

PRESS RELEASE

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Paint shop for agricultural machinery from JACTO

The heavy-duty specialist Vollert from Weinsberg, Germany, is supporting the agricultural machinery manufacturer JACTO in Brazil with the construction of a new combined powder and wet paint coating system. Large parts up to 10 m long, 2.5 m high and weighing 4 tons are coated, including for large coffee and sugar cane harvesters as well as planting and fertilizing machines. To speed up the time-consuming dip coating process, product carriers can be combined for smaller workpieces and separated again for larger workpieces.

The Brazilian agricultural machinery manufacturer JACTO is one of the largest manufacturers of planting, fertilizing, spraying and harvesting machines in South America. JACTO is currently building a new 96 million square meter plant in Pompéia in the state of São Paolo and is investing in modern Industry 4.0 technologies. This includes an automated coating system for large parts with conveyor technology from Vollert: two lift stations, six manipulators with a span of 12 m and a discharge station ensure that the workpieces are distributed between the five process lines, which are around 100 m long. The intralogistics specialists combine different drives such as friction wheels and rack and pinion slides on the manipulators and ensure damage-free transportation to the workstations with their level 1 control system.

Automated transport of large parts

The transport and pushing on and off of the product carriers is automated throughout the coating system. At the beginning, two Vollert lift stations guide the product carriers with the workpieces into a 10 m high double-decker buffer store, where they are stored by two manipulators and fed on demand into the conveyor line to the washing booth and sandblasting. Three further manipulators, distributed on a track, then take over the loading and unloading of the product carriers to the pre-treatment and e-coating dip coating tanks and then transfer them to the parallel lines for drying, wet painting or powder coating. At the end, a final manipulator takes the coated workpieces to the inspection stations and back to the two-storey parts buffer, from where they are transferred to further production via a discharge station. There are also several buffer stations at different points in the system to allow the workpieces to be ejected or pulled forward at any time. Protective devices safeguard the automatic areas of the manipulators as well as the manual work areas with

personnel traffic. The feeding stations are protected by personnel light barriers, among other things.

Shorter throughput times thanks to combined goods carriers

In order to reduce the throughput times in the dip tanks and drying booths, Vollert has for the first time combined several product carriers in the JACTO system. While all workpieces must be freely accessible hanging from a product carrier during blasting and painting, product carriers with smaller workpieces can be combined during the time-consuming dip coating and drying processes. Three guide rails were arranged in parallel on the manipulators for this purpose. The stacks of one, two or three product carriers are formed in the dipping station and separated again after drying when they are stored in the buffer store.

"The three-lane collection and separation of the goods carriers was interesting for us in terms of control technology, as was the associated data management of the workpieces. As a result, we achieve significantly faster throughput times," explains Jens Tangel, the responsible Senior Sales Manager at Vollert. Correct control of the different drives on the manipulators is also important. Acceleration and travel speed must be optimally coordinated to prevent the workpieces from oscillating. Speeds of 1-8 m/min are realized on the process lines. The manipulators travel at 1.5 m/min over 85 m.

"The interface coordination with all parties involved on the construction site is also crucial for the success of the project and the smooth commissioning," explains Wesley Gomes, CEO of Vollert do Brasil. On-site support and coordination was provided by Vollert's Brazilian subsidiary based in Belo Horizonte. The engineering and production came from Vollert in Germany.

The project for JACTO is Vollert's largest surface technology order to date in Brazil. In 2018, Vollert already supplied the conveyor technology for a combined assembly, welding and painting line for RANDON, the largest manufacturer of truck trailers and freight wagons in Latin America.

About Vollert Anlagenbau GmbH

As specialists for heavy loads and large parts, Vollert Anlagenbau GmbH develops turnkey intralogistics concepts for the aluminum and metal industry. As a general contractor and full-service provider, the service range encompasses state-of-the-art material flow, storage and packaging technology as a stand-alone solution or integrated into a larger logistics environment.

Whether fully automated mega-high bay systems for aluminum coils, intelligent material flow systems for the leading aluminum extrusion press manufacturers, the world's most efficient stacker cranes for the storage of sheet metal plates, automatic crane systems for 50 tons and more or the most modern surface coating systems – Vollert is everywhere.

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)

The new combined powder and wet coating system from JACTO can coat large parts up to 10 m in length and 4 tons in weight. For the first time, product carriers can be combined in parallel on the manipulators to speed up the dip coating process.

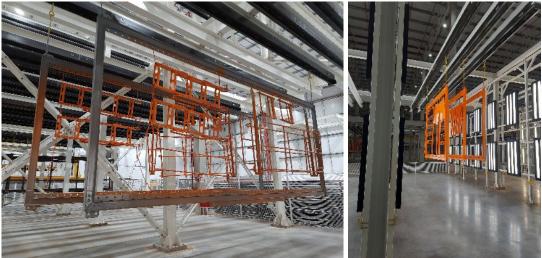


Image 3+4 (Source: Vollert)



Image 5 (Source: JACTO)

JACTO manufactures various machines for planting, fertilizing, spraying and harvesting and is one of the largest manufacturers of agricultural machinery in South America.