



Gas Flows in the Cementing Industry

DURATION

5 days

CONTACT HOURS

30

LEVEL

Intermediate

FEE PER DELEGATE

US\$1,500

Part one: the gas circuit through a cement plant, and why pressure profile explains so much of its behaviour.

Gas flow ties a cement plant together and is the least directly observed thing in it. This first part builds the fundamentals: flow and pressure drop through the system, the gas path from cooler and kiln through preheater to mill and filter, fan characteristics and the system curve they work against, and the false air that quietly consumes a large share of the fuel bill. Measurement is taught practically, since most plants have fewer reliable gas measurements than they believe.

Available as classroom, live online, in house.

Who it is for

Process engineers, kiln and mill operators, maintenance staff responsible for fans and ducting, and energy managers.

What you will be able to do

- Follow the complete gas path through a plant.
- Calculate pressure drop across major components.
- Read a fan curve against a system curve.
- Measure gas flow, pressure and temperature reliably.
- Locate and quantify false air.

The outline

DAY 1

Fundamentals

Gas properties at temperature · Pressure drop and resistance · Volume, mass flow and standard conditions

DAY 2

The circuit

Cooler, kiln and preheater gas path · Raw mill and cement mill circuits · Filters, stacks and bypass

DAY 3

Fans

Fan curves and the system curve · Dampers, inlet vanes and variable speed · Fan wear and performance loss

DAY 4

Measurement

Pitot traverses and their practice · Pressure measurement points · Temperature and the errors it introduces

DAY 5

False air

Where it enters · Quantifying it by oxygen balance · What it costs, and sealing priorities

What you leave with

- A gas circuit diagram with the pressure profile marked.
- A false air survey for one line.
- A fan performance assessment.

Published dates

DATES	WHERE	FEE
23 to 27 November 2026	Accra, Ghana	US\$1,500
30 November 2026 to 4 December 2026	Cape Town, South Africa	R15,000
7 to 11 December 2026	Durban, South Africa	R15,000
14 to 18 December 2026	Kampala, Uganda	US\$1,500

Fees are per delegate and cover all course materials. Travel and accommodation are arranged by the delegate. Reg

Register or ask a question

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