

PRESS RELEASE

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Shandong Weiqiao Lightweight Materials enters new business area with order of a 28 MN direct-indirect extrusion and tube press from SMS group

An extrusion all-rounder for the production of profiles
and thin-walled pipes for the mobility of the future



SMS group will deliver a complete package for Shandong Weiqiao Lightweight Materials : a 28 MN direct-indirect

extrusion and tube press complete with the design, assembly, electrics, hydraulics, and a technology and digitalization package. (Shown in the photo is a press of identical design).

Shandong Weiqiao Lightweight Materials Co., Ltd., China, a company of Shandong Weiqiao Pioneering Group, has placed an order with SMS group for the supply of a 28 MN direct-indirect extrusion and tube press. By making this investment in a multifunctional light-alloy extrusion press, the Chinese company is entering the new business area for extruded aluminium products. The Shandong Weiqiao's first extrusion press will be erected at the company's location in Zouping City, Shandong Province, China. The product range will include profiles and thin-walled pipes made of aluminium and aluminium alloys, primarily for use in the automotive sector, especially for the production of electric vehicles. The annual capacity of the extrusion press will be around 10,000 tons.

"We are investing in an extrusion press that meets all our technological requirements. The flexibility in production and the wide product diversity give our company a solid foundation for this new business area. SMS group's extrusion technology is the most advanced in its class and is resource-efficient too," says Zhang Guoshuai, Technical Project Manager at Shandong Weiqiao Lightweight Materials.

The extrusion press is capable of processing billets with a maximum diameter of 254 millimeters (ten inches) and a maximum length of 1,200 millimeters. The fully automatic circulation of the loose dummy blocks and the indirect dies is performed by an auxiliary robot.

SMS group is building the extrusion press for Shandong Weiqiao according to a proven design with the patented plate-type press frame, which makes the press structure much more rigid and thus more sturdy. The built-in, high-precision linear guides are practically maintenance-free.

Thanks to the servo drive technology used for all auxiliary functions as well as the EcoDraulic concept that reduces energy consumption, the press boasts a highly favorable energy balance. All pumps that are not

required during the extrusion process are switched off via the automatic start-stop feature.

SMS group's modular technology and process control package offers additional possibilities for optimization. The CadEX[®]/3 (Computer Aided Direct Extrusion) system for isothermal and isobaric direct extrusion calculates the optimum extrusion speed and billet temperature for each profile type. This enables a higher surface quality and material structure of the profile to be achieved, which also significantly reduces the scrap rate at the same time. The PICOS[®] software from SMS documents all process and product-relevant data, which can be retrieved for certification purposes, e. g. for automotive engineering. With the integrated IBA measuring and analysis system, fault diagnoses can be performed remotely, thus reducing downtimes during production.

SMS group will deliver the press in pre-assembled equipment units to Zouping City, which will significantly reduce the installation time at the customer's site. The acceptance test for the new 28 MN direct-indirect extrusion and tube press is scheduled for the third quarter of 2022.

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.