Hot dip galvanizing line no. 5
Voestalpine Stahl GmbH, Austria

Features

Scope of supply and services of ANDRITZ METALS
- Mechanical equipment for full strip transport
- Furnace, skin pass mill, tension leveler, coater, and turret-type side trimmer
- General planning
- Commissioning and start-up

Project data
- Project start: 2007
- Start of assembly: 2008
- Start of operation: 2009

Technical data
- Capacity: 400,000 t/a
- Strip thickness: 0.6-2.0 mm
- Strip width: 750-1,750 mm
- Coil weight: max. 30 t
- Entry section speed: max. 300 m/min
- Process section speed: max. 220 m/min
- Exit section speed: max. 350 m/min
- Steel grades: CQ, DQ, DDQ, EDDQ, HSLA, CP, TRIP
- Zinc coating weight: total 60-350 g/m²
Hot dip galvanizing line for latest high-strength steel.

Terminal equipment

The fully automatic entry and exit sections provide the feedstock for the annealing and galvanizing process, which includes an option for additional galvannealing of a wide range of products (CQ, DQ, EDDQ, BH, AHSS, MP).

 Process section

The advanced furnace technology, including a highly sophisticated DFF (Direct Fired Furnace), annealing at up to 860 °C and the innovative concept of the DRJC (Differential Rapid Jet Cooling), ensure controlled creation of strip with different metallurgical phases. By producing steel strip with GI, GA and zinc-magnesium coating, the line covers nearly all of the market’s demands.

After pot treatment

Following galvanizing or galvannealing, final surface conditioning, including final influence on the material properties, takes place at the 4-Hi skin pass mill (WR 650 mm and 450 mm) by means of wet skin passing, as well as at the tension leveler with 6-Hi cartridge design.

Narrow tolerances for elongation values and accurate rolling forces ensure the production of high quality products supplied to the wide range of end-users, including automotive exposed applications.

The chromium-free coating and ultra-thin application of surface protective media opens up different new market segments.

Exact width trimming by the turret-type side trimmer concludes the geometrical adjustments to meet customer demands (bottom left).

Best galvanized surface qualities for the automotive industry.