

PRESS RELEASE

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New order for SMS Meer

Mechanical expander for JSC Chelyabinsk

JSC Chelyabinsk, Russia has placed an order with SMS Meer GmbH, Mönchengladbach, Germany, for the supply of a further single-head mechanical expander, the second of this kind to be ordered from SMS Meer.

The mechanical expander will be employed to expand longitudinal SAW steel pipes with diameters from 40" to 48" (1,016 to 1,219 mm) and lengths from 10 to 12.2 m in material grades up to X80. The wall thicknesses range from 10.0 to 22.2 mm. The maximum expander force in the main cylinder is designed for 7.5 MN.

The successful commissioning of the first expander and the short delivery time thanks to the available technical know-how were among the deciding factors for the placement of the order with SMS Meer.

The main tasks of the mechanical expander are to size and straighten the pipes. Gradual cold forming of the pipes over an expanding head inserted into the pipe results in a plastic deformation of between 1.0 and 1.5 %, so that the pipes are sized from the inside and straightened over their entire length after final welding. This inside sizing facilitates the later laying of the pipes as the cross-

sections are optimally matched. This aspect is particularly important when pipe sections have to be cut in the field, as the pipes are sized over their whole length. The deformation of the pipe to beyond its yield strength subjects pipe body and weld seam to an extreme load above that to be expected later in the laid pipeline. Furthermore, this deformation also compensates the internal stresses created during forming of the pipe.

Due to their physical and mechanical properties and their geometric quality expanded pipes are being increasingly employed in gas and oil pipelines.

Erection and commissioning of the mechanical expander are scheduled for 2006.

SMS Meer GmbH forms part of the Tube, Long Product and Forging Technology Business Area of the SMS group.

(34 lines with max. 55 letters)

SMS GmbH is the holding for a group of companies internationally active in plant construction and mechanical engineering relating to the processing of steel, non-ferrous metals and plastics. The group is divided into the Business Areas of Metallurgical Plant and Rolling Mill Technology, Tube, Long Product and Forging Technology and Plastics Technology. In the year 2004 some 9,500 employees worldwide generated a turnover of about EUR 2.20 bn.