

PRESS RELEASE

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Wuxi Paike commissions SMS group to supply the world's largest ring rolling machine for the production of engine rings

Efficient production of new-generation aircraft engines



Thanks to the new ring rolling machine supplied by SMS group, Wuxi Paike New Materials Technology is able to roll safety-relevant components for aircraft engines made from titanium and nickel-based alloys.

Wuxi Paike New Materials Technology Co., Ltd., based in Wuxi, Jiangsu Province, China, has placed an order with SMS group to deliver the world's largest ring rolling machine for manufacturing components for aircraft engines. The RAW 1000/800-10000/1500-EH is the first

ring rolling machine in the world that is capable of rolling jet engine rings with a maximum height of up to 1,500 millimeters. This dimensional capacity will enable Wuxi Paiké to manufacture the rings required for the next generations of jet engines in an efficient way. "SMS group's decades of experience in ring rolling machine engineering and its significant technological edge over the competition were crucial factors in our decision to award the contract for the ring rolling machine to SMS group," says Mr. Shi, CEO of Wuxi Paiké New Materials Technology.

Another major advantage for the customer is the innovative electrohydraulic direct drive concept developed by SMS group for all process axes. The RAW-EH ring rolling machine offers not only more precise control compared to hydraulic-only drives, it also enables substantial energy savings to be made. The time required to assemble and install the machine is much shorter, as it does not have a central hydraulic station and requires far less foundation pipework. The ring rolling machine ordered boasts a radial rolling force of 1,000 tons and an axial force of 800 tons. SMS group will supply the machine fully equipped with electrical equipment, hydraulics, rolling tools, and an innovative software and technology package.

As well as the main product, rings for civil aircraft jet engines that are made from difficult-to-form materials such as titanium and nickel-based alloys, the machine is also designed to roll carbon steel rings up to a diameter of ten meters. Thanks to this multi-purpose configuration, the first of its kind so far, Wuxi Paiké is able to respond flexibly to both current and future market demands and manufacture a wider range of different high-end products.

Wuxi Paiké is a medium-sized company with 350 employees, based in Wuxi, Jiangsu Province, China. Forgings made by Wuxi Paiké are used in the chemical, shipbuilding, power engineering, and aerospace industries. As a well-established manufacturer of seamless rolled rings for aerospace applications, Wuxi Paiké has all the necessary infrastructure in place to operate the new ring rolling machine.

This order represents a further expansion of SMS group's leading market position in the field of ring rolling machines for the aerospace industry.

Commissioning of the RAW EN is scheduled for the fourth quarter of 2021.

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.