

Talk with Franck Dourlens, Ascoval.  
Implementation of fast-track bloom casting  
for rail steel in progress to reach maximum plant yield

## ASCOVAL LIBERTY DRIVING A GREEN AND SUSTAINABLE CONVERSION

## INTERVIEW

— EDITED BY ACHILLE TRISCIUZZI / Vice President, Sales, Continuous Casters, Danieli Centro Met

**A**scoval is an EAF-based steel plant in Northern France, owned by Liberty Steel.

With a capacity of 600,000 tpy, the plant produces carbon and alloyed grades (up to 13% Cr) of conticast and forged round bars for seamless tubes, mechanical engineering, and automotive industry applications. The caster, which was supplied by Danieli and commissioned in 2007 on an EPC basis, was designed to produce round sections up to 325 mm. In 2019 Danieli was contacted by Ascoval to implement, a CCM upgrade on a fast-track basis, introducing new casting sections and further expanding the range of quality steel grades with the aim to open new markets for the plant.

*— Mr. Dourlens, during your long experience in the steel industry you had the chance to work with Danieli. Can you please tell us about it?*

Yes indeed, I did work with Danieli Morgårdshammar 15 years ago, for a rolling mill revamping in France. A challenging project with a short time schedule and work to be carried out without the stoppage of produc-

tion. The end results were good, and our targets were reached.

*— Before talking about your current project with Danieli, could you please brief us about the railways market in Europe?*

The customers are mainly the national railways companies. The railway is clearly a low-carbon emission transport mode that is in line with EU low-carbon emission policy, and the main part of rail consumption is linked to replacing used rails: the market will be quite stable for years.

*— How is the competition among European steel producers?*

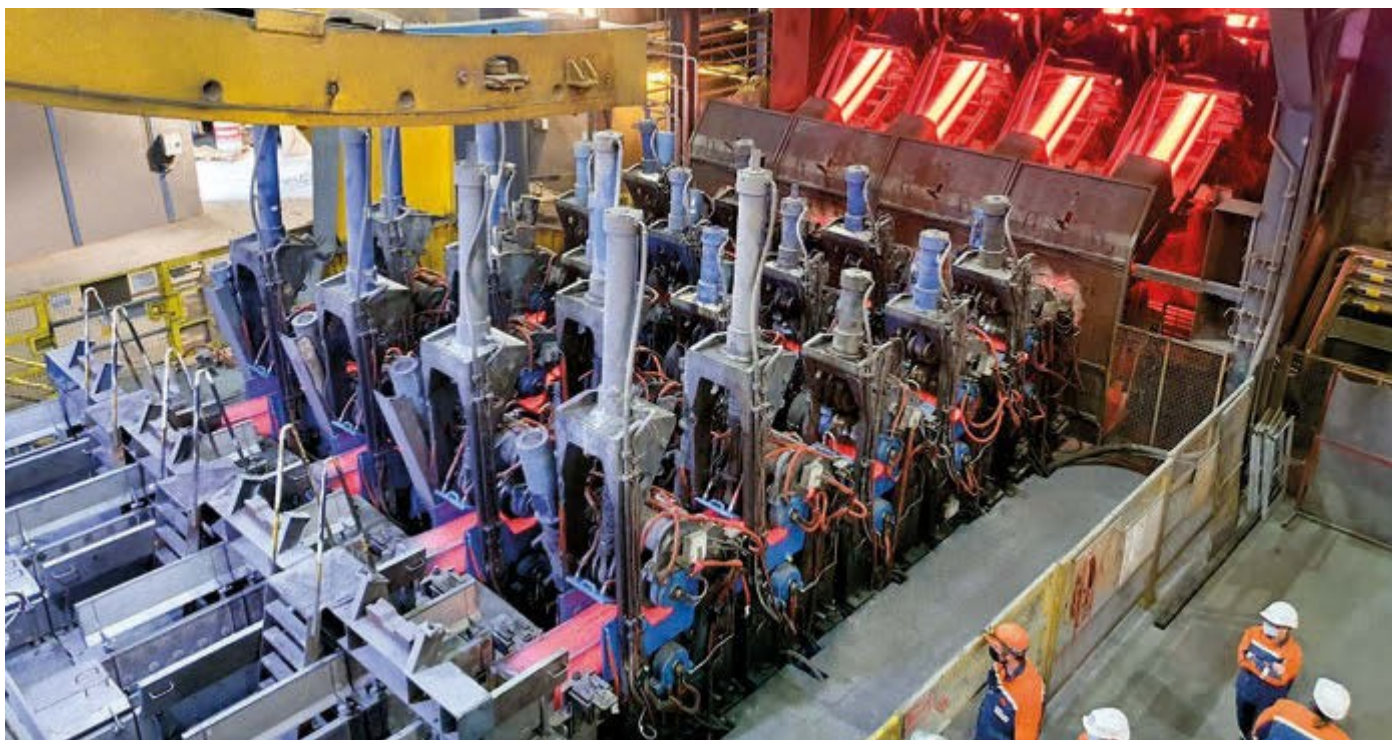
Three main integrated suppliers are present in this market, using blast furnace and BOF technologies. We are now the first and the only one to produce such grades adopting a green and sustainable technology in Europe!

*— Why did Ascoval order a state-of-the-art rail revamping from Danieli? How was the project born and how did Danieli support Ascoval in its choice?*



**FRANCK DOURLENS**  
Plant Manager

Ascoval steel plant,  
Saint Saulve, France  
(Liberty Steel Group)



Ascoval has long experience supplying special steel for oil-&-gas industry customers, as well as the mechanical industry, but limited to rounds production. The crisis within our markets convinced us to diversify our production with square and rectangular shapes.

In 2019, this project met the long-term view of FRI (Hayange) and SNCF to develop a “green” steel route for rail using an EAF technology to reduce our carbon footprint.

This project was a major reason for Liberty to take over Ascoval and FRI because it was fully aligned with its sustainability and low carbon-emission strategy.

When we made the choice for a partner, the main hurdle was the short time to implement the project and to ramp-up to industrial production: the rail industry needs long qualification tests to get customer approvals.

The decision to invest was made in June 2019, with the target to perform the commissioning and hot startup in August 2020, with approvals for SNCF in December 2020. During the technical discussions before the finalization of the contract,

we were convinced that Danieli could meet both the technical and planning challenges. The contract was like a full commitment.

—Ascoval kept the possibility to produce the previous round sections with an evident increase in plant flexibility. Did you notice any side effect on previous core production results?

We wanted to increase the section sizes offered to the market and keep the possibility to deliver the same round bar section and quality.

Careful checks were made during the process design period, so that no changes would be made to produce a negative impact on the rounds' quality. And the result is in line with that.

— Could you please mention some of the results achieved?

It's difficult for us to choose in a such successful project! Schedule time target: 1st heat 12 August; first rail rolled 11 September; at this time every test made by Ascoval, FRI and SNCF is within the target values: metallurgical structure, segregation, cleanliness, cracks absence and fatigue tests.

— How is the relationship with Danieli?

The commitment was very strong. During the project, the relationship with Danieli was driven in a full, constructive way and we were all aware that the deadline was very short. When Covid containment was established in Italy, we feared the project would be postponed. Danieli, however, continued to do everything possible, in close collaboration with our Project Manager, to be able to start the work as planned, at the end of June.

— Finally, what do you see as the next step for the Ascoval plant?

After two difficult years, with production at 60,000 tpy, the main challenge of the plant is now to increase production to more than 500,000 tpy in the next two years: it means increasing from 3 to 5 shifts, with training and skills development.

In the short term, we must finalize customer's approvals and ensure the production level by developing additional square sections. A new challenge for Ascoval and for Danieli! |