



**TMS 2014 Industrial
Aluminum Electrolysis Course**
The Definitive Course on Theory and Practice
of Primary Aluminum Production

COURSE AGENDA

November 16-20, 2014 • Dubai, UAE

Sunday, November 16, 2014

Time	Title of Presentation	Presenter
7:30 - 8:00	Registration	
8:00 - 8:15	Welcome and Opening of the Course	Halvor Kvande
8:15 - 9:00	Introduction to the Aluminum Electrolysis Process	Halvor Kvande
9:00 - 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	Lunch	
12:30 - 13:30	Current Efficiency	Alton Tabereaux
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

Monday, November 17, 2014

Time	Title of Presentation	Presenter
8:00 - 9:00	Crust and Alumina Powder Dissolution and Cell Feeding	Barry Welch
9:00 - 10:00	Measures to Manage Pot Complement	Steve Lindsay
10:00 - 10:15	Break	
10:15 - 11:30	Control of Temperature and Aluminum Fluoride - Part 1: Understanding & Setting Target Values	Barry Welch
11:30 - 12:30	Lunch	
12:30 - 13:15	Measurement Techniques for Pot Analysis	Vinko Potocnik
13:15 - 14:00	Electrolyte Compositions	Halvor Kvande
14:00 - 14:30	Diagnosis and Correction of Irregularly Operating Cells	Alton Tabereaux
14:30 - 14:45	Break	
14:45 - 15:45	Diagnosis and Correction of Irregularly Operating Cells (cont.)	Alton Tabereaux
15:45 - 16:30	Group Work on Problem Pots	Alton Tabereaux

Tuesday, November 18, 2014

Time	Title of Presentation	Presenter
8:00 - 8:45	Cell Control - History	Barry Welch
8:45 - 10:00	Cell Resistance and Alumina Feeding Control	Vinko Potocnik
10:00 - 10:15	Break	
10:15 - 11:30	Measures to Control Metal Purity in Prebake Reduction Cells	Stephen Lindsay

11:30 - 12:30 Lunch

13:00 Plant Visit to the Dubal (or Emal) Smelter All

Wednesday, November 19, 2014

Time	Title of Presentation	Presenter
8:00 - 9:00	Cell Temperature and Chemistry Control - Part 2: Practical Situations & Approaches	Barry Welch
9:00 - 10:00	Impact of Alumina Properties on Pot Operations	Steve Lindsay
10:00 - 10:15	Break	
10:15 - 11:00	Anode Cover	Steve Lindsay
11:00 - 11:30	Anodes in Cells - Part 1	Barry Welch
11:30 - 12:30	Lunch	
12:30 - 14:00	Anodes in Cells - Part 2	Barry Welch
14:00 - 14:30	Fluoride Emissions - Source, Generation Capture and Minimisation	Barry Welch
14:30 - 14:45	Break	
14:45 - 15:45	Fluoride Emissions Control	Steve Lindsay
15:45 - 16:30	Anode Effect Mechanism and PFC Emission Rates	Alton Tabereaux
18:00 - 22:00	Graduation Dinner	All

Thursday, November 20, 2014

Time	Title of Presentation	Presenter
8:00 - 8:45	Emergency Shutdown and Restart Potlines	Alton Tabereaux
8:45 - 10:00	Reduction Cell Busbars at Increased Amperage	Vinko Potocnik
10:00 - 10:15	Break	
10:15 - 11:30	Cathode Technology - Part 1 - Historical Developments	Manfred Banek
11:30 - 12:30	Lunch	
12:30 - 13:30	Cathode Technology - Part 2 - Improvement Options	Manfred Banek
13:30 - 14:00	Cell Autopsies	Vinko Potocnik
14:00 - 14:30	The Way Forward - Challenges and Opportunities in Aluminum Production	Halvor Kvande
14:30 - 14:45	Break	
14:45 - 15:30	Practical Cell Operational Problems - Questions from the Participants and Discussion and Sharing of Experiences	All
15:30 - 16:00	Summary and End of the Course	Halvor Kvande