

Phone: +49 211 881-4449
Fax: +49 211 881-774449
Mobile: +49 151 40226502
E-mail: thilo.sagermann@sms-group.com
Thilo Sagermann

PRESS RELEASE

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MMK relies on PQA[®] for quality management across all processes
**Industrie 4.0 system from SMS group for quality assurance at
integrated steel plant in Magnitogorsk**

Magnitogorsk Iron & Steel Works (MMK), Russia, has placed an order with MET/Con, an SMS group company (www.sms-group.com), for the implementation of the quality management system PQA[®] (Product Quality Analyzer). Together, MMK, SMS group and MET/Con intend to set a milestone with this project and show how the location's performance and quality levels can be improved thanks to total process and production transparency.

MMK produces around 10 million tons per year quality steel at its site in Magnitogorsk; this steel is used in the construction and automobile industries, for example, and for pipeline and mechanical engineering. As part of a company-wide Industrie 4.0 initiative, MMK will implement the new PQA[®] quality management system in order to further improve quality levels across all processes in Magnitogorsk, as well as stabilize production processes, improve on-time delivery performance, and thus improve its competitive position.

The PQA[®] system is a holistic IT solution that operates on know-how based expert rules. Among other things, the advanced software and database solution from QuinLogic GmbH in Aachen, also an SMS group company, is to be used. This approach has been successfully implemented in the past at selected flat steel and long product manufacturers with a wide range of downstream processing stages.

The PQA[®] system conducts an online analysis of process, production, and quality data from steel production, through casting and rolling, right down to surface finishing and refining. The PQA[®] expert rules, which can be freely configured and fed with specific know-how, take into account customer and order-specific information in the quality assessment process or when the material is approved for further processing.

The modular software structure comprises a LogicDesigner for flexible rule adaptation, a quality assessment module, and a web-based reporting system. The centerpiece of the quality management system is the DataCorrelator software module, which also covers current topics such as big data analyses and artificial intelligence (AI). Various intelligent mathematical evaluation methods, including pattern recognition options, identify and indicate correlations that can be directly used for process optimization.

(40 Zeilen à max. 65 Zeichen)



The PQA[®] quality management system from MET/Con for an improved level of quality, stable production processes, enhanced on-time delivery performance and ensured competitiveness.

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 13,500 employees who generate worldwide sales of more than EUR 3 billion. The sole owner of the holding company SMS GmbH is the Familie Weiss Foundation.