

PRESS RELEASE

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NLMK Group, Russia, commissions SMS group to supply two gas recovery systems for its site in Lipetsk

Improving the climate balance with environmental
technology and know-how from SMS group



Gas holder for converter offgases – SMS group's expertise in
environmental engineering.

NLMK Group, Russia, has placed an order with SMS
group for the delivery of two gas recovery systems for
its Lipetsk site.

NLMK operates two BOF steelmaking plants with three converters each.

Up to now, the offgas containing carbon monoxide that is generated during the converter process has been burnt off on a flare and discharged unused into the atmosphere as CO₂. The new gas recovery systems from SMS group will allow this gas to be collected in future and used to produce heat and electricity in NLMK's power generation plant, which is currently under construction. In this way, the plant's carbon footprint will be reduced by around 650,000 tons of CO₂.

These savings equate to the average CO₂ balance of a town of approx. 60,000 inhabitants.

Steelmaking shop no. 1, which has three 160-ton converters, is to be equipped with a switch-over station, a gasholder with a capacity of around 60,000 cubic meters, and a gas transfer station. Steelmaking shop no. 2, featuring three 330-ton converters, will be provided with a switch-over station, a gasholder with a capacity of around 90,000 cubic meters, and a gas transfer station.

The switch-over stations will be installed between the primary gas blowers and the gas flares. They consist of several special-purpose valves that were designed by SMS group and constructed specifically for cyclical converter operation. They allow the system to be safely switched between flare and gas recovery mode.

Both gasholders are operated with a diaphragm seal, which is adapted to suit the fluctuating climatic and operating conditions. The new gasholders will enable all three converters to be operated, with two converters running simultaneously in gas recovery mode.

SMS group's scope of supply covers the engineering, delivery of components, and technical support for erection and commissioning.

Commissioning of the environmental facilities is scheduled for 2022.

With its project to build a new power generation plant to produce electricity from secondary technological gases, NLMK is making its contribution to achieving the goals of the "Clean Air" project as part of the "National Ecology Project" in Russia.

NLMK is one of Russia's largest steel producers and is active in markets around the world.

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.