

BEST PRACTICE

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For Medicinal Purposes

Leading supplier minimises production line downtime with Kardex

Nutricia, part of the Danone group, are leaders in specialised nutrition for the youngest and most vulnerable. Their Liverpool site specialises in infant formulas for premature and nutrient deficient newborn babies. These products are then distributed throughout the UK to hospitals, pharmacies and dieticians.

Due to the nature of their products orders are frequently placed for same-day dispatch. It is therefore imperative that the production line process at Nutricia is not just reliable, but also that downtime is kept to an absolute minimum. In order to achieve this, Nutricia's Technical Stores Department plays a crucial role in this process.

"If our production line machines break down, it is the Technical Stores Department where the Engineers would find the necessary spare parts and equipment to carry out the repairs. The organisation of this area is vital" explains Neil Royle, Technical Stores Manager.

This organisation has been achieved by the installation of a Kardex Shuttle XP with Powerpick software. This has allowed 106m² of floor space over four different areas to be consolidated into just one area, into a footprint of just 6.7m². The Shuttle holds over 2,000 items with a stock value of £422,000.



The Need For Change

However, six months previous and the picture was completely different. Spare parts were located on racking, in cupboards and in boxes on the floor within four different areas of the warehouse, none of which were being maintained properly.

"It was a nightmare. Spare parts were stored all over the place. It was a mess. We just couldn't keep track of what stock we had. An engineer would take a part to fix a repair but wouldn't inform anyone. If another machine went down that needed the exact same part,



the machine would remain down until the new part was delivered, costing us tens of thousands of pounds. The performance of our equipment and its maintenance is extremely important. If we have a breakdown, people are literally waiting for our products" states Neil Royle, Technical Stores Manager.

Due to the spare parts not being stored in one central location Nutricia's Engineers spent considerable amounts of time searching for the appropriate part in all areas of the warehouse; on average up to 30 minutes per part, resulting in production line downtime. If a part could not be found two were ordered; one to repair the machine and another to keep in stock. However, due to stock accuracy levels running at approximately 75%, Nutricia often ended up with three or four of the same part, impacting on the company's bottom line figures. Up to 25% of the Nutricia spare parts were also redundant stock.

As a result a new way of working was essential, with the main impetus being placed on the centralisation of the Technical Stores Department. The solution needed to offer a way for stock levels to be monitored so that re-ordering was done in good time, resulting in the production line experiencing absolutely minimal downtime. The initiative for considering spares automation came from Operations Director Rogerio Pacheco tasking the team to investigate this failing area.



The Perfect Solution

“My Manager Christine Joyce was given the project of looking for a suitable storage system. Her research came up with Kardex. Initially we were leaning towards the Kardex Carousel but after speaking with Kardex, the Shuttle XP seemed to suit our requirements better. Kardex took us to another large healthcare company who were also users of the Kardex Shuttle XP. We were able to look at their operation and witness firsthand how Kardex had simplified their parts picking operations. However, personally I think that the decision to go with Kardex had already been made before this site visit” explains Neil Royle, Technical Stores Manager.

The 5.6 metre high Kardex Shuttle XP and associated PowerPick software was installed to schedule, in just three days between Christmas and New Year to coincide with Nutricia’s downtime period.

Nutricia’s Shuttle XP has twin access. Spare parts are cleaned with alcohol wipes, placed into clear bags and loaded into one side of the Shuttle XP. When required, Nutricia’s Engineers retrieve the spare part from the access opening in the ‘high care area’ (cleanroom standard 10001) on the reverse side of the Shuttle XP. Engineers are

required to wear full protection to enter this area. The ‘high care area’ is essential due to the nature of Nutricia’s products (designed for sick babies) and the strict hygiene requirements surrounding them (they must be germ free).

“The Kardex Shuttle XP has enabled us to simplify our spare parts process, especially since the integration of Kardex’s PowerPick software with SAP. If an Engineer requires a part from the Kardex machine, SAP generates a work order for it. This allows stock levels to be monitored and automatically triggers the ordering of replacement parts as and when required. Stock accuracy now stands at 96%; stock checks are faster and less frequently required. Improvements in productivity have also been realised. Items are now retrieved, on average, within two minutes resulting in the production lines being back up and running almost immediately. The time saved now means the Engineers are free to attend to other things” states Neil Royle, Technical Stores Manager.

The Kardex Shuttle XP has provided Nutricia with many other benefits. Stock shrinkage has been totally eliminated and security has improved dramatically via the introduction of usernames and passwords. Health and safety has also improved; no more bending or stretching to locate parts; parts are delivered to the user at an ergonomic height.

With the introduction of the Kardex Shuttle XP, Nutricia are also hopeful that they will be able to reduce their stock holding.

“At the moment we currently hold about £422,000 worth of stock, but the actual amount that is issued each month is only about £12,000. Based upon this we should only really be holding about £130,000 worth of stock. A new rule has been introduced by management, that whatever stock is not moved within that year, we will be expected to pay one third of the cost of, and then the following year another third. It is therefore within our interests to keep stock levels to a minimum” explains Neil Royle, Technical Stores Manager.

Proven Success

With Nutricia the facts speak for themselves. Prior to the installation of the Kardex Shuttle XP, there were seven Engineers who on average spent 200 minutes per day retrieving spares for breakdowns. On average 15% of the required spares could not be located at all and had to be re-ordered. Per year this equated to 833 hours spent by the Engineers retrieving parts at a cost of £22,491. The introduction of the Kardex Shuttle XP has meant that, on average, only 50 minutes per day is spent retrieving spare parts; equating to 208 hours per year at a cost of just £5,616. An annual saving of £16,875.

Nutricia cost justified the project on the assumption that three engineers at a cost of £114,000 could be replaced with three storemen at a cost of £66,000; a £48,000 saving. The total of the two savings were in the region of £64,000 and the payback period for the Kardex Shuttle XP was approximately 9 months.

“The reality of the installation has exceeded our expectations. The Kardex Shuttle is an impressive piece of equipment. It is easy to use and has without a doubt improved access to our spare parts. If as an Engineering Department you want to centralise your spare parts for ease of retrieval, then look no further than Kardex. For us, things are definitely a lot more disciplined and far less chaotic than they were before” concludes Neil Royle, Technical Stores Manager.

