



## HTC Technology leads to high productivity



**H**TC technology is the way to obtain high productivity with small size bars, delivered at ultra-high speeds onto the cooling bed, one bar per notch, both for one-strand and two-strand rolling.

Latest addition to the series of modern high performance bar mills of Danieli, the 220 tph, 1.2 MTPA re-bar mill at JSW Vijayanagar works in Karnataka achieved rated capacity and set a couple of records in its production program in January 2016.

The mill constructed and commissioned in 18 months, achieved the fastest ever production ramp up to hit 89% capacity in 6 months after start up.

"We have rolled during last year all the

products, but mainly rebar 2x12, 2x16 2x20 and 25 mm were produced. We are happy with the overall performance of the mill and Danieli is helping us in doing that," said Hari Kumar N, General Manager of JSW Bar Mill 2. These performances are being achieved thanks to the solid co-operation between JSW

and Danieli technicians. The positive results obtained, thanks to the stable and well-known high speed bar rolling system developed by Danieli Long Products Division, are consolidating JSW Group's indisputable leadership in rebar production, in the Far East countries.

## Rio Tinto trims iron-ore production

**A**s Rio Tinto doubled down on iron-ore mining in the remote northwest corner of Australia, executives envisaged a vast rail network where trains would snake through the Outback and be managed hundreds of miles away in the city of Perth.

But the much-anticipated AutoHaul project, which the Anglo-Australian mining company hoped to have operating last year, hasn't advanced beyond tests. Recently, Rio Tinto said, it is now expected to produce less ore next year because of the delay.

Driverless trains hauling ore from 15 mines in Australia's Pilbara region were aimed at transforming the mining industry. In 2012, Rio Tinto disclosed its plans for the

trains to travel roughly 800 miles (1,300 kilometers) of rail to ports where the company loads cargo ships full of the steelmaking commodity destined for customers across Asia. It expected AutoHaul to cost US\$518 million but save money by using fewer workers and fuel and giving the company more flexibility on train schedules.

"With the delay in AutoHaul, production from the Pilbara is now expected to be between 330 and 340 million metric tons in 2017," down from a prior estimate of 350 million tons, Rio Tinto said. A spokesman for the company said he couldn't comment further on the status of the train tests or when they might be completed.

## SMS Group and AFERPI sign contract on new steel complex in Piombino



**A**cciaierie e Ferriere di Piombino SpA (AFERPI) and SMS group have signed a contract on the supply of a new steel complex replacing outdated facilities at the Piombino site in Italy. The new complex will consist of a meltshop with a capacity of more than one million and a rail and section mill with a capacity of 700,000 tons per year.

The new plant will feature latest technology designed to produce premium steels at high productivity combined with environmentally friendly solutions for low energy consumption and low emissions.

SMS group will supply a 140-ton SHARC direct-current EAF, which operates very efficiently and in a highly eco-friendly way thanks to the extremely efficient preheating of the charge.

The SHARC (Shaft Arc Furnace) will be charged with a high rate of virgin materials, such as HBI, in addition to scrap in order to reliably meet the required cleanness of the steel produced. The steel plant will also comprise a twin ladle furnace and a twin vacuum degasser. These facilities will make it possible to adjust the liquid steel precisely to the required target composition before the steel is cast either on the new bloom caster or the new billet caster for SBQ (Special Bar Quality) products. Both casting machines will be equipped with CONVEX® mold technology and Mechanical Soft Reduction systems. The blooms will be processed in the newly built rail mill, the

billets in the existing bar and wire rod mills.

The new rail and section mill will produce rails with a length of 120 meters as well as various beams, sections and sheet piles.

Designed for quick program changing, the mill will comprise a tandem reversing mill with Compact Cartridge Stands (CCS®) and a Compact Roller Straightener (CRS®) as successfully in operation in numerous rail and section mills. The CCS® mill stands will be equipped with hydraulic adjustment systems to allow rolling at very close tolerances. The scope of supply also includes a RailCool® rail head hardening line.

The rail finishing line will process long and short rails and feature testing facilities, cutting and drilling machines as well as gap presses. A separate finishing line will process all the sections rolled.

This project will enable AFERPI to continue steel and rail production in Piombino with latest state-of-the-art equipment. The new steel complex will have all it takes to make world-class products.