

PRESS RELEASE

Düsseldorf, February 17, 2020

Xinjiang Amer Qian Golding Cable has ordered a CONTIROD[®]* copper wire rod plant from SMS group

High production output, efficiency and quality in the
production of copper wire



A comparable CONTIROD[®]* casting and rolling plant for
copper wire.

Xinjiang Amer Qian Golding Cable Co., Ltd. from China, a subsidiary of Amer Group, has placed an order with SMS group for a CONTIROD[®]* casting and rolling plant to produce copper wire. In total, the new CONTIROD[®]* plant of the CR-3500 type has been the fourth plant for the Amer Group over the last decade. The new plant is

destined to be installed at the Urumqi location in the Xinjiang Province. The technological know-how of SMS group's copper specialists and the proven plant concept were the decisive factors for the order.

The high-performance wire rod line CR-3500 is designed for the production of up to 35 tons of ETP copper wire per hour corresponding to an annual production output of about 225,000 tons. ETP copper wire (Electrolytic Tough Pitch) serves as starting material for the production of conductors for the electronic and electrical industries. With the new CONTIROD^{®*} plant, Amer Group expands its production capacities to meet the demand in the western Chinese regions consolidating its position as one of the leading Chinese wire rod producers.

The CR-3500 for casting and rolling copper wire in one process is modularly structured and consists of a shaft melting furnace, a holding furnace, a twin-belt caster, a twelve-stage rolling mill with separate individual drives, a deoxidation and cooling section as well as a wire coil station, strapping unit and foil packaging plant.

For the CONTIROD^{®*} CR-3500 SMS group employs state-of-the-art technologies, for example Lambda control on the shaft furnace, frequency-controlled three-phase drives, and deoxidation and cooling line with separate media circuits. The above features enhance the comprehensive process efficiency while product quality is improved at the same time. Fuel, working material and power consumption can be significantly reduced. As a result, CONTIROD^{®*} is marked with the SMS group ecoplants label.

In addition to the proven Lambda control, an improved charging and distributing system for cathodes and return scrap is employed on the shaft melting furnace. This technology minimizes the consumption of natural gas by efficient heat transfer and increases product quality.

Molten copper is continuously cast in an almost horizontal way via the Hazelett twin-belt caster to a casting ingot with a cross-sectional area of 6,510 square millimeters. A homogeneous casting structure

and an even oxygen distribution in the casting ingot are key factors for a high-quality wire rod. A chamfer plane and a spraying unit optimally prepare the casting ingot for the additional rolling process.

In the rolling line with altogether twelve individually driven mill stands the rectangular casting ingot is rolled down to eight millimeters round wire. Due to a specific force control from the individual mill stands, a top wire quality with fine-grained homogeneous rolling structure can be attained.

In a two-stage deoxidation and cooling section a water-alcohol solution first of all reduces the oxide layer on the wire rod surface. In a second step the wire rod is cooled down with water until a configured target temperature is reached. A laser measuring system controls the final diameter of the finished wire rod.

In a wire coil station with automated strapping unit and foil packaging plant the finished copper wire is prepared for further transport. A previously applied wax coating ensures that an oxidation process by ambient air is prevented.

The CONTIROD[®]* CR-3500 is scheduled to go on stream at the end of the second quarter in 2021.

*CONTIROD[®] is a registered trademark of Aurubis Belgium.

SMS group is a group of companies internationally active in plant construction and mechanical engineering for the steel and nonferrous metals industry. It has some 14,000 employees who generate worldwide sales of more than EUR 2.8 billion. The sole owner of the holding company SMS GmbH is the Familie Weiss Foundation.