

Look. Listen. Do!
Intelligent steelmaking.



Look.



Listen.



Do!

Course Outline

Process Metallurgy



BSE
ACADEMY
Education for Excellence

Course Outline

Process Metallurgy



What it is

A training seminar with systematic repetition/expansion of knowledge for junior production and maintenance managers respectively fresh graduates – in theory and practice dedicated to electric arc furnace steel making. This training course answers the basic question and delivers the necessary technical information needed to manage a steelmaking facility.

Who it is for

Production operators (meltshop), technicians, junior production managers and fresh graduates, who wish to gain a specific knowledge in process metallurgy for a better understanding of how to improve operations.

What is required

Pre-qualification: Technical qualification.

What is in it

- Raw Materials: Types, handling, problems
- Energy Input: Electrical energy, chemical energy
- EAF: Mode of operation, process, foamy slag, de-phosphorization
- LF: Secondary metallurgy, de-sulfurization, de-oxidation
- CCM: Tundish metallurgy, casting, material defects
- Consumables: Refractories, electrode handling
- Add on: Plant visit of Badische Stahlwerke (BSW)

Duration

3 Days

Course language

English

Detailed Program

	Day 1	Day 2	Day 3
Morning	<ul style="list-style-type: none"> - Introduction - Constituents of steel - Raw material: scrap, DRI, hot metal - Energy input: electrical energy 	<ul style="list-style-type: none"> - Energy input: chemical energy - EAF: mode of operation, process, foamy slag 	<ul style="list-style-type: none"> - Casting - Material defects
Afternoon	<ul style="list-style-type: none"> - BSW safety instructions - BSW plant tour 	<ul style="list-style-type: none"> - Secondary metallurgy - Tundish metallurgy 	<ul style="list-style-type: none"> - Refractories, electrodes - Concluding discussion

Look forward to additional evening events that will enrich the program.



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Your key lecturers

Dr. – Ing. Alexander Grosse

- Doctor's Degree in Metallurgical Engineering and Material Sciences
- Project Manager Consulting Steel Plant
- Specialist of EAF Optimisation and Oxygen Technology



Since 2007 Alexander Grosse has been working for the Badische group (BSW) and their engineering company (BSE). Being a project manager consulting steel plant he provides the optimisation of EAF and oxygen technology. Owing to his contacts to BSW he could gain an important experience enabling him to advise his customers individually. Moreover he participates in a joint research project named "Erestre" with the ambitious content "increasing of energy and resource and decreasing of blowing gas emissions in the iron and steel industry as well as in the zinc industry". Dr. Grosse has published several technical articles covering his field of responsibility.

Dr. – Ing. Sonja Grosse

- Doctor's Degree in Metallurgical Engineering and Material Sciences
- Quality and Product Development
- Head of Spectral Laboratory
- Specialist of Billet Quality in Continuous Casting



Since 2009 Sonja Grosse has been working for the Badische group (BSW). Being a plant quality engineer she provides the control and optimization of billet quality. Since 2011 she is head of Spectral Laboratory, managing laboratory technicians on 5-shift production. Dr. Grosse has published several scientific articles covering the field of solidification and crack susceptibility.

Fatih Gökce

- M. S. Degree in Metallurgical Engineering and Material Sciences
- Project Manager Consulting Steel Plant
- Specialist EAF Design& Optimisation and Oxygen Technology



Since 2012 M. Fatih Goekce has been working for BSE. Being a project manager consulting steel plant he provides the process design and optimisation of EAF & LF and oxygen technology.

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