

A Customer's Report:

# Stress Test for Tap-Changers

Hard conditions in a Russian steel mill

The most important facility at our plant is the DSP-60 furnace with an annual capacity of 300,000 tons. An Elektroazawod (Moscow) 40-MVA transformer has been in operation there since 2002. When it came to the tap-changer, we decided to use a Reinhausen VACUTAP® VVIIND6007610192 G for the first time. This tap-changer is used under very extreme operational conditions. During the melting process, it has to perform more than 50 switching operations – with a total of 17 melting processes per day! It has already carried out more than one million switching operations without a hitch.

To us, the most important features are the operational switching speed, the switching safety, and the general operating safety. The Reinhausen tap-changer excels with its stable design. There has been no disturbance whatsoever during operation.

The technical maintenance and repairs of the tap-changer are carried out solely

by the Reinhausen representative Mr. Kulkov of OOOMR in Moscow. Due to the very strenuous operating conditions of the tap-changer, we have revision and technical maintenance carried out on an annual basis – dependant upon the actual number of performed switching operations.

We are completely satisfied with the quality of the maintenance. One has to know that this work can only be done while the routine repair work is carried out on the furnace. It is, thus, not possible to schedule the work too far in advance. Under ideal conditions, the technical maintenance work only requires two shifts which means less than one day! Since we have never had any problems with Reinhausen products and services, we will continue to use this supplier also in the future. —

**Senior Engineer Klepikov L.V.**  
**Senior Power Engineer Schaldunov S.V.**

## Kamasteel: Facts and Figures

“000 MZ Kamastahl Ltd., Perm, Russia”  
Executive Management:

Director: Stecklein Vladimir Antonowitsch.  
Senior Engineer: Klepikov Lev Valentinovitsch.  
Senior Power Engineer: Schaldunov Sergej Vasiljevitsch.

Founded: 1995

## Production Details:

Molten steel, sheet metal production, high quality rolled goods, forging and stamped products, upgrading. The production program includes over 100 steel grades. “Kamasteel” is responsible for 16 % of the entire forging production in the Russian Federation and 13 % of the exports. The stamped products amount to 4.5 % of the Russian market. And 1 % of the market share in sheet metal. “000 MZ Kamasteel” is one of the largest steel mills in the Ural Mountain region. It has been awarded the following certificates: Det Norske Veritas (Norway), LloydRegister (UK), SLV Duisburg Baumaterialien (Germany).

[www.kamasteel.com](http://www.kamasteel.com)

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