



**TMS 2015 Industrial
Aluminum Electrolysis Course**
The Definitive Course on Theory and Practice
of Primary Aluminum Production

COURSE AGENDA

www.tms.org/IAE2015

October 19-23, 2015 • TRIMET Aluminium SE

The course will be taught in two locations:	
Trimet Aluminium SE Essen Aluminiumallee 1 45356 Essen	Trimet Aluminium SE Voerde Schleusenstrasse 11 46562 Voerde

Transportation will be provided daily between the course hotel and the classroom sites as part of the registration fee.

Monday October 19, 2015: Essen Location

Time	Title of Presentation	Presenter
07:30 - 08:00	Registration	
08:00 - 08:15	Welcome and Opening of the Course	Halvor Kvande
08:15 - 09:00	Introduction to the Aluminum Electrolysis Process	Halvor Kvande
09:00 - 10:00	Electrical Safety in Potrooms	Vinko Potocnik
10:00 - 10:15	Break	
10:15 - 11:30	Cell Energy Input and its Utilization	Barry Welch
11:30 - 12:30	Current Efficiency	Alton Tabereaux
12:30 - 13:30	Lunch	
13:30 - 14:30	Heat Balance Fundamentals	Halvor Kvande
14:30 - 14:45	Break	
14:45 - 15:45	Heat Balance Fundamentals (continued)	Halvor Kvande
15:45 - 16:30	Group Work on Heat Balance	Halvor Kvande

Tuesday October 20, 2015: Essen Location

Time	Title of Presentation	Presenter
08:00 - 09:00	Impact of Alumina Properties on Pot Operations	Stephen Lindsay
09:00 - 10:00	Crust and Alumina Powder Dissolution and Cell Feeding	Barry Welch
10:00 - 10:15	Break	
10:15 - 11:15	Cell Control	Till Reek, Trimet Aluminium
11:15 - 12:00	Electrolyte Compositions	Halvor Kvande
12:00 - 13:00	Lunch	
13:00 - 14:00	Anode Cover	Stephen Lindsay
14:00 - 15:00	Evolution of Perfluorocarbon Gases in Cells - Discussion Session	Alton Tabereaux and Barry Welch
15:00	Plant visit - Trimet Aluminium SE, plant Essen (Potrooms and cast house)	

(Wednesday - Friday continued on following page)

Wednesday October 21, 2015: Voerde Location		
Time	Title of Presentation	Presenter
08:00 - 09:00	Temperature and Chemistry Control - Part 1: Setting Targets	Barry Welch
09:00 - 10:00	Temperature and Chemistry Control - Diagnostics and Options, Part 2: Decision Making on Options	Barry Welch
10:00 - 10:15	Break	
10:15 - 11:15	Measures to Control Metal Purity in Prebake Reduction Cells	Stephen Lindsay
11:15 - 12:00	Energy Consumption	Halvor Kvande
12:00 - 13:00	Lunch	
13:00 - 14:00	Measurement Techniques for Pot Analysis	Vinko Potocnik
14:00 - 14:30	Cell Diagnostics	Alton Tabereaux
14:30 - 14:45	Break	
14:45 - 15:45	Cell Diagnostics (continued)	Alton Tabereaux
15:45 - 16:30	Group Work on Problem Pots	Alton Tabereaux
18:00	BBQ dinner	

Thursday October 22, 2015: Voerde Location		
Time	Title of Presentation	Presenter
08:00 - 08:30	Anodes in the Cell - Part 1	Barry Welch
08:30 - 10:00	Anodes in the Cell - Part 2	Barry Welch
10:00 - 10:15	Break	
10:15 - 11:15	Reduction Cell Busbars at Increased Amperage	Vinko Potocnik
11:15 - 12:00	Fluoride Emissions - Source, Generation Capture and Minimisation	Barry Welch
12:00 - 13:00	Lunch	
13:00 - 14:15	Fluoride Emissions Control	Stephen Lindsay
14:15 - 15:00	The "Virtual Battery" Project in Essen	David Eisma, Trimet Aluminium
15:00	Plant visit - Trimet Aluminium SE, plant Voerde (Potrooms and anode plant)	
18:00	Graduation Dinner at Dampfbierbrauerei, Heinrich-Brauns-Strasse 9-15, Essen	

Friday October 23, 2015: Essen Location		
Time	Title of Presentation	Presenter
08:00 - 08:45	Emergency Shutdown and Restart Potlines	Alton Tabereaux
08:45 - 10:00	Measures to Manage Pot Complement	Stephen Lindsay
10:00 - 10:15	Break	
10:15 - 12:00	Cathode Technology - Part 1	Barry Welch
12:00 - 13:00	Lunch	
13:00 - 14:00	Cathode Technology - Part 2	Barry Welch
14:00 - 14:30	Pot Autopsies	Vinko Potocnik
14:30 - 14:45	Break	
14:45 - 16:00	Practical Cell Operational Problems - Questions from the Participants and Discussion and Sharing of Experiences	All
16:00 - 16:30	Summary and End of the Course	Halvor Kvande

For additional course and accommodation details, visit www.tms.org/IAE2015.