Case Study

Macsim.

Wire decked racking solution; riveting stuff for fastener business.



"Storage solution which includes wire decking leads to 30 percent increase in productivity for Macsim Fastenings."

A Dexion Supply Centre storage solution, which includes wire decking, has lead to a 30% increase in productivity for Macsim Fastenings – according to Fraser Mackay-Sim, Managing Director.

Macsim Fastenings has been distributing wall fasteners, screws rivets and fixings since 1963 and is now one of the market leaders in the fastener industry. Macsim operates branches in four states with a franchise in New Zealand and exports to the South Pacific Region.

Like most rapidly growing businesses the company's warehousing capacity had evolved on an "as needs basis" and by mid 2004 Macsim was operating four separate warehouses in Sydney. Faced with spiralling storage costs –and with continued growth planned for the future – the decision was taken to consolidate the operation into one, brand new facility in western Sydney.

The team at Sydney's Dexion Supply Centre at Liverpool has managed the storage requirements and numerous fit outs for Macsim for over 20 years. When the decision was taken to consolidate into one facility, Dexion were given the warehouse footprint and told to design a storage solution that would best utilise the facility and serve MacSim well into the future.

According to Steve Matthews, Managing Director of Dexion Liverpool the project typifies the Dexion philosophy. "Business today needs to be relationship and customer focused.

We've known Fraser for over 20 years, we understand the MacSim business and we know he's confident in our ability to create and deliver the right solution for his storage needs," he said. "For us, it was a case of sitting Fraser down with our design team and working on concepts and layouts until he was happy with the overall solution. Information relating to fast, medium and slow moving products were examined and the best configuration for the racking, bulk storage and picking areas determined," he said.







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The new facility is designed specifically to incorporate, smart technology solutions and leading edge warehouse management systems. The warehouse and distribution area of 4000 square metres has just over 3000 pallet positions, plus 800 pick level faces and includes technology-assisted picking equipment which facilitates automated invoicing and freight confirmation processes. Average turn around for orders is two days, with up to 300 orders a day despatched to the interstate branches and major hardware retailers. According to Mackay-Sim, improved efficiencies within the new Distribution Centre are fundamental to his organisation.

"Sure, Macsim is in the fastener business but fundamentally it's about warehousing and distribution," he said. "We import, store and distribute millions of products every year and it's up to us to process the product through this facility as efficiently as we can. We're not going to improve our bottom line by increasing prices we're going to achieve growth by increasing the range of products we offer," he said. "For this to happen we have to be confident that we can process increased volumes productively and efficiently. The new facility has provided an opportunity to address a number of inefficiencies and occupational health and safety issues that were inherent with our old operation".

"A major issue with the old operation involved the double and sometimes triple handling of product when it arrived at the warehouse," said Mackay - Sim. "Because the majority of product is imported - and from a number of countries - it never arrives in the same condition or manner. Product might be stacked on slip sheets, particle board or on pallets that were non compatible with our racking," he said. "This meant we were unpacking containers, reconfiguring the loads onto hired pallets or stacking the non standard imported pallet on top of a slave pallet, very inefficient".

With this issue in mind Dexion specified MantaMESH as part of the overall solution.



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"We could see that the inefficient handling of pallets could be eliminated if we fitted wire mesh decking to the rack system," said Matthews, "so we approached MantaMESH and they manufactured some 'sample decks' which we fitted to a small section of the rack. Within a few days it was apparent that the MantaMESH would have a significant impact on the operation and the decision was taken to mesh the entire facility," he said.

Two types of mesh have been installed, the standard heavy duty MantaMESH with a 1 ton capacity for the pallet locations, and the new small parts MantaMESH with the close wire spacings for the picking levels. Both products feature the new SafeEDGE which is ideal for narrow aisle or high rise order picking applications, improving OH&S by eliminating the potential for operators to scratch hands or snag clothing on the leading edge of the wire mesh.

Macsim has experienced a number of benefits since installing the MantaMESH - some expected and others a surprise.

"No matter what the product arrives on, we are able to put it straight into the rack," said Mackay - Sim "which has really improved our productivity and reduced our operational costs because we don't need to hire so many pallets. When the new computerised picking process is fully operational we estimate productivity will increase by over 30%".

By installing MantaMESH and an early suppression fast response (ESFR) sprinkler System, Macsim is also able to comply with the strict fire safety and the latest insurance requirements.

"Fitting out the new warehouse wasn't the only element of the project," said Matthews, "we were able to trade in the contents of the old facilities for the new rack system and we dismantled, packed and strapped some of the old rack and transported to their interstate facilities".

"Although the project was some 6 months in the planning we ended up having a fairly tight build time," said Matthews. "I am happy to report that we were finished within two weeks, when we had forecast three and we delivered the project on budget, in full and to agreed quality standards," he said.



