

# Hot Rolling of Long Products 2021 v2

Online / e-Learning on our platform

“Practical knowledge to use in your company”

## Course Schedule

**Starts on the 13<sup>th</sup> October 2021 and ends the 16<sup>th</sup> December 2021**

### **Module 1: General Iron & Steel sector general vision and hot rolling processes**

- Productions, Capacities, Prices and trends.
- Hot rolling processes, general vision

### **Module 2: Metallurgical Vision of the Steel Hot Rolling Process**

- Steel structure and transformations
- Metallurgical temperatures and the rolling mill
- Grain structure and distribution
- Chemical composition and alloying elements
- Metallurgical Strategies and chemical composition
- Steel composition and final steel quality
- [Tutorship 1](#)

### **Module 3: Roll Pass Design (grooves and passes)**

- Constant volume and material flow
- Pass filling and not filling
- Rolling conditions
- Start of the rolling case of flat passes and bar sections (cases of theory-practice application will be presented constantly throughout the course)
- Types of rolls
- Plastic yield stress and influencing factors
- Temperature, profiles and round

- Roll groove dimensions
- Workshop – Product trace development for bar, from billet
- Force, Moment, Power & Motors
- Roll Pass design for Profiles
- Roll Pass design for bar
- Initial sections, number of stands and passes
- Rolling Defects and how to avoid them
- [Tutorship 2](#)

### **Rolling mill productivity and efficiency**

- Reheating furnace, types and strategy
- Rolling mill production capacity
- Initial sections definition
- Layout influence in quality
- Finishing mill
  - Cooling
  - Cutting
  - Straightening
  - Stacking & Labelling
- [Tutor 3: Interchange of ideas and end of the course](#)

## **e-LEARNING – ONLINE TRAINING**

Throughout the course, there is open access to platform forums and messaging, where anyone can participate in the exchange and interaction with the training tutor, as well as with other participants in the course.

To register, please send us a message at [info@atecid.com](mailto:info@atecid.com), or use our [contact web page](#), so we can reserve a place for you.