



The Can-Oat Milling operation in Portage La Prairie employs three spur train lines to handle a large part of the mill's bulk shipments of processed oats.

REAPING WHAT THEY SOW

World's largest oats processor lifts quality control to world-class level with Canadian-made metal detectors

If you really reap what you sow in life, then the people behind the success and growth of **Can-Oat Milling** in Portage La Prairie, Man., have a real world-class knack for sowing things just right.

From its humble origins inside a converted attic back in 1988, the company has grown in truly epic proportions over the years—today ranking as the largest industrial supplier of oat products in the world.

With annual sales of \$100 million and production capacity of about 300,000 metric tonnes of finished products a year, the little milling company that could not stop growing—a brain-child of

current president Karl Gerrand and four business partners—offers a compelling example of rapid rags-to-riches ascent.

“They created a business plan, attracted some investors, and by 1991 the Portage La Prairie mill was built—with hopes that it would employ 40 people some day,” recalls Ian Currie, plant manager of the company’s central, 80,000-square-foot facility that today employs 125 workers.

A wholly-owned subsidiary of the **Saskatchewan Wheat Pool** agribusiness cooperative, Can-Oat also employs another 75 people at a mill in Martensville, Sask., purchased in 1997, and at a 35,000-square-foot, organic-certified oat-



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processing facility in Barrhead, Alta., started up last year.

Although operating as an industrial supplier of ingredients to major food processors and manufacturers keeps the company largely out of the public spotlight, the fact is that millions of consumers along the North American West Coast and in major Pacific Rim markets consume Can-Oat products on a daily basis—in countless branded and private-label cereal mixes, granola bars, baked goods, and other grain-based products.

“Products that contain our oat ingredients can be found in just about every grocery store in the U.S. and Canada, although none of the store products will have our name on them,” relates Currie, adding that such anonymity is no big deal for Can-Oat.

“As long as people keep consuming oats-based foods, Can-Oat knows it has itself a market for the future.”

HEALTHY FUTURE

That future is looking increasingly promising in light of plentiful medical evidence of real health benefits related to daily consumption of cooked



A 50-pound, heavy-duty, heat-sealed, multiwall paperboard filled with oats moves quickly along a Fortress conveyor through a Phantom Big Bag King metal detector at the Can-Oat Milling plant.

oats—including the lowering of bad cholesterol and the risk of cardiovascular disease, stabilizing blood sugars in diabetics, boosting resistance to infections, numerous antioxidant benefits, and even reducing the risk of childhood asthma.

While processing vast bulk quantities of finished oats is an arduous undertaking, so is the packaging of huge volumes of coated oats into 50-pound, heat-sealed, heavy-duty, multiwall paperbags that account for the lion's share of the packaging done at the plant, which also uses jumbo-sized 1,000-pound corrugated boxes and 1,400- and 2,000-pound woven-polypropylene sacks.

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“Obviously the 76-inch-tall, 2,000-pound super-sacks are the easiest for us to package, but the massive size obviously presents handling challenges for some of our customers, which is why we have the smaller-sized packaging that we use,” says Currie.

Whichever way the coated oats are ultimately packaged, none of them leave the facility without having been subjected to thorough metal detection testing—administered by several high-performance metal detection systems manufactured by the Toronto-based **Fortress Technology Inc.**

The first of these Fortress systems, Currie relates, was purchased in 2003 to correct a long-standing problem of false readings—stemming from the plant personnel’s use of walkie-talkies in too close proximity to the older-model metal detectors.

“To resolve this issue, Can-Oat looked to purchase a more robust and a more sensitive metal detector,” Currie recalls, “and only Fortress could meet our strict customer requirements.

“Not only do Fortress metal detectors have the highest sensitivity levels in the industry, Fortress supplied us with the only metal detector that wasn’t affected by our

walkie-talkie interference—enabling us to eliminate the ‘false trip’ issue for good.”

Since then, Can-Oat has acquired several more Fortress metal detection systems through the man-



Ian Currie,
Plant Manager.

“These metal detectors have outperformed their competitors and have met all our exacting customer specifications”

ufacturer’s Richmond Hill, Ont.-based distributor **Charles Downer & Co. Ltd.**, to ensure optimal quality control for both bagged and bulk-shipped products leaving the Portage La Prairie plant.

“There are now a couple of large-bag metal detectors with integrated conveyors at the plant,” Currie explains, “plus five Phantom Gravity model metal detectors, which we use to detect contamination in free-flowing bulk products prior to packaging.”

HARSH DUTY

Incorporating a 7.5-inch-diameter searchhead with a six-inch product tube, as well as stainless-steel frame and reject-gate assembly, the **Phantom Gravity** metal detectors are engineered to provide a rugged, sturdy design to handle all the harsh environmental rigors of inline inspection of gravity-fed, granular dry products.

Like all *Phantom* series systems—first launched on the market in 1996—the *Gravity* systems use the most advanced Digital Signal Processor (DSP) technology to ensure the most accurate high-speed detection results, according to Fortress.



One of five Phantom Gravity metal detectors used to detect metals in free-flowing oat products before packaging.

REAPING WHAT THEY SOW



The systems also incorporate a number of exclusive features like the aforementioned RF (radio frequency) noise reduction option, which allowed Can-Oat plant personnel to continue using their walkie-talkies to communicate with each other, without worrying about getting too close to the detectors.

Says Currie: “We placed a Gravity detector close to the weigh-scale machine so that we could really ensure a true metal-free product prior to the packaging.

“There is currently no equipment on the market that can detect metallic objects down to the miniscule level we require in the large bags of 1,000-pound capacity or larger,” he points out.

As for handling the plant’s 50-pound bags after

they have been filled and sealed, the large-aperture **Phantom Big Bag King (BBK)** metal detectors enable the detection of nonmagnetic stainless-steel particles as small as 2-mm, with the integrated **Vector Conveyor** systems—equipped with six different reject options—offering full production flex-



The large-aperture Phantom Big Bag King (BBK) metal detectors can detect nonmagnetic, stainless-steel particles as small as 2-mm.

ibility by running at either fixed or variable speeds, as selected by users.

“We are very happy with the Fortress metal-detection technology,” Currie states. “These metal detectors have outperformed their competitors and have met all our exacting customer specifications.

“These metal detectors have been very reliable and virtually maintenance-free,” adds Currie, stressing the importance of optimal production efficiencies and top-notch quality control at the mill.

“While the industry we serve is very competitive, our company’s success has come from being always focused on satisfying the customer,” he sums up.

“This has enabled Can-Oat to consistently deliver high-quality products and service to its dedicated and loyal customers all over the world.” □



Built by Toronto-based Fortress Technology Inc., the rugged Phantom Gravity metal detector has a fast and powerful digital signal processing system that effectively eliminates noise interference.