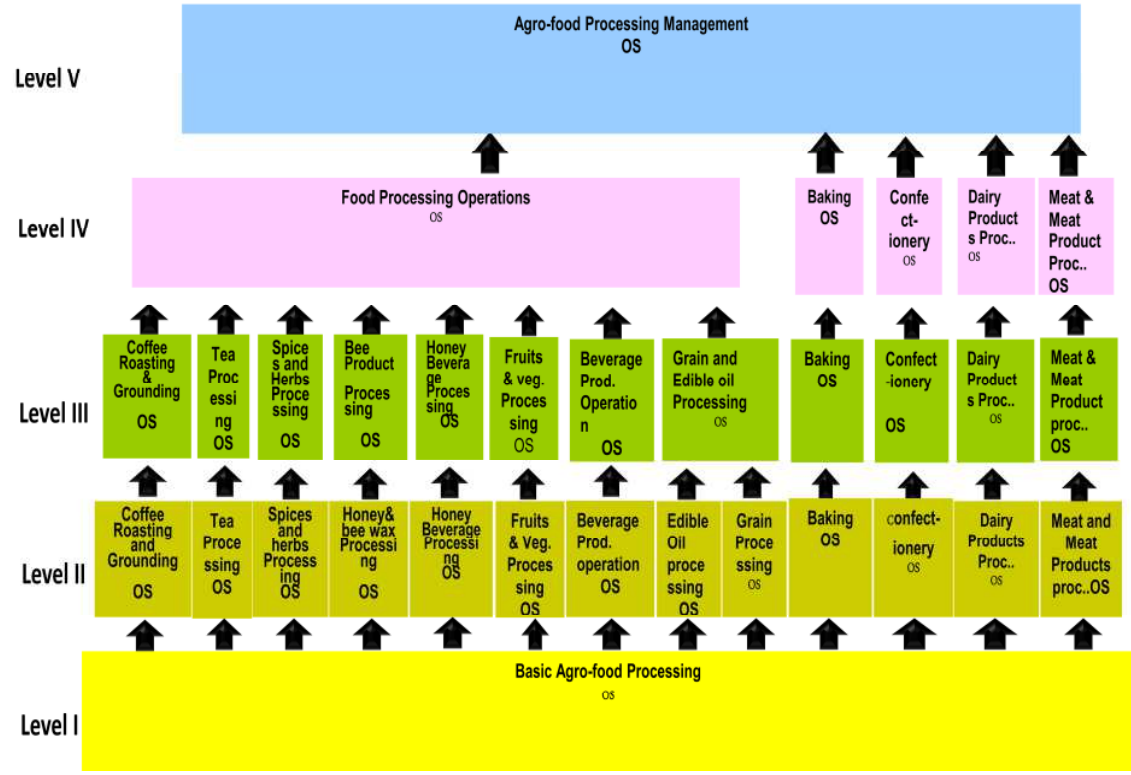
Variable	Range
OHS requirements	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • Are to be in accordance with legislation/ regulations/codes of practice and enterprise safety policies and procedures. This may include protective clothing and equipment, use of tooling and equipment, workplace environment and safety, handling of material, use of fire fighting equipment, enterprise first aid, hazard control and hazardous materials and substances. • Personal protective equipment is to include that prescribed under legislation/regulations/codes of practice and workplace policies and practices. • Safe operating procedures are to include, but are not limited to the conduct of operational risk assessment and treatments associated with workplace organization. • Emergency procedures related to this unit are to include but may not be limited to emergency shutdown and stopping of equipment, extinguishing fires, enterprise first aid requirements and site evacuation.
Safety equipment and tools	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • dust masks / goggles • glove • working cloth • first aid • safety shoes
Tools and techniques	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • Plant Layout • Process flow • Other Analysis tools • Do time study by work element • Measure Travel distance

	<ul style="list-style-type: none"> • Take a photo of workplace • Measure Total steps • Make list of items/products, who produces them and who uses them & those in warehouses, storages etc. • Focal points to Check and find out existing problems • 5S • Layout improvement • Brainstorming • Andon • U-line • In-lining • Unification • Multi-process handling & Multi-skilled operators • A.B. control (Two point control) • Cell production line • TPM (Total Productive Maintenance)
Relevant procedures	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • Make waste visible • Be conscious of the waste • Be accountable for the waste. • Measure the waste.
The ten basic principles for improvement	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • Throw out all of your fixed ideas about how to do things. • Think of how the new method will work- not how it won. • Don't accept excuses. Totally deny the status quo. • Don't seek perfection. A 50 percent implementation rate is fine as long as it's done on the spot. • Correct mistakes the moment they are found. • Don't spend a lot of money on improvements. • Problems give you a chance to use your brain. • Ask "why?" at least five times until you find the ultimate cause. • Ten people's ideas are better than one person's. • Improvement knows no limits.
Visual and auditory control methods	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • Red Tagging • Sign boards • Outlining • Andons • Kanban, etc.
5W and 1H	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • Who • What • Where • When • Why • How

Evidence Guide	
Critical Aspects of Competence	<p>Demonstrates skills and knowledge to:</p> <ul style="list-style-type: none"> • discuss why wastes occur in the workplace • discuss causes and effects of wastes/MUDA in the workplace • analyze the current situation of the workplace by using appropriate tools and techniques • identify, measure, eliminate and prevent occurrence of wastes by using appropriate tools and techniques • use 5W and 1H sheet to prevent
Underpinning Knowledge and Attitudes	<p>Demonstrates knowledge of:</p> <ul style="list-style-type: none"> • Targets of customers and manufacturer/service provider • Traditional and kaizen thinking of price setting • Kaizen thinking in relation to targets of manufacturer/service provider and customer • value • The three categories of operations • the 3“MU” • waste/MUDA • wastes occur in the workplace • The 7 types of MUDA • The Benefits of identifying and eliminating waste • Causes and effects of 7 MUDA • Procedures to identify MUDA • Necessary attitude and the ten basic principles for improvement • Procedures to eliminate MUDA • Prevention of wastes • Methods of waste prevention • Definition and purpose of standardization • Standards required for machines, operations, defining normal and abnormal conditions, clerical procedures and procurement • Methods of visual and auditory control • TPM concept and its pillars. • Relevant OHS and environment requirements • Plan and report • Method of communication
Underpinning Skills	<p>Demonstrates skills to:</p> <ul style="list-style-type: none"> • draw & analyze current situation of the work place • use measurement apparatus (stop watch, tape, etc.) • calculate volume and area • use and follow checklists to identify, measure and eliminate wastes/MUDA • identify and measure wastes/MUDA in accordance with OHS and procedures

	<ul style="list-style-type: none"> • use tools and techniques to eliminate wastes/MUDA in accordance with OHS procedure • apply 5W and 1H sheet • update and use standard procedures for completion of required operation • work with others • read and interpret documents • observe situations • solve problems • communicate • gather evidence by using different means • report activities and results using report formats
Resources Implication	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Sector: Industry
Sub- sector: Agro-food Processing



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We wish to extend thanks and appreciation to the many representatives of business, industry, academe and government agencies who donated their time and expertise to the development of this occupational standard.

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This occupational standard was developed on the date of June 25, 2013 at Debre Zeyit Ethiopian Management Institute.

COMMENT TEMPLATE

The Federal TVET Agency values your feedback of the document.
If you would like someone to personally contact you, please provide the following information:
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- **Phone# +251911207386/+251911641248/+251923787992 and**
- **E-mail: bizunehdebebe@yahoo.com/ Abebaw_maemer@yahoo.com /won_get@yahoo.com.**