



## MANUFACTURING AND PRODUCTION

# Steelmaking and Continuous Casting

5 day course

Classroom, online or in-house

## Course overview

Steel quality is set in the ladle and confirmed or lost in the caster, and the two are operated as one process by anybody who understands them. This course covers both. Delegates work through primary steelmaking in basic oxygen and electric arc routes, then secondary metallurgy including deoxidation, desulphurisation, alloying, degassing and inclusion control. Continuous casting follows: tundish practice, mould behaviour, cooling and the defects each stage produces. Refractory performance and its effect on both cost and quality are covered. The course closes on quality troubleshooting, tracing a defect in the finished product back to the ladle or the caster.

## What you will learn

- Compare basic oxygen and electric arc primary steelmaking
- Carry out deoxidation, desulphurisation and alloying
- Apply degassing and inclusion control to meet a specification
- Operate tundish and mould within their metallurgical limits
- Control secondary cooling and its effect on quality
- Manage refractory performance for cost and quality
- Trace a product defect back to the ladle or the caster

## Who should attend

- Steelmaking and casting process engineers
- Melt shop and caster operators and supervisors
- Metallurgists and quality staff
- Refractory and consumables specialists
- Graduate engineers entering steel production

## Course outline

- 01 Primary steelmaking routes
- 02 Deoxidation and alloying
- 03 Desulphurisation and degassing
- 04 Inclusion control and cleanliness
- 05 Tundish practice
- 06 Mould behaviour and lubrication
- 07 Secondary cooling and defect formation
- 08 Refractory performance and defect traceback

## Upcoming dates

| Dates                   | Venue                   | Format    | Fee per delegate |
|-------------------------|-------------------------|-----------|------------------|
| 21 to 25 September 2026 | Lagos, Nigeria          | Classroom | USD 1,325        |
| 9 to 13 November 2026   | Cape Town, South Africa | Classroom | R19,950          |
| 14 to 18 December 2026  | Pretoria, South Africa  | Classroom | R19,950          |
| 18 to 22 January 2027   | Casablanca, Morocco     | Classroom | USD 1,325        |



## Fees and how to register

This 5 day course is **R8,500** per delegate online, **R19,950** in the classroom in South Africa, Botswana, Namibia, Lesotho and Eswatini, and **USD 1,325** in the classroom elsewhere in Africa. In-house training is quotation on request. Book 2 or more delegates on this course and save 10%.

To register or request an in-house proposal, visit [www.afrisciencegroup.com](http://www.afrisciencegroup.com), email [info@afriscience.co.za](mailto:info@afriscience.co.za), or WhatsApp us on **+27 63 479 1136**.

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