Primetals Technologies to supply AOD converter and dedusting system to Acroni

- Additional secondary metallurgy route will increase production capacity by over 20 percent
- Savings on alloying elements will reduce production costs

Acroni, d.o.o., a Slovenian steel producer belonging to the Slovenian Steel Group (SIJ), has awarded Primetals Technologies an order to supply a new 95 metric ton AOD converter and dedusting system to its steel works in Jesenice. This will give Acroni another steel production option in addition to the existing process route, and will increase production capacity by more than 20 percent. The new AOD converter will expand Acroni’s product portfolio, relieve the pressure on the existing production processes in the steel works, and improve product quality. Overall, this will reduce the required amount of alloying elements and thus cut production costs as well. The new plants are scheduled to come on stream at the beginning of 2017.

Acroni is Europe's leading producer of stainless quarto plates. It also specializes in electrical and special steels, which have been sold in the form of hot and cold-rolled coils, heavy plates, and cold-formed profiles, which are mainly used for special niche products. The Acroni works lies in Jesenice, about 60 kilometers northwest of the capital, Ljubljana. Until now, the crude steel has been produced in an electric arc furnace, and decarburized in a VOD converter with a capacity of 90 metric tons. As the duration of treatment is significantly longer than for carbon steels, this plant configuration represents a bottleneck in the stainless steel production that will be eliminated by installing an AOD converter, which will increase both the production capacity and the flexibility of the steel works. Additional advantages of an AOD converter are the low degree of slagging of alloying elements, such as chromium, and the option of using cheaper ferrochromium grades with a higher carbon content as an alloying addition.

Primetals Technologies is responsible for the design and manufacturing of the key components of the AOD converter and the dedusting system, and will supervise their construction and commissioning. The new material handling system for the converter will be integrated into the existing system. The scope of
supply also includes a process automation system specifically designed for AOD converters. This ensures that raw materials are used efficiently, and minimizes treatment times. The converter is equipped with a Drive Damper system. This lowers the vibrations caused by the injection processes, and thus the mechanical stresses acting on the entire system from the converter down to the foundations. The patented system reduces wear and maintenance costs, while also lengthening the service life of the plant. The dedusting system, which will be installed at the same time as the AOD converter, will not only ensure that emissions are below the current limits, but also increase the energy efficiency and occupational safety in the production environment.

The project will be handled by a consortium with the Slovenian company Esotech d.d., Velenje. Esotech is responsible for the structural steel work, plant construction, and supply of the water treatment plant.

Computer animated view of an AOD converter from Primetals Technologies

This press release and a press photo are available at
www.primetals.com/press/

Contact for journalists:
Dr. Rainer Schulze: rainer.schulze@primetals.com
Tel: +49 9131 7-44544

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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 9,000 employees worldwide. Further information is available on the Internet at www.primetals.com.