

PRESS RELEASE

Paus and Danfoss electrify mine vehicles

- Cooperation of Paus Maschinenfabrik from Emsland with Danfoss Mobile Electrification
- Universal vehicle MinCa 5.1 with electric and hybrid drive available
- Health protection for miners through emission-free electromobility / Cost reduction through lower fuel and ventilation costs



Emsbüren / Lappeenranta (Finnland) / 11th June 2018. The inhalation of exhaust gases from diesel vehicles is a significant health risk for mine workers. Often lung and respiratory diseases are the result of many years of underground activity. Emission-free electromobility can reduce the risks - a new trend to which the globally operating specialist for mining and tunneling vehicles, Emsbürener Hermann

Paus Maschinenfabrik GmbH, now also devotes. The first electric and hybrid vehicles from the cooperation with the company Danfoss Mobile Electrification will be delivered to customers shortly.

In Canada, the use of diesel vehicles in first mines has already been banned. With the MinCa 5.1, the family-owned company Paus is now offering for the first time a universal vehicle for mining as a hybrid or electric variant, which corresponds to the trend towards locally emission-free underground mining. With its compact dimensions (4 * 1.75 meters) and a payload of 1.2 tons, it is particularly suitable for passenger and material transport in mines.

The electric drive train system EDITRON is supplied by Danfoss Mobile Electrification for the all-wheel-drive off-highway vehicle MinCa 5.1 in two variants:

- As a pure electric drive with 50 kilowatt electric motor and a battery system with 50 kilowatt hours for 3-4 hours of work
- As a hybrid drive with 50 kilowatt electric motor, a range extender and a battery system with 20 kilowatt hours for 12 hours of work

In addition to the health protection of mine workers, customers based in, for example, North and South America, Russia or Australia benefit from up to 50 percent lower fuel costs for construction site work. In addition, the abandonment of diesel vehicles generally improves air quality - so the cost of ventilation systems can also be minimized.



The universal vehicle MinCa 5.1 is produced in Emsbüren and has been on the market for two years as a diesel vehicle. The electric and hybrid version, which was developed and tested in cooperation with Paus and Danfoss in recent months, is now going into series production. The first copies of the four-wheel drive vehicle will be delivered to customers of the two companies later this year.

Danfoss Mobile Electrification, part of Danfoss Power Solutions, is a specialist in smart electric and hybrid powertrains for marine, commercial and heavy-duty vehicles based in Lappeenranta, Finland. Danfoss Mobile Electrification was created following the acquisition of Danfoss' original Visedo Oy company, founded in 2009, in December 2017. The drives are suitable for hybrids and electrical systems in the 30 to 2,000 kilowatt power range.

About Danfoss Mobile Electrification (<u>www.visedo.com</u>)

Danfoss Mobile Electrification specializes in hybrid and electric powertrain systems for off-highway and marine markets. A business division of Danfoss, it develops and manufactures high-performance power systems for heavy duty vehicles, machines and marine vessels, based on its unique synchronous reluctance assisted permanent magnet (SPRM) technology. Danfoss Mobile Electrification powertrains deliver market-leading efficiency and are suitable for hybrid and electric applications within the power range of 30kW to 2,000kW.

Based in Lappeenranta, Finland, Danfoss Mobile Electrification has assembled an award-winning team to work on the technologies that will enable the world of tomorrow to do more with less.

Editron is the new name for the complete electric drivetrain system developed by the company. It is controlled by powerful software that optimizes each individual component of the electric or hybrid drivetrain, leading to far more intelligent management of power distribution in order to deliver maximum efficiencies for the end user.

Prss Contact:

Martin Jendrischik Life Size Media martin@lifesizemedia.de +49(0)341/52576050