

DIARY

2005

24-27 February, Biofach World Organic Trade Fair - The Mother of All Organic Trade Fairs, Nuernberg, Germany. Contact Johann-Caspar Rose at the German-Australian Business Service on (02) 9327 5889, fax (02)9362 4965, for more information.

19-23 April, MetPack - International Trade Fair for Metal Packaging, Essen, Germany, www.metpack.de, fey@messe-essen.de.

21-27 April, Interpack - 17 International Fair of Packaging Machinery, Packaging & Confectionery Machinery, Düsseldorf. Contact Barth Trade Consulting Australia, (02) 8966 9159, fax (02) 9907 8261, r.barth@german-trade.com.au, www.german-trade.com.au.

28-30 April, Gutenberg Festival, Los Angeles, www.gasc.org, info@gasc.org.

10-12 May, High Performance & Functional Pigments 2005, Toronto, Canada, www.intertechusa.com, scott@intertechusa.com.

16-19 May, Appita Annual Conference & Exhibition, Auckland, New Zealand, www.appita.com.au, admin@appita.com.au.

24-28 May, Pacprint, Melbourne Exhibition & Convention Centre, Melbourne. Visit www.pacprint.com.au or email brian.bradford@reedexhibitions.com.au.

1-2 June, Smart Supply Chain Technology Show, Sydney, Sydney Convention Centre, Darling Harbour, info@smartsupplychain.com.au.

22-25 June, ProPak Asia, Bangkok, www.besallworld.com, or email propak@besallworld.com.

26-28 July, ProPak China - 11th International Packaging & Processing Exhibition, www.chinaallworld.com, propakchina@oesallworld.com.

11-14 October, AUSPACK 2005 - Australia's Premiere Packaging Trade Show, www.auspack.com.au, auspack@etf.com.au.

2006

27-31 March, Hispack International Packaging Exhibition, Barcelona, www.hispack.com, hispack@firabcn.es.

Weight watching with a difference

When Kimberly Clark needed to improve its product checking processes, it turned to Ward Materials Handling Solutions to deliver a custom-built solution with the ability to think for itself.

Checking the weight of boxed product rolling off the end of a manufacturing line might sound simple enough, but not when it comes to tissue-based products, such as hand towels and facial tissues.

For David Bower, process design engineer at Kimberly Clark's Warwick Farm plant in western Sydney, the ability to checkweigh outgoing boxes of facial tissues and hand towel clips was a function that would result in improved quality control - creating advantages not only for Kimberly Clark but also for its customers.

Despite the simple solution - to check the weight of outgoing boxes - the execution was complicated by the fact the weight of tissue-based products is never consistent.

"The weight of things like hand towels and facial tissues varies according to the roll stock, so there's bulk variations that need to be considered to attain an accurate average weight," explains Bower.

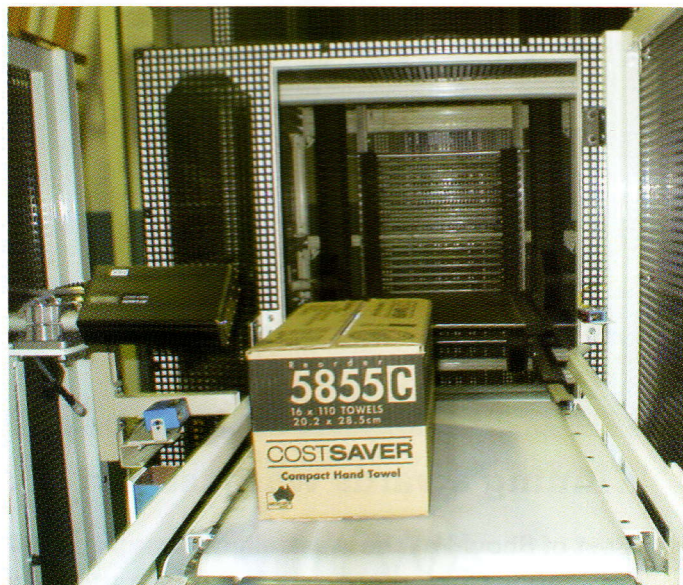
To fulfil the function of ensuring correct product weight, Bower had to find a checkweigher capable of handling the bulk variations of roll stock in order to create a moving average for each product rolling off the line.

Enter Melbourne-based Ward Materials Handling Solutions. In late 2003, Bower had seen a Ward checkweigher in action at a Melbourne cement factory.

"It was really something I noticed," explains Bower. "I was impressed with the robust nature of the Ward Materials Handling checkweigher - the fact it was successfully operating in the harsh environs of a cement factory was pretty impressive."

Simon Ward, managing director of Ward Materials Handling Solutions, was contacted by Bower to design, manufacture and commission a checkweighing system.

"It was custom built to suit Kimberly Clark's application and thus keep mechanical reworking



Using algorithms helps add some brain to the beef of Ward Materials Handling Solutions' checkweigher at Kimberley Clark's Sydney manufacturing plant.

How it works...

- As product moves over the checkweigher, a scanner reads a barcode identifying the product. The PLC calls up the last three recorded weights of the specified product, with the oldest recorded weight dropping off the system to be replaced by the new weight, creating the moving average.
- Tolerances are set as a percentage of unit weight (with upper and lower limits) and when an over- or underweight box rolls across the checkweigher, the system will divert the box onto a reject conveyor where the box is physically removed and checked.

of their existing conveyors to a minimum. This design of checkweigher has subsequently been supplied to Norwood Industries, a manufacturer of plastic plant tags, as well as the wine industry," says Ward.

Bower says Ward's custom design was integral to the success of the project, which was built around the concept of ease of use. "Part of the beauty of the system is that installation was such a simple process - there was essentially no downtime," says Bower.

To fulfil the requirement of a moving average weight for each specific product, Bower engaged a PLC programmer to create algo-

rithms that allowed the checkweigher to feed the information back to the PLC to make the moving average target weights.

"It was the same contractor who created the existing PLC system so he could make the checkweigher interface seamlessly and easily," he says.

"There's a perception that PLC systems are difficult to use but they don't have to be. We could have bought an off-the-shelf system from overseas, but this would have meant all we got was a black box that was difficult to get service and support for if something went wrong," says Bower.