



How Delos helped Bestobell double its capacity and improve cash flow

The company

Bestobell Valves of Sheffield was consuming cash at an alarming rate. Thanks to a Delos Partnership education programme, not only is Bestobell's cash flow back in balance, but the site is making more products than ever in half the space. The operations of Bestobell and its sister company Conflow have been merged on the Sheffield site and their parent company Flow Industries is actively looking for business with which to fill the space vacated!

Bestobell makes over 80,000 standard and bespoke cryogenic valves a year for the industrial gas producers and equipment suppliers. The valves handle liquid nitrogen, oxygen and carbon dioxide and other low-temperature gases in gas holding tanks, gas trailers and industrial processes at temperatures down to 196 degrees centigrade.

The industrial gas business is

a global niche market in which price, delivery and quality are of paramount importance and customers are such as BOC and Air Products.

The challenge

Flow Industries acquired the Bestobell business in 2001 and appointed a new Operations Director, Andrew Sinclair. "Product quality was good," says Sinclair. "But getting valves from us was too much trouble," he says.



Andrew Sinclair - Operations Director

Lead times, quoted at six weeks, were usually eight or nine and sometimes 12, way longer than the competition so customer satisfaction was

poor." Sinclair made some improvements in his first six months but lead times and inventory levels stayed stubbornly high. Bestobell's ERP system worked well but those using it all had different objectives. Purchasing staff were briefed to avoid shortages so bought too much inventory. The shop floor manager prioritised orders with the highest value but machinists, told to be efficient, avoided set-ups by processing the largest batches first.

Sinclair's priority was to make sure everyone in the workforce was working to the same objective, "And we had to start off with customer service - achieving a delivery performance that customers are happy with."

How Delos met the challenge

Mark Ansell, the Managing Director of Flow Industries who own Bestobell, had previously worked with Richard Watkins of the Delos



Partnership. There he had seen inventory and customer lead times reduce and hoped to achieve the same again at Bestobell. Ansell appointed Richard to visit Bestobell and identify the problems. Shortly after, Andrew Sinclair joined Bestobell Limited as Operations Director. Sinclair started to work with Richard Watkins, whose courses he had attended earlier in his Career.

Watkins and Sinclair worked out a series of one and two-day bespoke workshops on planning, purchasing, sales forecasting, capacity management, detail planning, bills of materials and inventory accuracy.

“Delos helped the workforce and management to believe that having the best product is not enough – you must have the best customer service levels as well to survive.”

“The first thing Richard did,” says Sinclair, “was to get everyone in the factory involved. And it really did get everyone else involved to the

point where they felt, ‘It’s our responsibility really – customer service, making the company profitable – it’s not just about operations making a shipment’.

“Richard’s quickly identified the issue with capacity management and how that affected what we are able to offer,” Sinclair summarises. Bestobell’s biggest problem was its inability to forecast accurately, despite steady demand. Firstly Watkins engaged the Sales and Marketing people in the process to provide a realistic forecast and then he immediately pinpointed the key problem: Bestobell was over-estimating its capacity, so how could any plan based on this ‘phantom capacity’ be valid?

Bestobell based its forecasts on theoretical, not demonstrated, capacity. Bestobell then filled the machine shop with work in progress while the stores would start picking kits to issue to assembly when only half the kits were available, produce manual shortage lists for each kit and send that back to the machine shop or purchasing to chase. Thus the

actual driver for machine shop priorities were these manually created shortage lists. The stores floor was covered in part-picked kits, incomplete kits were issued to assembly in a desperate attempt to recover some of the lost time making assembly very inefficient. And this was a business with an up-to-date ERP system. Delos’s programme forced the company to work out from its own history how many finished parts it had put into stores and how many standard hours it took to make them. This calculation gave Bestobell its true capacity - well below the figure it had assumed.

Richard then got Bestobell to use the trial kitting tool on the ERP system so that stores personnel did not start picking a kit to issue to assembly until they knew that all items were available to pick. This was a major culture change.

The machine shop work to lists then became genuine work to lists and not being substituted by a manual alternative.

Now, by knowing its real rate of production, paying more attention to data accuracy, and putting an end to the



allocation of raw materials, Bestobell could predict exactly not just what it could deliver and when, but how much raw material it would need. Instead of buying all the materials needed for the phantom capacity, purchasing bought just the material needed to deliver those products which they knew, from past records of demonstrated capacity, they could actually make.

The results

Cash Flow: Bestobell's key measure - cash flow - was the difference between survival and disaster. The longer the lead times were, the worse the suppliers' tempers became. "By doing what we did with Delos," says Sinclair, "we turned that around." As the work in progress reduced, Bestobell needed to buy less raw material: "That turned our cash flow situation from being negative to being break even," Sinclair says.

Less inventory: Finished goods stocks reduced from £102,000 at the end of October 2002 to £44,000 – a 57 % reduction.

Better customer service: Bestobell's delivery

performance began to improve. We have a clear goal to get to 2 week lead times for all runner and repeater products lines, and we know how to get there.

Work in progress (WIP): says Sinclair, "just fell out of the floor. We must have had over £100,000 in WIP, which included all the kitting." WIP reduced to no more than a few thousand pounds' worth. Now if you go into the stores, you will only see the kits on the floor that are being picked today and not rows and rows of incomplete kits

Handling: "Much reduced," Sinclair reports. So the company's velocity - the proportion of time the goods are being worked on throughout their time in the plant - has risen.

The future

Bestobell has only started its journey, Mark Ansell declares: "Because we've reduced the amount of WIP and through a complementary 5 'S' programme, we've reduced the number of machines and we're looking at those inefficiencies, we can reduce the amount of space that we

use by 50 per cent. We now need to say to the banks, 'Do you know another business that's struggling because its overheads are high? We have a good management team, good systems, and we've demonstrated we can manage a business. Give us something else to go at!'"

Sinclair heaps praise not just on the content of the Delos courses, but the way they were delivered: "Richard brings it all together, makes it practical and enjoyable by communicating at all levels with people in their own language. Without exception everybody who has been on the course has said, 'We actually learned something today'. That's quite different from some courses that you go on.

Ansell concludes: "One major benefit was that we started changing what we were doing immediately after leaving the workshops. We're a small company and the training was a considerable investment for a company of our size that was struggling with cash. The money was quickly paid off from the inventory reductions"