

Case Study

Autoparts Toyota.

Kaizen: New Perth distribution centre.





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The Japanese have a special word: ‘kaizen’. There’s no direct English equivalent, but kaizen refers to a kind of continuous improvement that has become integral to successful Japanese businesses like Toyota.

Kaizen is as much daily ritual as management technique. Essentially, it empowers a company’s people on the ground to diagnose inefficiencies and eliminate them from business processes.

Kaizen helps humanise the workplace, encourages meaningful collaboration and eliminates unnecessarily hard work (known as muri).

When Gary Nettle took the reins in 2007 as general manager of Autoparts (Toyota’s parts and accessories arm in West Australia), he quickly saw plenty of muri and lots of opportunity for kaizen in the company’s Perth distribution centre.

“The DC was built in 1982, and had never been significantly updated in 25 years,” explains Nettle. “We sell 20-odd thousand new Toyotas a year in WA. With a car park

of over 400,000 Toyotas in the state, Kewdale (the suburb where the facility is located) was creaking under the snowballing demand for parts and accessories.”

An urgent problem.

A greenfields site was quickly discounted. At the time, WA was at the height of the mining boom and suitable property was at a premium. Additionally, the business was already at full capacity and simply couldn’t wait 2 or 3 years for a new facility to come online.

So the decision was made to create a brown site, renovating fundamentally without disrupting the normal flow of business.

“Toyota has a special place in the West Australian heart. For years, we’ve outsold Holden and Ford combined,” says Nettle. “We simply couldn’t leave our customers without parts and accessories, even for a day.”

Under the direction of Avi Olender, Autoparts’ senior projects manager, a detailed tender was drawn up, doubling the number of



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locations from 33,000 to 70,000. “The ‘Toyota Way’ requires a one part, one location system. It’s a finite specification; each item stocked has to have its own unique location,” explains Olender.

Tenderers were assessed on the quality of their components and their logistical capability. After a highly competitive process, Dexion was selected as project partner.

Work at Kewdale began in February 2009.

Room to move.

Kewdale carries an eclectic range of 35,000 SKU, from giant roof panels for Coaster minibuses to steel Landcruiser bullbars to fingernail-sized washers. Not surprisingly, the variation and breadth of stock had changed beyond recognition since Kewdale’s opening in the Cressida and Crown days of 1982.

And while the number of Toyotas on the road had increased exponentially, the DC’s floor space had remained unchanged at a modest 6,000 square metres.

“There was no capacity to store any materials on site,” says John LeMerle, Dexion’s project manager. “We had to pre-assemble as much as we could off site, then ship it in.”

Dexion’s logistical solution took advantage of the company’s strong local presence. Using storage capacity not far from the site, an intricate six-step implementation plan was executed. “So as not to interrupt the flow of business, stages were completed by Dexion one at a time, then handed over to Autoparts. Sometimes, there were partial handovers within those sections. It was a fine balance,” says Autoparts’ Olender.

The only way is up.

Early stages of the project were completed using Dexion Keylock MK6 narrow-aisle racking. Accessories such as mesh decks and dividers were deployed to help efficiently store medium sized and bulky parts.

Autoparts’ tender also called for a multi-tier module as the centrepiece of the new



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system. Dexion proposed a three-tier HI-280 shelving solution.

“HI-280 is an extraordinarily flexible system,” comments LeMerle.

“A light-to-medium duty shelving system, it has a modular design that makes it pretty easy to reconfigure when demand patterns change.”

“It provided high density storage of small parts while fulfilling Toyota’s one-part-one-location criteria,” adds Olender.

Now completed, the HI-280 stretches 7.8m from floor level to the top of the 3rd tier. Again, Dexion Keylock MK6 racking is utilised and extensively accessorised to meet Autoparts’ specifications.

Upper tiers are accessed via structural steel staircases, lined with handrails and decked with mesh Fameco flooring sourced from Belgium.

Four loading gates and a hydraulic goods hoist help shift goods in and out. Dividers and bin fronts have been added,

maximising the utility of available space and ensuring the most efficient storage of any shaped and sized item. Adjacent to the HI-280 are three vertical carousels, critical to the high-density storage of very small parts. Combined, these units now consolidate and organise literally thousands of parts and accessories that were previously scattered the length and breadth of the DC.

Challenges overcome.

While the technicalities of the solution were challenging enough, there’s no doubt what the largest complication was. “Keeping out of the way of daily operations,” smiles Dexion state manager, WA, Mark Brajkovich. “We had 5000-odd SKUS washing in and out of the facility even as we were trying to rebuild it. “Fortunately our working relationship with the Autoparts guys was fantastic.”

The understanding and respect was mutual, and critical to the project’s success. “Craig (Dexion site manager Craig Lee) has been here pretty much every day for

12 months now. He’s got his own desk and office. He’s even put himself up for Employee Of The Month!” laughs Nettle. “Because Dexion have been there day in, day out, together we were able to make a lot of important decisions on the fly.” Through an intimate understanding of goods flow and anticipating times of peak activity, Dexion were able to stage deliveries and installations in perfect sync with Autoparts’ natural business patterns.

This didn’t surprise Gary Nettle. “Perhaps the main reason we decided to go with Dexion in the first place, is the time they took to really understand our business. From the moment they started their tender, they were really hands-on guys. The Dexion team, led by Mark, John and Craig, were leaders in every way. Not just in the racking they installed, but in the way they ‘got’ our business. They brought things to the party. Ideas that we would never have thought of.”

And the results? Nettle continues. “The centre isn’t due to go fully live until the end of March. But even at this early stage

efficiency levels and picking rates are way above any of our expectations. Our figures for 2008 were swelled significantly by the mining boom that was going on at the time. But even taking into account that we were effectively rebuilding the centre over the entire year, plus the global financial crisis which put such a hole in new car sales, we were still able to better the 2008 figure in 2009. “That’s a wonderful result!”

What really excites both Dexion and Autoparts though, are the possibilities just around the corner. Nettle again. “What’s fantastic is that we’ve done all this work, reinvented the whole facility, while the economy was in a big dip. Now that things are picking up again, and all the signals seem to be there, we’re really well placed to take full advantage.” In the spirit of kaizen, Gary Nettle doesn’t see the relationship with Dexion ending anytime soon. “We’re due to go live soon, perhaps even a little ahead of schedule, but that’s not the end of it. Our business faces new challenges every day. We want to partner up for life.”