

Gelato Manufacturer Takes Food Safety to the Next Level Thanks to X-ray Technology

FIASCO

As a company that is expanding its business, Fiasco Gelato is committed to delivering gelato and sorbetto to more customers across big retailers. In order to achieve this, their goal for now is getting the SQF certification, recognized by food service providers worldwide and designed to meet regulatory requirements for all sectors of the food supply chain. Using a METTLER TOLEDO Safeline X-ray system, Fiasco Gelato products are checked at the end of the production line to ensure every product is contaminant free.

Pints of gelato and sorbetto.

Fiasco Gelato is an artisan ice-cream manufacturer based in Calgary, Canada. Founded in 2003, they started as single scoop shop where artisan fresh gelato was made every day in the store. Nowadays makes about 4,800 liters every day. Due to the growth of the company, the responsibility of assuring consumer's safety is higher, which means investment in better quality systems to meet regulatory compliance.

**Fiasco Gelato**

X-ray Inspection

METTLER TOLEDO



Shashi Singh and Amy Hosking next to the Safeline X33 x-ray inspection system.

Money may not buy happiness, but if it can buy ice cream, then that may very well be the next best thing

Launched originally as a scoop shop, Fiasco Gelato evolved into the proud manufacturer of small batch gelatos and sorbetto that it is today. The 8,000-square-foot facility has 25 production-dedicated employees working one shift, including a sanitation shift at the end of the day.

Fiasco Gelato has been quickly picked up by leading national grocers such as Loblaws, Longo's, Whole Foods Market, Pusateri's, Real Canadian Superstore, Sobeys, Thrifty Foods, among others, where its 562-ml clear semi-rigid filled jars has made a huge impact with their consumers.

As a small business, Fiasco Gelato had no shortcomings of challenges that they had to face, trying to break into a competitive industry, most ice cream and gelato companies are constantly creating innovative and delicious new products and discovering new ways to manufacture that will not only appeal to consumers, but also guarantee them a spot in stores with limited shelf space.

To guarantee a coveted spot, Shashi Singh, the quality assurance and sanitation lead at Fiasco Gelato and his team needed to make sure that the gelato and sorbetto were safe for consumption and would not be subject to recalls due to listeria and other harmful contaminants.

"As both the company and avenues that we're selling into grow, we're making more products every day," Singh explains. "Because of that, the machines that we use on a daily basis are susceptible to making ingredients that could possibly contain a contaminant in the product. Our challenge was to ensure that we were not getting any foreign material into our product."

Crediting their robust maintenance program, Fiasco Gelato ensures that their machinery and equipment are functioning properly and continues to demonstrate their capabilities to produce the gelato and sorbetto product.

Taking food safety to the next level

When they first moved into their new location back in August 2015, Shashi Singh and safety operators would conduct a pre-operation inspection of the facility, making sure that all of the machinery, tanks and all of the utensils were intact

and nothing has been lost during the process, this method of product inspection did not provide a full enough coverage.

"To physically verify gelato product that we make is a little harder because you do not have any system to visually inspect the inside of the product," Singh elucidates. "Which is why we wanted a technology that would help us recognize and identify any potential hazard that we can correct on-site."

To find a solution for a full safety inspection, Fiasco Gelato reached out to product inspection specialist METTLER TOLEDO Canada Inc., who is exclusively represented by Shawpak Systems Ltd. across Canada.

According to Shawpak president and business partner Nigel Turnpenny, he and his team concluded that an x-ray system at the end of the production line would have been a better solution for Fiasco Gelato.

"The reason we had to go with an x-ray system is that they actually have an induction seal which is a metallized film on the product which would not allow it to pass through a metal detector," Turnpenny explains.

Due diligence as a deciding factor

Thanks to the guidance of METTLER TOLEDO, Fiasco Gelato purchased a METTLER TOLEDO Safeline X33 Series x-ray inspection system, which was purchased early in the New Year and subsequently installed in May 2019.

Installed at the end-of-line, the Safeline X33 x-ray inspection system offers the due diligence that Fiasco Gelato had been searching for when it comes to food and product safety.

“One of the other deciding factors is the due diligence that comes with it by being able to see an image of every product that they produce, an image of every reject that they have, an image of every test that they do on the system,” Turnpenny extols. “Fiasco Gelato has got full traceability in the event that they did have an issue and that their machine is testing correctly and why rejects happen.”

The Safeline X33 x-ray inspection system is a 20-watt generator, whereas most competing x-ray systems start around the 100-watt generator size. While it is assumed that higher power of the x-ray system equates to better detection results, this is not always accurate, according to Turnpenny.

“It produces less heat so the X33 does not require any cooling systems, so there's no air conditioning units on the unit, which also makes it easy to move around, less maintenance on this system and it makes it a greener machine overall,” Turnpenny says.

Singh also appreciates this facet of the x-ray, stating, “it is a low energy x-ray unit, which in the long term saves us a lot of capital.” The X33 x-ray inspection system also is capable of handling a range of different products, whether it is individual pints of gelato or full cases.

According to Singh, the addition of the Safeline X33 x-ray inspection system has been the cherry on top of the sundae for Fiasco Gelato, as examining the pints has become a much better process overall. “Before, if there was a problem and we recognized a potential issue in the middle of production without the x-ray, we would have no option but



A sampling of the finished retail gelato product.

to hold up production because you do not know where that physical hazard ended up or in which pint or at what stage of the process,” Singh explains.

“Now that we have this new unit here, we know exactly which pint has been affected, what product needs to get quarantined, what needs to be sourced and what is passable for production. This helps the product reach its best quality.”

At the end of the production line

Sourcing the ingredients and dairy products locally, the gelatos and sorbetto are mixed on-site through a cooling tank and then put into a blast freezer supplied by Tetra-Pak.

The finished product comes out the other side of the blast freezer, where the finished product has the consistency and density of a standard gelato and sorbetto product. Once removed from the freezer, the product is moved to Fiasco Gelato’s rotary packaging system, which automatically fills product in pints.

As the final stage of the production process, a single conveyor belt runs the pints through the X33 x-ray inspection system, to ensure that no possible contaminants inadvertently made their way into the pint.



All finished gelato and sorbetto products are run through the Safeline X33 X-ray Inspection system to check for any possible contaminant.

Looking ahead, the already HACCP (Hazard Analysis and Critical Control Points)-certified Fiasco Gelato will receive their first SQF (Safe Quality Food) audit by the year's end, to further emphasize their commitment to food safety. Singh believes that the future looks bright for Fiasco Gelato, as they get into other avenues of sale, with a possible jump into the U.S. market. "All of those changes would be made possible thanks to our certifications and all of our food safety systems," Singh concludes, "just like the one we invested in with our x-ray system."

Once successfully run through the x-ray, the finished gelato and sorbetto product comes out the other end ready to be palletized before it is distributed for retail sale.

Part of what has made purchasing the Safeline X33 Series x-ray inspection system a positive experience for Fiasco Gelato has been the support they received from METTLER TOLEDO throughout the whole process.

METTLER TOLEDO has a local service support team based in Calgary that visits the facility to try and support them and assisted in training Fiasco Gelato operators.

"It's not just about assisting if there is downtime," Turnpenny insists, "if they want any additional training or a visit for other aspects, the technician is local and always ready to help them."

"Whenever we have required, the service of METTLER TOLEDO to be there for us has been impeccable," Singh adds. "The support that they offered us after the installation, as well as during the installation process, training all of our folks, was just one aspect of their services."

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METTLER-TOLEDO Group
Product Inspection Division

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Website: www.mt.com/pi

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