

Training Program on “Aluminium Technology” for Aluminium Smelter Officials

DAY – 1

- History of aluminium and world trends in aluminium production
- Applications of aluminium & its alloys
- Bayer process alumina technology
- Fundamental of aluminium smelting
- Bath chemistry and cell performance
- Anodes in operation – quality, reaction and properties

DAY- 2

- Voltage and energy balance
- Alumina and its properties in cell
- Aluminium melt quality and treatment
- Alloying and heat treatment of aluminium alloys
- Downstream processing method (rolling, casting and extrusion)

DAY-3

- Energy and current efficiency
- Cathode in operation – properties and reactions
- Process control measurement and expert system
- PFC emissions in aluminium smelting
- Future trends in aluminium smelting and alternative extraction process
- Consumption of prebaked anodes during aluminium smelting & Variables in anode manufacture purposes
- Value added products from aluminium industry waste.
- Lab. Visit
- Group discussion and interactive session.