

ABB reveals new articulated arm robot and linear gantry unit for extended working range and faster cycle times.

Robot range is expanded to offer a 150kg gantry mounted robot for materials handling and machine tending applications.

2009-10-15

ABB has launched its first robot combining the advantages of an articulated robot and a linear gantry for improved flexibility and cycle times. The IRB 6620LX is a 5-axis overhead mounted robot arm on a linear axis unit. The IRB 6620LX provides flexibility in production with its 150kg payload and large scalable work space. Ideal for machine tending and material handling applications, the IRB 6620LX offers greater versatility and cost effectiveness compared to customised linear handling systems. The IRB 6620LX is also suitable for applications such as power train assembly, heavy arc welding and grinding.

To integrate articulated and linear technology, ABB has removed the first rotational axis from the robotic arm, enabling it to be mounted either upside down or sideways on the linear gantry unit, which acts as the first axis. The ability to be mounted overhead facilitates production flexibility as the linear gantry axis unit can be extended by up to 33 meters horizontally and 4 meters vertically.

With this extended reach, the robot can access several machines or work stations without compromising on performance, resulting in high productivity and machine utilization. The vast flexibility and work space of IRB 6620LX can be exploited through additional processes, such as inspection, deburring, packing or gluing in addition to 'basic' material handling tasks to further improve robot utilisation. This inherent flexibility also enables quick and easy changeovers for improved production uptime and provides opportunities for the solution to be tailored for different applications.

The IRB 6620LX also enables savings in investment and maintenance, as only one robot is needed to replace numerous complex materials handling systems. It can be readily fitted or adapted to existing production lines as it requires limited floor space requirements and can be configured to position the support legs to suit the application.

Press Release



The use of standard, well-proven components guarantees the highest possible performance and reliability. The unparalleled speed and acceleration on the linear axis secures the shortest possible cycle times with highest possible accuracy, even at large distances and with a full payload. The high performance is delivered as a result of sophisticated mechanical engineering and ABB's state-of-the-art motion control technology, TrueMove and QuickMove.

In machine tending applications the IRB 6620LX offers better handling possibilities compared to conventional solutions as it can access machines either from the top or the side. In addition, overhead rail mounted robots provide open access in front of machines for manual operation, maintenance work, handling of short batches and quick changes. As a result, personal safety is improved, as the robot is not present if there is a need to operate machines manually.

The IRB 6620LX's five-axis robot arm is available with ABB's well-known Foundry Plus 2 protection, which includes IP67 for the entire arm. The linear gantry axis has IP66 protection as standard.

The new robot is available with ABB's well established and powerful IRC5 robot controller and is fully supported by the ABB Robotics global sales and service organization in 49 countries and over 100 locations.

Visit www.abb.com/robotics for further information.

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Further information for editors.

ABB (www.abb.com) is a leader in power and automation technologies that enable utility and industry customers to improve their performance while lowering environmental impact. The ABB Group of companies operates in around 100 countries and employs about 120,000 people.

ABB Robotics is a leading supplier of industrial robots - also providing robot software, peripheral equipment, modular manufacturing cells and service for tasks such as welding, handling, assembly, painting and finishing, picking, packing, palletizing and machine tending. Key markets include automotive, plastics, metal fabrication, foundry, electronics, machine tools, pharmaceutical and food and beverage industries. A strong solutions focus helps manufacturers improve productivity, product quality and worker safety. ABB has installed more than 160,000 robots worldwide.

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