CASE STUDY 19 – Warehouse optimisation, United Utilities

Working in conjunction with Burman Associates we were approached by United Utilities to undertake a full review of their warehousing operation for water, electricity and gas meters. Spending time working with the staff in the warehouse and having in depth discussions with customers and suppliers we were able to formulate a plan which not only significantly reduced the warehouse footprint, moving from an 80,000 sq.ft. plus building to a 15,000 sq. ft building but also reducing the amount of handling by staff through increasing the number of direct deliveries to the engineers.

"Overall, I was very impressed with the company, they delivered on time, against the agreed budget, secondly, interaction with the business was managed very effectively. The recommendations presented have been fully implemented, operational / financial benefits have been realised....thumbs up for me. I would recommend that you request that a chap called Gwynne Richards be appointed as the Project Manager".

Paul Quinn Procurement Manager United Utilities

CASE STUDY 20 - Warehouse optimisation, Harding Brothers

Working in conjunction with Burman Associates, Apprise consultants were able to assist Harding Brothers management improve warehouse operations by re-designing the existing warehouse internally by removing the portakabin offices, replacing them with offices under the mezzanine, changing storage layouts and providing greater access to loading doors.

The consultants worked closely with the Harding Brothers management team and staff to come up with the optimum solution enabling Harding Brothers to cope efficiently with a new contract which was to add 20% volume to the operation.

The operation was cost neutral in terms of the construction of the offices and working conditions were much improved leading to greater productivity.

Gwynne Richards and a colleague from Burman Associates were chosen by Harding Brothers, to carry out a review of warehouse operations and conditions, with a view to maximising the real estate, facilities and personnel available. They quickly got to grips with the task in hand and diligently carried out a full review of the site working practises, taking great care to interview personnel and ensure they understood the finer workings of our business. We found the consultants to be of the highest calibre, taking great care to meticulously plan and document each phase of their proposal.

At the end of their review they gave a thorough and professional presentation to senior management and left us to decide our own path. We chose to follow their advice and the results of the change, much improved floor space, operating area and offices, have been of enormous value to both the team and the company.

Roger Bishop Harding Brothers

CASE STUDY 21 – Warehouse Optimisation – Underwater robots in oil industry

Apprise Consulting Ltd was approached by Company A to evaluate the current warehouse complex and its associated operational practices to include the warehouse processes from receipt through to

despatch including returns, the facility layout and flow of goods, the storage and handling equipment utilised and the staffing levels.

To undertake the above evaluation, five days were spent on site to record all the processes and review the operation in its totality. Specific areas included inbound, put-away, picking and shipping. Time was also spent discussing the staff requirements and issues whilst a questionnaire was sent to the offshore operations to get their views on the service provided by the warehouse.

The following suggestions were discussed fully with the staff to ensure that they were feasible based on the experience and knowledge of the existing staff.

Although the service from the warehouse to its internal customers was good (based on results of an internal survey instigated by Apprise) it did come at a cost. This was mainly in the form of additional labour costs.

The warehouse operation suffered to a degree because of the lack of a Warehouse Management System. The system was a good ERP system however it was more of a stock control system as far as the warehouse was concerned, as opposed to managing the warehouse operation itself.

As a result, the staff spent a great deal of time on their computers when they could be actively inhandling, putting away, picking and despatching.

The location system in the warehouse was tied to individual products and this had a detrimental effect on available storage locations. Slotting was not used in the warehouse to identify the most popular items nor those which ship together regularly. A product popularity and affinity file was produced.

In order to provide solutions to the issues found the following suggestions were made:

These suggestions should be introduced gradually with the agreement and involvement of all the staff. Managing these changes is crucial to the success of the ongoing operation.

- 1. Introduce a Warehouse Management System (WMS) into the warehouse operation
- 2. Reduce the amount of stock held
- 3. Hold stock closer to the point of use Workshops and DTS
- 4. Review the procurement process in terms of order quantities and non-part numbered items
- 5. Erect racking in the main warehouse and the shipping area
- 6. Ensure that areas are kept clean and tidy at all times
- 7. Introduce meaningful KPIs and make sure they are aligned across departments
- 8. Reduce the amount of checking on in-bound utilise random checks based on supplier accuracy
- 9. Improve the pick operation through utilising technology and re-locating stock by ABC
- 10. Look to introduce minimum order quantities
- 11. Only ship items to Workshops when all parts on the order are available, where feasible

- 12. Evaluate kitting as an option to reduce pick times
- a. Produce a list of required parts for each major component
- b. Build those parts into a kit and produce a new product code
- 13. Move towards a random location method of storage
- 14. Improve communication between departments and move away from a silo type management system
- 15. Encourage management staff to make quicker decisions and put a time limit on replies
- 16. Train the warehouse staff
- 17. Separate deliveries into the warehouse from collections
- 18. Clean and treat both warehouse floors and sort out damp in the shipping area.

"Some really good ideas that we need to adopt. I really like the random locations and will be pushing this".

A second phase was initiated following the first report.

The brief for phase two was to outline the space required by Company A for their current and future business needs. To undertake the above evaluation, two days were spent on site to record all the current space utilised and discuss potential future requirements. Conversations took place with members of the warehousing and QA teams.

A decision was taken to move the existing operation to a nearby warehouse facility which had recently become available.

Apprise utilised a Warehouse design and simulation package to produce an efficient and cost effective warehouse layout.

The majority of ideas were accepted and the move to the new warehouse took place.

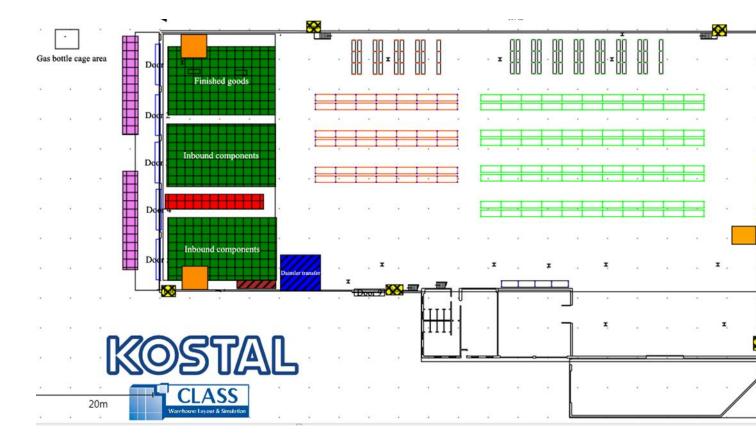
"We've been in a whole year now and what a difference. We went for a slightly different layout but still using your flow". Company A Supply Chain Manager.

CASE STUDY 22 - Warehouse layout optimisation Kostal

Apprise was approached by Kostal, an automotive parts supplier to undertake a full review of their warehouse operation.

Apprise utilized Class, a warehouse layout and simulation software package to produce an efficient layout for the warehouse they were transferring to.

The transfer of the warehousing operation was successful and there was sufficient space for future expansion.



CASE STUDY 23 – Warehouse layout optimisation Appleton Woods

The project work was carried out by David Cairns and Gwynne Richards.

The overall plan was to provide Appleton Woods with an efficient warehouse layout for their new building, utilising the space to its best advantage by liaising with racking companies.

Phase 1

An understanding of the current operation was acquired and after a number of iterations a stock file was produced detailing products by frequency of sale and total sales.

Based on the analysis of this stock file and discussions regarding future sales and operations a warehouse layout was produced for the new location.

The agreed layout was circulated to the three racking companies contacted so that they could produce a quote to supply the material and quote for dismantling and erecting both the existing and new shelving and racks.

The final report featured a warehouse layout plan detailing how the racking and shelving was to be set out in the opinion of Apprise and the racking companies utilised.

The idea was to use as much of the current equipment as possible to minimise further investment.

The report identified a layout that met immediate requirements to accommodate both the current and near future level of activity and provided options for extending fit out to accommodate projected growth and discussed the ease or otherwise of such future enhancements.

Sub phase 2

Apprise liaised with AW to decide on the stock to be moved and outline potential locations within the new warehouse for the transferred stock.

Phase 2

The next phase was to assist Appleton Woods with the transfer of product from Linden House to New Linden House and set up the warehouse locations.

The following tasks were carried out:

- 2To oversee the installation of the racking and other storage mediums
- DEnsure that the racking is labelled correctly with system generated locations
- Production of an implementation plan for the transfer of stock
- Production of a warehouse layout map detailing product locations
- Managed and arranged the transfer of stock from the existing building to the new warehouse
- ②Assisted in managing the despatch of goods from both locations in the initial stages
- ②Ensured that stock was placed in the correct locations

"Having gained a thorough understanding of our warehousing requirements, Gwynne designed, specified and sourced the requirements for our new facility. He was also asked to plan the move, and source the resources necessary to accomplish it. The move went very smoothly and the new facility is working extremely well. Gwynne helped us through a significant change, and his professionalism, knowledge and reassurance were greatly appreciated. It was a pleasure working with him, and I will have no hesitation in calling on him again as our business continues to develop."

Chris Brown - MD, Appleton Woods Ltd