



**Advanced Detection Systems**

4740 Electric Ave.  
Milwaukee, WI 53219  
Phone (414) 672-0553  
Fax (414) 672-5354  
[www.adsdetection.com](http://www.adsdetection.com)

## **American Institute of Baking (AIB) Metal Detection Audit Is Met At Bakers Quality Pizza Crust, Inc.**



### **A proactive approach to ensuring the standard is achieved**

Bakers Quality Pizza Crust rolled its first pizza crust off its processing line over a decade ago and a lot has changed in food manufacturing processes since that time. Fulfilling the increasing demand is critical to each part of the process, of course without compromising product quality. In the continued effort for increased output, Bakers Quality Pizza Crust realized that one thing should never change and that is product quality.

With a dozen employees producing over 2 million crusts per year, the Waukesha Wisconsin company employs an approach that enhances its sheeted pizza crust to promote its natural flavor, according to its president Tom Miller. The manufacturing process of the pizza crust takes over 24 hours to arrive at perfection. During this perfection process, the company uses a food metal detector from Advanced Detection Systems that ensures its product quality. Perhaps these are the reasons the company has enjoyed year over year increase in its pizza crust demand.

### **Adding a ProScan metal detector to the process helped in the plant expansion**

In 2009 during a major plant expansion, the company realized that an additional step in its quality control process had to take place. According to Tom, “we knew our customer requirements were changing and we had to take a proactive approach in addressing their concerns”. One of these requirements was to have metal detection in place to inspect all their products prior to shipment. After considerable research, the company contacted Advanced Detection Systems based out of Milwaukee Wisconsin. According to Tom, “we wanted a local company that manufactured its systems in the USA, understood our production requirements, and could build a system to our exact needs”.

A typical problem found in metal detection is an unacceptable level of false rejection rates (FRR). Bakers Quality Pizza Crust expressed this concern and wanted to know for sure that each rejected product was in fact contaminated and completely removed from its process.

To satisfy this requirement the ProScan metal detector technology is custom designed to phase out the product effect signal ensuring 100% detection. The microprocessor controlled electronics uses a unique software feature that is capable of learning the exact product signal, thereby eliminating any false rejects. This concern was especially

important to Bakers Quality Pizza Crust because they produce various size pizza crusts and with inspection completed prior to the freezer. Prior to product freezing inspection means, the product effect is at its greatest and detection sensitivity the most difficult. After learning the product effect, the signal is stored in memory, recalled during production, and used for analysing the metal detect signal. With virtually no product signals evident, the metal detector is capable of finding extremely small particles of ferrous, non-ferrous and stainless steel contaminates that are not found in older metal detectors.

With the ProScan metal detector “we are 100% assured that we are removing the contaminated product before it leaves our factory and never questioning what is good product or not,” said Tom.

### **The net result is the AIB standards are being met**

The system has a timed alarm every two hours for notifying the operators, which ensures the reject count is reviewed. During that two-hour period if there was a reject, all the pizza crusts are rechecked. This additional quality control step serves as testament to the company’s proactive approach to ensuring their detection standards are met. Tom explained further that, “we are very confident that metal detector is rejecting contaminated product, but we want to be doubly sure our product is of the highest quality, even if it involves an added step of rechecking the product”. Furthermore, part of the procedures the company includes in its total quality validation process is to have the metal detector checked for accuracy every six hours by the production operator. With the established standards placed in the production line, the operator will confirm proper rejection. This check is documented in a report and kept for internal and AIB audits.

As with any equipment that uses an extremely precise computer, the company needed technical assistance throughout the sales and support process. “The sales support prior to purchasing and the informative training done on site during start-up proved to be crucial toward its metal detection program,” stated Tom. “We are pleased that the metal detector is doing exactly what it is intended to do and the support from Advanced Detection Systems has been outstanding”.

When it comes to product safety, having a highly accurate metal detector system in place is not just to satisfy the AIB requirement but is paramount in the total product quality and safety management program.

In the end, there are many similarities with the two companies and is best summarized in Bakers Quality Pizza Crust slogan where each crust is “*specifically tailored to your needs*”. With a custom manufactured metal detector, uniquely tailored to the needs of the customer, the AIB certification is easily met.

For more information about Bakers Quality Pizza Crust, Inc. [www.bakersqualitypizzacrusts.com](http://www.bakersqualitypizzacrusts.com)

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