



## Developing production machines and automation products for the Asian market

**Success in overseas markets often requires vendors to adapt their products or services to suit their target markets. This is particularly evident in automation, where each continent tends to favour specific communications solutions. Here we look at how several European machine builders and device makers have addressed the needs of potential customers in Asia.**

CC-Link and its Industrial Ethernet equivalent CC-Link IE were originally developed in Japan and today are used throughout all of Asia, a fact acted upon by many European companies trying to do business in the region.

"CC-Link IE and CC-Link are the *de-facto* standards for open automation networks in many sectors throughout the whole of Asia – therefore a machine designed to be sold in that market that is not CC-Link compatible is at a distinct disadvantage," says John Browett, General Manager of the CLPA (CC-Link Partners Association) in Europe. "Furthermore, CC-Link IE is leading the world as the only open Ethernet for automation that offers gigabit bandwidth."

Many CLPA members, including Balluff, Schaeffler and Weidmüller, have recognised this and integrated CC-Link into their products. One member, Mitsubishi Electric, is well placed to provide an overview of the wider aspects of developing CC-Link IE and CC-Link based automation systems. Items such as PLCs, HMIs, inverters, servos, robots, and all the other diverse elements of a control network can, it says, communicate effectively using CC-Link IE and CC-Link networks. Mitsubishi Electric, which has its origins in Japan, has ensured that all of its automation components are CC-Link IE or CC-Link enabled so that comprehensive automation solutions can be built from them.

Another partner, Balluff, supports the use of CC-Link IE in demanding environments. It has developed IP67 rated I/O for use with CC-Link IE installations and says that significant systems costs savings can be made because the need for protective cabinets is much reduced.

One of the biggest names in precision motion and bearings, Schaeffler, has developed SmartCheck, a device which allows breakdowns to be avoided by comprehensive condition monitoring. SmartCheck provides CC-Link IE connectivity via the use of the Seamless Message Protocol (SLMP), and thus is highly attractive to potential users in Asia.

Similarly Weidmüller offers certified CC-Link IE products and identifies this as being instrumental in developing its business in Asia across a range of different industries.



Berners Consulting does not manufacture products but helps client companies develop strategies for entering international markets. It constantly monitors how Asian markets like China are developing and how the keys to success there differ from conventional Western business thinking. In fact it thinks that CC-Link IE and CC-Link is so important that it has become a member of the CLPA too!

While it is essential to recognise the differences between Asia and Europe, it is equally critical to identify the similarities. Again Mitsubishi Electric provides a link, noting how CC-Link IE's unique gigabit bandwidth is particularly suitable for use in systems aiming at Industry 4.0, the goal of creating highly connected cyber-physical systems that can be used to drive efficiency into the whole production value chain.

Hilscher considers rapid deployment of compatible products to be a delineator of success and says that with appropriate tools CC-Link can be incorporated very easily. As a company, its product portfolio covers PC-Cards and Gateways as well as Embedded Modules and ASICs for all major fieldbus protocols. Since many companies already use Hilscher technology in their products, this also demonstrated how close a CC-Link solution may be for many of them.

HMS has had similar experiences of the need for timely, seamless project implementation and recognises CC-Link IE's capabilities in this area. It has a "chip, brick, module" offering that tailors the communications required for a device to fit the functional and physical parameters of the project and finds that CC-Link is the preferred solution for nearly all Asian projects.

With safety an increasingly important consideration throughout Asia, Molex can assist in the development of CC-Link IE based safety devices using its communications stack solutions. They also offer compatible I/O blocks and network interface cards.

At the device level Renesas' powerful R-IN32M3-CL device combines CC-Link IE communications with a processor capable of running general device functions. It also features hardware acceleration capable of increasing performance up to six times compared with software based designs.

Conformance testing when developing CC-Link compatible products is supremely important when exporting to Asia, notes Mitsubishi Electric, who operates the CLPA's European conformance testing centre near Düsseldorf. This view is endorsed by Weidmüller which says that such certification has led to tangible business benefits with their Asian customer base.

**Image 1:** John Browett, General Manager of CLPA Europe, explains the opportunities of developing production machines and automation products for the Asian market



## About the CLPA

The CC-Link Partner Association (CLPA) is an international organisation with over 2,600 member companies worldwide. The partners' common objective is promotion and technical development of the family of CC-Link open automation network technologies. Over 1,500 certified products are now available from more than 300 manufacturers. CC-Link is the leading open industrial automation network technology in Asia and is becoming increasingly popular in Europe and the Americas. The CLPA's main initiative for Europe is the Gateway to Asia (G2A) programme, which helps European businesses develop their Asian business further. More details are at [www.cc-link-g2a.com](http://www.cc-link-g2a.com)

The image(s) distributed with this press release may only be used to accompany this copy, and are subject to copyright. Please contact DMA Europa if you wish to license the image for further use.



## Editor Contact

DMA Europa Ltd. : Anne-Marie Genth

Tel: +44 (0)1562 751436

Fax: +44 (0)1562 748315

Web: [www.dmaeuropa.com](http://www.dmaeuropa.com)

Email: [anne-marie@dmaeuropa.com](mailto:anne-marie@dmaeuropa.com)

## Company Contact

CLPA-Europe : John Browett

Tel: +44 (0) 7768 338708

Fax: +49 (0) 2102 532 9740

Web: [www.clpa-europe.com](http://www.clpa-europe.com)

Email: [John.browett@clpa-europe.com](mailto:John.browett@clpa-europe.com)