



Press Release

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FEV and Hilite Partnering on Series Production of Two-Stage, VCR Connecting Rod

Aachen, February 2018 – The FEV Group and automotive parts supplier, Hilite International, are partnering to develop and manufacture a two-stage, variable compression ratio (VCR) connecting rod. The goal of this partnership is to leverage synergies in the development of the product and devise a cost-efficient solution for serial production.

This collaboration is mutually beneficial for both parties. FEV will provide the development and systems expertise, while Hilite, a systems supplier with vast experience in production, has the know-how to produce large quantities of components.

According to Professor Stefan Pischinger, President and CEO of the FEV Group, “we have found Hilite to be a strong partner for the final phase of development for the VCR connecting rod, as they have established themselves as a systems supplier within the market.” On the subject of the cooperation, he adds, “VCR connecting rods are an important technology for the future of the internal combustion engine to considerably reduce CO₂ and exhaust emissions in real operation. FEV’s solution has the advantage that it can be incorporated into nearly any engine without an entire redesign.”

David Wei, CEO of Hilite, based in Marktheidenfeld, Germany, gives a positive assessment of the partnership, which initially is scheduled for a period of two years.

“We supply our customers with advanced and efficient solutions,” said Wei. “By collaborating with FEV and combining our expertise, we will now be able to offer our customers this value proposition in the area of VCR.”

The VCR technology meets the challenges of downsizing and the associated increase in combustion pressure by enabling optimal adjustment of the compression ratio at any time. This innovative approach is a reasonable complement to the wide variety of future powertrain solutions for affordable, personal mobility. The optimized internal combustion engine will continue to play a major role alongside purely electric drives – in particular, for long-distance travel – and in hybrid vehicles. That claim is even more valid when considering that the properties of future, renewable fuels (referred to as “e-fuels”), encounter favorable conditions within a VCR engine.

The two-stage VCR connecting rod developed by FEV is already being used in multiple demonstration vehicles. The company also has prototypes for heavy-duty and large engines, which have already proven their performance in a comprehensive series of tests.

About FEV

The FEV Group, with headquarters in Aachen, Germany, is an internationally renowned service provider in vehicle development. The skill spectrum of FEV includes consulting and the development and testing of innovative vehicle concepts, all the way up to serial production. In addition to engine and transmission development, vehicle integration, and the calibration and homologation of modern vehicle powertrains, the development of hybrid and electric drive systems as well as alternative fuels is constantly increasing in

importance. Another area of activity includes optimizing electronic control systems as well as the increasing connectedness of cars. In this context, one particular focus is the continued development of autonomous vehicles.

As a globally operating service provider, the company offers these services to its customers from the transport sector worldwide. The FEV Group employs over 4,800 highly qualified specialists in modern development centers close to our customers at more than 40 locations on four continents.

About Hilite

Since it was founded in June 1999, Hilite International has grown into a global automobile parts supplier. The focus is on the development and production of systems and components for improving fuel consumption and reducing emissions. The company demonstrates its comprehensive experience and vast expertise with advanced products for engines and powertrains.

Hilite has just under 1,600 employees at eight locations in Europe, North America, and Asia.