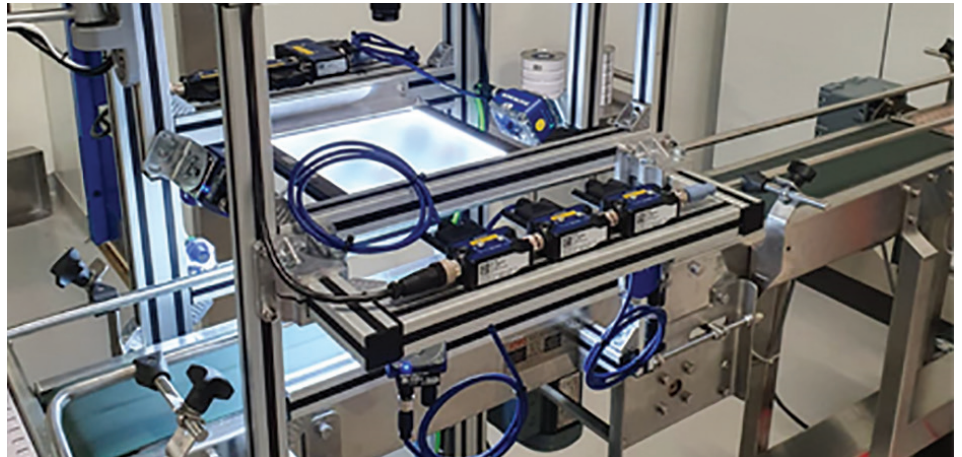


Newbaze Ireland Nutrition reveals superior manufacturing for safe, wholesome food

A machine vision solution verifies that every single product is right the first time, and QR Codes allow the end customer to check its origin and quality



Newbaze Ireland Nutrition uses automated traceability to meet tough regulations and lets consumers see manufacturing data for every package.

Objective

To comply with strict food manufacturing regulations and assure discerning Chinese consumers of product quality and safety

Approach

A machine vision solution to verify all product manufacturing data and a QR Code look-up for consumers

Technical requirements

- Read barcodes at 360°, text data and QR Code on every product
- Real-time interface with the manufacturing traceability system
- Provide customer access to product data via the QR Code

Newbaze Ireland Nutrition has invested 20m Euro in a state-of-the-art professional dairy formula plant to produce baby powder formula and nutritional formula in Carrickmacross County Monaghan. Newbaze Group chose Carrickmacross because Ireland is known for natural, green, and wholesome dairy farming. It is a new venture by the Shanghai-based Newbaze Group, investing in Europe for the first time. The milk formula is sold under the Ireliffey brand. Newbaze Ireland Nutrition is to offer the new facility for contract manufacturing services.

Chinese consumers care deeply about the quality of the infant formula they buy and will pay a premium to be sure of product quality and safety. Europe is seen to offer the world's highest quality food, made in a safer and more scientifically controlled environment.

How to show superior quality and compliance?

Food manufacturing is tightly controlled. The regulations governing foods of animal origin and powdered formula for infants and young children in particular, are very strict. EU853/2004 governs safety in food manufacturing and EU178/2002 requires traceability capabilities. To supply product to China GB23790, which relates to infant foods, also applies. Newbaze Ireland Nutrition needs to comply with all these regulations and prove this compliance. This means that every batch of baby formula must be 100% traceable.

“Thanks to the new Vision System, we can prove with certainty that every can of formula is correct.”

NEWBAZE

The solution

- Datalogic's MX-E processor, E100 cameras, Matrix 300N barcode readers, IMPACT software and custom lighting
- Vision System designed by AIS

Results

- One system reads QR Codes, barcodes and text
- Compliance with EU853/2004, EU178/2002 regulations and China's GB 23790 legislation
- 40 cans processed per minute



Newbaze group has an established manufacturing facility in Shanghai and the new facility in County Monaghan operates in exactly the same way as the one in China. Both sites are designed for dry blending of infant and follow-on milk formula. For Carrickmacross Newbaze decided to invest in multi-faceted computerized cameras and visual sensors to capture the details of each can and its contents and apply QR Codes. The vision system captures all of the identification and traceability parameters on every can. This means that consumers buying the blended formula powder in China can scan the QR code with their smart phone and see exactly where the can was produced, the manufacturing date, the expiry date and other safety data.

“This process has been used for some time in China. It gives the customers important information and helps to confirm that the product is genuine in a market where counterfeits may exist. This way of communicating with the customer is starting to catch on outside of China.”

An expert partner brings software and ready-made scanners

“We searched for local companies with a good understanding of vision systems who could build a custom solution for us, and AIS was recommended.” AIS are experts in the inspection systems used by large food and beverage manufacturing companies. They are also partnering with Datalogic, the manufacturer of data capture and automation products.

Newbaze Ireland Nutrition did not want a standard package, they required a tailored solution which would integrate with their traceability system, so they invited Simon Smyth, Managing Director of AIS, to visit the plant and discuss their requirement.

“We were delighted with the response from AIS,” says Newbaze. “We discussed the information that matters to the customer, and how the vision system could positively identify this key data. AIS designed our system to check each of these parameters so that we can prove with certainty that every can of formula is correct. For example, the system looks for text and checks that it is present, complete, correct, and legible. It provides a positive verification that every can of formula we produce is right.”

“We combined a number of technologies in the solution,” Simon Smyth explains. “Newbaze Ireland Nutrition uses a barcode, a QR Code and printed human readable characters on the top of each can. The barcode can be anywhere on the can, so that had to be readable at 360 degrees. Our solution reads all of the codes in one pass and we cross-check the data to be sure that everything matches.”

“Datalogic’s cameras, scanners and Impact software were clearly the best choice for this project,” Simon explains. “Their off-the-shelf products fit perfectly, and we added our own software that talks live to the traceability solution and feeds back data in real-time. We then tested the full solution in our Dublin laboratories using cans manufactured by Newbaze Ireland Nutrition.”

Confirmed quality and something more: consumer confidence

Newbaze Ireland is completely happy with the results. “We placed the vision system right at the end of the line, so that it proves we have done everything right up to that point,” Newbaze explains.

“It completes the verifications just before the products are packed into their cardboard boxes for shipping. This means we know that every product is correct - we can trace who made it and when.”

“The end customer can scan the QR Code and see the manufacturing information from the AIS system. What will they think? They will feel confident in our product and the Newbaze Ireland/Ireliffey brand. This is something extra we provide.”

Newbaze is set to offer this state-of-the-art manufacturing facility to other European food producers, for large and small production volumes.

Learn more:
www.datalogic.com



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