



MANUFACTURING AND PRODUCTION

Steel Rolling Mill Operations

5 day course

Classroom, online or in-house

Course overview

A rolling mill turns a heavy semi finished product into a shape sold on dimensional tolerance, at a speed that leaves no time to think, which is why mill performance depends on setup and pass design rather than on operator reaction. This course covers the setup. Delegates work through reheating: furnace practice, soaking, scale formation and the temperature uniformity that determines rolling load. Hot rolling fundamentals follow, including deformation, spread, elongation and the draft a stand can take. Pass design and roll groove geometry are covered for long products, with the sequence that arrives at the finished section. Flat product rolling is addressed through crown, profile and flatness control. Roll materials, wear and roll shop practice follow, including grinding and roll changes. Cooling beds, straightening and cut to length are covered. Surface and dimensional defects are diagnosed. Cold rolling and finishing are addressed briefly. The course closes on yield, on mill delays and on the balance between throughput and tolerance.

What you will learn

- Run reheating practice for temperature uniformity and low scale
- Apply deformation, spread and elongation to rolling load
- Follow a pass design sequence to a finished section
- Control crown, profile and flatness on flat products
- Manage roll materials, wear, grinding and roll changes
- Operate cooling beds, straightening and cut to length
- Diagnose surface and dimensional defects and improve yield

Who should attend

- Rolling mill operators and shift supervisors
- Mill process and pass design engineers
- Quality staff on rolled products
- Roll shop and maintenance staff
- Production managers in steel long and flat products

Course outline

- 01 No time to think at rolling speed
- 02 Reheating, soaking and scale
- 03 Deformation, spread and elongation
- 04 Pass design and roll groove geometry
- 05 Crown, profile and flatness
- 06 Roll materials, wear and roll changes
- 07 Cooling beds, straightening and cutting
- 08 Defects, yield, delays and tolerance trade offs

Upcoming dates



Dates	Venue	Format	Fee per delegate
5 to 9 October 2026	Kigali, Rwanda	Classroom	USD 1,325
30 November to 4 December 2026	Windhoek, Namibia	Classroom	R19,950
7 to 11 December 2026	Kampala, Uganda	Classroom	USD 1,325
11 to 15 January 2027	Online	Online	R8,500

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, email info@afriScience.co.za, or WhatsApp us on **+27 63 479 1136**.

AfriScience Group | +27 61 536 6531 | info@afriScience.co.za | Pretoria, Gauteng, South Africa