



Phone: +49 211 881-4449  
Fax: +49 211 881-774449  
Mobile: +49 151 40226502  
E-mail: [thilo.sagermann@sms-group.com](mailto:thilo.sagermann@sms-group.com)  
Thilo Sagermann

## **PRESS RELEASE**

Düsseldorf, April 8, 2014

### Order for SMS Siemag from China

#### **Tianjin Zhongwang orders energy-saving color coating line for aluminum can stock**

All plant components for the new color coating line for Tianjin Zhongwang (Tianjin Zhongwang Aluminum Co., Ltd.) will be supplied by SMS Siemag, Germany, ([www.sms-siemag.com](http://www.sms-siemag.com)) from a single source. An outstanding feature of the plant design is the compact coating process. The chemical pre-treatment section, the subsequent strip coating process and the drying furnace are perfectly harmonized. For many products, the drying furnace uses only energy recovered from the process. This ensures low consumption of resources and energy while achieving a high product quality.

In addition to the coating process equipment, SMS Siemag's scope of supply comprises all mechanical equipment and the entire electrical and automation systems for the lines. Beside the design and manufacturing of the equipment, SMS Siemag will be responsible for the supervision of installation and commissioning.

To attain a strip surface condition that complies with the requirements of color coating, the strip will first be subjected to intensive cleaning and then covered with a passivating chemical coating. Two finish coaters using a high-quality control system ensure a uniform coating result perfectly complying with the specified coating thickness, while keeping media consumption low. The solvents will be evaporated

without any contact in a floatation furnace with the paint on the strip surface curing in the process. Along the entire furnace length, the strip will be uniformly heated by hot-air jets while being carried by an air cushion in a floating position. The fact that there is no mechanical contact between the strip and any part of the furnace guarantees an impeccable surface quality.

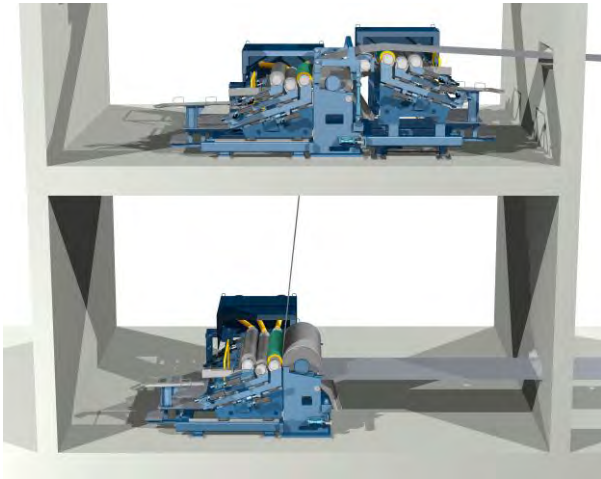
The evaporated solvents will be combusted in a highly efficient thermal process in a regenerative thermal oxidizer (RTO). This solution makes it possible to heat treat a wide range of products without any external energy input (autothermal operation).

To protect the finished surfaces and improve the properties for further processing, a wax layer can be applied to the color coated strips. This is done in a vertical roll coater using heated rolls.

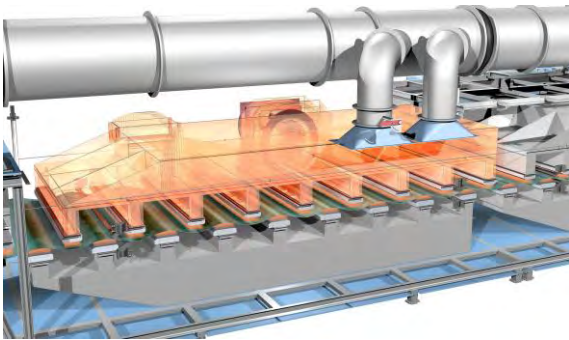
The line is designed for strips with a thickness of 0.15 to 0.5 millimeters and widths ranging from 950 to 2,000 millimeters. In the process section the strip will be coated at a process speed of 250 meters per minute, whereas in the entry and exit section speeds of up to 300 meters per minute can be attained. The production range includes 3xxx series aluminum alloys, as well as 5052 and 5182 alloys.

Main components of the line are two uncoilers and cross-cut shears, a stitching machine, entry accumulator, cleaning section, chemical coater, two finish coaters, a floatation furnace, exit accumulator, inspection section, wax coater, oiling machine, side trimmer, flying shear and two coilers.

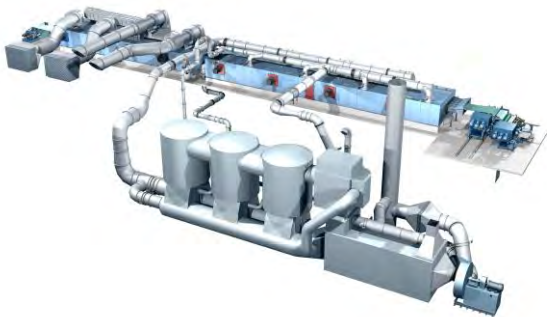
(48 lines of max. 65 characters per line)



Two finish coaters for color coating: a U-roll coater for coating the upper strip surface and an S-roll coater for two-sided coating.



In the GATV floatation furnace, the strip is uniformly heated by hot-air jets while being carried by an air cushion.



The evaporated solvents will be combusted in a regenerative thermal oxidizer (RTO), which makes an autothermal operation possible.

SMS Siemag AG is a company of the SMS group which, under the roof of the SMS Holding GmbH, consists of a group of global players in machinery and plant construction in steel and nonferrous metals processing. Its workforce of more than 13,500 employees generates sales worldwide totaling EUR 3.3 billion.