

The X33 Series X-ray System Provides Optimal Food Safety



An innovative nutrition bar startup is off to a flying start with an exciting new brand of healthy snacking options and optimal food safety and quality control capabilities

If good things in life come in small packages, it's safe to say that the good folks at Riverside Natural Foods Ltd. have that formula down pat with their one-of-a-kind MadeGood brand of allergen-free granola bars and bite-sized snacks packing a healthy dose of vegetable-derived nutrients and a unique taste profile appealing to both kids and their health-conscious parents alike.



The X33 Series x-ray system suitable for retail packaging applications

MadeGood

Granola

X33 Series X-ray System



MadeGood brand of allergen-free granola bars and bite-sized snacks

As Good as it Gets

Developed and launched in 2014 under the guidance of company founder and president Nima Fotovat, a well-known personality in Canada’s highly competitive marketplace for granola and cereal bars, the upstart MadeGood product family has enjoyed remarkable market success in its early going so far leading to a significant influx of new staff and high-performance production and packaging machinery at the company’s tidy, BRC (British Retail Consortium) certified facility just northwest of Toronto in Concord, Ontario.

Situated in a suburban industrial park just across from the company’s slightly bigger and newer 24,000-square-foot sister plant specializing in private-label production of store-brand cereal bars for retail customers across North America. The original Riverside facility is a 100 percent nut-free and allergen-free operation whose relatively small size belies its unique industry status.

No Small Feat

“As small as it may seem, this is

actually the biggest allergen-free production facility in Canada making branded products,” says Vice-President of Operations Justin Fluit, a professional chemical engineer who joined the company about a year ago after several years in the management consulting business.

“Aside from that distinction, the product we make here is a completely organic, non-GMO (genetically modified organism), gluten-free product that poses many ingredient challenges to manufacture in commercial volumes,” Fluit told Canadian Packaging on a recent visit to the lively, clean operation that’s doing its best to keep up with soaring demand, both at home and abroad, for the MadeGood products.

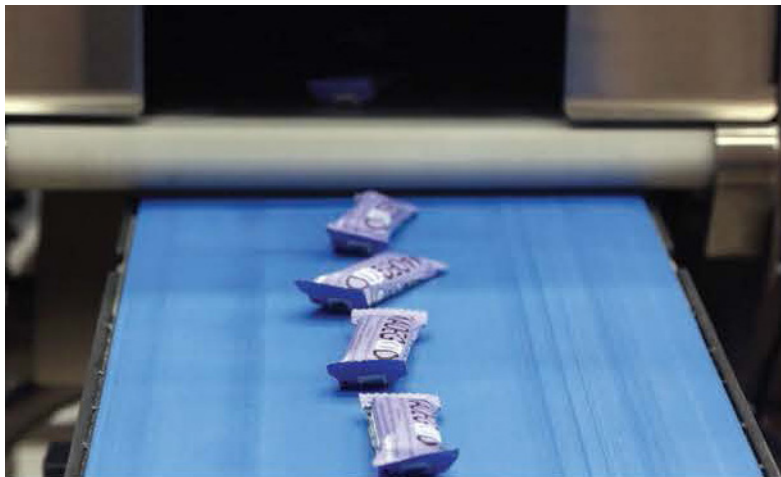
As Fluit explains, “There is only one supplier of gluten-free organic oats in Canada, and maybe three or four in the U.S., so the big cereal manufacturers out there could not do what we do here even if they wanted to because they would not be able to secure the supply of raw materials they would need to make

it on a large enough scale to do it profitably.

“What we’re doing here at Riverside is making good-tasting, healthy food that is completely allergen-free,” says Fluit, citing the product’s innovative formulation and cooking process that completely avoids the use of eight common allergens that include peanuts, tree nuts, wheat, dairy, eggs, soy and sesame, along with fish and shellfish.

Instead, the MadeGood recipe makes extensive use of blended vegetable powder, derived from spinach, broccoli, carrots, tomatoes, beets and shitake mushrooms, to deliver the nutritional equivalent of one full serving of vegetables in every pack of MadeGood Organic Granola Bars and ball-shaped MadeGood Granola Minis snacks, thereby providing about 20 per cent of the required daily intakes of Vitamins A, B1, B6, C, D and E.

“It’s the kind of product that moms feel good about giving their kids for lunch, being nutritious, organic, school-safe, allergy-free and, above



A row of freshly-made MadeGood nutrition bars.

all, tasting good,” Fluit points out.

“It’s the next best thing to having an actual apple. “It has a unique soft-crunch texture, and consumers also like the unique, bite-sized ball shape of our Minis snacks, which can be enjoyed on their own or added as a topping to milk or yogurt for a more complete meal solution,” Fluit explains, noting that leading domestic airline Air Canada has recently added the MadeGood Granola Minis to its on-board menu selection.

“It has certainly given us some good market exposure and traction,” says Fluit, crediting company founder Fotovat for coming up with the idea of ball shaped granola snacks.

It’s certainly an idea that has found quick international recognition, Fluit reveals, noting that the company currently export about half of its MadeGood brand output to diverse overseas markets, including Japan, Australia, Chile, Holland, U.K., Dubai, Singapore and Hong Kong, among others.

“We are now focusing our

marketing efforts on the U.S. markets to take advantage of the low Canadian dollar,” Fluit says, relating that leading organic foods retailer Whole Food Market Inc. is preparing to roll out the MadeGood brand nationally in the U.S. later this year.

“We have already had some regional success with Whole Foods in the New York and New Jersey markets,” Fluit points out, “but to be retailed across the U.S. in more than 370 stores will definitely be a big step up for us.”

To keep up with buoyant demand growth, Riverside Natural Foods had to make sizable additions to its workforce since start-up, according

to Fluit. “There were only six people working here when the company began operations in 2013,” he states, “which grew to 15 people in 2014 and to about 50 people right now.

“We could well have up to 70 people working at our two plants by the end of this year,” Fluit says. “It really is a terrific job creation story.”

Retailing cross Canada at most leading grocery chains and independent outlets, the MadeGood brand is currently offered in 15 different retail SKUs (stock-keeping units) and in several tasty flavour varieties, ranging from Chocolate Banana and Apple and Cinnamon to Mixed Berry and Chocolate Chip.

According to Fluit, the brand’s main target audience consists of “higher-income, well-educated professional moms that put a lot of effort to look after what their kids eat, but don’t have a lot of time to do it regularly.

“There’s a significant clash between what moms want their kids to eat, apples and carrots and broccoli, and what the kids want to eat, and this is where our product comes in,” Fluit explains.



A Concord plant employee helps to pre-mix a carefully measured blend of oats and other key raw ingredients used in production



The X33 Series x-ray system uses new detector technology which is five times more sensitive than traditional x-ray systems

Not surprisingly, the upscale MadeGood brand products are one of the more expensive cereal bars around at most grocery outlets, Fluit acknowledges, but the price premium is well justified by its “nutrient-dense” formulation and a highly enjoyable snacking experience for the kids.

Offering one-year shelf-life achieved with inline application of MAP (modified-atmosphere packaging) gas-flushing just prior to packaging, the MadeGood nutrition bars are packaged five bars to a box, while the Minis are packaged in four 24-gram pouches to a box, with Toronto-based paperboard converter Accurate Rola Co. Ltd. supplying the decorative folding-cartons for both product varieties, with each flavour distinctly differentiated by its unique primary colour dominating the box.

“The kids really go for the bright yellow, pink and blue colors of our boxes,” says Fluit, while also crediting Brampton, Ontario.-based flexible packaging converter Alpha Poly Packaging Solutions for supplying the high-quality, foil-lined

roll-stock wrapping film used to pack the individual granola bars.

Operating a one-shift schedule for now, the allergen-free facility plant currently produces about 150,000 granola bars and 100,000 packs of Mini snacks per week, according to Fluit, using a broad range of high-quality equipment and machinery supplied by local packaging machinery distributor and integrator CAM Packaging Systems of Aurora, Ontario.

In addition to CAM-manufactured VFFS (vertical form/fill/seal) baggers, a rotary eight station pre-made bagging system, bucket conveyors, combination scales, multihead weighers, turntables and linear conveyors, CAM Packaging also supplied both Riverside plants with AFA Systems manual end-load cartoners; Mach 1 stretchwrappers; Advantage Machinery shrinkwrapping tunnels, case-tapers and conveyors; Dorner gravity conveyors; and an assortment of horizontal flowwrapping equipment manufactured by Campbell Wrapper Corporation, Tecno Pack

spa and PFM Group. All told, the aforementioned equipment forms the core of two bar production lines and two VFFS bagging lines at the allergen-free plant, along with the three wrapping lines and one VFFS bagging line recently installed at the new sister plant.

Says CAM Packaging president Gareth Kennedy: “Riverside Foods is a great customer and a terrific family-owned company success story with a fantastic new product. “I have worked with the Fotovat family for many years, and much more since they have started up Riverside Natural Foods,” Kennedy adds. “We are proud to have them as a loyal customer and are very grateful for their business.”

Quality Control

The MadeGood product starts out in a large mixing bin that blends all the pre-measured ingredients together into a consistent mixture, which is then passed through a series of forming rollers to emerge as continuous slabs of product. The slabs are then precision-cut into individual bars, which are swiftly wrapped into individual wrappers

and placed into the folding cartons. From there, the cartons are packed into the RSC (regular slotted case) corrugated shipping boxes, which are then tape-sealed and placed onto pallets for shipment. Along the way, the individual packages are coded by one of several Domino, Videojet and MarkemImaje product coding and marking systems placed strategically along the production lines. "We use a combination of inkjet, laser and thermal-transfer coding systems to take care of all our product identification and traceability requirements: a bit of everything," Fluit remarks. "All in all, it's a fairly manual process at the moment; not highly automated just yet," Fluit acknowledges.

"That's one of the growing pains of starting a new business: you start out being fairly manual so you can be flexible and agile," he expands, "but that will only take you so far.

"So we are now investing quite extensively to automate our whole bar manufacturing process," notes Fluit, "and CAM Packaging has been of great help to getting us there." As for the critical quality

control and product inspection functions, Riverside Natural Foods has it all expertly covered with installation of five high-performance X33 X-ray inspection systems from leading product inspection equipment manufacturer METTLER TOLEDO Safeline.

Food Safety

With three X33 systems in place at the allergen-free plant and two more units in the new satellite facility, Fluit says he is very confident about the company's ability to ensure optimal product safety and quality control for its customers.

"These systems are invaluable for us in terms of detecting any foreign materials, such as metal or stones and pebbles, of greater than two millimeters," Fluit says. "Ensuring food safety is a major CPP (critical control point) for us, and these X-ray units have worked out very well for us so far.

"In fact, they have worked so well that we recently decided to purchase two more X33 units for the new plant," Fluit reveals, "making seven X-ray systems in total.

"The METTLER TOLEDO technology is really world-class, and these systems have been a key part of our business right since we started," Fluit continues. "They are very reliable, highly accurate, and very flexible, we can use them on bars one day, and on Minis the next day, and wherever else they may be needed," Fluit relates.

They can pick up things like fruit pits and nut shell fragments that conventional metal detectors could not detect, which provides us with a real peace of mind," he elaborates. "We certainly don't want consumers to end up with a chipped tooth because of something getting into our product that should not be there, or have any sort of a negative experience," he states.

"In the overall scheme of things, it's a fairly reasonable investment with a very quick ROI (return-on-investment) payback," says Fluit, noting Riverside also uses its X33 X-ray systems for the "dual purpose" of checkweighing all the packages to verify their weight accuracy.

"I think we are very unique in using these systems for two functions," he notes, crediting the systems' Canadian distributor Shawpak Systems of Oakville, Ontario, for enabling Riverside to make optimal use of the robust X-ray technology.

"They were extremely helpful in installing the systems, upgrading them with the latest software, running tests for new products, and helping to train our line operators to use them at a reasonable comfort level.



Riverside Natural Foods produces 150,000 granola bars and 100,000 packs of Mini snacks per week

"It's a fairly complex technology that requires a certain learning curve, but we received good support from Shawpak to get familiarized with it," says Fluit, noting that the versatile X33 x-ray systems can also be set up to inspect bulk ingredient shipments, if required, or to inspect finished products already inserted inside secondary or tertiary packaging.

Such system flexibility and modularity are a perfect fit for the company's ambitious business plans in the upcoming years, as Fluit confides. "There are no shortcuts in this business, and if you want to attract bigger customers down the road, you need to show them that you have the best available equipment to ensure that the product you ship to them is as safe as it can be," Fluit states.

"And naturally, this is also the best way to safeguard the reputation of our brand, which has been so well received in the marketplace already."

Says Fluit: "We have a lot of young enthusiastic staff, full of energy, who have fully embraced our team culture and the potential to grow with the company, as we continue to pursue exciting opportunities in this fast-growing food industry in a healthier direction gives us a meaningful purpose behind what we do here, which is to provide modern consumers with healthier and more enjoyable food options, without taking any shortcuts when it comes to quality and product safety," he asserts.

"We want our MadeGood snacks to be a staple in every kid's lunchbox," Fluit concludes, "because we honestly believe that this is the best-quality, healthiest and safest lunchbox item out there in the snack business today."



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The Product Inspection Division of METTLER TOLEDO is a leader in the field of automated inspection technology. Our solutions increase process efficiency for manufacturers while supporting compliance with industry standards and regulations. Our systems also deliver improved product quality which helps to protect the welfare of consumers and reputation of manufacturers.



Metal Detection



X-ray Inspection



Checkweighing



Vision Inspection

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