

Automate NOW

SUPPLEMENT TO CANADIAN PACKAGING AND FOOD IN CANADA

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TO PRESS THE POINT

Modular components and use of 'open architecture' control technology enable press manufacturer to build up a loyal client base

Faced with an ever-increasing competition for business, label converters and printers are constantly finding themselves in need of cost-effective printing machines that will not only shorten print runs and reduce setup and changeover times, but are also flexible enough to allow a high degree of label customization, while consistently delivering high-quality labels with crisp and sharp image resolution and perfect color integrity.

Based on its growth in recent years, it seems safe to say that **Technologies Chromas Canada Inc.** is clearly doing all it can to deliver on all these critical requirements—in the process helping its customers to maximize their competitiveness. And one of the things it has been doing particularly well in this respect is incorporating the variable speed drives and modular components—supplied by Toronto-based power and automation systems distributor **Schneider Electric**—into its machine design.

Located in the Montreal suburb of St-Bruno, Chromas manufactures a wide range of narrow-web label presses for the folding carton, flexible packaging, and tag-and-label printing applications. The company's equipment line-up includes:

- The LX series machine, which prints labels using plastic film, paper and thin board.
- The Instaprep press, which prints labels on paper with adhesive backing, which is then affixed to cardboard or plastic

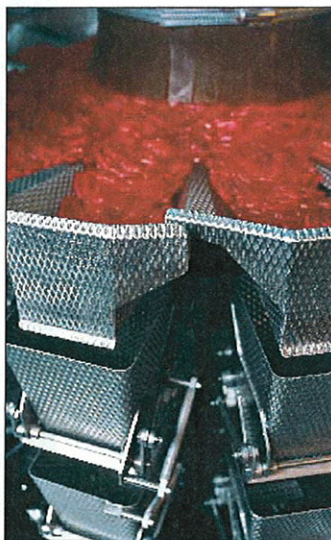
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CARRY YOUR WEIGHT

Canada's leading candy-maker scales the heights of weighing precision with Multipond equipment

BY DAN PELTON, FEATURES EDITOR

PHOTOS BY SANDRA STRANGEMORE



All-new Multipond weighers in action at Cadbury Trebor Allan.

Due to the sheer staggering volumes and far-ranging varieties of its products, **Cadbury Trebor Allan Inc.** could well be regarded as a true "renaissance" candy-maker. The Canadian subsidiary of British confectionery giant **Cadbury Schweppes plc** is one of Canada's leading manufacturers of chocolate and candy confectionery products.

With close to 2,500 employees at operations across Canada, the company produces and markets such well-known brands as *Caramilk*, *Crispy Crunch*, *Crunchie*, *Wunderbar*, *Fuzzy Peach*, *Cherry Blasters*, *Maynards Wine Gums*, *Gummies*, *Sour Patch Kids*, and the full line of Easter Chocolates, featuring the famous *Cadbury Creme Egg*.

The company's rise to the very top of the Canadian confectionery market, which ranks as the world's 11th-largest, traces back to Cadbury's acquisition of **Trebor Allan Inc.** in 1995, and that of **Neilson Cadbury** in 1996.

Headquartered in Toronto, the company currently operates four manufacturing facilities—two in Hamilton, Ont., one in Toronto and another one in Granby, Que.—as well as Ontario-based warehouses in Stoney Creek and Oakville.

As a major player in the diverse and carefully-regulated confectionery business, Cadbury constantly has to face some very

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TURBULENT PLC MARKET STILL OFFERS GOOD GROWTH PROSPECTS

For all the grand pronouncements of its inevitable demise from the industrial automation landscape, the ubiquitous PLC (programmable logic controller) continues to display signs of remarkable resilience and longevity, according to new findings from Dedham, Mass.-based high-technology consultants **ARC Advisory Group**.

Despite seeming having everything stacked against it—from global economic slowdown to the rise of directly competing technologies such as the industrial PC—the PLC should be able to hold its ground as the industrial "black box" of choice in spite of the serious challenges facing the PLC suppliers.

"The PLC suppliers are worried," ARC researchers observe in the report titled *PLC Worldwide Outlook, Market Analysis & Forecast Through 2006*. "Rapid changes in computing and communication technologies, a strong user acceptance of open systems, the global economic slowdown, impact of events in 2001, and a small but growing threat from industrial PCs are combining to create turbulent market conditions and the threat of an uncertain future."

Such conditions, however, may also play a part in helping PLC suppliers protect their turf, the report suggests, because the uncertain climate inherently works to encourage users of industrial automation to stick with proven technologies, such as the PLC, rather than risk large-scale experimentation.

"The industrial PC is not yet a threat," says the report. "Suppliers also need to view it as an ally, providing the hardware and software components to upgrade 'traditional' PLCs out of the 'outdated' label. Intelligent sensors and actuators are also not yet a threat, though increasing processing power at that level does make it possible to create complex automation systems with less PLCs that were required earlier.

"Clients, on the other hand, need assurance that components have a proven history of having worked together, and that service support is available in case they do not. They are more comfortable in dealing with a single point of responsibility as it eases implementation, reduces downtime, and simplifies stocking, ordering and paying for spares."

The report also suggests that the suppliers of PLCs have many new growth opportunities opening up to them as a result of the high level of compatibility between PLCs and many new emerging new automation technologies and strategies.

Says the report: "PLC suppliers need to take note of advances in software, particularly the component-based, object-oriented concepts that allow clients to easily configure and use special functions that make PLCs do much more than logic control.

"A major resultant trend is towards including sophisticated motion and position control software, while another is towards providing web-enabled functionality such as web-based HMI, on-line upgrades, and remote troubleshooting. Different types of PLCs, software and services will therefore rapidly grow or decline, even though the overall market exhibits slow growth," the report states.

"Users need automation to improve productivity, reduce costs, and increase flexibility to meet varying demands. Seeds of revival are also present in the high pace of technological change, as fears of obsolescence drive upgrade plans.

"In addition, the potential of reduced total cost of ownership with open connectivity and programming platforms stimulates demand for higher levels of automation." □



The high-speed Controller-E from ifm efector operates as a PLC or a gateway to a higher-level network.

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CARRY YOUR WEIGHT

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unique challenges in the manufacturing and distribution of its products.

A good case-in-point is its 90,000-square-foot Ewen warehousing/packaging facility in Hamilton, where the company packages such sugar-coated and oil-coated candy products as *Sour Patch Kids*, *Swedish Fish*, and *Water Melon Slices*.

When it came to selecting a weigher recently, Cadbury understandably sought out a machine that was not only fast and reliable, but one that could stand up to the elements.

After a close evaluation of the available technologies, the company ultimately zeroed in on **Multipond**, a Waldkraiburg, Germany-based company with its North American operations headquartered in Green Bay, Wis., and represented in Canada by Burlington, Ont.-based **Abbey Packaging Equipment Ltd.**

Last June, Abbey Packaging supplied two types of Multipond weighers—models 1401-FF and 1601-FF—to two packaging sites.

The 1401 system handles packages weighing 17 grams, and those between 55 and 57 grams. In both instances, the machine operates at a speed of 140 weighings per minute. The 1601-FF, which has a more variable payload and different weigh speeds, handles unit weights of 100, 140, 190, and 250 grams, with the corresponding weigh speeds of 120 to 125, 115 to 120, 110 to 115, and 105 to 110 weighings-per-minute respectively.

Yet, as far as project engineering manager Brett Thorne was concerned, speed was just one factor in Cadbury's decision to go with the Multipond machines.

"I needed a company that was willing to customize the machine to our product nuances," explains Thorne. "We have this special [sugar] coating we put on the outside of some products to make them sour. That coating adheres to all equipment throughout the packaging process, causing wear and tear, such as abrasion, at any moving point.

"We requested bearings in all the moving parts, we wanted the machine to be made completely of stainless steel for washdown, and to be able to run in a dusty environment," Thorne recalls.

Another customizing requirement from Cadbury called for the operator interface screen to be dupli-

cated to the point where the weigher controls would be in total sync with the **Aquarius** bagger machines—thus eliminating the need for an operator to be constantly running from one machine to the other.

This total harmony between weigher and bagger was an essential requirement for Cadbury, in Thorne's opinion.

"The weigher and the bagger are essentially one piece of equipment," Thorne states. "You cannot have one running good and one running bad. If you do, the output is bad."

Besides being confident that Multipond could work nicely in concert with the Aquarius equipment, Thorne adds that he has always been a fan of German machinery workmanship.

"The German-built quality says it all. It's ingrained in their culture that function and form must go hand-in-hand. Their machinery must also look good; it is not just thrown together—it's finessed."

"Thorne is also quick to give Abbey Packaging high marks for all its help with installation and after-sale service.

"I felt confident that Abbey Packaging could give me the support I needed," Thorne told *Canadian Packaging* during a recent visit to the Ewen facility.

"They (Abbey) have a very good technical understanding of the machinery, its interaction with the next-stage pieces, and the reasons behind the customization I was trying to achieve," he says.



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1,200 grams, and a portion volume maximum of 3,000 ccm, Multipond's 01 series weighers, including the two Cadbury machines, are capable of speeds up to 200 weighings per minute. The prefeed and weigh hoppers, which each have a volume capacity of one liter, are constructed of either stainless steel or a special anti-static, anti-cohesive, food-grade, injection-molded material that can repel both ice and fat.

Another strong point of the Multipond offerings from a technical perspective is that a deviation, or "drifting," off the specified weight is miniscule. The strain gauge weigh cells, which have a measuring range up to 320 grams, are automatically calibrated during operation, at pre-determined intervals, by using internal calibration weights—virtually eliminating any drifting caused by extreme external temperature or humidity.

Operated by high-speed, 32-bit microprocessor computer technology, the Multipond weighers are also easy for the operators to use. To key in a new weighing program, the operator only needs to input product name, target weight, product classification and weighing speed, while the machine automatically calculates and sets all the other key parameters.

All in all, Multipond clearly has what it takes to enable the likes of Cadbury Trebor Allan to do all it can to satisfy the sweet tooth of the nation—down to the fraction of a gram. □

For more information on:

Abbey Packaging Equipment Ltd. Circle 450
Multipond America Inc. Circle 451



Project engineering manager Brett Thorne says he has been very impressed by the performance and reliability of the Multipond weighing equipment (above).