

# CC-Link In Action

OPEN NETWORKS

## Fieldbus Demonstrates Good Taste

**The new Cleaning in Place systems (CIP) systems on a recently-extended cook-chill plant for gourmet ready meals communicates with plant and enterprise information systems via a CC-Link open fieldbus.**

The cook-chill plant includes two base sauce tanks, four cooking vessels totalling nearly 4000 litres capacity, two auxiliary or pre-mix tanks for making up starch and milk powder, and three cooling tanks. These are configured into three subsystems for flexibility of production and each is controlled by a dedicated PLC. Amongst other tasks, these PLCs monitor temperature, set the mixing time and control inverters on the agitator drives to change the speed as mixing progresses.

The PLCs communicate with HMIs (human machine interfaces) to display overview graphics of the whole plant or parts of the plant in greater detail, to allow local monitoring and control by the plant operators.

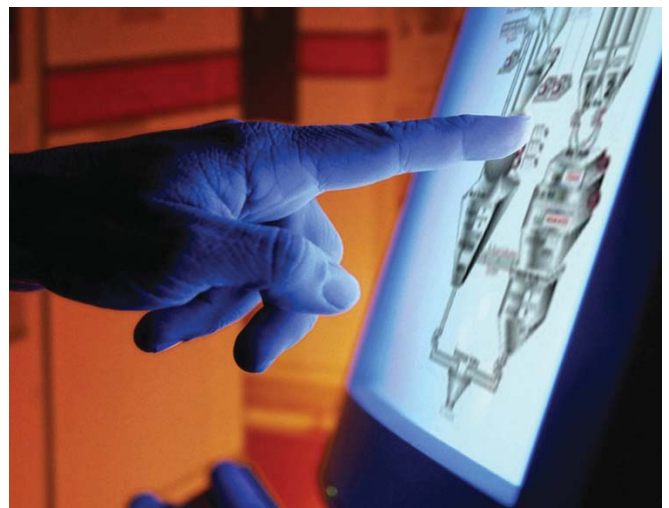
Integral with the production aspects of the plant are two CIP (cleaning in place) systems. The first is for 'low risk' areas, the second guaranteeing super-high performance hygiene for cleaning the high risk sections where raw meat is present. Communication with the CIP systems is via CC-Link, the open fieldbus protocol which is equally able to handle analogue process data and digital commands.

CC-Link is a field or device level network that provides high speed deterministic communications, linking a wide range of automation technologies over a single cable.

It is ideal for machine, cell or process control in manufacturing and production industries, and is also widely used in facilities management and building automation.

One of the great advantages of CC-Link is that it is open that is to say it can be used with switches, sensors and controllers from a wide range of manufacturers without the need for special interfaces or be tied to a single supplier of automation equipment.

Food processors take cleaning and hygiene issues very seriously and often require it to be an integral part of the overall production process. The control system must be robust enough to ensure that the cleaning regime has been completed in full. It also has to collect all relevant data passing it onto the enterprise management data systems and storing it as a record for long term traceability.





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



**CC-Link Partner Association - Europe**  
Tel: +49 2102 486 1750 or +44 1707 278953  
email: [partners@clpa-europe.com](mailto:partners@clpa-europe.com) | [www.clpa-europe.com](http://www.clpa-europe.com)