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PRESS RELEASE

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World's widest continuous caster successfully commissioned at Anyang Iron & Steel

SMS Demag, Germany, have successfully commissioned the single-strand continuous caster for ultra-wide medium slabs at Anyang Iron & Steel Company, PR China.

The continuous caster will produce ultra-wide medium slabs between 1,600 and 3,250 mm at a thickness of 150 mm, thereby boosting Anyang's production capacity by around 1.1 million tons per year.

The slab caster is designed as vertical bending unit with a vertical length of 2.5 m and a metallurgical length of 18.6 m. Its maximum casting speed is two meters per minute.

The new slab caster will produce a large variety of high-quality steel grades ranging from high-strength structural steels to pipe qualities. The slabs produced by the caster will then be processed further by hot charging in the Steckel mill to yield plates and hot strip.

The scope of supply includes the basic and detail engineering, the moulds, a spring-guided resonance oscillator with hydraulic actuator, supervision of fabrication and erection, and commissioning plus supplies and bought-out items for local fabrication. SMS Demag have also supplied the entire electrical equipment and automation system,

starting with the basic automation and technological control systems and extending to the technological process models (Level 2).

A particular feature of the caster is the SMS Demag-developed Breakout Prediction System (BPS) and SMS Demag's Mould Monitoring System (MMS). By creating a "transparent" mould the systems provide the customer with real-time full visualization of the casting process.

In order to optimize the pattern of the steel flowing into the mould on the world-record casting width for the achievement of defect-free slab surfaces, a new Submerged-Entry-Nozzle (SEN) was developed.

The caster is equipped with an air-mist type secondary cooling system, width-dependent spraying system and a hydraulic segment-adjustment facility plus dynamic soft reduction for an improved internal quality of the slabs.

The whole automation system was completely set up at SMS Demag's test centre before commissioning and tested and optimized using a plant-specific simulation software which almost fully reflects the real operating conditions. The use of the "Plug and Work" process considerably accelerated the commissioning.

During the final stage of testing, the customer's personnel was intensively trained at near-real conditions and thus optimally prepared for hot commissioning and subsequent production.

SMS Demag AG forms part of the Metallurgical Plant and Rolling Mill Technology Business Area of the SMS group. (45 lines with max. 55 letters)

SMS GmbH is the holding for a group of companies internationally active in plant construction and mechanical engineering relating to the processing of steel, non-ferrous metals and plastics. The group is divided into the Business Areas of Metallurgical Plant and Rolling Mill Technology, Tube, Long Product and Forging Technology and Plastics Technology. In the year 2004 some 9,500 employees worldwide generated a turnover of about EUR 2.20 bn.