

Press Release

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Voith Turbo drive systems for China's first hybrid rail vehicles

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The Changchun Railway Vehicles Company Ltd. (CRC) of China is planning to build 30 hybrid rail vehicles featuring RailPack 400DE drive systems from Voith Turbo. Each three-part vehicle will have two of these systems, both with a 375 kW diesel engine and a 345 kW generator. The first three RailPack 400DEs have undergone comprehensive testing at CRC's own test ring in Changchun and at Beijing Jiaotong University. The rail vehicle itself is expected to be tested and approved by the China Railway Corporation, the country's national railway operator, in 2017.

"This is an absolute first for China," **Roland Aeugle**, rail functional head, comments. The hybrid rail vehicles are to be used in those city suburbs with only partial electrification. The RailPack 400DE will come into play here, while the operator will be able to switch to electrical drive outside these areas, with the added benefit of zero emissions.

The hybrid vehicles can reach a top speed of 120 km/h with the diesel-electric drive The RailPack 400DEs also feature a quick-switch system from electric to diesel-electric drive. In addition, the Voith drive system can handle extreme temperatures of minus 40°C.



"The cooperation between CRC and Voith on this pioneering rail project is based on Voith's readiness to use existing tried-and-tested technology to develop customer-specific solutions," Aeugle concludes.

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Voith RailPacks are drive systems for use in single-segment and multi-segment diesel railcars for commuter, regional, national and intercity service. They can be supplied as diesel-mechanical, diesel-hydraulic and diesel-hydraulic models. They are available with an engine performance of 294 kW to 735 kW.

Voith Turbo, a Group Division of Voith GmbH, is a specialist in intelligent drive solutions and systems. Customers from highly diverse industries such as oil and gas, energy, mining and metal processing, mechanical engineering, ship technology, rail and commercial vehicles rely on advanced technologies from Voith Turbo.

Voith sets standards in the markets of energy, oil & gas, paper, raw materials and transport & automotive. Founded in 1867, Voith today has more than 39 000 employees, sales of €5.3 billion and locations in more than 50 countries, making it one of the largest family-owned companies in Europe.

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