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**Tenova to supply an Evaporative Cooling System for Georgsmarienhütte Electric Arc Furnace, Germany.**

**December 20, 2007.** TECHINT ITALIMPIANTI Deutschland GmbH, Düsseldorf, a company of Tenova LOI Italimpianti, has recently received the purchase order from Georgsmarienhütte GmbH for the engineering, manufacturing, assembly and commissioning of a new evaporative cooling system for the waste gas duct of the EAF in the customer's main plant, Georgsmarienhütte.

The EAF with a production output of 140 t/h produces ca. 100,000 m<sup>3</sup>/h waste gas with a peak temperature of 1800 °C and an average waste gas heat of 25 MWh

The new cooling system for the waste gas duct was planned as a state of the art evaporative cooling system and will use the waste heat energy for steam production. 12 t saturated steam with 20,5 bar and 216 °C will be produced hourly. The steam will be used for vacuum steel degassing where up till now primary energy has been used.

Due to the discontinuous mode of the furnace and the continuous steam demand of the steel degassing additional steam accumulators will be used as buffers.

The order involves the turn key delivery of the first, heavily burdened elements of the waste gas duct, the cooling system for the complete waste gas duct and all peripheral components for steam production. The new system will be implemented in a separate building, which has been specially adapted for this purpose.

Another important aspect beyond the drastically improved operating efficiency is the simplified maintenance and the possibility of repairs during ongoing production.

The complete plant will be commissioned in January 2009 after a production stop of only eight days during which the necessary installation and plant redesign will be carried out.

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