

PRACTICAL CURRICULUM · FRUIT PROCESSING & OIL EXTRACTION · FULL-TIME

PALM OIL & PALM KERNEL OIL

A complete, workshop-based vocational training programme.

Real plant, real batches, industry-grade competence.

THE PROGRAMME

From fresh fruit bunch to bottled oil. In your own plant.



Palm Oil & Palm Kernel Oil is a workshop-based two-year programme for processing palm fruits and kernels in a real small-scale mill.

Across twenty-nine modules, trainees advance from the fundamentals of raw-material and process knowledge through sterilisation, digestion, pressing, clarification, kernel recovery and refining, all the way to filling, sustainability certification and plant management.

The focus is on hands-on practice throughout. Skills are learned on a real processing plant, with around 1,500 workshop hours and about 130 assessed exercises.

Each module concludes with an assessable examination, so that competence is demonstrated on a processed batch and not on paper.

The programme is offered as a curriculum, as a matching equipment specification, or as a turnkey package for the site.

29

MODULES · M01-M29

1,500_h

WORKSHOP HOURS

130₊

PRACTICAL EXERCISES

420₊

EQUIPMENT ITEMS

2_{Years}

FULL-TIME

PRACTICAL CURRICULUM

Twenty-nine Modules. In Three Parts.

Part A lays the foundations, Part B runs through the process from fresh fruit bunch to filling, Part C covers quality, environment, operations and the final project.

MODULE

M01 – M29 · PARTS A · B · C

M01 Profession & Safety
FOUNDATIONS

M02 Raw Materials: Oil Palm
FOUNDATIONS

M03 Oils & Fats Chemistry
FOUNDATIONS

M04 Process Engineering
FOUNDATIONS

M05 Hygiene & HACCP
FOUNDATIONS

M06 Materials & Tools
FOUNDATIONS

M07 Fruit Reception
PROCESS

M08 Sterilisation
PROCESS

M09 Threshing & Separation
PROCESS

M10 Digestion & Pressing
PROCESS

M11 Crude Oil Clarification
PROCESS

M12 Kernel Recovery
PROCESS

M13 Palm Kernel Oil Pressing
PROCESS

M14 Refining CPO/PKO
PROCESS

M15 Filling & Packaging
PROCESS

M16 By-products
PROCESS

M17 Sensory & Lab
QUALITY

M18 Maintenance
OPERATIONS

M19 Utilities & Energy
OPERATIONS

M20 Wastewater & Emissions
ENVIRONMENT

M21 Sustainability & RSPO
ENVIRONMENT

M22 Regulation & Trade
OPERATIONS

M23 Product Development
APPLICATION

M24 Business Management
APPLICATION

M25 Self-Financing
APPLICATION

M26 Documentation
APPLICATION

M27 Consumables
APPLICATION

M28 Assessments & Test Pieces
APPLICATION

M29 Final Project
APPLICATION

EQUIPMENT

Trained on real equipment.



01

Fruit Reception & Sterilisation

Weighing, ripeness inspection, steam steriliser, batch marking.

02

Comminution & Oil Pressing

Thresher, motorised digester, screw press, hydraulic press.

03

Kernel Preparation & Kernel Oil Pressing

Depericarper, nut cracker, kernel dryer, expeller for palm kernel oil.

04

Clarification, Filtration, Filling

Clarifier tank, filter press, hot filler, labelling and packaging machine.

05

Quality Lab & Analytics

FFA titration, moisture, iodine value, sensory panel, sampling devices.

06

Utilities & Maintenance

Steam boiler, water treatment, maintenance station, PPE and tools.

~420 ITEMS · 6 CATEGORIES

BRING THE PROGRAMME TO YOUR SITE



LET'S GET STARTED.

AVAILABLE AS • **Turnkey** (Consulting + Equipment + Delivery + Curriculum + Setup)