

**PRESS RELEASE**

Düsseldorf, May 7, 2012

**Modernization of ACERINOX stainless steel meltshop from  
SMS Siemag and SMS INNSE**

ACERINOX, Palmones, Spain, has awarded SMS Siemag, Germany, and SMS INNSE S.p.A., Italy, a contract for the supply of an AOD converter vessel and the modernization of the Electric arc furnace supplied in 1998.

SMS INNSE supplies an AOD converter vessel and two change vessels with a tapping weight of 108 t. The converter design was optimized on the basis of studies which ACERINOX had ordered from SMS Siemag before. SMS Siemag's study investigated the vibrations that occur during the AOD blowing process on account of bath movements. To this end, comprehensive measurement series were recorded and evaluated throughout the campaign of the refractory lining.

On the basis of these data SMS INNSE examined the effects on the service life of the converter tilting gear unit. SMS INNSE will modernize the valve station (O<sub>2</sub>, Ar, N<sub>2</sub>, Air) which will receive an individual shrouding-gas control system. Also included in the scope of supply are the engineering, the mechanical equipment as well as the supervision of erection and commissioning.

The electric arc furnace with a heat size of 120 t will be modernized by SMS Siemag. The spout-tilting electric arc furnace supplied in 1998 will receive a new furnace roof. The former conventional type of roof will be replaced by a spray-water cooled furnace roof. This patented method of roof cooling uses water at atmospheric pressure, thereby reducing the potential risk which large amounts of high-pressure water present in case of leaks.

SMS Siemag's scope of supply includes the engineering, the supply of the mechanical equipment, electrical equipment and automation system, as well as the supervision of erection and commissioning.

The AOD converter is to start production still in this year, while the electric arc furnace is scheduled to be commissioned in 2013.

AOD converter: Vibration and flow simulation.

Combining the various measuring and simulation techniques, i.e., operating tests in the meltshop, physical simulation on a reduced-size water model and numerical simulation CFD (Computational Fluid Dynamics), FEM (Finite Element Method), provides a more profound understanding of the process-metallurgical influences on the mechanical equipment of the AOD plant. SMS Siemag use this information and the company's many years of experience in the field of converter technology as a basis for the rating, design, operating process and maintenance of AOD converters.

At their Palmones works, ACERINOX operates a flat-product line for the production of stainless steel in various grades. The meltshop is equipped with three electric arc furnaces and two AOD converters and produces around 1 million t (0.9 million t flat products and 0.1 million t long products) of liquid steel per year.

(47 lines with max. 65 letters)

SMS Siemag AG is a company of the SMS group which, under the roof of the SMS Holding GmbH, consists of a group of companies internationally active in plant construction and mechanical engineering for the steel and nonferrous metals industry. With some 11,000 employees, the group generates sales of over EUR 3 billion.