



STEEL INDUSTRY Training Courses



Cokemaking / Ironmaking / Steelmaking / Continuous Casting / Steelmaking & Casting / Reheating / Metallurgy / Technology Management

Graduate Trainee Training Programme / Technology Management Advanced Course



Theoretical, practical & operational courses based on the major technologies currently in global operation

Steel Industry Courses



Cokemaking:

The Cokemaking Course provides an in-depth overview of the cokemaking process. The course is based around practical, operational and theoretical modules involving laboratory experiments, lectures and discussion based learning.



Ironmaking:

The Ironmaking Course provides an in-depth understanding of the blast furnace process and raw materials requirements, as well as an overview of the upstream processes and ironworks costs and constraints. The presentations combine both the theoretical and practical aspects of ironmaking.



Steelmaking:

The Steelmaking Course provides a practical, operational and theoretical understanding of primary and secondary steelmaking. The course includes lectures, discussion groups, laboratory experiments, throughprocess / through-cost assessments and a visit to the Institute's Normanton Steel Plant.



Continuous Casting:

The Continuous Casting Course provides an understanding of all aspects of the continuous casting process, including machine design, operations and how to cast defect-free products. Lectures and discussions are intermixed with laboratory activities and a visit to the Institute's Normanton Steel Plant.



Steelmaking & Casting:

The Steelmaking & Casting Course provides a comprehensive overview of primary steelmaking, secondary steelmaking and continuous casting. The course involves lectures and practical based learning, including laboratory work and a visit to the Institute's Normanton Steel Plant.



Reheating:

The Reheating Course provides an understanding of the fundamental science and operational practicalities of steel reheating for hot rolling. The course considers specification, design and practical operations and includes practical and theoretical learning based around group discussions and laboratory activities.



Metallurgy:

The Metallurgy Course provides a theoretical and practical understanding of metallurgy, primarily for carbon and alloy steels. The course provides an excellent understanding of the processes, products and properties of steel. Alongside the lectures are practical sessions, held in the Institute's well equipped Metallographic Laboratory.



Technology Management:

The Technology Management Course looks at commercial, legislative, environmental and societal factors driving technology development. The course considers the opportunities and challenges for industry, how the need for and value of new technology is assessed, and how the process is managed to achieve maximum benefits.

Graduate Trainee Training Programme

This training programme is for graduate trainees working in the steel industry. The training is grouped into modules and gives a comprehensive overview of all aspects of process and product technology in the steel industry.

COURSE MODULES

COKEMAKING & IRONMAKING

PRIMARY STEELMAKING

SECONDARY STEELMAKING

COLD & HOT ROLLING

REHEATING & FINISHING PROCESSES

LONG PRODUCTS

FLAT PRODUCTS

CONTINUOUS CASTING & INGOT PRODUCTION





Technology Management - Advanced Level

This advanced level course looks at the commercial, legislative, environmental and societal factors influencing technology management in the steel industry.

The course considers opportunities for technology introduction and the impact and potential benefits of innovation. The course looks at how the value of new technology needs to be assessed, and how the process of development and implementation is managed to maximise the benefits of new technology introduction.



Steel Industry Workshops

The Institute also runs workshops and other courses based on specialist requirements including:

- Refractories
- Clean steel
- Mould powders
- Hydrogen
- Stainless steelmaking
- Casting defects / Surface quality
- Electric Arc Furnaces (EAF)
- Basic Oxygen Steelmaking (BOS) process control

Course Details & Registration:

For further details including course dates, prices and registration, visit the Institute's website: www.mpiuk.com/training

For course enquiries, contact the training team: training@mpiuk.com

Telephone: +44 (0)1642 382000



STEEL INDUSTRY Training Courses





In-depth courses based on the major technologies currently in global operation

years.

During this time, scientists, researchers and and finishing. engineers have been at the centre of major technological changes within the steel industry. The Institute prides itself on being able to

have been instrumental in shaping the industry operational levels. towards the state-of-the-art processes and equipment currently being used.

sintering and scrap, through to oxygen and currently in global operation. electric steelmaking, casting, rolling, reheating

present the academic and practical aspects of The Institute's ongoing research programmes industrial processes, at both management and

Steel courses have been developed by the The Institute has expertise in heavy end Courses and workshops offered by the Materials Processing Institute over the last 70 processing; from raw materials, cokemaking, Institute are based on the major technologies

Materials Processing Institute Eston Road Middlesbrough TS6 6US **United Kingdom**

+44 (0)1642 382000 training@mpiuk.com www.mpiuk.com/training

MPI SITC 05/17 Copyright © Materials Processing Institute UK 2017

