Ensuring Product Safety

Soap Manufacturer Outshines the Competition



Located in the heart of Provence, Laboratoires BEA produces private label personal care products for some of the finest global brands. The French company explains how its recent investment in x-ray inspection technology is helping it safeguard customer welfare and stand out from its competitors by providing safety and quality assurance.

Since 1992, BEA has developed a reputation for its unique, high-quality skin care, soap and fragrances which it sells directly to retailers in Germany, France and the United States.

The company manufactures an array of organic and natural cosmetic products which are Ecocert and National Organic Product (NOP) certified, including body lotions, shower gels, bubble baths, scrubs, shampoo, deodorants and perfumes.



X33 Series X-ray Inspection System





Laboratoires BEA export soaps globally with complete confidence following x-ray inspection.

Around 2,500 tonnes of soap are manufactured every year to different recipe formulas, and in various shapes and sizes from 10g to 300g - 30% of which are organic.

Quality is a core concern for BEA and the ongoing commitment of the company to improve its quality policy was rewarded by its ISO 9001 certification in 2011 as Technical Director, Mr. Didier Vial explains, "It consolidates the relationship of trust with our customers and partners by ensuring them of our implication to deliver a quality of service."

In a bid to further enhance quality, the company began exploring product inspection solutions in 2014 as Mr. Vial explains, "We manufacture soap for many retailers and our aim is to meet our customers' needs precisely in terms of the shape, colour, size and perfume of the soap, but most important is product safety.

"Our soaps are at risk from two types of contamination; firstly from contaminated raw materials, for example stones from the lavender fields, and secondly from parts of our processing machinery.

"Soap manufacturing is a mechanical process and there's a risk that little parts of blades or screws could end up in products. Metal is the main contaminant; we once found part of a metal spring in a bar of soap, which could have been extremely damaging if it found its way to a customer.

"We decided we couldn't take this risk and at that time, we had no existing inspection equipment in place so we began to conduct some tests with a variety of product inspection systems from a number of different suppliers, not all of the results were acceptable for us until we tested with x-ray inspection equipment."

Outstanding Contaminant Detection

In the company's search for a solution capable of providing unrivalled contaminant detection in its bars of soap, BEA contacted several x-ray system manufacturers, before purchasing Safeline X-ray's X33.

Specifically designed to inspect small to medium-sized packaged products, the X33 utilises new detector technology which allows the integration of a low power (20W) x-ray generator.

The x-ray system provides automatic detection and rejection of glass, metal, mineral stone, calcified bone and high-density plastics and rubber, and is capable of inspecting up to 300 products per minute.

Safeline X-ray - A Trusted Brand

Multiple factors influenced BEA's investment decision as Mr. Vial recalls, "The first reason we chose the X33 over competitors' systems was because the Mettler-Toledo brand name is well known and has a good reputation.

"Our customers are aware of this and when they visit our factory and see the trademark Metter-Toledo, they are very confident; the effect is not the same with other trademarks.



All authorised personnel are fully trained to meet local and global standards.

"The strong local support that Mettler-Toledo offered was another key reason for investment. Having local representation provided us with the support and knowledge we required which gave us confidence in using Mettler-Toledo as a supplier."

Installed in January 2015, the X33 sits at the end of BEA's production line and currently inspects 50 bars of soap wrapped in plastic per minute.

BEA was pleased with the x-ray system's integration and, in particular, the support the company received to ensure the machine complied with local rules and regulations on the use of ionising radiation as Mr. Vial explains, "X-ray regulations are very strict in France and prior to operation we had to register our new equipment with the country's radiation control agency and obtain the relevant documentation to allow us to work with x-rays. Mettler-Toledo supported us with this and a service technician helped with setting up the machine."



Lavender plants in fields surrounding the manufacturing facility in Provence before they are harvested and included into soap recipes.

X-ray Helps BEA Discover the Origin of Contamination

The company is delighted with the impact the x-ray system has had so far as Mr. Vial affirms, "By detecting very small contaminants, the X33 gives us and our customers the assurance that our soaps are safe which helps to differentiate us from our competitors.

"When an important customer recently came to inspect our factory, we explained that in soap manufacturing there's a risk of contamination and that by investing in x-ray inspection, we're doing all we can to reduce that risk."

In addition, the x-ray system is also helping to preserve the life of BEA's processing machinery as Mr. Vial explains, "For us, the x-ray system is not just a means of segregating bad product from good; if a metal contaminant is detected, we stop the line and cut the soap into little pieces to find the contaminant. After this, we endeavour to find the root cause of the contamination and, once we've done so, we modify our processing machines.

"The introduction of the X33 x-ray inspection system has allowed our manufacturing process to evolve whilst gaining a competitive advantage by offering a safe product to our customers."





The X33 x-ray system inspecting Laboratoires BEA soap at the end of the production line before dispatch to markets worldwide.

The Company: Laboratoires BEA

Since 1992, BEA has produced private label personal care products for some of the finest global brands. Over the last 15 years, they have gained a reputation for the development of unique, high quality formulations.

Laboratoires BEA recently renovated and government certified their facility which covers two production sites of 6,000 and 3,000 square meters, encompassing a full laboratory, as well as production facilities for skin care, soap and fragrances.

With 100 staff, specialising in all areas of product development including formulation, production, packaging, regulation and quality control, BEA can help to develop customers ideas into finished products. BEA have an annual production volume in the millions of units, bilingual staff and a strong export team, they are able to guide their customers through the production process with comfort and ease.



www.mt.com/safeline-xray

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