

## **PRESS RELEASE**

*Weinsberg, 26 March 2021*

### **State-of-the-art shunting technology speeds up soybean and corn handling at ADM do Brasil**

**The agricultural group Archer Daniels Midland (ADM) relies on two cable-powered shunting robots STANDARD KR 70 and two diesel-electric shunting robots PRO DER 240 from the German shunting specialist Vollert for handling soy and corn at its modernized shipping terminal in Santos, Brazil. In perfect interplay, the shunting machines handle the shunting of freight trains weighing up to 3,900 t in 24-hour operation.**

With a service weight of over 100 t, the two shunting robots PRO DER 240 from Weinsberg are two real heavyweights in southern Germany. Equipped with two bogies each and four spring-mounted drive axles, their frequency-controlled diesel-electric drive provides 240 kN tractive effort - and thus enough power to shunt up to 3,900 tons. Control is either from the two operator consoles on both sides or by radio, and the coupling can also be opened either automatically or manually. Due to the numerous coupling operations involved in weighing, unloading and returning the wagons in ADM's port terminal, this means a considerable time advantage. "The partial automation, but above all the newly organized shunting of the full and empty wagons by a total of four shunting robots, bring significant performance improvements," explains Christian Langner, Vollert's project manager. "Previously, the wagon feed in the terminal was carried out purely manually with the help of tractors."

#### **Perfect interaction**

In ADM's terminal, unloading is divided into two areas. The synchronized shunting of full freight cars is handled by diesel-electric shunting machines, while two cable-powered shunting robots return and assemble the empty trains. The DER 240 shunting robots move trains of up to 30 wagons weighing 130 t each, positioning each wagon individually on a scale before they are moved on and uncoupled for unloading.

In the shunting area after unloading, two smaller shunting robots KR 70 from Vollert follow. They guide the empty wagons to another scale and then assemble the empty trains with a total weight of up to 900 tons. A motor-controlled cable drum for energy supply enables the KR 70s to travel a distance of around 320 m, so that their all-wheel drive is emission-free thanks to four electronically controlled electric traction drives with a total output of 60 kW.

The two KR 70 shunting robots are controlled mainly by radio remote control or alternatively from their driver's cab. In the long term, complete automation of the entire processes is also possible. "Our four systems are arranged in parallel in duplicate and operate with a time delay. This results in perfect interaction in shunting operations", says Wesley Gomes, Managing Director of Vollert's Brazilian subsidiary, explaining the concept. "In addition, this allowed us to retain the existing track system without any replanning."

### **Sustainable modernization for low-dust loading**

With the new construction of the port terminal, located about 80 km from Sao Paulo, ADM invested a total of about EUR 60 million in sustainable port operations. The modernization will eliminate up to 80 percent of emissions of dust and grain particles generated during loading. For example, the loading hall was equipped with automatic gates for dust protection. The new shunting machines also help reduce emissions. At the same time, ADM increased capacity at the terminal from 6 to 8 million tons of agricultural products per year.

### **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 and South America the company's own subsidiaries strengthen in addition the sales activities. Vollert employs more than 250 people at its company headquarters in Weinsberg. **[www.vollert.de](http://www.vollert.de)**

### **Press contact**

#### **Frank Brost**

Senior Marketing Manager

Vollert Anlagenbau GmbH  
Stadtseestr. 12  
74189 Weinsberg/Germany  
Phone: +49 7134 52 355  
Fax: +49 7134 52 203  
E-mail: [frank.brost@vollert.de](mailto:frank.brost@vollert.de)



**Image 1**



**Image 2**