



MELFA-3D Vision and Sensor-less Servo Win R&D 100 Awards

Dublin, Ireland. 21st November 2014

Two Mitsubishi Electric factory-automation technologies,
MELFA-3D Vision and Sensor-less Servo, have each won a 2014
R&D 100 Award from R&D Magazine. The awards, commonly known
as the "Oscars of Innovation," underline Mitsubishi Electric's
continuing status as a global leader in industrial innovation.

The award ceremony took place at the Bellagio Hotel, Las Vegas, Nevada on November 7.

MELFA-3D Vision

The MELFA-3D Vision provides bin-picking solutions for a wide class of complex shaped parts. The MELFA-F series robotic system, using the advanced vision solution, is the first system of its kind to completely automate bin-picking. In many conventional factories, various parts are supplied manually to automatic assembly systems. Repetitive tasks such as these can become painful and stressful for workers, which is why parts feeders were adopted to automate bin-picking tasks. Feeders, however, need to be custom-designed for each part and often occupy large spaces. Several robotic systems using vision sensors have already been developed, but typically they can be used only for parts with simple shapes in conventional systems. In response to these technical limitations, Mitsubishi Electric's MELFA-3D Vision technology offers dramatically improved capabilities for the automatic bin-picking of general parts on production lines.

Sensor-less Servo

The Sensor-less Servo system combines a specialized drive unit and motor for precise control of speed and position without the need for an encoder. The drive offers many advantages over conventional substitutes, including a smaller motor, higher durability and greater efficiency. Conventional motor drive products, such as general-purpose inverters and servo drives, have contributed to improved performance and efficiency in production machines, but the Sensor-less Servo technology is expected to be used in an increasing range of drive products as the variety and needs of these production machines expand.

About the R&D 100 Awards

The R&D 100 Awards recognize the top technology products of the year. Past winners have included sophisticated testing equipment, innovative new materials, chemistry breakthroughs, biomedical products, consumer items and high-energy physics. The Awards span industry, academia and government-sponsored research. Established in 1963, the program initially was named the I-R 100s in keeping with the original name of the sponsoring magazine, Industrial Research. In the first year, winners were picked by a panel of outside judges selected by the publisher and editor. No entries were required, and only U.S. companies could win. A formal entry procedure was established in 1964 and final judging was performed by the magazine's editors, with the advice of outside experts. The first non-U.S. winners came along in 1965.

Photo captions:



Picture 1: Mitsubishi Electric's MELFA-3D Vision technology offers dramatically improved capabilities for the automatic bin-picking of general parts on production lines.



Picture 2: The Sensor-less Servo system combines a specialized drive unit and motor for precise control of speed and position without the need for an encoder.

First released in Japan, 6th August 2014.

Note to Editor: if you would like the text in another language please contact Nicola Bigmore at DMA Europa – nicola@dmaeuropa.com.

About Mitsubishi Electric

With over 90 years of experience in providing reliable, high-quality products to both corporate clients and general consumers all over the world, Mitsubishi Electric Corporation is a recognized 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, water and waste water, transportation and building equipment.

With around 124.000 employees the company recorded consolidated group sales of 39,3 billion US Dollar* in the fiscal year ended March 31, 2014.

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

Mitsubishi Electric Europe, Industrial Automation – Irish Branch is located in Dublin, Ireland. It is a part of the European Factory Automation Business Group based in Ratingen, Germany which in turn is part of Mitsubishi Electric Europe B.V., a wholly owned subsidiary of Mitsubishi Electric Corporation, Japan.

The role of Industrial Automation – Irish Branch is to manage sales, service and support across its network of local distributors throughout Ireland.

*Exchange rate 103 Yen = 1 US Dollar, Stand 31.3.2014 (Source: Tokyo Foreign ExchangeMarket)

Further Information:

Website: <u>ie3a.mitsubishielectric.com</u>

Website: www.mitsubishielectric.com

Twitter: https://twitter.com/MitsubishiFAIRE

LinkedIn: http://www.linkedin.com/company/mitsubishi-electric-ireland

YouTube: http://www.youtube.com/user/MitsubishiFAEU

Facebook:

https://www.facebook.com/pages/Mitsubishi-Electric-Ireland-Factory-Automation/431651286897460

Press contact:
Mitsubishi Electric Europe B.V. Irish Branch
Rachel O' Brien
Westgate Business Park,

Ballymount Road, Dublin 2.4 Tel.: +353 1 419 8856

Fax: +353 14198890 rachel.obrien@meir.mee.com ie3a.mitsubishielectric.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