



# Seminar explores Asian growth opportunities, adds Balluff as board member

The enormous potential of open networks for automation and control systems in Asia, including forecasts for technical development, economic growth and geographic coverage, was highlighted at a seminar attended by leading European figures in control engineering and automation.

The event took place in Hatfield, UK and was organised by the CC-Link Partner Association (CLPA). Speakers included senior managers from some of Europe's biggest automation vendors, such as Balluff, Renesas, Festo and Mitsubishi Electric. There were also presentations from Gambica, the organisation representing the Instrumentation, Control, Automation and Laboratory Technology industries of the UK, the CLPA and Berners Consulting, a boutique management consultancy.

One of the key themes of the day was establishing business links with China and other growing markets of Asia. This started with an important announcement by John Browett, General Manager of the CLPA, that its hugely successful Gateway to China ("G2C") business development programme was to be expanded to cover all of Asia. The expanded programme will be renamed Gateway to Asia ("G2A") and will assist European companies to develop their business in equally important markets such as Japan, Korea, Taiwan and India. The G2A programme will continue to support growth through advertising, exhibitions, seminars, webinars and other promotional activities for companies implementing CC-Link technology in their products.

CC-Link is a leading open automation network technology in China, Japan and other Asian countries and is virtually a prerequisite for success in the region. With IMS Research (now part of IHS), a leading market research organisation, recently calculating that 46% of automation sales are now in Asia-Pacific, CC-Link capabilities are critical for global success.

Browett noted that there are currently about 11 million CC-Link nodes installed around the world and that there are at least 270 manufacturers offering more than 1,300 CC-Link-enabled products. He also noted that IHS's figures indicate that this position is expected to further strengthen in the future, and hence provide continuing business opportunities.

Lutz Berners, President of Berners Consulting in Germany, gave a presentation in which he emphasised the importance of local partnering to succeed in China. He went on to explain how China has developed over recent years and to forecast future changes, such as rising wage levels, an ageing population (exacerbated by the long-standing one child per family policy) and development of rural areas by populations moving inland from the coastal conurbations.

## Connecting with AS-Interface

AS-International and the CC-Link Partner Association (CLPA) have announced the formation of a relationship in order to provide a complete open network hierarchy for a wide range of application types.

The decision to form a closer relationship came naturally. Says John Browett, General Manager of the CLPA, "AS-Interface and CC-Link are very complementary technologies. AS-Interface provides a well proven, effective solution at the bottom end of the network hierarchy and also has an excellent safety solution with AS-i Safety at Work. CC-Link neatly fits on top of this with a transparent architecture that provides seamless communication from devices on a machine all the way to enterprise level systems such as MES and ERP. Some of our key mutual partners such as Bihl+Wiedemann and Pepperl+Fuchs are already providing solutions to allow seamless interoperation between the two networks."

Continues Rolf Becker, Managing Director of AS-International, "We are looking forward to strengthening the relationship between our two organizations. We have already conducted some joint promotional activities in Europe such displays at the Hannover Fair and SPS/IPC/Drives Italia. We are also planning further activities in Asia, such as joint seminars for the automotive industry in China, as well as fairs in Japan like the SCF



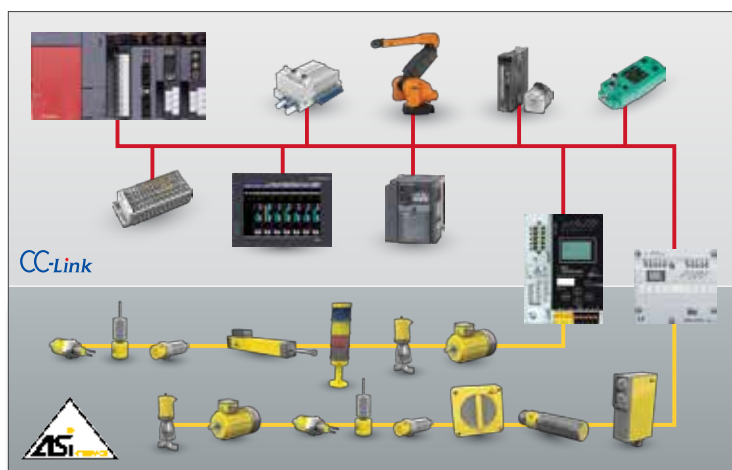
Jürgen Gutekunst of Balluff (left) accepts their board member certificate from CLPA-EU General Manager, John Browett.

He says that there is no doubt that China will become the world's biggest economy and that automation is essential to combat the declining population and rising costs.

This last point was also touched upon by Steve Brambley, Deputy Director of Gambica, who noted that in China the automation market is growing faster than the general economy. Further, although robot density is still low, there are signs that it will soon be growing rapidly.

In a presentation for Mitsubishi Electric, Chris Evans, Marketing and Operations Manager, was able to give a double perspective – being a European supplier to the Asian markets and being part of one of the major indigenous groups in the region. He also touched on the hot topic of cyber security and how CC-Link offers some safeguards in this area.

Finally, Balluff was presented with an official certificate to recognize their admission to the board of the CLPA. The certificate was accepted by Jürgen Gutekunst, Vice President of the Business Unit Networking and Business Unit Systems. Becoming a board member is a significant commitment to the organization and allows Balluff to join an elite group of companies worldwide who provide the strategic direction for the CC-Link technology. Being the first European board member, this demonstrated the growing importance of CC-Link in the European market. Jürgen also made a presentation which explored Balluff's support for CC-Link, the Asian market and their capabilities as a leading automation devices company globally.



Fair. We also hope to see further support for the cooperation from our member companies via a continually expanding product selection for both network technologies."

# India's largest car manufacturer sees the benefit of using CC-Link open networks at major production sites

Maruti Suzuki is producing over 1.5 million vehicles annually and achieving consistent market quality leadership with the help of CC-Link open networks, and is planning for more widespread use in their plants in the future.

Maruti Suzuki has been the largest single producer in the Indian car market for over 25 years, now contributing more than 1.5 million new vehicles annually. Operating out of manufacturing plants in Gurgaon and Manesar, the company produces 15 different brands and makes over 150 variants of its models. It is the first and only Indian company to have crossed the 10 million sales boundary and exports widely around the world.

The Indian manufacturing plants are highly automated, yet are constantly being updated with new technologies and improved systems. In recent times it has installed several CC-Link industrial communications networks to enhance various systems on the shop floors, as part of a continuous development plan.

CC-Link is an open automation network technology that allows devices from many different manufacturers to be mixed and matched on the same network. This means users can install best in class control equipment, rather than being tied to a single manufacturer. Currently over 1,300 products from more than 270 manufacturers are available.

CC-Link can be used to create networks that integrate digital I/O on the shop floor directly with enterprise IT systems so that stores, production, sales and distribution, finance and marketing all become one seamless operation. It is available in two different technology formats: a unique gigabit industrial Ethernet and a fieldbus.

Maruti Suzuki has already installed CC-Link in several applications, such as the Cordless Limit Wrench, a system which provides fool proofing for torquing of critical joints during the assembly of each vehicle. It guarantees application of correct torque by stopping the assembly conveyor if a joint is over- or under-torqued or even missed completely.

Previously the torque control system was hard wired and very complex: CC-Link has reduced the wiring and complexity by an order of magnitude, improving reliability and making maintenance far easier. It has also freed up shop floor space and reduced cost by enabling a much more compact control panel to be designed.

It has also been retrofitted to what Maruti-Suzuki calls the "Pika Pika" system, This is their interpretation of the "poke yoke" or error proofing system. The system guides the correct selection of component parts during assembly and prevents incorrect parts being used. With such a huge number of vehicle variations going down the line, without this kind of assistance it soon becomes difficult for assembly workers to always be sure they are fitting the right parts on the right vehicles. Hence CC-Link



is playing a key role maintaining vehicle quality by ensuring errors are eliminated at source, preventing expensive re-work and making sure defects do not reach the customer. This is also one of the reasons why Maruti-Suzuki has been rated first by the prestigious JD Power survey for the last 12 years. In addition to these benefits, use of CC-Link in the Pika Pika system has provided cost reductions through simplified cabling, reduced installation time and increased flexibility when line changes or updates are implemented.

CC-Link was also used to update the Andon system and the Vehicle Tracking System (VTS). Andons (from the Japanese word for lantern) are typically large electronic displays used in manufacturing plants to communicate critical production information and faults to employees so that appropriate action can be taken. In the case of Maruti-Suzuki, the Andon system is used for monitoring, displaying and recording conveyor and equipment stoppage information and calculating line efficiency. The VTS system is critical for flexibility in manufacturing, and broadcasts individual vehicle information (model, chassis details etc) to conveyor line equipment so that the correct parts are fitted and appropriate operations are executed at each work station. It also helps to increase line efficiency by eliminating the need for manual interventions.

Benefits gained within by the use of CC-Link in the VTS include a 40% reduction in cables and hardware through use of CC-Link remote I/O, a reduction in installation time, capacity for transmitting up to 128 different signals and interconnectivity with other systems. Previously, the system had only allowed the handling of 4-5 signals and had no ability to communicate with other systems.

## More partner joint marketing

Following our recent successful joint Partner marketing activity, the campaign is now being extended to include market leaders Bihl+Wiedemann and Festo.

Look out for our striking whole page advertising in messtec drives Automation magazine and the Industrial Ethernet Journal.

These will be supported with web banners on their web sites.



## sps ipc drives Competition results

The "Guess the number of Weidmüller connectors" competition was very successful, with over 550 entries.

The lucky winner on each of the 3 days who guessed the correct quantity of 195 was:

Day 1 – xxx

Day 2 – xxx

Day 3 – xxx

Overall the fair was a great success for the CC-Link Partner Association, with significant interest shown in the Gateway to Asia programme.



## Product spotlight:

### Pepperl+Fuchs CC-Link to AS-Interface gateway



Pepperl+Fuchs is one of the leading system suppliers for AS-Interface worldwide. AS-Interface is widely used due to combining energy supply, communication for safety and non-safety signals on one

easy to use cable. The new CC-Link AS-Interface Gateway VBG-CCL-K20-D-BV from Pepperl+Fuchs comes in a high grade steel housing with a bright display and easy to operate function keys. It can also be directly mounted on a DIN rail. Up to 500 I/O signals can be handled by one CC-Link address. This allows bigger sub-networks and offers flexibility for extensions. It also saves space in a cabinet as well as time and money during installation.

### Weidmüller STEADYTEC® connectors



Weidmüller's **STEADYTEC®** connectors provide a familiar and reliable RJ45 format for connecting

gigabit CC-Link IE networks. To meet the demands of the factory, the connectors are ruggedized to IP67 specifications. They are also designed for a long service life with a guarantee of more than 750 mating cycles and contacts that are insensitive to vibration, shock and mechanical stress.



Did you know there are over 1,300 CC-Link products available from more than 270 manufacturers?

Visit our website to see the full range.

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

# New Indian office

The CC-Link Partner Association has opened an office near the Indian capital of New Delhi to serve one of the world's most exciting manufacturing economies. This expands the network of existing offices in the UK, Germany, North America, China, South Korea, Taiwan, Singapore and Japan.



The CC-Link Partner Association (CLPA) is an organisation of manufacturers and users of CC-Link, the Non-Stop Open Network. It manages the CC-Link specifications and promotes their worldwide adoption for network communications in industrial automation and also in an increasing range of other uses.

India is seen as one of the economies tipped to develop steadily over the next decade, enhancing its global reach and developing new sectors. It already has a firm manufacturing base that includes traditional heavy industries, modern electronic and computer based activities, and a world-leading biotech sector. Established and emerging industries alike are turning to automation to improve productivity, quality and safety so that they can be certain they are performing at the world class levels necessary for global competitiveness.

India has a large and growing population, with many highly educated younger people committed to pursuing technology-based careers. It has strong links with major markets in Europe and North America and is strategically placed to support developing markets in Asia, Eastern Europe and Africa.

CC-Link was originally developed in Japan by Mitsubishi Electric and was made an open network by them in 2000. This allowed a wide variety of companies to develop compatible devices and currently over 270 companies offer CC-Link products. Moreover, the CLPA now counts over 1,900 companies and organizations in its membership.

The installed base of CC-Link nodes passed eleven million some time ago, with steady growth expected to continue for the foreseeable future. Indeed, independent research indicates that not only does CC-Link have the largest market share in Asia, but that it is also expected to see the highest growth potential of all open networks.

CLPA India was inaugurated at a ceremony attended by over 140 people. Attendees included representatives from other CLPA branches around the world, as well as senior management from CLPA board members such as Cognex and Mitsubishi Electric.

A variety of speeches and presentations formed the main part of the programme which included a presentation on the impact on productivity CC-Link has had for Maruti Suzuki, one of the largest automotive manufacturers in India.

John Browett, General Manager of CLPA-Europe commented, "We are very pleased to welcome our new Indian colleagues to the global CLPA organization. This new office is further evidence of CC-Link's continuing growth in the world market. The so called "BRIC" countries are well known as engines of global growth and CLPA India is a strong sign of CLPA's commitment to support these new growth economies. It is also a symbol of CLPA's willingness to support our key partners locally no matter where they may be located in the world."

## Gateway to Asia Programme Partners



Empowered by Innovation



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