

Industry 4.0 in the Food and Beverage industry

Ratingen, Germany 30th of July, 2015

The practical advantages that the new cyber-physical interface of Industry 4.0 brings are acknowledged by engineers across a range of industries. Jeremy Shinton, Product Manager UK – Business Solutions at Mitsubishi Electric Europe B.V., UK Branch, Automation Systems Division, explains how food and drink manufacturers in particular can benefit from the implementation of Industry 4.0:

Industry 4.0 can be defined as the development of manufacturing technologies to allow higher levels of interconnectivity, leading to greater communication between machines and decentralised/local processing of data. The result is smart factories in which machinery is increasingly autonomous, so able to manage its own service and maintenance requirements, and adapt instantly to new production requirements.

Food and drink manufacturers could benefit from the implementation of Industry 4.0 even more than most industries.

- The constant pressure on costs in the food industry means it has a long history of innovating, so is likely to embrace Industry 4.0 quickly and enthusiastically.
- The need for traceability right through the production chain has already ensured that machines are interconnected and archiving data. Industry 4.0 will enhance this.

- Greater flexibility will enable bespoke production for each customer and rapid adaption to changing product specifications.
- Energy usage can be monitored and optimised to new levels.

The net result will be improved machine performance, optimised maintenance and reduced costs. This should help win new customers and retain existing ones. It is also likely to create new revenue streams in the form of value adding services, and allow seamless connectivity with upstream and downstream supply chain partners.

Significantly, Industry 4.0 is not just a 'big boys' toy'. If anything, it offers even more opportunities for small- and medium-sized food and drink producers, which will be able to form seamless links with their machine builders and technical services suppliers. This will make their production systems just as advanced and sophisticated as those of their larger brethren.

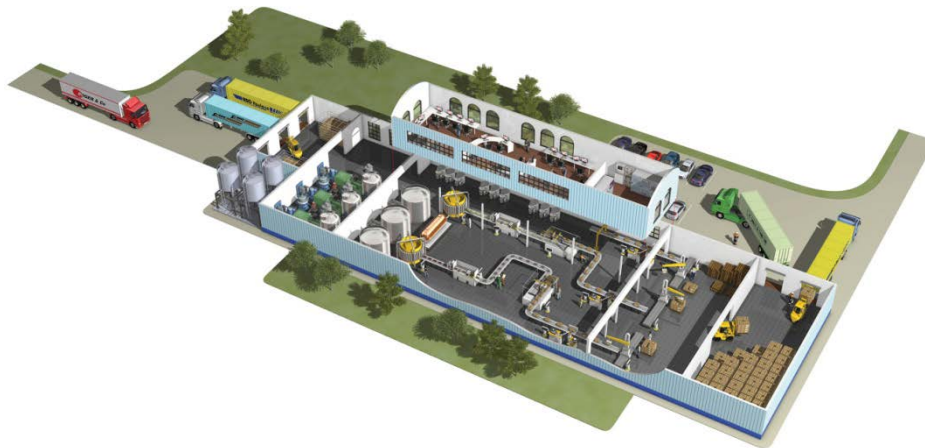
For instance, it will permit the optimisation of preventive maintenance programmes, so that expensive and delay-inducing machine failures are all but designed out. Put another way – the overall equipment effectiveness (OEE) strategies that to date have been the preserve of larger companies, will come within reach of all.

We can sum up Industry 4.0 as improving data management through better communication and data collection across all machines in the production chain; instant archiving and data historian functions; real-time analytics; multifunction alarm management; web-publishing; as well as interconnectivity and data transparency throughout the entire value chain.

Most engineers are able to see the practical advantages that the new cyber-physical interface of Industry 4.0 will bring. However, like the internet

20 years ago, or mains electricity a hundred years ago – it will almost certainly over-deliver on expectations by orders of magnitude. This is because while we can foresee the immediate and obvious benefits, far more will almost certainly evolve over time.

Image Captions:



Picture 1: Industry 4.0 is leading to greater communication between machines and decentralised/local processing of data. The result is smart factories, able to manage their own service and maintenance requirements and adapt instantly to new production requirements.

[Source: Mitsubishi Electric Europe B.V.]



Picture 2: The constant pressure on costs in the food industry means it has a long history of innovating, so is likely to embrace Industry 4.0 quickly and enthusiastically.

[Source: Mitsubishi Electric Europe B.V.]



Picture 3: Jeremy Shinton, Product Manager UK – Business Solutions at Mitsubishi Electric Europe B.V. , UK Branch, Automation Systems Division.

[Source: Mitsubishi Electric Europe B.V.]

First released in UK, May 2015.

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

Further Information:

Website: eu3a.mitsubishielectric.com/fa

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

Twitter: <https://twitter.com/MitsubishiFAEU>

Press contact:

Mitsubishi Electric Europe B.V.

Factory Automation European Business Group

Monika Torkel

Marketing Communications Coordinator

Gothaer Str. 8

40880 Ratingen, Germany

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

Fax: +49 (0)2102 486-7170

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