British Steel to upgrade wire rod mill with new Primetals Technologies rod line outlet

- New wire rod outlet will improve product quality
- Expanded size range will serve new markets
- Mechatronic packages and smart sensors represent first step towards Industry 4.0

In a move to improve the quality and range of wire rod produced in the United Kingdom, British Steel selected Primetals Technologies to design, manufacture and install a new wire rod line and upgrade long rolling equipment in the company’s existing rod mill in Scunthorpe, UK. The expanded size range will enable British Steel to serve new markets. Mechatronic packages and smart sensor systems mark the first step towards Industry 4.0 for this rolling mill.

The project will replace two of the four strands of the existing wire rod mill with a new high production and high-speed rod outlet, plus two prefinishing mill bypass lines that will enable rods to enter a reducing/sizing mill to produce a wider range of sizes. The contract’s scope of supply includes modifications to the existing mill train, prefinishing mills and high-speed trim shears, with a new 230 Vee prefinishing mill, shear arrangement, a four-stand quick change Morgan Reducing/Sizing Mill, Morgan traversing water boxes and covered troughs, pinch roll and laying head arrangement with a quick change robot, a 10-zone Morgan Stelmor conveyor, the patented stepless reform station for coil forming, and vertical stem pallet system for coil handling. In addition, British Steel has contracted for mechatronic packages for section gauges and a laser gauge speed monitoring system with smart sensors, the first step towards Industry 4.0 digitalization of the rolling mill.

Once commissioned, the upgraded mill will produce 700,000 tons of wire rod per year, with tighter tolerances, better surface quality and microstructures, in sizes up to 28 mm in diameter. The contract also includes site supervision. Designed for a guaranteed maximum speed of 110 meters per second, the mill will run at 153 tons per hour.
The wire rod mill opened in Scunthorpe in 1976 as part of an integrated steelmaking site. The mill produces wire products for the automotive, construction, engineering and consumer goods markets. The original British Steel was founded in 1967 by the UK government from the country’s 14 main steel producing companies whose operations dated back to the 19th century. Privatized in 1987, the company merged with Koninklijke Hoogovens in 1999 to form Corus, which Tata Steel purchased in 2007 and renamed Tata Steel. In June 2016, Greybull Capital purchased the European long products business and renamed the new business British Steel. It produces sections, special profiles and wire rod manufacturing across the UK and rail manufacturing in the UK and France, with a network of metal centers and service centers in the UK and Ireland.

Stelmor is a registered trademark of Primetals Technologies, Limited in certain countries.

Morgan Reducing/Sizing Mill

This press release and a press photo are available at www.primetals.com/press/
Primetals Technologies, Limited headquartered in London, United Kingdom is a worldwide leading engineering, plant-building and lifecycle services partner for the metals industry. The company offers a complete technology, product and service portfolio that includes integrated electrics, automation and environmental solutions. This covers every step of the iron and steel production chain, extending from the raw materials to the finished product – in addition to the latest rolling solutions for the nonferrous metals sector. Primetals Technologies is a joint venture of Mitsubishi Heavy Industries (MHI) and Siemens. Mitsubishi-Hitachi Metals Machinery (MHMM) - an MHI consolidated group company with equity participation by Hitachi, Ltd. and the IHI Corporation - holds a 51% stake and Siemens a 49% stake in the joint venture. The company employs around 7,000 employees worldwide. Further information is available on the Internet at www.primetals.com.