

JBT debuts JayBoT™ AGV at LogiMAT 2016

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A smart, simple and affordable AGV solution for mid-sized companies

JBT has launched an automatic guided vehicle (AGV) system designed specifically for mid-sized companies that is lower cost than fully automated alternatives, more productive than manual or semi-automated solutions, and can be delivered and installed in less time and with less support than traditional systems.

The JayBoT™ AGV will make its UK debut at this year's PPMA show in Birmingham in September and the first time in Germany at the LogiMAT Hall 9 Stand C15

A world leader in the development of new AGV technology, JBT developed the JayBoT AGV for operations that currently use up to four manual fork-lift trucks, and are just starting to automate material movement.

The main difference between the JayBoT AGV solution and traditional AGV systems is that direct two-way communication and decision-making capability are incorporated into the actual vehicle, allowing JayBoT AGVs to communicate with each other, and other equipment, without the need for a system manager. This reduces the complexity of the installation, making the JayBoT AGV much less costly and easier to install.

"Following some market research we identified that many smaller enterprises could benefit from using AGVs, if the cost could be reduced," says Nicholas Bellwood, European Sales Director Geschäftsbereichs JBT Corporation Automated Systems. .

"The JayBoT AGV delivers all of the productivity increases, safety improvements and precise manoeuvring of a traditional AGV system, but at a lower cost. Eliminating the system manager is only one step in reducing cost.

"We've also developed advanced natural environment navigation that typically requires no landmarks, such as reflectors, magnets or wires, to be installed. Vehicle communication that doesn't require the cost of complete wireless coverage over the entire operating area has also been built-in to the vehicle."

JBT has introduced flexible and affordable financing options, so that mid-sized companies can spread the cost of an installation, either by purchasing or leasing.

The JayBoT AGV's on-board intelligence allows it to navigate independently on predefined 'roads' with a 360-degree 'safe zone' around the vehicle (including warning and stop zones) to protect pedestrians, other mobile vehicles and equipment. The vehicle is capable of very precise manoeuvring, including the type of positioning needed for servicing racks, stands and other locations.

Designed to maximise both productivity and profitability, the JayBoT AGV communicates directly with input/output sensors and PLCs to support movement, automatically charge batteries and receive orders to move loads. The JayBoT AGV uses decentralised control (no system manager) for simple A to B movements for between one and four vehicles, but is fully scalable and can be upgraded to a centralised design (with a system manager) for integrated, highly optimised fleets.

This scalability is ideal for companies in the middle segment, who want to test automation in smaller applications before proceeding with large installations.

JBT has been designing and manufacturing AGV systems from its European headquarters in Leicester for over 25 years. The company provides forked, special application, tug and unit load AGVs to every size and segment of industry, in addition to AGV engineering services and system software.

JBT has recently completed AGV system installations throughout Europe in the dairy, automotive, pharmaceutical, packaging and retail sectors.