

PRESS RELEASE

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Remote-controlled rail loading in Finland

The seaport operators in Pori, Finland, rely on a radio-controlled shunting solution from Vollert for the rail loading of iron sulphate as bulk goods. A Tandem DER 150 shunting robot provides and moves freight trains weighing up to 2,000 tons. The coupling system is compatible with both Eastern and Central European systems.

The iron sulphate is stored and loaded in the port of Pori, protected from the weather. For loading by wheel loader, the freight trains are moved into a loading hall and later made available again for further transportation outside. This task is performed by an economical shunting solution from Vollert - the Tandem robot DER 150. The radio-controlled vehicle unit allows the wheel loader driver to operate the entire 500 m long track section. The necessary thrust is provided by a stage V diesel-electric drive, which powers the four electric motors on the four axles of the tandem machine. The DER 150 has a total weight of 100 tons on the rails. The tensile load of 150 kN allows the reliable pulling of up to 2,000 tons of weight at a speed of 0.5 m/s.

Automatic roof system and flexible coupling

The iron sulphate is also protected from rain and weather in the freight wagons. For this purpose, the open-top wagons are fitted with lockable roofs. These can be opened and closed hydraulically by radio by the shunting robot. A corresponding hydraulic unit with 22 kW provides the necessary pressure.

In addition, the robot in the Port of Pori offers the option of shunting both wagons with Eastern and Central European couplings. This means that both couplings with central buffers (SA3) and the outer buffers commonly used in Central Europe can be coupled and moved with the shunting solution from Vollert. The SA3-compatible wagons are also coupled and uncoupled automatically. The DER 150 has its own compressed air compressor to release the wagon brakes.

Robust technology for harsh conditions

Vollert installed several repeaters along the 500 m radio link to ensure reliable transmission of the control data inside and outside the track system. The system ensures automatic switching between the stations for optimum control of the transmission and reception power. Another automatic sanding system uses a measuring wheel to record the actual speed of

the robot and increases the friction of the four drive axles in the event of slippage. This ensures reliable shunting even in adverse weather conditions such as rain, snow and ice. Remote maintenance access also enables remote control of the shunting robot and therefore fast and direct support from the Vollert service team in Germany at any time. All of the robot's performance data, such as operating hours and consumption, can be evaluated over longer periods of time in the dashboard.

About Vollert Anlagenbau GmbH

As an innovator, Vollert Anlagenbau GmbH develops economical shunting systems for connecting and secondary lines. Since the 1950s, Vollert's stationary, cable-mounted shunting systems are used worldwide for the shunting of railway wagons and trains. Moreover, Vollert delivers stand-alone shunting machines, heavy-duty transport trolleys and transfer platforms for reliable and efficient operations in refineries, mines, ports, steel and cement plants, explosion protection areas, train wash facilities and maintenance facilities.

Vollert's plant and machine solutions are deployed in more than 80 countries around the world and in Asia, North and South America the company's own subsidiaries strengthen in addition the sales activities. Vollert employs more than 300 people at its company headquarters in Weinsberg. **www.vollert.de**

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Image 1+2 (Source: Vollert)

Olmar Management B.V nutzt zur Bahnverladung von Schüttgut im finnischen Pori robuste Technik aus Deutschland: Der funkgesteuerte Rangier-Robot Tandem DER 150 von Vollert verfügt über eine flexible Kupplung für ost- und mitteleuropäische Waggonssysteme sowie über ein Hydraulikaggregat zum Öffnen der Waggondächer.



Image 3 (Source: Porin Satama Oy)