

PRESS RELEASE

Düsseldorf, March 03, 2021

SINOPEC SSPW invests in state-of-the-art spiral pipe plant from SMS group



The centerpiece of the SMS spiral pipe plant: the pipe forming station.

SINOPEC Shashi Steel Pipe Works (SINOPEC SSPW) has placed an order with SMS group for the supply of a spiral pipe plant for its facility in Jingzhou, China. The plant will be designed for both submerged arc and MAG (Metal Active Gas) welding (PERFECT arc[®]). SINOPEC SSPW plans to process higher material grades with the new plant, while boost productivity. This will be achieved thanks to a stable forming process and the PERFECT arc[®] technology developed by SMS,

enabling, for example, energy savings of up to 30 percent compared to equipment from other suppliers.

The new plant will produce spiral tubes for oil and gas applications within the 508 millimeter (20 inch) to 2,032 millimeter (80 inch) diameter range, with a maximum wall thickness of 25.4 millimeters (1 inch) and a length of 15 meters. The plant will be able to produce pipes in an online and in an offline process. After forming, the pipe can be either directly finish-welded on the machine (online) or tack-welded at a three to four times higher speed and finish-welded later, on separate finish-welding stands (offline).

The plant will be integrated into a production planning and management system (Industrie 4.0) and providing production data in real time. To this end, it features the latest automation systems, including Siemens TIA (Total Integrated Automation) control technology. The digitally controlled processes will further enhance production flexibility thanks to the seamless interaction of all automation components with the dedicated software and the higher-level systems and services.

The PERFECT arc[®] welding technology includes features to record and evaluate the measurement data and comes with the latest generation of laser line scanners for the precise advancement of the welding head and for measuring the welding profile right in the machine. The latest current-source technology with IGBT (Insulated Gate Bipolar Transistor) power electronics, in which control of the welding current is fully digitalized, achieves consistent welding results with a reduced heat input. The PERFECT arc[®] power source guarantees a high welding efficiency of 90 percent.

In the offline process, PERFECT arc[®] even adapts the welding parameters automatically to the welding/forming speed. In addition, state-of-the-art drive and hydraulic systems make the machine highly energy-efficient.

SINOPEC SSPW has been operating a plant for the production of longitudinally welded large-diameter pipes from SMS since 2002. That plant has been producing pipes of excellent quality for many years. The good experience with that plant has been a very strong

argument for investing in a spiral pipe plant from SMS. We trust in SMS group's expertise and expect an accordingly high quality from the new plant," says Qi Suo, President of SINOPEC Shashi Steel Pipe Works. "There are plans to extend the spiral pipe plant to include separate finish-welding stands at a later date. Thus, we will be perfectly set up to meet the future demand of the market."

The equipment for the new pipe plant is scheduled to be supplied in the third quarter of 2021. Following the installation, commissioning is planned to take place in the middle of the fourth quarter of 2021.



Detail view of the three-roller bending unit of the pipe forming station supplied by SMS.

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 2.9 billion. The sole owner of the holding company SMS GmbH is the Familie Weiss Foundation.