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**PRACTICAL SKILLS COMPONENT:**

**LOG BOOK**

**This Log Book belongs to:**

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**OCCUPATIONAL QUALIFICATION: SUGAR PROCESSING MACHINE OPERATOR**

**PRACTICAL SKILLS COMPONENT:**

**LOG BOOK**

**PRACTICAL SKILLS COMPONENT:**

**LOG BOOK**

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**OCCUPATIONAL CERTIFICATE:**

**SUGAR PROCESSING MACHINE OPERATOR: ID 98912: NQF 3**

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# AN INTRODUCTION TO THIS LOG BOOK

## Practical Skills Module Specifications

This Log Book is intended to be used for the Practical Skills Component of the Occupational Qualification: Sugar Processing Machine Operator NQF 3. This Log Book contains the following Practical Skills Module Specifications:

* 716106000-PM-01, Operate pre-set sugar processing equipment, NQF Level 2, Credits 12
* 716106000-PM-02, Operate programmable sugar processing equipment, NQF Level 3, Credits 24
* 716106000-PM-03, Operate a bank of inter linked equipment that functions in sequence in a sugar mill, NQF Level 03, Credits 8
* 716106000-PM-04, Meet occupational health, safety, environment and quality standards, NQF Level 03, Credits 8

Total number of credits for Practical Skill Modules: 52

## Types of Assessment Tools that will be used in the Practical Skills Component

Throughout this Occupational Qualification there are three assessment tools or ways of recording knowledge and practical skills. The first method is related to the underpinning knowledge and takes the form of written assessments (as has generally been the case in the Formative Assessment within the Knowledge Component preceding the Practical Skills Component). These have taken the form of multiple choice assessments and short structured questions requiring explanation on the part of the learner. It has also included practical or homework assignments during the formative assessment.

The second and third types of assessment tools are related to the ways in which the assessor can gather and record evidence for the practical skills that you, the learner, must demonstrate. A competence checklist is a list of activities or performance outcomes that you, the learner, must **be seen to be able to do** in order to be considered competent in the tasks being assessed. The checklist provides a space to state that either “Yes, the learner successfully carried out this activity” or, “No, the learner has not yet achieved this standard”.

Checklists are provided in this Log Book and you, the learner, has to show that the tasks can be performed to the standard stated – The method of assessment is “observation of performance under realistic conditions”. Alternatively performance may be observed under controlled conditions such as a simulated work environment in a training centre workshop or registered Assessment Centre (if the necessary tools and equipment or systems are available for such assessment).

The third method that can be used to assess practical skills is the provision of opportunities for practical assignments. These are tasks that you will be required to complete. In these cases, your supervisor will provide instructions for you to follow in order that you can demonstrate your competence. Practical assignments may ask you to produce a product (e.g. a plan, a report, a design, a drawing, a schematic), or it may require observation by the supervisor of your performance, or a combination of the two.

## Completing your Log Book

Once each of these competence checklists are completed and signed off, the Learner Log Book document and all its Supporting Evidence must be handed to the relevant QCTO Assessment Quality Partner for verification.

A summary “Learner Assessment Record” is provided at the back of the Learner Log Book and is a record of your progress over the entire Practical Skills Component. This should be completed by the Mill Supervisor and a certified copy inserted into the Summative Guide (In the Work Experience Component).

## How to use the Competence Checklists

The Competence Checklists for each of the Practical Skills Modules contained in this Log Book appear as follows. A few guidelines on how to use these Checklists are shown below:



## How to use the Preparation Matrices

To prepare for each Practical Skills Module a Preparation Matrix has been provided for your use. Use this to plan your work in collaboration with the Mill Supervisor.



(Note: PM = Practical Skills Module, PA = Practical Skill Assessment Scope, AK = Applied Knowledge)

# PRACTICAL SKILLS MODULE 1

## Operate pre-set sugar processing equipment

Module number: 716106000-PM-01: NQF Level 2: Credits 12

**The focus of the learning in this module is on providing the learner an opportunity to gain practical skills required to attend to pre-set equipment used in uncomplicated processes such as filter presses, juice heater, coolers, Oliver filters, continuous centrifuges in a controlled learning environment.**

The learner will be required to:

* PM-01-PS01: Conduct pre start-up procedures of preset sugar processing equipment
* PM-01-PS02: Monitor and operate preset sugar processing equipment
* PM-01-PS03: Shut down and clean preset sugar processing equipment

## Preparation Matrix for Practical Skills Module 1

| **Practical Skills Module \_\_\_\_****Number of credits \_\_\_\_\_** | **Title of Practical Skills Module: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_****\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_****\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** | **Preparation Notes** |
| --- | --- | --- |
| **The focus of this Practical Skills Module is: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_****\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** |
| Instructions and hand-outs provided (list them here) |  |
| What competence will the Mill Supervisor want to see? |  |
| To what standard will the Mill Supervisor want to see the task completed at? |  |
| What supplementary material must you collect, collate, prepare and insert into the Log Book? |  |

## Competence Checklist for Practical Skills Module 1

| PM01: NQF Level 2: Credits 12 | Operate pre-set sugar processing equipment | Learner | Mill Supervisor |
| --- | --- | --- | --- |
| Date completed | Evidence attached | Signature | Can the learner do this? Yes / No | Comments | Signature |
| **The focus of the learning in this module is on providing the learner an opportunity to gain practical skills required to attend to pre-set equipment used in uncomplicated processes such as filter presses, juice heater, coolers, Oliver filters, continuous centrifuges in a controlled learning environment.** |
| PM-01-PS01: Conduct pre start-up procedures of preset sugar processing equipment | Scope of Practical Skill:Given pre-set equipment in a controlled operational environment, operating procedures and instructions, the learner must be able to: |
| PA0101 | Use a control sheet to inspect the preset equipment for correct settings and mechanical soundness |  |  |  |  |  |  |
| PA0102 | Inspect and identify feeder material for availability and correctness |  |  |  |  |  |  |
| PA0103 | Inspect material routing for readiness |  |  |  |  |  |  |
| **Applied Knowledge** | Date completed | Evidence attached | Signature | Can the learner do this? Yes / No | Comments | Signature |
| AK0101 | Equipment mechanical inspection procedures and standards |  |  |  |  |  |  |
| AK0102 | Flow of material |  |  |  |  |  |  |
| AK0103 | Equipment settings |  |  |  |  |  |  |
| **Internal Assessment Criteria** | Date completed | Evidence attached | Signature | Can the learner do this? Yes / No | Comments | Signature |
| IAC0101 | Inspection reports are accurately completed |  |  |  |  |  |  |
| **Supplementary Evidence Provided** | Date completed | Evidence attached | Signature | Can the learner do this? Yes / No | Comments | Signature |
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| PM-01-PS02: Monitor and operate equipment preset sugar processing equipment | Scope of Practical SkillGiven pre-set processing equipment in a controlled learning environment, the learner must be able to: |
| PA0201 | Perform specific operational tasks in accordance with equipment operating procedures e.g. start-up, change-over, purging, cleaning, shut down, emergency stop |  |  |  |  |  |  |
| PA0202 | Monitor preset equipment to maintain operation within output/product requirements and equipment specifications |  |  |  |  |  |  |
| PA0203 | Recognise and rectify and/or report operating problems related to different scenarios |  |  |  |  |  |  |
| PA0204 | Achieve required volumes and quality standards |  |  |  |  |  |  |
| PA0205 | Complete a production report |  |  |  |  |  |  |
| **Applied Knowledge** | Date completed | Evidence attached | Signature | Can the learner do this? Yes / No | Comments | Signature |
| AK0201 | Standard operating procedures or instructions |  |  |  |  |  |  |
| AK0202 | Sensory signs of operating problems |  |  |  |  |  |  |
| AK0203 | Material specifications |  |  |  |  |  |  |
| AK0204 | Indicators of the mechanical problems |  |  |  |  |  |  |
| AK0205 | Product/material standards and specifications |  |  |  |  |  |  |
| AK0206 | Production reporting requirements |  |  |  |  |  |  |
| **Internal Assessment Criteria** | Date completed | Evidence attached | Signature | Can the learner do this? Yes / No | Comments | Signature |
| IAC0201 | The equipment is operated in accordance with standard operating procedures or instructions |  |  |  |  |  |  |
| IAC0202 | The consequences of wrong practices, neglect and/or misinterpretation of instrument readings, incorrect settings in relation to equipment efficiency and product quality is explained correctly |  |  |  |  |  |  |
| IAC0203 | Production volumes and quality standards are achieved |  |  |  |  |  |  |
| **Supplementary Evidence Provided** | Date completed | Evidence attached | Signature | Can the learner do this? Yes / No | Comments | Signature |
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| PM-01-PS03: Shut down and clean preset sugar processing equipment | Scope of Practical SkillGiven cleaning material, equipment, lubricants and the required mechanical tools the learner must be able to: |
| PA0301 | Perform pre-set equipment shutdown procedures |  |  |  |  |  |  |
| PA0302 | Clean pre-set sugar processing equipment and perform housekeeping |  |  |  |  |  |  |
| PA0303 | Lubricate pre-set sugar processing equipment |  |  |  |  |  |  |
| **Applied Knowledge** | Date completed | Evidence attached | Signature | Can the learner do this? Yes / No | Comments | Signature |
| AK0301 | Equipment cleaning procedures |  |  |  |  |  |  |
| AK0302 | Equipment care and maintenance |  |  |  |  |  |  |
| **Internal Assessment Criteria** | Date completed | Evidence attached | Signature | Can the learner do this? Yes / No | Comments | Signature |
| IAC0301 | Scheduled cleaning and equipment care procedures are executed in accordance with manufacturer specifications and standard procedures |  |  |  |  |  |  |
| **Supplementary Evidence Provided** | Date completed | Evidence attached | Signature | Can the learner do this? Yes / No | Comments | Signature |
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# PRACTICAL SKILLS MODULE 2

## Operate programmable sugar processing equipment

Module Number 716106000-PM-02, NQF Level 3, Credits 24

**The focus of the learning in this module is on providing the learner an opportunity to develop skills to operate programmable equipment or equipment setup and operated in series. The learner will gain the skills by operating equipment used for extraction, clarification, evaporation, sugar melting and refining processes.**

The learner will be required to:

* PM-02-PS01: Conduct pre start-up procedures of programmable sugar processing equipment
* PM-02-PS02: Monitor and operate programmable sugar processing equipment
* PM-02-PS03: Shut down and clean programmable sugar processing equipment
* PM-02-PS04: Record data and maintain production records

## Preparation Matrix for Practical Skills Module 2

| **Practical Skills Module \_\_\_\_****Number of credits \_\_\_\_\_** | **Title of Practical Skills Module: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_****\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_****\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** | **Preparation Notes** |
| --- | --- | --- |
| **The focus of this Practical Skills Module is: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_****\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** |
| Instructions and hand-outs provided (list them here) |  |
| What competence will the Mill Supervisor want to see? |  |
| To what standard will the Mill Supervisor want to see the task completed at? |  |
| What supplementary material must you collect, collate, prepare and insert into the Log Book? |  |

## Competence Checklist for Practical Skills Module 2

| PM-02, NQF Level 3, Credits 24 | Operate programmable sugar processing equipment | Learner | Mill Supervisor |
| --- | --- | --- | --- |
| Date completed | Evidence attached | Signature | Can the learner do this? Yes / No | Comments | Signature |
| **The focus of the learning in this module is on providing the learner an opportunity to develop skills to operate programmable equipment or equipment setup and operated in series. The learner will gain the skills by operating equipment used for extraction, clarification, evaporation, sugar melting and refining processes.** |
| PM-02-PS01: Conduct pre start-up procedures of programable sugar processing equipment | Scope of Practical Skill:Given a controlled operational environment, operating procedures and instructions, the learner must be able to: |
| PA0101 | Use a control sheet to inspect programmable equipment for correct settings and mechanical soundness |  |  |  |  |  |  |
| PA0102 | Inspect and identify feeder material for availability and correctness |  |  |  |  |  |  |
| PA0103 | Inspect material routing for readiness |  |  |  |  |  |  |
| **Applied Knowledge** | Date completed | Evidence attached | Signature | Can the learner do this? Yes / No | Comments | Signature |
| AK0101 | Programmable equipment mechanical inspection procedures and standards |  |  |  |  |  |  |
| AK0102 | Flow of material |  |  |  |  |  |  |
| AK0103 | Programmable equipment settings |  |  |  |  |  |  |
| **Internal Assessment Criteria** | Date completed | Evidence attached | Signature | Can the learner do this? Yes / No | Comments | Signature |
| IAC0101 | Inspection reports are accurately completed |  |  |  |  |  |  |
| **Supplementary Evidence Provided** | Date completed | Evidence attached | Signature | Can the learner do this? Yes / No | Comments | Signature |
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| PM-02-PS02: Monitor and operate programmable sugar processing equipment | Scope of Practical Skill:Given programmable processing equipment and a controlled learning environment, the learner must be able to: |
| PA0201 | Set-up and start-up programmable sugar processing equipment manually and achieve normal operating conditions |  |  |  |  |  |  |
| PA0202 | Control the programmable equipment operation within required output/product specifications |  |  |  |  |  |  |
| PA0203 | Perform specific procedures related to the process (e.g. change-over, cleaning, emergency stops) |  |  |  |  |  |  |
| PA0204 | Adjust programmable equipment setting in response to instrument readings and required operating conditions |  |  |  |  |  |  |
| PA0205 | Use instrumentation readings and sensory cues to anticipate quality problems and make adjustments |  |  |  |  |  |  |
| PA0206 | Achieve consistent flow of material in terms of required volumes and quality standards |  |  |  |  |  |  |
| PA0207 | Read and explain a programmable equipment operating diagram |  |  |  |  |  |  |
| PA0208 | Select and apply appropriate responses to material or process deviations |  |  |  |  |  |  |
| PA0209 | Control the programmable equipment operation within required output/product specifications |  |  |  |  |  |  |
| **Applied Knowledge** | Date completed | Evidence attached | Signature | Can the learner do this? Yes / No | Comments | Signature |
| AK0201 | Standard Operating Procedures |  |  |  |  |  |  |
| AK0202 | Manual and automatic starting/shut down procedures |  |  |  |  |  |  |
| AK0203 | Equipment operating procedures and specifications |  |  |  |  |  |  |
| AK0204 | Product specifications |  |  |  |  |  |  |
| AK0205 | Standard safety procedures |  |  |  |  |  |  |
| AK0206 | Standard responses to common problems |  |  |  |  |  |  |
| AK0207 | Process flow |  |  |  |  |  |  |
| **Internal Assessment Criteria** | Date completed | Evidence attached | Signature | Can the learner do this? Yes / No | Comments | Signature |
| IAC0201 | The execution of equipment set-up, start-up, operation and shutdown in accordance with standard procedures |  |  |  |  |  |  |
| IAC0202 | The execution of adjustments to equipment setting in response to instrument readings and material variations are performed in accordance with standard procedures |  |  |  |  |  |  |
| IAC0203 | Required product volumes and quality standards are achieved |  |  |  |  |  |  |
| IAC0204 | The impact and implications of wrong actions in relation to equipment efficiency and product standards can be explained |  |  |  |  |  |  |
| IAC0205 | Responses to different emergency scenarios, risks and problems can be explained |  |  |  |  |  |  |
| IAC0206 | Indicators of the mechanical equipment functionality can be explained |  |  |  |  |  |  |
| **Supplementary Evidence Provided** | Date completed | Evidence attached | Signature | Can the learner do this? Yes / No | Comments | Signature |
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| PM-02-PS03: Shut down and clean programmable sugar processing equipment | Scope of Practical Skill:Given cleaning and lubricating materials, standard procedures and programmable processing equipment or equipment in series in a controlled learning environment, the learner must be able to: |
| PA0301 | Perform equipment shutdown procedures of programmable sugar processing equipment |  |  |  |  |  |  |
| PA0302 | Set-up and run programmable equipment cleaning cycles |  |  |  |  |  |  |
| **Applied Knowledge** | Date completed | Evidence attached | Signature | Can the learner do this? Yes / No | Comments | Signature |
| AK0301 | Cleaning and equipment care procedures |  |  |  |  |  |  |
| AK0302 | Equipment shutdown procedures |  |  |  |  |  |  |
| **Internal Assessment Criteria** | Date completed | Evidence attached | Signature | Can the learner do this? Yes / No | Comments | Signature |
| IAC0301 | Equipment cleaning and care procedures are executed in accordance with standard procedures |  |  |  |  |  |  |
| IAC0302 | Equipment shutdown procedures are executed in accordance with standard procedures |  |  |  |  |  |  |
| **Supplementary Evidence Provided** | Date completed | Evidence attached | Signature | Can the learner do this? Yes / No | Comments | Signature |
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| PM-02-PS04: Record data and maintain production records | Scope of Practical Skill:Given production line, quality reports and product specifications, the learner must be able to: |
| PA0401 | Interpret, collate, calculate, summarise and record production data to ensure availability of accurate and complete production information |  |  |  |  |  |  |
| PA0402 | Compile production reports to communicate required information accurately |  |  |  |  |  |  |
| PA0403 | Present information in simple graphical format to analyse and report production data |  |  |  |  |  |  |
| PA0404 | Read and respond to the essence of written instructions |  |  |  |  |  |  |
| PA0405 | Organise and capture data |  |  |  |  |  |  |
| **Applied Knowledge** | Date completed | Evidence attached | Signature | Can the learner do this? Yes / No | Comments | Signature |
| AK0401 | Data analysis |  |  |  |  |  |  |
| AK0402 | Reporting and presenting data |  |  |  |  |  |  |
| AK0403 | Use or purpose of data |  |  |  |  |  |  |
| **Internal Assessment Criteria** | Date completed | Evidence attached | Signature | Can the learner do this? Yes / No | Comments | Signature |
| IAC0401 | Data is analysed and reported on accurately |  |  |  |  |  |  |
| **Supplementary Evidence Provided** | Date completed | Evidence attached | Signature | Can the learner do this? Yes / No | Comments | Signature |
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# PRACTICAL SKILLS MODULE 3

## Operate a bank of inter linked equipment that functions in sequence in a sugar mill

Module Number 716106000-PM-03, NQF Level 3, Credits 8

**The focus of the learning in this module is on providing the learner an opportunity to develop skills to operate inter linked equipment set up and operated in series such as effluent and waste control and waste product handling systems.**

* PM-03-PS01: Conduct pre start-up procedures for a bank of inter linked equipment that functions in sequence in a sugar mill
* PM-03-PS02: Monitor and control a bank of inter linked equipment that functions in sequence in a sugar mill

## Preparation Matrix for Practical Skills Module 3

| **Practical Skills Module \_\_\_\_****Number of credits \_\_\_\_\_** | **Title of Practical Skills Module: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_****\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_****\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** | **Preparation Notes** |
| --- | --- | --- |
| **The focus of this Practical Skills Module is: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_****\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** |
| Instructions and hand-outs provided (list them here) |  |
| What competence will the Mill Supervisor want to see? |  |
| To what standard will the Mill Supervisor want to see the task completed at? |  |
| What supplementary material must you collect, collate, prepare and insert into the Log Book? |  |

## Competence Checklist for Practical Skills Module 3

| PM-03, NQF Level 3, Credits 8 | Operate a bank of inter linked equipment that functions in sequence in a sugar mill | Learner | Mill Supervisor |
| --- | --- | --- | --- |
| Date completed | Evidence attached | Signature | Can the learner do this? Yes / No | Comments | Signature |
| **The focus of the learning in this module is on providing the learner an opportunity to develop skills to operate inter linked equipment setup and operated in series such as effluent and waste control, waste product handling systems.** |
| PM-03-PS01: Conduct pre start-up procedures for a bank of inter linked equipment that functions in sequence in a sugar mill | Scope of Practical Skill:Given a controlled operational environment, operating procedures and instructions the learner must be able to: |
| PA0101 | Use a control sheet to inspect the bank of equipment for correct settings and mechanical soundness |  |  |  |  |  |  |
| PA0102 | Use a control sheet to inspect the material transfer pumps, pipes and valves for correct settings and mechanical soundness |  |  |  |  |  |  |
| PA0103 | Inspect and identify feeder material for availability and correctness |  |  |  |  |  |  |
| PA0104 | Inspect material routing for readiness |  |  |  |  |  |  |
| **Applied Knowledge** | Date completed | Evidence attached | Signature | Can the learner do this? Yes / No | Comments | Signature |
| AK0101 | Operating procedures for the equipment |  |  |  |  |  |  |
| AK0102 | Equipment inspection procedures |  |  |  |  |  |  |
| **Internal Assessment Criteria** | Date completed | Evidence attached | Signature | Can the learner do this? Yes / No | Comments | Signature |
| IAC0101 | Pre start-up procedures are performed in a structured manner in accordance with operating procedures |  |  |  |  |  |  |
| **Supplementary Evidence Provided** | Date completed | Evidence attached | Signature | Can the learner do this? Yes / No | Comments | Signature |
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| PM-03-PS02: Monitor and control a bank of inter linked equipment that functions in sequence in a sugar mill | Scope of Practical Skill:Given a bank of equipment in series in a controlled learning environment the learner must be able to: |
| PA0201 | Set-up and start-up the bank of equipment manually and achieve normal operating conditions |  |  |  |  |  |  |
| PA0202 | Monitor and control the operation of a bank of equipment working in series within required output specifications |  |  |  |  |  |  |
| PA0203 | Shut down the bank of equipment |  |  |  |  |  |  |
| PA0204 | Read and explain a process flow diagram |  |  |  |  |  |  |
| **Applied Knowledge** | Date completed | Evidence attached | Signature | Can the learner do this? Yes / No | Comments | Signature |
| AK0201 | Standard Operating Procedures |  |  |  |  |  |  |
| AK0202 | Standard responses to common problems |  |  |  |  |  |  |
| AK0203 | Material flow diagrams |  |  |  |  |  |  |
| **Internal Assessment Criteria** | Date completed | Evidence attached | Signature | Can the learner do this? Yes / No | Comments | Signature |
| IAC0201 | The operation of the bank of equipment is monitored and controlled in accordance with standard procedures |  |  |  |  |  |  |
| IAC0202 | Indicators of the mechanical equipment functionality can be explained |  |  |  |  |  |  |
| **Supplementary Evidence Provided** | Date completed | Evidence attached | Signature | Can the learner do this? Yes / No | Comments | Signature |
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# PRACTICAL SKILLS MODULE 4

## Meet occupational health, safety, environment and quality standards

Module Number 716106000-PM-04, NQF Level 3, Credits 8

**The focus of the learning in this module is on providing the learner an opportunity to develop skills to comply with occupational safety, health and environmental protection standards and to conduct In-line quality assurance.**

The learner will be required to:

* PM-04-PS01: Comply with occupational safety, health and environmental protection standards
* PM-04-PS02: Conduct In-line sugar quality assurance

## Preparation Matrix for Practical Skills Module 4

| **Practical Skills Module \_\_\_\_****Number of credits \_\_\_\_\_** | **Title of Practical Skills Module: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_****\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_****\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** | **Preparation Notes** |
| --- | --- | --- |
| **The focus of this Practical Skills Module is: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_****\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** |
| Instructions and hand-outs provided (list them here) |  |
| What competence will the Mill Supervisor want to see? |  |
| To what standard will the Mill Supervisor want to see the task completed at? |  |
| What supplementary material must you collect, collate, prepare and insert into the Log Book? |  |

## Competence Checklist for Practical Skills Module 4

| PM-04, NQF Level 3, Credits 8 | Meet occupational health, safety, environment and quality standards | Learner | Mill Supervisor |
| --- | --- | --- | --- |
| Date completed | Evidence attached | Signature | Can the learner do this? Yes / No | Comments | Signature |
| **The focus of the learning in this module is on providing the learner an opportunity to develop skills to comply with occupational safety, health and environmental protection standards and to conduct In-line quality assurance.** |
| PM-04-PS01: Comply with occupational safety, health and environmental protection standards | Scope of Practical Skill:Given occupational safety and health procedures, inspection sheets and personal protective equipment the learner must be able to: |
| PA0101 | Use a control sheet to inspect equipment and protective devices for safe operating conditions |  |  |  |  |  |  |
| PA0102 | Select, use and care for personal protective equipment |  |  |  |  |  |  |
| **Applied Knowledge** | Date completed | Evidence attached | Signature | Can the learner do this? Yes / No | Comments | Signature |
| AK0101 | Safety inspection procedures and standards |  |  |  |  |  |  |
| AK0102 | Personal protective equipment |  |  |  |  |  |  |
| **Internal Assessment Criteria** | Date completed | Evidence attached | Signature | Can the learner do this? Yes / No | Comments | Signature |
| IAC0101 | Safety checks and inspections are performed in accordance with manufacturer specifications and standard procedures |  |  |  |  |  |  |
| IAC0102 | Personal protective equipment is selected and used correctly |  |  |  |  |  |  |
| IAC0103 | Operating risks and measures to prevent these can be explained |  |  |  |  |  |  |
| **Supplementary Evidence Provided** | Date completed | Evidence attached | Signature | Can the learner do this? Yes / No | Comments | Signature |
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| PM-04-PS02: Conduct In-line sugar quality assurance | Scope of Practical Skill:Given a production line, quality reports and product specifications the learner must be able to: |
| PA0201 | Integrate various sources of information (instrument/PLC readings, quality reports, sensory cues) to determine quality standards |  |  |  |  |  |  |
| PA0202 | Conduct in-process sampling and product evaluation to maintain quality control standards |  |  |  |  |  |  |
| PA0203 | Complete in-process quality reports |  |  |  |  |  |  |
| **Applied Knowledge** | Date completed | Evidence attached | Signature | Can the learner do this? Yes / No | Comments | Signature |
| AK0201 | Quality control procedures |  |  |  |  |  |  |
| AK0202 | Product quality specification |  |  |  |  |  |  |
| AK0203 | In-process sampling and evaluation techniques |  |  |  |  |  |  |
| **Internal Assessment Criteria** | Date completed | Evidence attached | Signature | Can the learner do this? Yes / No | Comments | Signature |
| IAC0201 | In-line quality control procedures are adhered to |  |  |  |  |  |  |
| IAC0202 | Deviations form required quality standards are recognised and reported |  |  |  |  |  |  |
| **Supplementary Evidence Provided** | Date completed | Evidence attached | Signature | Can the learner do this? Yes / No | Comments | Signature |
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# SUMMARY LEARNER ASSESSMENT RECORD

As soon as you have completed all the Practical Skills Modules successfully, this form and the stakeholder information below should be completed and the Log Book with all its supplementary information should be handed to the relevant QCTO Assessment Quality Partner for verification.

A certified copy of this entire section (Section 6: Summary Learner Assessment Record) must be inserted into your Summative Guide (In the Work Experience Component).

## Learner Assessment Record

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Practical Skills Module | Credits | Can the Learner do this? | Signature of Mill Supervisor | Date |
| 716106000-PM-01, Operate pre-set sugar processing equipment, NQF Level 2 | 12 |  |  |  |
| 716106000-PM-02, Operate programmable sugar processing equipment, NQF Level 3 | 24 |  |  |  |
| 716106000-PM-03, Operate a bank of inter linked equipment that functions in sequence in a sugar mill, NQF Level 03 | 8 |  |  |  |
| 716106000-PM-04, Meet occupational health, safety, environment and quality standards, NQF Level 03 | 8 |  |  |  |

## Stakeholder information

### Learner Details

|  |  |
| --- | --- |
| First name: |  |
| Surname: |  |
| ID number: |  |
| Telephone number: |  |
| Mobile number: |  |
| E-mail address: |  |
| Postal address: |  |
| Start date of workplace experience: |  |
| Completion date of workplace experience: |  |
| Signature of learner: |  |

### Mill Supervisor Details

|  |  |
| --- | --- |
| Organisation / workplace: |  |
| Workplace designation (of Mill Supervisor): |  |
| First name: |  |
| Surname: |  |
| ID number: |  |
| Telephone number: |  |
| Mobile number: |  |
| E-mail address: |  |
| Postal address: |  |
| Date completed: |  |
| Signature: |  |

### Programme Assessor Details

|  |  |
| --- | --- |
| Company:  |  |
| First name: |  |
| Surname: |  |
| ID number: |  |
| Telephone number: |  |
| Mobile number: |  |
| E-mail address: |  |
| Postal address: |  |
| Date assessed: |  |
| Signature: |  |