

Press Release

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Voith Roof-Mounted Cooling Systems for Russian Railways

Voith will be fitting new multiple train units of RZD Russian Railways with roof-mounted cooling systems. With a new concept and cold-resistant materials, Voith is meeting a specific requirement: the cooling systems have to operate reliably at temperatures of up to minus 50°C.

RZD Russian Railways have the 50 multiple units built at Metrovagonmash MVM, a subsidiary of Russia's largest rail vehicle manufacturer Transmashholding TMH. Stadler Rail will deliver 100 four-axle articulated railcar drive components with diesel-electric drive systems. Voith will fit these units with roof-mounted cooling systems for cooling the diesel engine, the inverter and the machine compartment. The cooling systems are designed for extreme temperatures of up to minus 50°C and also up to plus 40°C. The core piece is the Voith developed "SilentVent" fan, which ensures that the required noise emission levels are observed.

New Concept for Low-Temperature Operation

The pre-heating process of the machine compartment is utilized for warming the hydrostatic oil so that it reaches its required minimum temperature. As a result there is no need for the otherwise necessary preheating of the hydrostatic system. The cold-resistant materials of the roofmounted cooling systems ensure the required robustness during extreme minus temperatures. The cooler housing is made from aluminum in lightweight design, ensuring optimum weight ratios.

Voith will deliver the first two roof-mounted cooling systems as well as other components such as hydrostatic units and the machine compartment fan to Stadler in June and July 2012. Series deliveries will commence from mid-2013. The first complete train is expected to enter service in Russia in 2014. June 2012



Voith sets standards in the markets energy, oil & gas, paper, raw materials and transportation & automotive. Founded in 1867, Voith employs almost 40 000 people, generates €5.6 billion in sales, operates in about 50 countries around the world and is today one of the biggest family-owned companies in Europe.

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