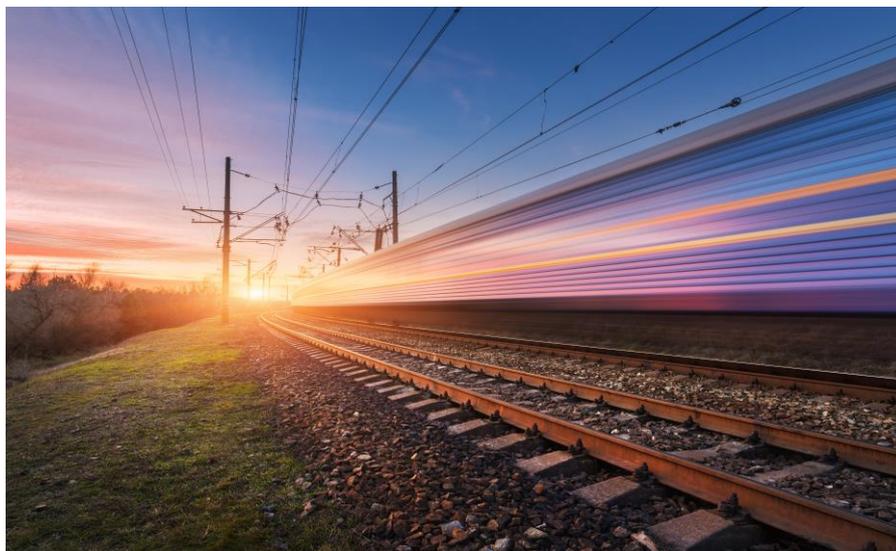


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## PantolInspect launches new Digital Twin platform For Pantograph Condition Monitoring



Copenhagen, Denmark, 2020 – PantolInspect, the market-leading manufacturer and supplier of 3D automated and real-time wayside pantograph monitoring systems, is proud to launch its new digital twin platform for pantograph condition monitoring. The new platform which will be introduced to infrastructure owners, rolling stock operators and maintenance workshops in both the electrified rail and light-rail industries, has been launched in November 2020.

The PantoSystem now uses deep learning combined with ultra-high-speed 3D laser scanners and offers an AI Cloud Service with its Web-client platform. The new digital twin platform of the PantoSystem is now capable of automatically identifying each type of train pantograph, which provides a more accurate measurement. This is very beneficial to infrastructure owners, who need to manage numerous types of rolling stocks, since the use of AI for pantograph monitoring, makes it much faster to train the system in recognizing diverse type of trains and pantographs. The new platform of the PantoSystem enables Infrastructure owners to get their pantograph monitoring system up and running more rapidly, which will make a significant contribution to their decision intelligence and asset management strategy.

*Malte Breiting, the CEO of PantolInspect, said: “Combing AI with highspeed 3D laser triangulation, opens up for a whole new level of measurement confidence, that will change how the industry can benefit from automatic measurement systems”.*

With the help of big data analytic tools, the PantoSystem will play a significant role in improving predictive maintenance of railways. In this way, a larger amount of data will be processed at faster speeds, meanwhile powerful deep learning techniques is expected to enable the PantoSystem to monitor customized trends and patterns on equipment failure, on the entire fleet of trains. These advanced data analytics will provide railway operators with valuable insights on the condition of the trains, enabling them to improve the operational efficiency of their equipment and reduce cost of maintenance by significantly reducing the number of damages and preventing network disruptions. Furthermore, the PantoSystem will provide infrastructure owners with a very powerful tool for early detection of systematic pantograph damages caused by infrastructure defects, which will enable them to optimize their railway infrastructure. With the new digital twin platform combined with its ultra-high-speed 3D scanners, PantoInspect will be able to expand its digitalization capabilities by training the monitoring system to recognize almost anything related to the railway infrastructure such as defects on the roof of the train. These capabilities will allow PantoInspect to support the digital transformation of the railway industry.

### **About PantoInspect**

PantoInspect was the first company world-wide to develop an automated pantograph inspection system, in partnership with Banedanmark, the Danish railway infrastructure manager, around 2008. Today, PantoInspect is one of the world's most recognized and respected brands, and a market-leading manufacturer and supplier of automated and real-time Wayside Pantograph Monitoring systems to the global Railway industry. We have supplied several pantograph monitoring systems to some of the world's leading infrastructure managers and rolling stock operators such as Deutsche Bahn, RATP, Infrabel, Sydney Trains, Network Rail and TRA.

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