Metal Highlights

INDUSTRY CONTRACTS

Siemens expects multi-billioneuro orders for rail and wind systems in Russia

In connection with German Chancellor Angela Merkel's visit to Russia, Siemens President and CEO Peter Löscher signed memorandums of understanding in Yekaterinburg to supply wind power and railway technologies with a total value of several billion euros. Under the agreements, Siemens is to modernize 22 railway switching yards by 2026 and supply Russian Railways (RZD) with 240 regional trains over the next ten years. Siemens is also to install wind turbines with a total capacity of up to 1,250 megawatts in Russia by 2015. In order to manufacture most of the products in Russia, three joint ventures with Russian partners are planned.

A joint venture between RZD, the All-Russian Railway Research Institute and Siemens aims to modernize a total of 22 railway switching yards across the country by 2026. In addition, RZD and Siemens have reached an agreement to jointly produce 240 regional trains, with a total of 1,200 coaches, for RZD. The trains will be a specialized version of the Desiro, which will be produced in Russia starting in 2012. For this purpose, Siemens is planning a joint venture with RZD subsidiary Aeroexpress. With these steps, the company is intensifying its focus on production in Russia: in May 2010, Siemens announced the joint production with Sinara of 221 locomotives for RZD in Yekaterinburg.

Russia plans to install wind power systems with a total capacity of roughly 5000 megawatts by 2020. Siemens wants to install at least 1,250 megawatts of capacity by 2015 alone. To achieve this goal, the company is planning to establish a joint venture with the Russian companies Rostechnologii and RusHydro.

JFE Steel and GMH agree on steel bars for energy field

JFE Steel Corporation has concluded an agreement with Georgsmarienhütte Holding GmbH, Germany concerning technical collaboration on steel products mainly focused on steel bars to be used for energy field typically for wind power. Back in 2002 JFE Steel and GMH Holding concluded a collaboration agreement concerning special steel bars for automotive industry and its components makers including bearing manufacturers. Since then they have been collaborating by mutual technical exchange.

This collaboration will be expanded further through exchange of technology information, joint R&D and licensing of technology as related to steel products for energy field mainly focused on steel bars involving steel companies, forging companies, etc, belonging to GMH Holding, which owns several companies involved in wind power generation.

Ruukki secures commercial and construction contracts in Central Eastern Europe

Ruukki, Finland, has recently agreed a number of steel structure solutions in Central Eastern Europe. The contracts are worth a total of over 5 million €.



Ruukki keeps securing industry construction contracts (picture: Boiler plant site in Södertälje, Sweden, 2009).



Metal Highlights

In Poland, Ruukki has agreed on a complete steel structure delivery for a construction project to build a factory making television and LCD monitors. The delivery includes designing, manufacturing and installing the steel frame, facade and roofing system for TVP Displays Polska's factory. "Recent contracts further strengthen our position in commercial and industrial construction in Central Eastern Europe. In construction, we are particularly focusing on further developing our design expertise," says Jouni Metsämäki, Senior Vice President, Central Eastern Europe, Ruukki Construction. The steel structures will mostly be made locally near the customer at Ruukki's plants in Oborniki and Zyrardow in Poland.

In Poland, Ruukki has also delivered and installed the steel structure for an exhibition hall at the MTP Poznan International Fair; in the Czech Republic, the company has agreed the delivery of a warehouse and administrative building for finance company Fortis BD.

Eventually, Ruukki secured a contract to deliver the steel frame for the roof of a 40,000-square-metre logistics centre for the Mega Image supermarket chain in Romania. The contract includes steel frame manufacture and installation, as well as project management and Ruukki's fire protection design. The new logistics centre is to built on the outskirts of the Romanian capital Bucharest. Consisting of seven interconnected units, Mega Image's logistics centre will be 347 metres in length and 12 metres in height. The steel structures were manufactured at Ruukki's plant in Bolintin Deal, Romania. The building will be brought into use in February 2011.

PLANTS AND EQUIPMENTS

Ternium and Nippon Steel to establish joint venture in Mexico

Ternium S.A. and Nippon Steel Corporation announced that they have signed a definitive agreement to form a joint venture in Mexico for the manufacturing and sale of hot-dip galvanized and galvannealed steel sheets to serve the Mexican automobile market. The joint venture will operate under the name of Tenigal SRL de CV (Tenigal).

Ternium and Nippon Steel will hold 51% and 49% participations in Tenigal, respectively. Tenigal plans to build a hot-dip galvanizing plant in the vicinity of Monterrey City (equivalent to the state-of-the-art equipment now in operation at Nippon Steel's steelworks in Japan) with a production capacity of 400,000 metric tons per year.

Construction of the facility would require a total investment of approximately US\$350 million. The plant is expected to commence production of galvanized and galvannealed automotive steel sheets, including outer-panel and high-strength qualities, in 2013. It is expected to serve the demanding requirements of the automotive industry in Mexico, including those of the Japanese car makers.

Outotec to supply iron ore sinter plant for SAIL in India

Outotec has secured an order from Steel Authority of India Ltd (SAIL) for the design and delivery of an iron ore sinter plant for SAIL's Bhilai Steel Plant in Chhattisgarh. Outotec will implement the plant project in consortium with Larsen & Toubro Ltd.

The new sinter plant is part of SAIL's program of expanding the annual capacity of the Bhilai Steel Plant to 7 million tonnes of crude steel. Outotec's scope covers engineering, supply of proprietary and special equipment as well as technical services for a sinter plant with annual capacity of 3.7 million tonnes. Larsen & Toubro will cover supply of local components and site construction works. The new sinter plant is expected to become operational in 2012.

voestalpine: 130 million euro investment in Böhler Edelstahl, Kapfenberg

voestalpine's ProForge hall was officially opened in September. The production facility now houses a longitudinal forging machine capable of producing steel bars up 15 metres long, with a diameter of up to around 550 mm and a unit weight of up to 8 tonnes.

The centrepiece of the new forging plant, a GFM longitudinal forging machine RF100, has a forging force of 2,000 tonnes.

It was also necessary to adjust the steel plant and finishing capacity to handle the increased forging and heat handling capacity. A new gag press, peeling machine, grinder and cold-cutting unit will be housed in the existing hall 2 of the finishing area and a combined inner and outer surface checking facility has been installed in a new parallel hall.



The plant is now capable of producing steel bars up 15 metres long, with a diameter of up to 550 mm.

The products are temporarily, systematically stored in an automatic high-bay warehouse. The capacity of the mechanical workshop was also extended with a new heavy-duty lathe and a vertical turret lathe meant for freeform products.

Further projects are planned in Kapfenberg with a total investment volume of around 21 million € this year. Highlights are two projects planned for the roll forming line with a total budget of approximately 10 million €, the completion of which is scheduled for the 2013 business year.

ArcelorMittal Kessales modernizes existing CAL

The furnace section of the existing Stein Heurtey CAL at ArcelorMittal Kessales, built in 1985, will be completely revamped. Annealing throughput is 650,000 t/y, the max. processing speed is 230 m/min. Furnace maker Ebner will fit this facility with double-P type Inconel radiant tubes from the new line of Recoteb radiant tube/burner system solutions. This radiant tube / burner package features higher combustion efficiency and simultaneously lower NOx emissions.

The scope of supply includes a new furnace section, 203 Recoteb radiant tube / burner packages (double-P type, Inconel), modifying the exhaust system from Pull to Push/Pull and new electrical and control systems including installation and commissioning.

This project notably involves dismantling the existing furnace section and removing it in segments, without touching the support frame. Both roll boxes will remain as is.

This continuous annealing line largely produces material for the automotive industry, especially high strength steel (DP1400).

The modification work is scheduled for summer 2011, commissioning will be finished in the 3rd quarter of 2011.

Haldor Topsøe and Linde supply technology for POSCO's SNG plant in South Korea

Gases and engineering company The Linde Group, and Haldor Topsøe, a market provider of integrated catalyst solutions, today announced they have been selected as technology suppliers for the syngas treatment and methanation unit of steel producer POSCO's synthetic natural gas (SNG) plant. The new plant will be built in Gwangyang, South Korea, producing SNG from coal and/or petcoke.

The POSCO SNG plant, with a nominal capacity of 500,000 metric tons per year (MTPY) of pipeline-ready SNG, must be brought into operation by end of 2013. The plant, which will feature ConocoPhillips' E-gas gasification technology, will be adjacent to the steel works of Gwangyang, where site preparation is already initiated.



Water-cooled, copper-plated ladle inner roof enables the distance between the melt and the edge of the vessel to be reduced to about 500 millimeters.

The Linde Group's engineering division will supply the technology chain of syngas treatment and conditioning, including sour shift, acid gas removal – featuring Linde Rectisol – and sulphur recovery. Haldor Topsøe will supply the methanation technology, TREM, including conditioning of the product gas, to deliver SNG with a methane purity in excess of 98 percent.

Ural Stal orders vacuum degassing plant from Siemens VAI

Ural Stal is a niche supplier of special steel products, such as steel strip, tube billets, bridge and engineering steels. The company belongs to the Metalloinvest Group. The vacuum degassing plant for the Ural-Stal Works in Novotroitsk is designed as a twin station with a capacity of 120 tonnes. Siemens VAI is responsible for the configuration and supply of main plant components. This includes components such as a water-cooled, copper-plated ladle inner roof, which enables the distance between the melt and the edge of the vessel to be reduced to about 500 millimeters. It must meet the tapping weight of 120 tonnes specified by Ural Stal, while at the same time largely preventing the formation of slag skulls.

The order also includes an adaptation of the alloying station and the construction of the steel supporting structures for the degassing plant and vacuum pump. This project is being realized in cooperation with Siemens Russia, which will be in charge of handling all the steelwork and performing installation services for the electrical and automation equipment.

Russula improves troubleshooting and preventative maintenance at Nucor Steel Seattle

Engineering company Russula, specialized in upgrades and modernization projects for the steel industry with major offices in Spain,

Metal Highlights

Brazil, Argentina, India and Atlanta, has commissioned a high speed data acquisition system for Nucor Steel Seattle, in Seattle, WA. The goal of the project was to enhance the troubleshooting and preventative maintenance resources in the rolling mill. This project represents the fourth modernization project for Russula at Nucor Steel Seattle since 2004.

Russula supplied the system, using service provider IBA's hardware and software, and the engineering and hardware necessary to integrate the system with the existing ABB Advant AC450 automation system. The company was also responsible for installation supervision, commissioning and training. While onsite, Russula also provided automation training and the programming necessary to replace the mill's obsolete loop scanners with a readily available device.

ThyssenKrupp: first slabs from Brazil arrive in Duisburg

On Wednesday, October 27, 2010 the first shipment of 10,000 tons of steel slabs from the new ThyssenKrupp CSA Siderúrgica do Atlântico integrated iron and steel mill in Santa Cruz, Brazil, was unloaded at Walsum port in Duisburg after a two-and-a-half week journey across the Atlantic. The slabs were transshipped at Europoort Rotterdam, and transported by barge trains up the Rhine to Duisburg.

ThyssenKrupp's new integrated mill – construction of which commenced four years ago – began producing slabs at the start of September this year. The mill is situated in Rio de Janeiro state. After the full ramp-up – at present the first of two production lines is in operation with one blast furnace and one converter – the mill must produce a total of five million metric tons of slabs a year. It is scheduled to reach full capacity at the end of fiscal 2011/2012. Three million tons of the total capacity will go to the ThyssenKrupp processing plant currently under construction near Mobile in Alabama, USA, while two million tons will be shipped to ThyssenKrupp Steel Europe's plants in Germany for processing into finished products for European customers.

ThyssenKrupp Steel Europe has made major investment in Germany – totaling around 208 million € so far – in order to process the additional slab quantities. In the past four years around 125 million € has been invested in the Duisburg-Beeckerwerth and Bochum hot strip mills to increase their capacity. At the Beeckerwerth hot strip mill, for example, the coil yard has been expanded, the drive power of the finishing train stands increased and the performance of the cooling zone improved. At the Bochum hot strip mill a new walking beam furnace was built and put into operation almost two years ago. The company's hot dip coating lines have also been revamped at a cost of around 30 million € – for instance, furnace heating capacities have been optimized, new zinc pots built and a new laser welding line installed. In addition, the slab logistics infrastructure has been upgraded to meet the new requirements.

The slabs from Brazil, 396 in total, were unloaded by four magnet cranes at a purpose-built deep sea terminal at Rotterdam Europoort operated by logistics company C. Steinweg-Handelsveem B.V. From Maasvlakte/Europoort they were then transported by ThyssenKrupp Veerhaven B.V. on barges up the Rhine to Walsum port in Duisburg where, thanks to



ThyssenKrupp's integrated mill in Rio de Janeiro state comprises a port, raw material handling, coking plant, sintering plant which was commissioned on June 18, 2010, two blast furnaces, a BOF shop and a power station.

a 530-ton bridge crane with permanent magnets capable of moving loads of up to 36 tons, the slabs are removed from the ship. The advantages of this lifting technology lie in increased safety for employees and greater ease of handling: the magnets hold on to the slabs until an electrical impulse interrupts the contact. It also eliminates the need for chains and so saves large amounts of wooden dunnage. Besides, a franking system using a memory chip ensures that each individual slab can be identified digitally, without line of sight, without contact and over large distances, and the data can be processed directly in connected computer systems: directly after production in Brazil the slabs are tagged with an RFID (radio frequency identification) chip that permits fully automatic handling on every part of the route. The chip contains essential information about the individual slab, allowing it to be identified, stored, transported and finally processed as planned.

JFE Steel to construct continuous galvanizing line for autos in Thailand

SJFE Steel Corporation will build a continuous galvanizing line for automobiles at the Hemaraj Eastern Seaboard Industrial Estate of Rayong Province in southeastern Thailand. JFE Steel Galvanizing (Thailand) Ltd. will handle construction and operation of the facility, as well as sales of hot-dip galvanized steel.

The new continuous galvanizing line will enable JFE Steel to respond to demands from automakers in Thailand for high-end automotive steel sheet that can be procured locally.



The facility, located in southeastern Thailand, will produce 400,000 tons/year of hot-dip galvanized steel sheet.

Total investment is about US\$ 300 million. The facility will produce 400,000 tons/year of hot-dip galvanized steel sheet (sheet thickness: 0.4-2.3 mm, sheet width: 800-1,880 mm). Operation must start in April 2013.

ECONOMY WATCH

BHP Billiton and Rio Tinto give up plans

"The announcement by BHP Billiton and Rio Tinto to give up their plans for a joint venture or their iron ore assets in Western Australia is a victory for competition in the international raw materials market", commented EUROFER director general Gordon Moffat.

EUROFER objected at both EU and German level against the JV as an unacceptable market concentration which would have restricted competition in the seaborne iron ore market to an even greater extent as already experienced today. According to Eurofer, the effect of the JV on the global iron ore market would not have been materially different from the full merger which had been proposed in 2008, as it would have resulted in a position of market dominance of only two companies (Vale, BHP Billiton/Rio Tinto), which would substantially have reduced the consumer choice of supplier.

BHP Billiton and Rio Tinto have market shares of 17% and 19% respectively in the seaborne iron ore market, while Vale, the third mining giant, controls 33% (2008). These three companies together control 70% of the seaborne iron ore market.

Tata Steel Living Solutions to cease operations

Tata Steel intends to cease operations at its Living Solutions site at Shotton, North Wales. The business was established in 2003 as a downstream diversification using the company's steel to make modular buildings for the construction industry.

Andrew Black, Managing Director of Tata Steel Building Systems, said: "It is with great regret that, following a detailed review of the Living Solutions business, we have proposed to withdraw from this business activity. Living Solutions was set up as a pilot venture to explore a non-core business prospect downstream of our normal steelmaking activity. Given the continuing weak construction market and the impending completion of a long-term agreement to supply modules to the defence accommodation sector, Living Solutions has been unable to establish sufficient market presence to justify continuing with the business, which has never been profitable."

Tata Steel declare they have already attempted to address the business's problems by reducing costs and through a restructuring that took place last year. Despite these efforts, there are no prospects of generating viable new business following the completion of the defence contract. The proposal will put at risk 180 jobs in the Living Solutions business. This announcement does not affect other businesses at Shotton, which include Tata Steel Colors, Panels and Profiles and other Tata Steel facilities.

PEOPLE AND ORGANISATION

ArcelorMittal appoints new Chief Executive of Stainless division

ArcelorMittal announces that Mr Bernard Fontana has been appointed Chief Executive of its Stainless Division, which is currently being assessed for a potential spin-off. Mr Fontana was previously Head of Human Resources for the Group and is replacing Jean-Yves Gilet, who has left the Company to head up France's Strategic Investment Fund. He will report to Gonzalo Urquijo, Member of the Group Management Board of ArcelorMittal.

Mr Fontana joined Arcelor as Senior Vice President of Human Resources, Flat Products Europe in 2004. A graduate of École Polytechnique in France, he was hired by French chemical group SNPE in 1986, becoming deputy CEO. With the merger of ArcelorMittal in 2006, he was appointed as Executive Vice President of the Global Automotive business.

Mr Willie Smit, who was Vice President Employee Relations & Benchmarking, will replace Bernard Fontana as Executive Vice President, Head of Human Resources and will join the Group's Management Committee. Mr Smit has been with ArcelorMittal since 2005 and prior to joining he held senior HR positions at leading mining, manufacturing and construction companies. The most recent was as Vice President of Human Resources at Siberian-Urals Aluminium Company (SUAL) in Russia.