



Quenching and Partitioning for AHSS

ArcelorMittal Belgium (Liege), Belgium,
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PRIMARY AND METALS



ArcelorMittal is the world's leading steel and mining company. Guided by a philosophy to produce safe, sustainable steel, it is the leading supplier of quality steel products in all major markets including automotive, construction, household appliances and packaging.

The Q&P project aims for continuous improvement of technical capabilities to produce third generation AHSS products. The new Q&P metallurgical route is the mainstream chosen for UHSS 3rd generation steels on CAL. The development of this metallurgy is a first for Arcelor Mittal Europe and closely followed by R&D.

Main modifications of the CAL are:

- New complete furnace (DFF)
- New transversal flux inductor (prototype)
- Split and regulation modification of existing furnace
- New Slow Cooling Section (SC)

In order to perform the necessary modifications and to install the new equipment, many different fields are impacted:

- Medium voltage for new inductor (5 MVA)
- MCC and low voltage distribution
- Automation of new equipment
- Civil works for new basement
- New utilities (cooling, actuators and furnace atmosphere)

Principal project data

Advance High Strength Steel (AHSS) section at Kesselares site

Total budget: 24m€

Timing: 18months between start of feasibility to commissioning

Scope IPS

Project Feasibility

- Technical solution and layout
- Budget
- Planning
- Project definition and scope
- Investment file

Project Preparation

- Main inquiries (specifications, tender, supplier comparison and negotiation)
- Suppliers follow up
- Project team development
- Technical support
- Budget and planning follow up

- New thermal model and line regulation

IPS operational unit(s)

- IPS Belgium sa

