



Air Compressors, Operation, Maintenance and Troubleshooting

DURATION

5 days

CONTACT HOURS

30

LEVEL

Intermediate

FEE PER DELEGATE

R15,000

Running a compressed air system where most of the cost is leakage, pressure and the demand nobody questioned.

Compressed air is the most expensive utility on most sites and the least examined. A system typically leaks a quarter to a third of what it makes, runs at a pressure set by the one application that needed it years ago, and uses air for tasks a fan would do. The machine itself is then blamed for a cost the system created. This week covers the compressor and the system together: how each type behaves, what the air treatment has to achieve, where the energy actually goes, and how to troubleshoot a fault rather than replace a component.

Available as classroom, live online, in house.

Who it is for

Utilities and plant operators, maintenance technicians and engineers responsible for compressed air, energy managers, and reliability staff.

What you will be able to do

- Match a compressor type to a duty, including part load behaviour.
- Specify air treatment from the actual quality the application needs.
- Find and quantify leakage, and cost it.
- Decide the system pressure from demand rather than from history.
- Troubleshoot capacity, temperature and condensate faults to a cause.

The outline

DAY 1

The machines

Reciprocating, screw and centrifugal, and the duty each suits · Capacity control, and part load efficiency · Cooling, lubrication and the oil carryover question · Multiple compressors, and sequencing them

DAY 2

Air treatment

Moisture, dew point and what the application actually needs · Dryer types, and the energy each costs · Filtration, oil removal and pressure drop · Condensate handling and disposal

DAY 3

Where the money goes

Leakage, found, quantified and costed · System pressure, and the cost of each unnecessary bar · Artificial demand and inappropriate use · Storage, and using it to absorb peaks

DAY 4

Operation and maintenance

Routine checks that detect something · Filter, oil and element change on condition rather than calendar · Valve, seal and bearing maintenance by type · Monitoring that would show efficiency drifting

DAY 5

Troubleshooting

Low capacity, traced through the system first · High discharge temperature and its causes · Excess condensate, oil carryover and pressure instability · Unloading and control faults

What you leave with

- A demand and leakage assessment for the delegate's own system, costed.
- A treatment specification matched to the applications it serves.
- A troubleshooting routine for the three faults their plant sees most.

Published dates

DATES	WHERE	FEE
23 to 27 November 2026	Maseru, Lesotho	R15,000
30 November 2026 to 4 December 2026	Lagos, Nigeria	US\$1,500
7 to 11 December 2026	Gaborone, Botswana	R15,000
14 to 18 December 2026	Nairobi, Kenya	US\$1,500

Fees are per delegate and cover all costs arranged by the delegate. Reg

Register or ask a question

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This copy was produced on 30 October 2026.