

Industrial robots are on the move

Ratingen, Germany, 14th August 2018

An autonomously guided vehicle (AGV) equipped with a robot arm from Mitsubishi Electric is making it possible to deploy the same robot at multiple workstations. The system has been designed to provide flexibility on assembly lines and boost plant productivity.

An articulated arm robot can be tremendously helpful in performing production line tasks such as assembly work or transferring, packing and sorting items from a conveyor. Companies that employ robots appreciate their flexibility in terms of adapting to different routines and tasks, however it hasn't been possible for the robot to easily move around a production facility to perform different tasks at individual workstations.

This is why Mitsubishi Electric and AGV manufacturer Mirage have created a solution which consists of an AGV and a robotic arm as a stand-alone system. This combination allows users new installation options e.g. deploying robots at multiple workstations. Not only can the robot move along a production line from product assembly to pick-and-place packaging tasks based on demand, it can switch lines and function to wherever it is needed.

The AGV can move around the assembly line following a path traced by magnetic tape. Radio frequency identification tags are used to tell the AGV where to stop, speed up or slow down. It is also equipped with safety scanners that allow the device to stop if an obstacle is found en route or an operator steps too close to the vehicle. Robot and vehicle

communicate via a Mitsubishi Electric PLC which enables them to determine when the AGV has reached the station and the task can be set in motion.

Having arrived at a designated workstation, before performing the actual task, the external vision system assesses the location of the machine to compensate for small variations in arrival position and recalculates its position relative to the station. Once this datum point is established, all the accuracy of the industrial robot is retained. Equipped with on-board power supply that lasts up to 13 hours, the unit can easily complete a full work shift before the removable power unit needs to be exchanged.

Operators can interact with the robot and AGV via a Mitsubishi Electric graphic operator terminal (GOT) or remotely, using a Wi-Fi connected master control box. The robotic arm also features Mitsubishi Electric's predictive maintenance tools which enable operators to quickly determine any issues in the equipment and minimize downtime. By maximising operator safety, ease of use, interconnectivity and flexibility on the factory floor the solution is an obvious enabler for achieving Industry 4.0 objectives.

Learn more about this project by watching the video here:

https://youtu.be/wmZF9L7R_1g

Note:

See how Mitsubishi Electric is able to respond to today's automation demands:

eu3a.mitsubishielectric.com/fa/en/solutions

Image captions:



Photo 1: The AGV can move around the assembly line following a path traced by magnetic tape and is equipped with safety scanners that allow the device to stop if an obstacle is found en route.

[Source: Mitsubishi Electric Corporation, Japan]



Photo 2: Operators can interact with the robot and AGV via a Mitsubishi Electric graphic operator terminal (GOT) or remotely, using a Wi-Fi connected master control box.

[Source: Mitsubishi Electric Corporation, Japan]

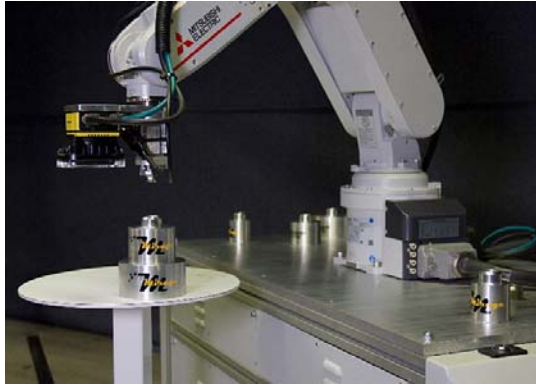


Photo 3: The AGV-mounted robot can move along a production line and perform jobs such as product assembly, pick-and-place or packaging tasks.

[Source: Mitsubishi Electric Corporation, Japan]

The image(s) distributed with this press release are for Editorial use only and are subject to copyright. The image(s) may only be used to accompany the press release mentioned here, no other use is permitted.

Note to Editor: if you would like the text in another language please contact Philip Howe at DMA Europa – philip@dmaeuropa.com.

About Mitsubishi Electric

With nearly 100 years of experience in providing reliable, high-quality products, Mitsubishi Electric Corporation (TOKYO: 6503) is a recognised world leader in the manufacture, marketing and sales of electrical and electronic equipment used in information processing and communications, space development and satellite communications, consumer electronics, industrial technology, as well as in products for the energy sector, transportation and building equipment.

The company recorded consolidated group sales of 4,444.4 billion yen (in accordance with IFRS; US\$ 41.9 billion*) in the fiscal year that ended on March 31, 2018.

Our sales offices, research & development centres and manufacturing plants are located in over 30 countries.

Factory Automation – European Business Group

Mitsubishi Electric Europe B.V., Factory Automation - European Business Group (FA-EBG) has its European headquarters in Ratingen near Dusseldorf, Germany. It is a part of Mitsubishi Electric Europe B.V., a wholly owned subsidiary of Mitsubishi Electric Corporation, Japan.

The role of FA-EBG is to manage sales, service and support across its network of local branches and distributors throughout the EMEA region.

*Exchange rate 106 Yen = 1 US Dollars, last updated 31.03.2018 (Source: Tokyo Foreign Exchange Market)

Further Information:

eu3a.mitsubishielectric.com/fa

Follow us on:



youtube.com/user/MitsubishiFAEU



twitter.com/MitsubishiFAEU

Press contact:

Mitsubishi Electric Europe B.V.

Factory Automation - European Business Group

Monika Torkel

Expert Marketing Communications

Mitsubishi-Electric-Platz 1

40882 Ratingen, Germany

Tel.: +49 (0)2102 486-2150

Fax: +49 (0)2102 486-7780

Monika.Torkel@meg.mee.com



PR agency:

DMA Europa Ltd.

Mr. Roland Renshaw

Europa Building, Arthur Drive, Hoo Farm Industrial

Estate, Kidderminster, Worcestershire, UK

Tel.: +44 (0)1562 751436

Fax: +44 (0)1562 748315

roland@dmaeuropa.com

www.dmaeuropa.com