

INTOUCH

THE LATEST NEWS ON INTEGRATED AND INFORMATION SOLUTIONS

AUTOMATED STORAGE & HANDLING



Logistics and traceability have become major objectives in the management of warehousing and distribution, as all goods whether industrial or consumer, have to be in the right place at the right time.

From manufacturing centres, goods are often distributed to a network of warehouses strategically placed around main populated areas and on main transport routes throughout the UK. Therefore, by seamlessly linking manufacturing data to your supply chain management systems, there are many efficiencies to be achieved and cost savings.

Keymas Controls and Automation have recognised the needs of modern production and supply chain management, providing cost effective customised controls and conveyor systems to ensure traceability of production, sortation sequences, through to storage and despatch.

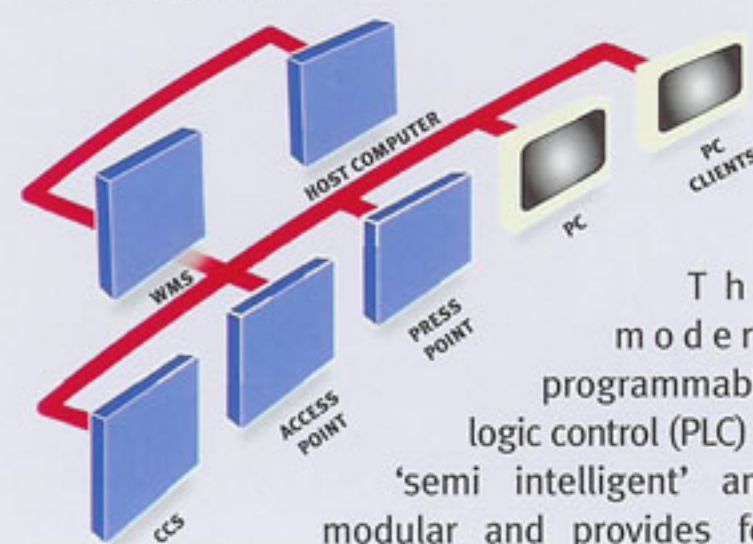
The Keymas approach to business is flexible and this is reflected in the type of customer we service and projects undertaken. From a simple control system interfacing an OEM's equipment into a processing/packaging line, through to the design, supply and commissioning of a total integrated handling solution.

Associated with the materials handling industry for over 18 years, Keymas has the resources and technical expertise to support projects of all sizes and have many customer reference sites to bear testimony to their capability.

Introducing automated storage and handling systems has improved productivity for many clients, optimising on space utilisation, ensuring accuracy of order picking and inventory control, and warehouse management.

MANAGEMENT SYSTEMS

Today's control systems take full advantage of modern technology, as volume production of various modular system elements has provided a wide choice of cost-effective reliable options.



The modern programmable logic control (PLC) is 'semi intelligent' and modular and provides for

greater system flexibility. A large system may be broken down into networked 'sub groups' each with their own PLC and, additional communication links make expansion or modifications simple to meet future requirements.

Keymas can provide complete conveyor control systems which can be integrated fully with existing warehouse management systems, or form part of a totally new Keymas WMS. Live continuous data exchange between the SMW - 'System to Manage the Warehouse', industrial PC's and the PLC ensure full track and traceability of production and sortation sequences. Operational data is visually displayed through 'Windows' based screens.



Control & Automation Systems

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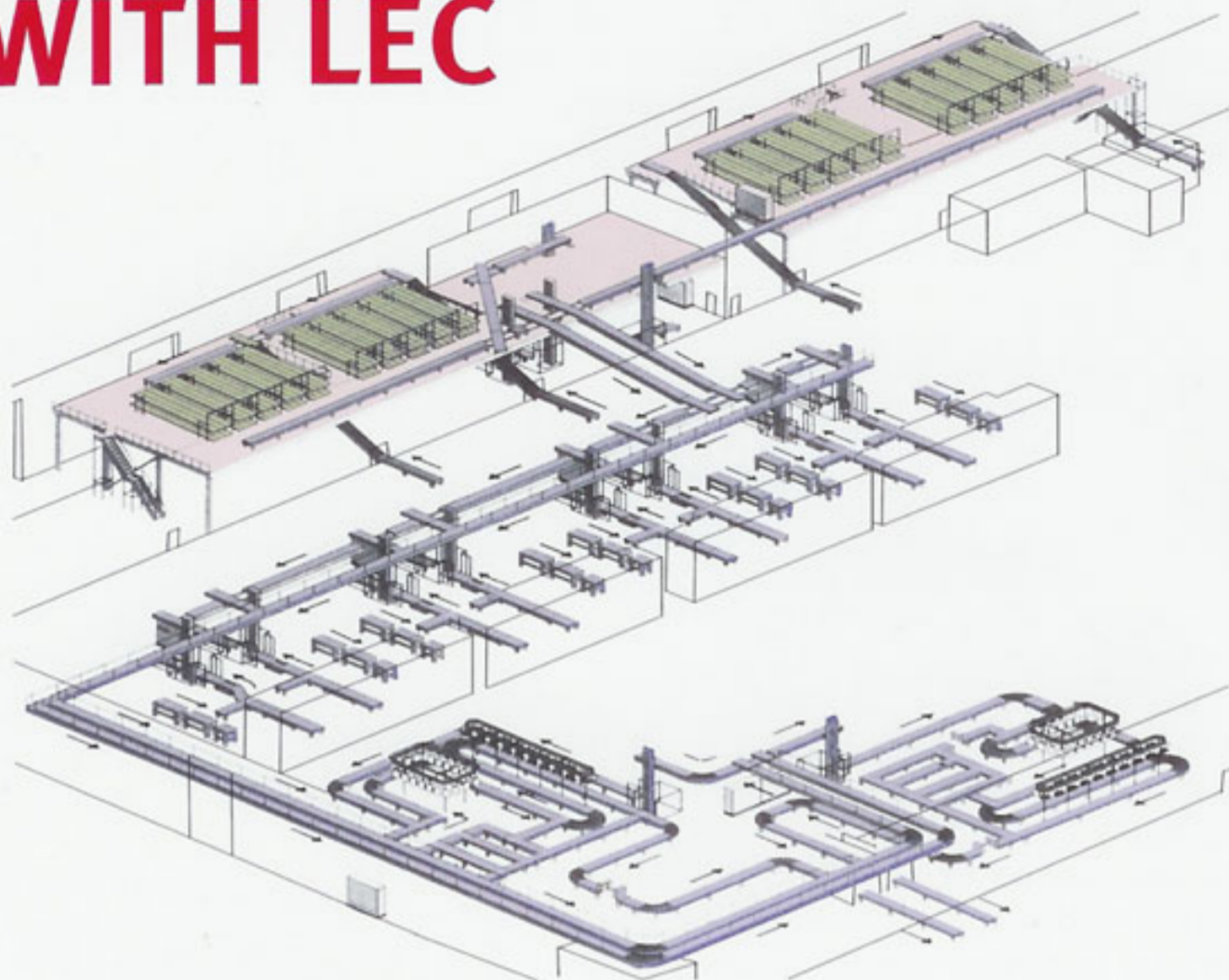
- White goods handling on assembly line

FREE SEMINAR OPPORTUNITY

Register your details now as places are limited

- Keymas evolves Würth handling systems
- 'Continental Tyre' handling solution
- Bulk store and order picking/despatch handling system

KEYMAS IS ALL WHITE WITH LEC



One of Europe's largest manufacturers of white goods, specified Keymas to supply the controls and management system for an integrated material handling project, which was part of a major investment programme to revolutionise production facilities. Since commencement, further updates and re-configurations have taken place, raising the total contract value to up to £2.4 million.

The entire scheme involved the integration of 1.5km of powered roller conveyor, 1km. of gravity conveyor, 14 high speed elevators and 22 specifically designed turntables. At the heart of the scheme is a PC based programme and monitoring system. This supervises the bar code reader network and the 10 PLC's that are strategically placed throughout the plant, all integrated to ensure accurate tracking and movement.

Control computers are programmed for the type of fridge to be produced. The PC's are linked to network control panels which operate the conveyors, turntables, elevators, etc.

Fridge inner containers are given a bar code and placed on a level/ inclined belt conveyor. The control computer allocates each container a destination within the live storage system, which is located on a raised mezzanine floor, and the inner is transferred to store.

Production cells call off work requirements and inner containers are directed from the live storage system directly to the cells, or to a separate holding area. A bar code scanner detects the fridge type and directs the container through a fire door and onto an overhead roller conveyor, being tracked continuously by bar code sensors until it reaches its destination, where it is transferred via a turntable onto an elevator to be lowered to the designated production cell at groundfloor level.

The container is located into a special pre-treated steel fridge cabinet and inserted into a foam filling machine for injection of insulation material between the inner and outer cabinet walls. The product is then transferred to the final assembly area, via the elevator and overhead conveyor. A bar code scanner reads the model of cabinet being transported and directs the unit down one of two slow moving curing lines. A lowerator lowers the cabinet into the assembly area where its doors are finally added.

The completed fridge then passes into the final test area where test equipment using bar code tracking ensures that individual items meet Lec quality control standards. The fridge is shrink wrapped for protection and transported by conveyor into the warehouse for final shipment to the customer.

FREE SEMINAR

"The key to increased efficiencies and traceability in industry"



Keymas Controls and Automation is proposing to launch a series of free seminar events to be held in main cities throughout the UK.

Seminars will be informative, eliminating mystique and jargon, and present a very practical overview of products available and efficiencies that can be achieved with professional information handling solutions.

Whether your's is an established company or in the early stages of business development, many managers are under pressure to provide cost effective solutions and real time saving benefits. The key to logistics efficiency in supply chain operations depends not only on the effective movement of goods, but also on the productive use of information within the system; be it in manufacturing, warehousing, handling and transportation systems.

Keymas will demonstrate that the use of modern technology has improved productivity for many of their clients, optimising on space utilisation, integration of handling systems, ensuring accuracy of order picking, traceability, inventory control and providing the all important management information.

Should individual companies have a number of interested personnel, Keymas is prepared to present the seminar at their offices by arrangement.

With limitations on numbers, anyone wishing to attend the first seminar should telephone Mike Lynam at Keymas (Tel: 01384 401162) to register interest in attending. We will confirm proposed locations and dates by return.



WÜRTH THE INVESTMENT

Some years ago Würth UK, an international stockist of high quality construction fittings and automotive components, awarded a contract to Keymas to supply all the controls and integrate a materials handling system to improve the efficiency in their distribution chain. Since that time, the working relationship has continued as the system has been enhanced to accommodate operational changes.

One of the initial projects was the result of an increased forecast in sales, requiring an automatic improvement in distribution efficiency to cope with the demand. An automated power roller accumulation conveyor system was installed transferring plastic boxes throughout the warehouse, complete with optical recognition coding, and into the packaging and despatch areas.

Creating the brain for the system, Keymas installed a Programmable Logic Controller which received signals from track-mounted sensing equipment and controlled the routing of containers via drive units, 45° in-line transfers and

pneumatically operated stops. The final packing operation was achieved using indexing belt conveyors to automatically feed an in-line strapping machine.

WÜRTH their return with zero pressure

Confident in the ongoing professional services they receive, Würth more recently called upon Keymas to consider a requirement for a zero pressure accumulation conveyor line.

After a site survey and review of existing conveying equipment, Keymas put forward a very cost effective proposal to upgrade and enhance an existing lineshaft by utilising their latest control circuitry for the control of 24volt brushless motorised rollers. Each conveyor zone requires one motorised roller and sensor, both of which are linked directly to the new generation logic control board, via quick connections. Each board is then plugged into the adjoining zone circuit board in order to communicate zone status and create zero pressure accumulation.

The highly efficient and compact units provided an unsurpassed combination of high torque, high speed and high duty cycle, making it ideal for zero pressure accumulations in assembly, packaging and distribution situations. The decentralised method of conveying allows ease of conveyor design as well as flexibility for line extensions and modifications.

Würth have also the additional unique control function which includes flexible zone recognition, singulated or slug (train)

release, synchronised speed variation and stable speed and torque.

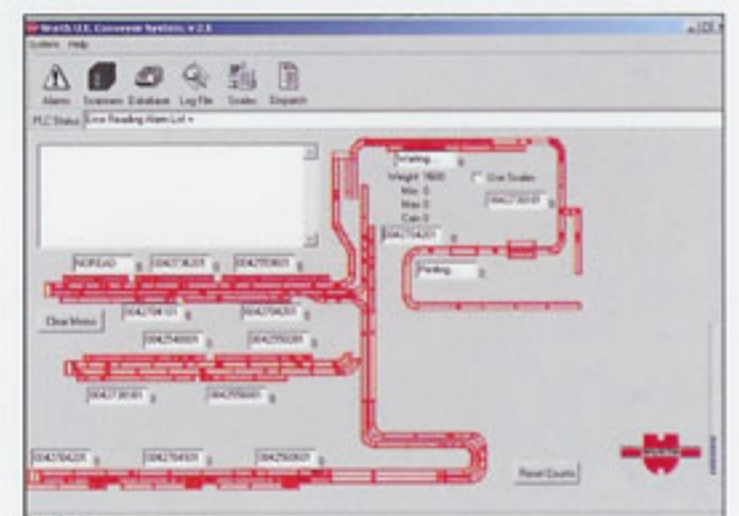
Supplied and fitted into the existing lineshaft side frame with Keymas controls, this provided a neat, highly efficient zero pressure accumulating conveyor solution at a fraction of the cost, as compared against a completely new ZPL handling system with PLC controls.

Keymas 'measures' up at WÜRTH

Recent increases in product/ order awareness involved Würth UK contacting Keymas to enhance the automated order pick process at their distribution centre.

With the increased drive to be environmentally friendly and more efficient, Würth UK contacted Keymas to modify their existing facilities to include Full Radio Data Terminal pick operations, together with full Volumetric capabilities.

Paperless Pick Process

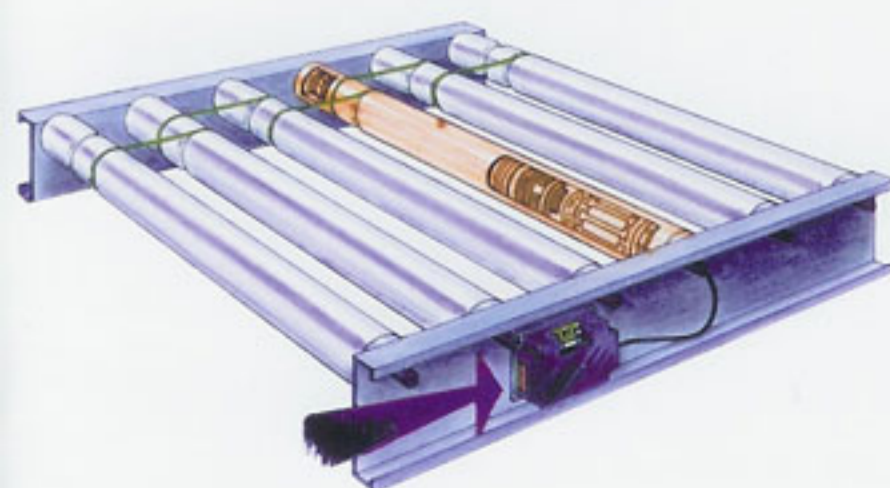


This necessitated the introduction of some 23 RDT's to offer Würth a truly paperless pick process with the added advantage of increased efficiencies in the pick process and order awareness. Using a fully graphical operation, management are presented with accurate product/ order pick information and can trace orders throughout the warehouse.

The introduction of a user friendly 'Volumetric' feature provides Würth with the added facility of knowing the exact number of transportation boxes that will be required, before the pick starts for a specific order. This results in less material wastage, increased operating efficiency and less carriage cost for Würth on individual order shipments.



This long term business relationship bears testimony to the professional and reliable service offered by Keymas Controls and Automation.



CONTINENTAL TYRE HANDLING



As part of a major re-organisation of the distribution network there was an identified need to improve handling efficiencies and storage of finished products. This resulted in the fourth largest tyre manufacturer - 'Continental Tyres' of Portugal, contacting BPS Logistica and associate company Keymas to review the overall handling procedure.

The solution was to design, manufacture and install a stillage handling system to automatically convey tyres from the manufacturing plant to a new warehouse and storage facility located several hundred metres away.

The problem of elevating such a large transportation stillage, measuring 2.4m L x 2m.H x 2m.W required BPS and Keymas to work closely together to provide a total turnkey solution. This included everything from custom built elevators/lowerators, chain conveyors and turntables, together with a special control sub-system allowing integration into the factory wide management system.

The complete project included all civil work, material handling equipment, controls and project management; this was completed on time and within budget to the complete satisfaction of Continental Tyres.

KEYMAS IMPROVE BOOK STORAGE AND HANDLING EFFICIENCIES



A leading logistics company recently awarded Keymas Controls and Automation a contract to improve storage capacity, order picking and handling efficiency at their new warehouse, which was involved with the storage and distribution of books and journals on behalf of a leading international publisher.

Acting as main contractor, Keymas undertook an initial site survey before designing and commissioning the complete turnkey project. This included a mezzanine floor to create additional bulk storage space, feeding to a live storage system at ground floor and a conveying system to support order picking from some 12,000 picking locations. The whole ground floor operation was illuminated by Keymas to ensure safety of operations in re-stocking and order picking.

Running parallel to the order picking face, is a purpose designed three tier conveying system with built-in workbench. Three different sized boxes, feeding from a new case erector, are accumulated on lineshaft driven roller conveyors for the operative to select the optimum case size. On completion of an order, picked from the live storage racking, cases are placed on a conveyor located below the workbench to be transported on a series of lineshaft powered roller and belt conveyors, via case sealers and taping machines also supplied by Keymas, to a marshalling area for sorting and despatch. To assist in vehicle loading, Keymas supplied Bestflex vehicle loaders to reduce manual handling.

The customer commented that the Keymas proposal clearly demonstrated an understanding of material handling techniques and by using modular equipment within the system design, this contributed to a very competitive tender. Their proposals also provided for maximum flexibility, making it easy and inexpensive to make system changes to meet possible future changes or expansion needs.

The system met their criteria for improved storage, order picking and handling efficiencies and was completed on time and within budget.

