SUCCESS STORY
Performance and optimized yield for color coated products

METALS

COIL COATING LINE NO. 2

VOESTALPINE AG AUSTRIA

ENGINEERED SUCCESS
Coil coating line for highest quality

ANDRITZ Metals supplied a coil coating line for the production of organically coated steel sheets with a strip thickness of 0.4–2.0 mm and a strip width of 700–1,850 mm. The capacity is around 200,000 tons per annum.

**ENTRY SECTION**
This section consists of two pay-off reel groups each equipped with a leveller and a crop shear. The head and tail ends of the coils are welded together through a laser welding process in order to create a continuous strip.

**EXIT SECTION**
The exit section consists of one coil ing reel group as well as a bypass to a separate crop shear in order to cut larger sample quantities.

**STRIP CLEANING AND PRE-TREATMENT**
After passing the entry accumulator the strip continues through a horizontal, alkaline strip cleaning to achieve optimal surface conditions for painting. This is done in the following zones:
- Alkaline spray cleaning 1
- Brushing machine
- Alkaline spray cleaning 2
- Cascade rinsing with demineralized (also sometimes soft or de-salted) water
- Chromium-free pre-treatment
- Dryer

**COATER**
The top and bottom coating applies at three stations:
- Prime coater (basecoat on top and bottom)
- Finish coater A (topcoat on top)
- Finish coater B (topcoat on top and bottom)

**ENAMELLING FURNACE**
The strip passes through a horizontal furnace in order to condition the coat. Basically, the holding time is approximately 20 to 25 seconds, in which the hot air is blown directly on the strip. Finally, the outgoing strip has a temperature of about 240° C.

**COOLER**
Directly after being enamelled the strip is cooled down from 240° C to approximately 40° C. The cooling takes place in a horizontal stainless steel tank by quenching the strip with demineralized water.

**LOOPER**
The vertical entry and exit accumulator compensate any downtime to avoid stops and provide a continuous strip travel in the process section.

**PLANT FACTS**
- Capacity: 200,000 t/year
- Strip thickness: 0.4–2.0 mm
- Strip width: 700–1,850 mm
- Entry section speed: max. 210 m/min
- Process section speed: max. 120 m/min
- Exit section speed: max. 210 m/min
- Project start: 2002
- Start of operation: 2003
ENGINEERED SUCCESS
FOR FLAT PRODUCT PROCESSING

ANDRITZ Metals is – via the Schuler Group – one of the world’s leading suppliers of technologies, plants and digital solutions in sheet metal forming. The product portfolio also includes automation and software solutions, dies, process know-how and service. In the metals processing segment, the business area provides innovative and market-leading solutions for production and processing of flat products, for welding systems, as well as furnaces and services for the metals industry.

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