



November 6–10, 2017

Crowne Plaza London Heathrow • London, United Kingdom

Course Schedule

(As of October 9, 2017)

Monday, November 6: *Liquid Into Products Safely*

07:00–08:00	Registration	
08:00–08:15	Welcome and Course Introduction	
08:15–08:45	Cast Shop Safety <i>Includes molten metal hazards</i>	Grandfield
08:45–09:45	Customer's Products: Applications, Allows, Formats, & Downstream Processes	Grandfield
09:45–10:00	<i>Break</i>	
10:00–11:30	Cast Shop Economics	Grandfield
11:30–Noon	Metal Supply—Primary Smelter	Grandfield
Noon–13:00	<i>Lunch (provided)</i>	
13:00–15:00	Metal Supply—Secondary: Melting, Furnaces, & Refractory Technology	Peterson
15:00–15:15	<i>Break</i>	
15:15–16:15	Dross Generation & Processing	Peterson
16:15–17:00	Group Work: Improvement Case Studies	

Tuesday, November 7: *Preparing and Solidifying the Liquid*

08:00–08:45	Trace Elements & Impurities: Sources & Effects	Grandfield
08:45–09:25	Furnace Fluxing & Alloying	Grandfield
09:25–09:45	Inclusion Sources & Measurement	Grandfield
09:45–10:00	<i>Break</i>	
10:00–11:00	Inclusion Removal	Grandfield
11:00–Noon	Degassing	Peterson
Noon–13:00	<i>Lunch (provided)</i>	
13:00–14:00	A Cast Microstructure	Eskin
14:00–15:00	Aluminum Solidification Fundamentals	Eskin
15:00–15:15	<i>Break</i>	
15:15–16:15	Grain Refinement—Theory	Eskin
16:15–17:00	Grain Refinement—Practice	Grandfield

Wednesday, November 8: DC Casting

08:00 - 09:00	DC Casting Heat Flow	Grün
09:00–09:45	DC Water Cooling & Water Systems	Grandfield
09:45–10:00	<i>Break</i>	
10:00–11:00	Billet Casting Mould Technology	Grandfield
11:00–Noon	DC Surface Defects	Grandfield
Noon–13:00	<i>Lunch (provided)</i>	
13:00–18:00	Tour and DC Casting Demonstration at Advanced Metals Casting Centre (AMCC) at Brunel University London (<i>transportation provided</i>)	

Thursday, November 9: Ingot and DC Casting

08:00–09:45	Sow and Chain Conveyor Ingot Casting	Grandfield
09:45–10:00	<i>Break</i>	
10:00–11:00	Heat Tearing Defects	Eskin
11:00–Noon	Macrosegregation in DC Casting	Eskin
Noon–13:00	<i>Lunch (provided)</i>	
13:00–14:00	Q&A: What’s My Defect?	
14:00–15:00	Slab Cracking Defects	Eskin
15:00–15:15	Engineering Maintenance & Productivity	Grandfield
16:00–17:00	DC Casting Variants—HDC, EMC, Etc.	Grün

Friday, November 10: More Slab & Homogenization

08:00–09:00	Rolling Slab Mould Technology	Håkonsen
09:00–09:45	Slab Casting—Shape Control	Håkonsen
09:45–10:00	<i>Break</i>	
10:00–Noon	Homogenization: Principles, Practice, Problem, and Productivity	Eskin
Noon–12:15	Graduation Ceremony and Wrap-Up Discussion	
12:15–13:00	<i>Lunch (provided)</i>	
13:00	Course Adjourn	