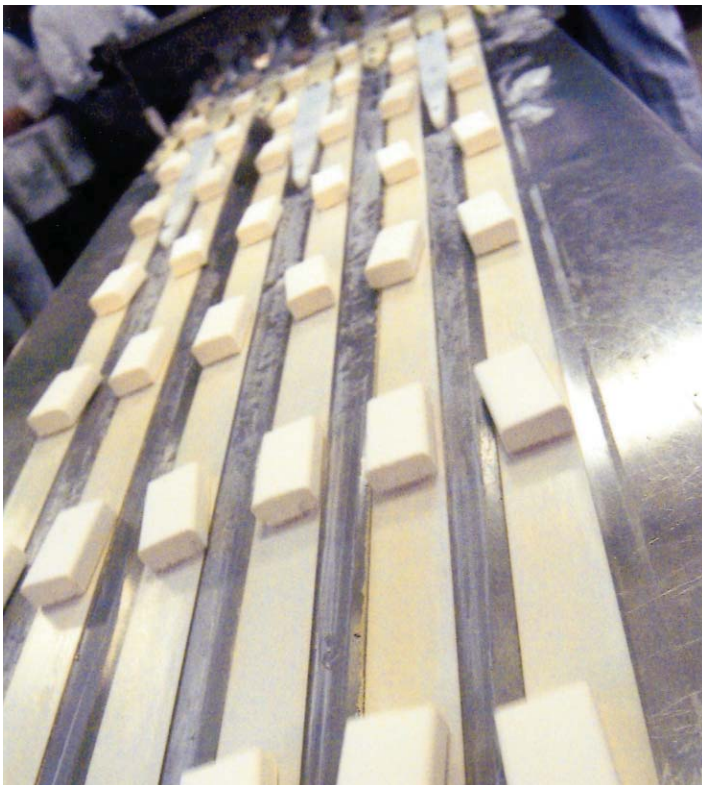


Driving out packaging problems

When reject rates on a choc-ice packaging line began to climb, the company needed an engineering solution. The resulting scheme, featuring Control Techniques Drives, has cut rejects by 90% and given a rapid payback measured in months!

Falling accuracies and drift on the synchronisation between conveyor speeds and the actions within the packaging section on this line have resulted in increasing reject rates. Because the waste is a mixture of ice cream and packaging, the only solution was to send it to land-fill, which, of course, was an additional cost on top of the lost production.

Rewinds & J. Windsor, a Control Techniques drives reseller, analysed the problem and designed a solution based on six servo drives. The key to the solution is precise synchronisation between the drives themselves and the choc-ice production line.



Six Control Techniques 'Maxi Maestro' high performance DC servo amplifiers were chosen for the control of the lane/crimping drives, another for the wrapper feeder whilst a 7.5 kW Unidrive SP powers the jaw drive, with its on-board SM application module provides the complete programming for the wrapping machine, eliminating the need for the PLC previously employed.

'The key to this project is the functionality of the Unidrive SP,' explains Rewinds and J. Windsor's Project Manager, Mark Swayne. 'We used the SM applications module as the programming platform, using Control Techniques' SyPT programming software. This gave us the performance of a level 3 PLC, which greatly simplified the project, eliminated the need for a PLC and made the solution highly cost-effective. Now, any length of product can be accommodated by simple parameter adjustments and the whole system is digitally locked into precise synchronism.'

Since the ice cream wrapping machine has been refurbished, rejects due to synchronism faults have been totally eliminated, with the reject rate on the line as a whole down by a massive 90%. This has actually boosted line production because waste has been cut so drastically. And, taking into account savings in production, plus the reduced costs in sending waste to landfill, payback on this project was even sooner than anticipated.

For the full press release please visit www.controltechniques.com.

KEY BENEFITS

- REJECTS CUT BY 90%
- LINE PRODUCTION BOOSTED
- SAVINGS TO PRODUCTION COSTS
- REDUCED COSTS FROM WASTE HANDLING
- PROJECT PAYBACK FASTER THAN ANTICIPATED
- UNIDRIVE SP'S UNIQUE FLEXIBILITY AND CONNECTIVITY

