

Mitsubishi Automation Solutions

FOR THE FOOD AND BEVERAGE INDUSTRY



the strongest
link
in the
food.
chain



**MITSUBISHI
ELECTRIC**

Your partner in automation systems



Mitsubishi - s

Mitsubishi Electric, known the world over as a leading symbol of strength, growth and success, knows about the food and beverage industry. By drawing on our vast experience and knowledge of

raw ma

At the very base of the food chain are the raw materials. To produce the best results, you need to use very best products. World-leading design, manufacturing expertise and technical quality of Mitsubishi Electric products and systems have been nurtured and developed in many different production environments, tried and tested across the world.

production

Mitsubishi knows how to apply intelligent automation solutions to your industry. The integration of automation systems provides information processing, control and monitoring, robotic precision, environmental control and redundancy capability to a level way beyond your expectations.

handling

Food and beverage processing does not stop when the oven bell rings. Automated canning, packaging, labelling and handling systems are tailor made to fit the job in hand, taking the product a step nearer to its natural end.



retail

A select network of specialist System Integrators brings our systems to your market. They have specific and proven food and beverage expertise, supporting individual application projects and, primarily, plant-wide totally integrated solutions.

strengthening the food chain

industrial automation products and systems,
we have the power to specifically design
and install process solutions that will
increase your efficiency, quality and
productivity. Let's talk about basics.

materials



Mitsubishi Electric is busy in the food and beverage industry -

Allied Frozen Foods • Banham Poultry • Basildon Dairy Foods • Allied Bakeries • Bernard Matthews • Birds Eye Walls • Bristol Meyer • British Bakeries Limited • Cavaghan & Gray Ltd

- Dairycrest • Dalehead Foods • Express Foods • Fenland Foods Limited • Frigoscandia • Geest Prepared Foods • Grampian Convenience Foods • Howard Long • Hygenic Systems • McCain Foods • McVities Prepared Foods • MD Foods • RHM Technology • Ross Young • Rycroft Foods Ltd • Salvesen Foods • Shephard Neame • Silver Springs • The Wrigley Company • Tuchenhagen UK Limited • JAS Bowmans • United Biscuits...

In every industry, increased productivity of quality products and lower costs are key business objectives. In a market place as competitive as the food and beverage industry, a successful company has to keep ahead of its competition, making sure that the plant is running to maximum performance. From the human business decision through to the distant electronic impulse, Mitsubishi's integrated solutions provide you with the control that gives you the competitive edge. Greater flexibility, versatility, reliability and, of course, cost efficiency come as a standard package, increasing your production plant life cycle.

linking to

batching and blending

Easy-to-use Windows-based SCADA software packages and reliable serial devices simplify the logistics of controlling a particular recipe's component quantities, flow, availability, mixing and distribution. Efficient real-time control of the materials movement allows precise blending and batching management, from simple mixes up to complex multiple production lines. Data exchange is executed at great speeds yet with accurate control and logical sequencing for optimum production scheduling.

measurement and control

Mitsubishi keeps your finger right on the productivity pulse. Management decisions can be quickly and easily executed and adapted as vital production data is fed back to your core information network. On-screen graphical representations of your process in action, viewed on PCs and Human Machine Interfaces (HMIs), allow you to clearly interpret and alter commands as necessary. Statistical Process Control safeguards your process by constantly monitoring it for potential problems, initiating alarms that warn of dangers approaching. Real-time and historical data can be easily applied to tables and charts for analysis, producing meaningful and clear reporting of essential data. Furthermore, supremely accurate PID modules can control critical temperature operations. These self contained units can be easily fitted directly into a PLC rack and are built-in features of our intelligent drives, removing the need for additional, time-consuming programming across the entire network.



hygiene

As well as the complete integrated picture, detail in individual product design is also carefully planned. Mitsubishi's product range has been built to the highest standards, having the ability to withstand harsh treatment and remain safe to operate. For example, components within the PLCs are hermetically sealed to prevent intrusion of damaging particles and the E range of HMIs meets the IP65 standard with a fully encapsulated screen and keypad making them both water and dust proof. This all goes to help reduce downtime for cleaning and improve hygiene standards.

greater productivity



environment

Environmental control is important in many industries, particularly in the production of Food and Beverage. In the plant environment, energy-saving drives can regulate exacting ambient conditions by accurately controlling ventilation fans, while small but highly functional micro PLCs minimise space consumption. Again, design of Mitsubishi products enables unaffected operation even when subjected to high humidity and temperature conditions. Drives, for instance, have a built in feature which prevents heat build up, avoiding the need to install additional costly air cooling units on multi-drive cabinets. Mitsubishi observe strict global policies to help protect the environment, constantly striving to reduce energy consumption, noise and waste. Effluent management and waste control systems are key areas where Mitsubishi is making a difference.

traceability

In order to successfully manage your particular food and beverage process, you must be able to track not only the individual stages of the process, but the overall operation as a whole. Mitsubishi's Management Information Systems (MIS) and Management Execution Systems (MES) enable exactly that to happen, providing the production and management information necessary for reporting, logging and archiving. Internet and intranet technology provides information access from any global location, or from anywhere within the company, using standard Microsoft tools.

What would make you think about choosing Mitsubishi as a supplier and why are we any different to other solution providers? The simple but

powerful answer is that Mitsubishi Electric offers total connectivity with open solutions that can easily integrate into existing plants - with minimum effort and time. Our advanced functionality products such as drives, system and micro PLCs, HMIs, motion control systems, software packages, networks and Q process control systems featuring unrivalled redundancy capabilities, offer the best of both worlds. They instinctively and intelligently talk to each other, but it is the open integration with other manufacturers' products that provides the strongest link holding your process chain together.

Mitsubishi - link

real time control

The ability to see, understand and act on what is actually happening along the line of your process is critical. Mitsubishi PLCs can process information at an amazing 0.2 msecs. This information is immediately sent to the Windows-based MX³² SCADA PC software that tells you exactly what's happening. The ability to customise your operator display screens to include your own graphics and bitmap images makes the information even easier and quicker to interpret. This degree of control applies to every stage of the process, from the shop floor to the business decision level. Mitsubishi's range of HMIs employ real-time control as standard and these can be easily integrated throughout your plant, whatever your current product configuration happens to be.

open int

networking

Mitsubishi's extensive range of network solutions offer high functionality that is easy-to-use, providing information flow from plant sensors through to the office environment. Fast and accurate communication of critical data is made available throughout your business, from financial decisions on stock and materials through to production and plant availability. At the office level, standard Ethernet connectivity provides information that can be easily recorded and monitored using standard Microsoft programmes such as Excel, Access, etc. Process information, on the other hand, is gathered across Mitsubishi's MELSEC networks, providing secure built-in redundant features. The versatility of field bus technology provides direct connectivity to the plant sensors and I/O. Mitsubishi provides the choice of open standards including Modbus, Profibus, ASI, or it's own CC Link and remote I/O Link products. Whatever your particular needs may be, Mitsubishi can provide simple solutions to often complex networking problems.

ing to totally open solutions



information exchange

Electric is at the forefront of process control software packages with the Melsec suite of industrial software solutions. The suite is ever growing to meet technological challenges and currently includes MX³², a complete SCADA solution with open architecture and

seamless integration capabilities, MXChange for easy sharing of informational database, MX Computer Control providing PC control from desktop to factory floor and Melsec Medoc Plus, a powerful PLC programming software compliant to IEC 1131.3 for programming any Mitsubishi PLC product range.

egration

scalability

The difficulty with most product and system suppliers is their inflexibility to add to, reduce, upgrade or totally re-specify application controls within the process network. The openness and adaptability of Mitsubishi's hardware and software products means they can easily be integrated into existing processes with minimum downtime, whatever your size of plant. There is no need to totally replace your existing systems with new equipment, expending valuable time, money and effort. Mitsubishi products can be added to third-party hardware and grow as your plant grows.

Chain reaction

In response to customers needs, Mitsubishi's support services provide the total reassurance which makes specifying and installing our products the best solution to your industrial automation needs.



Mitsubishi has invested more than £2 million in the Customer Technology Centre (CTC). As well as being a state-of-the-art visitors centre, it is also the nationwide control centre of the Diamond service support programme.

It is from the CTC that we co-ordinate our 24 hour service back-up telephone hotline, provide support information via post, email and the internet, and organise customer training packages. You can also access a wide range of information instantly, 24 hours a day, 7 days a week by using our FaxBack service.



Complete the chain

You are only as strong as your weakest link - as the saying goes. See for yourself how strong we are. To talk in more detail about how Mitsubishi Electric can help to increase your productivity in the food and beverage industry contact **01707 278847**, quoting the Food and Beverage brochure. For more detailed information on any of the products mentioned in this publication, contact the BROCHURE HOTLINE: **0990 168567**.



THE POWER TO INTEGRATE



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