



Accredited Africa Training Institute for Capacity Development

Unit FO409, Hatfield Plaza · 1122 Burnett St, Hatfield 0028 · Pretoria, Gauteng · South Africa

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COURSE BROCHURE

Filter Rod Processing Unit Maintenance Procedures Training

Agriculture and Nature Conservation / Secondary Agriculture

Unit Standard 114153 · NQF Level 4 · 16 Credits · 13 Days

COURSE OVERVIEW

This course equips learners with the skills to perform routine maintenance on filter rod processing units in a tobacco manufacturing environment. It focuses on ensuring equipment reliability, minimizing downtime, and adhering to safety and quality standards.

Category	Agriculture and Nature Conservation
Subfield	Secondary Agriculture
Unit Standard	114153
Accreditation	SAQA Accredited · NQF Level 4 · 16 Credits
Duration	13 days
Training Method	Online, On-Campus, In-House
Certificate	Issued via AATICD LMS – verifiable online

LEARNING OUTCOMES

- Demonstrate understanding of filter rod processing unit components and their functions.
- Apply routine maintenance procedures according to manufacturer specifications and standard operating procedures.
- Analyze equipment performance data to identify potential faults and schedule preventive maintenance.
- Implement corrective maintenance actions to restore unit functionality after breakdowns.
- Evaluate maintenance outcomes to ensure compliance with quality and safety standards.
- Document maintenance activities and report deviations in line with organizational procedures.

WHO SHOULD ATTEND

- Maintenance technicians, machine operators, and engineering staff responsible for the upkeep of filter rod processing units in the tobacco industry.

COURSE OUTLINE

Day 1: Introduction to Filter Rod Processing Units

- Overview of filter rod manufacturing process.
- Components of the processing unit: hopper, garniture, cutter, and transfer systems.
- Safety regulations: PPE, lockout/tagout, and emergency stop.
- Basic mechanical and electrical principles.
- Introduction to maintenance schedules and documentation.

Day 2: Mechanical Systems and Components

- Drive systems: belts, pulleys, and gears.
- Bearing types and maintenance.
- Pneumatic components: cylinders, valves, and fittings.
- Lubrication points and recommended lubricants.
- Inspection checklists for mechanical integrity.

Day 3: Electrical and Control Systems

- Electrical safety and isolation procedures.
- Reading and understanding circuit diagrams.
- Sensors: proximity, photoelectric, and temperature.
- Motors and drives: types and maintenance.
- PLC basics: inputs, outputs, and fault finding.

Day 4: Pneumatic and Hydraulic Systems

- Pneumatic circuit operation and maintenance.
- Hydraulic system components and fluid types.
- Filter replacement and reservoir maintenance.
- Troubleshooting common issues: leaks, pressure drops.
- Safety precautions with high-pressure systems.

Day 5: Cutter and Garniture Maintenance

- Cutter head design and operation.
- Garniture tape tension and tracking.
- Blade types and sharpening methods.
- Alignment procedures for consistent cut length.
- Changeover procedures for different filter types.

Day 6: Filter Rod Transfer and Collection Systems

- Conveyor systems: belts, rollers, and drives.
- Vacuum transfer: fans, filters, and ducts.
- Reject and divert mechanisms.
- Adjusting speed and synchronisation.
- Cleaning and inspection of transfer paths.

Day 7: Quality Control and Process Monitoring

- Quality specifications: length, diameter, pressure drop.
- Gauges and sensors for online monitoring.
- Statistical process control basics.
- Corrective actions for deviations.

- Documentation of quality checks.

Day 8: Preventive Maintenance Planning and Execution

- Maintenance planning: daily, weekly, monthly tasks.
- Inspection routes and checklists.
- Lubrication and filter replacement schedules.
- Condition monitoring techniques: vibration, temperature.
- Maintenance logs and CMMS entries.

Day 9: Troubleshooting Common Faults

- Troubleshooting steps: observe, isolate, test, fix.
- Common faults: jams, misalignment, sensor errors.
- Using multimeters, pressure gauges, and software.
- Fault tree analysis for complex issues.
- Safety during troubleshooting.

Day 10: Changeover and Setup Procedures

- Changeover procedures: mechanical adjustments.
- Recipe management and parameter entry.
- Tooling and part changeovers.
- Setup verification checks.
- Lean techniques to reduce changeover time.

Day 11: Safety and Compliance in Maintenance

- Lockout/tagout: steps and verification.
- Confined space and working at height safety.
- Chemical handling: adhesives, solvents, lubricants.
- Fire safety and emergency response.
- Reporting incidents and near misses.

Day 12: Advanced Diagnostics and Performance Optimisation

- Performance metrics: OEE, downtime analysis.
- Vibration analysis and thermal imaging.
- PLC data logging and trend analysis.
- Fine-tuning parameters for speed and quality.
- Energy efficiency considerations.

Day 13: Integration, Assessment, and Best Practices

- Comprehensive review of course content.
- Practical assessment: complete maintenance cycle.
- Best practice sharing and case studies.
- Maintenance documentation and handover.
- Final Q&A; and feedback.

ASSESSMENT & CERTIFICATION

Delegates are assessed through exercises and a final test. A mark of **50% or above** earns an **AATICD Certificate of Completion**, issued digitally with a unique verification code. This course carries **16 NQF credits** at **NQF Level 4**.

PRICING (PER DELEGATE, EX-VAT)

Delegates	Training Method	Price per Delegate	Total
1	Online	R 43,500.00	R 43,500.00
1	In-House	R 56,600.00	R 56,600.00
1	On-Campus (Pretoria)	R 65,200.00	R 65,200.00

UPCOMING SESSIONS

Start	End	Method	Venue
10 Aug 2026	26 Aug 2026	On-Campus	Dubai, UAE
11 Aug 2026	27 Aug 2026	On-Campus	Pretoria, South Africa
12 Aug 2026	28 Aug 2026	On-Campus	Abu Dhabi, UAE
13 Aug 2026	31 Aug 2026	On-Campus	Durban, South Africa
13 Aug 2026	31 Aug 2026	On-Campus	Mauritius
14 Aug 2026	01 Sep 2026	On-Campus	Cape Town, South Africa
17 Aug 2026	02 Sep 2026	On-Campus	Pretoria, South Africa
18 Aug 2026	03 Sep 2026	On-Campus	Abu Dhabi, UAE

Contact us if no suitable date is listed – on-demand sessions can be arranged for groups.

HOW TO GET A QUOTE OR APPLY

- 1. Get an instant quotation online:** visit www.aaticd.co.za, open the page for this course (Unit Standard 114153) and click **Get A Quote / Apply**. Select your training method and number of delegates – your quotation is generated immediately and emailed to you with the course brochure attached.
- 2. Apply by email:** send the course title, your preferred training method (Online, In-House or On-Campus Pretoria), the number of delegates and your preferred dates to apply@aaticd.co.za – our team will reply with a formal quotation.
- 3. Apply by phone or WhatsApp:** call +27 12 004 8389 or WhatsApp +27 65 077 6310 and we will prepare your quotation and reserve your seats.
- 4. Confirm your booking:** accept the quotation and settle the invoice. As soon as payment is confirmed your delegates are enrolled and receive their AATICD LMS login details by email, along with joining instructions for their chosen training method.

Group discounts apply automatically – the more delegates you enrol, the lower the price per delegate. No payment is required to request a quotation.

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