Numerous application areas

REAL-TIME X-RAY TECHNOLOGIES FOR INDUSTRIAL MEASUREMENT & QUALITY CONTROL



X-ray inspection of fish and fish products

Fish bone detection

Finding a fish bone in a supposedly boneless fillet of fish is an unpleasant surprise for a customer. Opening a package of fish product only to discover that the content has been exposed to air due to fault in the seal or the seam of the plastic or metal package can be downright fatal. Situations like these are a nightmare for fish manufacturers, but it can be prevented using our unique low-energy X-ray technology.





Application areas

InnospeXion's systems have numerous applications, and this Micro Fish Bone Detection System is no exception. The system is suitable for inspection of various types of fish - both fresh and frozen. InnospeXion even has experience with inspecting living fish that were sedated in order to determine their gender (see the two pictures above). Various types of shellfish have also been inspected with our systems, and particularly packaging is a key area of InnospeXion's low-energy X-ray technology. The only limit is your imagination, and the fact that there must be a contrast between the products and the detail(s) searched for.



Our low-energy X-ray technology makes it pos-sible to detect both the packed fish product and the packaging itself as in the case of this image. The shrimp is inspected for potential flaws such as foreign objects, while the package is inspected for sealing problems of different variations.

Designed and manufactured in Denmark.



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The pictures in this brochure illustrate the level of details that the X-ray based Micro Fish Bone Detection System is capable of producing. It is also an example of the many applications the system is suited for. There are hardly any limits to what sort of fish product the systems are able to inspect, whether it regards fillets, whole fish, living fish, shellfish, shrimps etc.



Detecting defects with low-energy X-rays

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Seeing the invisible

InnospeXion has designed and produced the most sensitive X-ray technology for detection of bone and foreign objects such as glass, stones, shell fragments etc. in fish products, down to 0.1 mm in size, which makes the Micro Fish Bone Detection System superior to ordinary X-ray system.

What makes this X-ray technology so outstanding compared to conventional X-ray technologies, is the ability to perform the inspections automatically - which means that no human intervention is required.

Tailored to the applications

The Micro Fish Bone Detection System also has the big advantage of easily being fitted into existing production lines, and has low energy consumption. The Micro Fish Bone Detection System is furthermore suitable for automatic bone picking.

> tailored into the production line concerned. The conveyor belt transports the fish through the system, and the low-energy X-rays detect details otherwise invisible for ordinary X-ray systems.

















The X-ray system is controlled by a PLC, and the extremely sensitive X-ray detector has a resolution of 0.1 mm and up to 300 frames per second, while also performing a high-speed on-line inspection of 30 m/min. Furthermore, the system is simple and robust, compact and easy to service. It features a hygienic design, has a long lifetime, and is fully automatic.

Additional features:

- cabinet







A unique X-ray technology

REAL-TIME X-RAY TECHNOLOGIES FOR INDUSTRIAL MEASUREMENT & QUALITY CONTROL

Features

 Retractable drum motor driven convevor section with pneumatic automatic conveyor tensioning mechanism

Radiation safety A304/A316 stainless steel

 Specific PLC and PC software configured to line capacity and needs

Remote operation using external trigger