

## Grocontinental

### RF helps organization to “gro”

Grocontinental has come a long way since it was founded back in the 1920s. From humble beginnings Victor Grocott, father of the present Chairman Ray Grocott, launched what was initially a livestock transport service for local farmers – first using horses, later vans and lorries. Subsequent generations of the family have overseen the evolution of the company into what is now one of the largest storage and distribution organizations of its type in the country. The company has developed a particular expertise in handling the specialist requirements of the chilled and frozen food sectors and can list many blue chip companies amongst its client base.

The company has historically been based at Higher Heath in North Shropshire where it has a 10,000 square meter site. However, more recently Grocontinental have added a second award-winning facility a few miles further north, on the edge of Whitchurch. The huge additional facility provides a storage facility of some 60,000 pallet spaces, 25,000 of which are frozen, 25,000 chilled and 10,000 ambient.

The pallet throughput averages approximately 1,800 each day, though this number increases to in excess of 2,000 at peak times of the year. With the Whitchurch facility now in full operation, Grocontinental can handle around a million pallets a year in total.

Much of the investment in the Whitchurch facility has been spent on refrigeration, mobile storage, conveyor systems and the updating of the company's radio frequency ( RF ) infrastructure. The latter is an integral part of an overall spend on IT systems that exceeds half a million pounds.

The adoption of RF within the new facility was a logical strategic move according to Peter Layfield, Grocontinental's Finance Director : “The physical nature of the Higher Heath facility and the throughput we were handling initially didn't warrant such an investment. However, the creation of the Whitchurch site was part of a very ambitious long-term expansion strategy that will see gradual de-emphasis of the Higher Heath site and centralization of our facilities. As such, it was vital that we adopted the latest technology to ensure that quick and problem-free service can be retained throughout every phase of our growth. With the addition of so much extra capacity, the retention of paper-based systems would have seen the company suffering under an impossible administrative burden. The handling movements associated with our move into frozen storage were higher than we anticipated, based on our experience with chilled and ambient products, but the adoption of RF means we can cope with such activity levels with ease.”

The incorporation of a cold store facility at Whitchurch was a partially speculative strategic move but was also a response to the needs of its customer base. Several large existing accounts had frozen storage facilities with other organizations – Grocontinental's objective was to encourage these customers to consolidate their frozen and chilled storage requirements within the Whitchurch facility. Effectively, Grocontinental were focusing on manufacturers whom they could offer a back-end to their own production process. This proved to be sound commercial rationale for as soon as the capacity was established it was filled with the frozen goods requirement of both existing, and several new, clients ! Much of the stored product is ultimately distributed to other manufacturers, the remainder forwarded to retail outlets.

The Whitchurch facility is governed by warehouse management software (WMS) developed by Chess, in conjunction with **Belgravium RF hardware. The RF hardware consists of a combination of hand-held and truck-mounted terminals, which are of a particularly rugged design. Grocontinental evaluated the product ranges of several manufacturers but could find few who offered cold store capability, within an 'open systems' emulation architecture. Belgravium terminals have integral on-board heating components which ensure that radio coverage is retained on a continuous basis and battery life between charges is maximized.**

An effective triangular relationship between Grocontinental, Belgravium and Chess ensured that the installation of the new warehouse IT system proceeded without a hitch.

Orders are currently received via fax, phone and e-mail, although the company is considering the adoption of an EDI system. The order bank is continually evaluated to ensure the most effective picking flow but typically, orders are released on a day one for day three basis, although there are many instances where instructions are accommodated to within a couple of hours of loading. Typically, in a picking scenario, there will be half a dozen RDT-equipped operatives awaiting work instruction. The system allows for optimization of the picking routine according to a number of criteria. Rarely will an operative be picking against a single order. An operative will be instructed to pick for several orders where the required product is located within close proximity. The order will be part-picked and the operative sent to a marshalling area where the product is assembled into the complete outgoing order. Picking accuracy is ensured via the adoption of location check digits throughout the entire facility.

The Chess software also has in-built algorithms that allow order prioritization to be added to the creation of an optimum set

of picking instructions. The location of the trucks and stock within the bay are cross-matched against the scheduled pick and accompanying priorities and the operative instructed accordingly. Due in part to its real-time nature, the Belgravium-Chess system has the flexibility to cater for the changing dynamic of the warehouse operation. Advance planning of picking routines is invaluable but, in the real world, suppliers can be late for or miss their booking slot entirely, orders will be added to or cancelled from the system at short notice. The scheduling of work is a delicate balance between assessing the 'certainty' of orders that ideally should be forward-picked and the adoption of a general principle that scheduling as near to your cut-off point as possible is the best way to retain flexibility. As Peter Layfield explains : " Forward picking an order when experience tells you that there is a strong likelihood of that company altering or postponing it's requirement is inefficient – it merely clogs your marshalling area with unnecessary product. Certain customers are typified by a regular and consistent order requirement that allows us to operate with a high 'certainty level' with regard to their pick. Another factor is the balance between third party transportation and the use of Grocontinental's own vehicles. We have a substantial fleet of 45 vehicles and just over 100 trailers, 87 of which are refrigerated. We obviously tightly manage our own transportation capability and can, again, accord maximum 'certainty' to schedules that will utilize these vehicles. With third party operators we are obviously reliant upon them making their pre-determined booking slots."

The RF system is also used within Grocontinental's goods-in operation. The company receives pre-receipt notification of an incoming order. On arrival, the **products are scanned into a stock area and then re-scanned as an integral part of the 'put away' process, using Belgravium's 'Geneva' hand held terminals.**

The Chess software provides full visibility of individual operative productivity. Statistics are available on every facet of warehouse activity – times taken on individual picks, 'dead' time when an operative is idle, the frequency of picking problems reported by an operative etc. – which effectively constitutes a full audit trail for both stock and employees. The fact that stock location information is inherently accurate and available on a real-time basis negates the need for periodic, time-consuming, manual stock checking procedures. Indeed, the rate of throughput of the Whitchurch facility means that such paper-based procedures are actually pointless. As Peter Layfield remarks; "I could theoretically run off a report that provided stock location information. However, by the time I've printed the report and walked to the location there is every possibility that the stock could have been allocated against an order and picked accordingly."

The future is looking bright for Grocontinental. The creation of the Whitchurch facility has been fully vindicated by the level of new business secured and the company is about to complete a further extension to the Whitchurch site. This will add a further 7,000 pallets of frozen storage to its capacity and will lead to a further extension of the Belgravium RF system on the site.

Peter Layfield summarizes the key role that RF has played in optimizing the warehouse facility: "As I mentioned before, the prime motivation for the adoption of RF was to reduce the level of paperwork within the system in order to control the administrative burden. However, the other major benefit is the availability of real-time information and the operational visibility that provides. With real-time data we can readily optimize load planning and order prioritization. Now that we've invested in the core RF infrastructure it's simply a question of adding a limited amount of hardware in order to extend that real-time capability to any area of the facility we wish. The bottom-line is that our level of expansion to-date couldn't have been achieved if we hadn't adopted RF technology."

Chairman Ray Grocott adds : "I think that many people have to come to think of Grocontinental as a small successful family-run business and, while that is true to a certain extent, it does not begin to tell the whole story. With the Whitchurch investment people have come to recognize us for what we really are, a firm that has not only expanded its share in the national market but has also gained recognition internationally. The investment we have made in IT systems has ensured that our warehouse facilities remain 'state of the art' and has helped cement growth by ensuring that our customer base is operationally well-served."