

Thomas-Krenn case study



Mesutronic GmbH

Mesutronic is a leading manufacturer of inspection systems for the plastics and food industries. The company currently employs about 230 people.

Location:

Kirchberg im Wald

CONTROLLED QUALITY

Taking testing to the next level with a platform IoT concept

Constantly stricter regulations and ever growing technological possibilities: The challenges and opportunities in testing solutions are extensive and dynamically evolving for a wide range of industries – including food: There, the motto of controlled quality applies in many respects.

The company

Mesutronic GmbH, based in Kirchberg im Wald in Lower Bavaria, has been supplying customers around the world with innovative technology for metal detection and inspection for over 30 years. The company is considered a technological leader in industrial metal and foreign object detection. Its sophisticated inspection systems are used in a wide range of industries – from food and pharmaceuticals to hygiene, plastics, textiles and mining. The central product groups in Mesutronic's range include metal detectors, metal separators, metal detection systems and X-ray equipment for protecting machines and systems from unwanted foreign objects. All systems are individually adapted to the customer's requirements and meet the highest standards of quality and reliability. The medium-sized company therefore more than lives up to its claim of "Metal Detection Made in Germany".

Taking a closer look at food

When it comes to food, governments and their testing organizations are particularly strict – and for good reason: our health is at stake. And, of course, the producers themselves also attach great importance to regular, transparent and traceable quality control. The spectrum ranges from random visual, odor and taste checks by personnel to permanent sensor-based checks performed by specially developed high-tech inspection systems. The latter can be used to detect foreign bodies or contaminants so that the delivery of contaminated batches can be stopped immediately, if necessary.

Mesutronic GmbH specializes in the development of such test systems. However, due to the constant advancement of technical development there is an ever growing number

of sensors with ever improving capabilities becoming available. With every sensor added to the network, the amount of data to be processed increases. This also changes the requirements for the systems controlling these sensors, which is especially true of the industrial PCs used. The development of future-proof solutions is therefore an ongoing task for the company.

The goal

Keeping up with the rapid pace of technical development is a demanding task that ties up a lot of the company's resources. Technical feasibility analyses and compatibility tests are part of its daily business, as is the procurement of suitable hardware. "Our Development team is constantly working in a highly dynamic environment to future-proof the systems," explains Andre Eggersdorfer, Product Manager at Mesutronic GmbH. In order to save on internal resources, Mesutronic decided to cooperate with external experts in this area – namely with the hardware professionals at Thomas-Krenn.AG. The aim was to find an efficient and economical long-term solution that could be used for existing and future projects. It should be realized without changing the current platform – and without a significant increase in costs.

Alternative solutions, such as sourcing hardware from other manufacturers, proved to be dead-ends due to a lack of long-term availability.

The challenge

Since the availability of hardware components and Windows licenses was now ensured even during the pandemic thanks to Thomas-Krenn, a strategy could now be developed to cope with further challenges.

"The entire process with Thomas-Krenn.AG was as usual very agile and uncomplicated. We were looking for professional support and received it across the board."

Andre Eggersdorfer

Product Manager, Mesutronic GmbH

These primarily revolved around the implementation of a platform concept with scalable computing power. The idea was to ensure that Mesutronic could respond to current customer inquiries with a market-oriented service at all times. This required a system that could be flexibly scaled to future demands without any complications.

Optimal scalability with industrial PCs

Mesutronic and Thomas-Krenn wound up deciding on a system of industrial PCs. These robust and versatile machines are specially manufactured for use in industrial conditions and allow flexible scaling. With a lead time of approx. 3 months, the software requirements were compared and a solution proposal consisting of hardware and software was defined on the basis of these requirements. This analysis phase was followed by a pre-test under real conditions:

A demo system for internal evaluation ensured that the industrial PC system met all scalability and usability requirements. This

also ensured that the departments involved, such as Purchasing, Product Management, Engineering and Order Preparation, had sufficient time to prepare for the commissioning of the new system. After a satisfactory test phase, a framework agreement was finally concluded and the order was dispatched shortly afterwards. This was fulfilled across multiple deliveries in close coordination with the Sales and Systems Engineering departments of Thomas-Krenn.

Summary

The industrial PC systems have now been delivered in full and are performing as intended. Mesutronic GmbH is so satisfied with the result that further collaborations in the field of IoT and Industry 4.0 are already being planned. The uncomplicated process and fast response times of Thomas-Krenn were highly praised by Mesutronic. This successfully completed project equips the metal detection experts with a future-proof IT solution and forms the cornerstone of a mutually beneficial partnership.

THOMAS KRENN®

About Thomas-Krenn:

Thomas-Krenn.AG is a leading manufacturer of custom server and storage systems as well as a solutions provider for the industrial sector.

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