New approaches for new growth

From inspection to process optimization

IXS | Systems business

- Process optimization
- Enabler for new production methods
- Metrology
- Inspection

■ Future potential
■ Existing capabilities
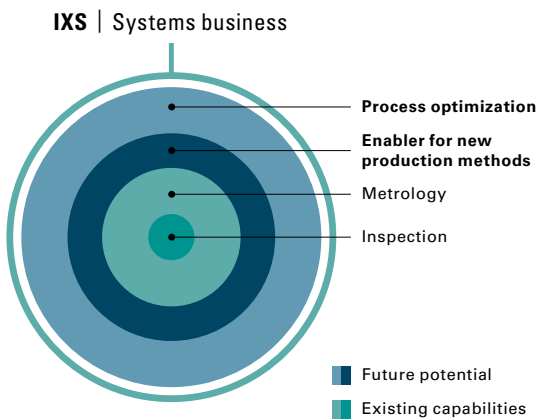
In inspection, IXS is able to build on its strengths and the successful integration of measurement technology. The division is now focusing on strengthening its position in integrated process control and building the capabilities needed to develop solutions for the optimization of manufacturing processes.

Thomas Wenzel's vision for IXS goes far beyond inspection applications. "In CT today we deliver the best image, but even more importantly, CT as a technology provides the best sensor in the industrial manufacturing sphere. And this combination is precisely the key to future growth for our x-ray systems," says the new President of the IXS division. He adds that, while the focus today is on hardware and image quality for optimum defect recognition, tomorrow's emphasis will be on analytics software and comprehensive data for the predictive optimization of entire production processes. "For defect detection we only need 5% of all the data we generate. Our goal is to leverage the unused 95%, together with deep learning techniques, to optimize existing manufacturing processes. Our customers will thus be able to analyze data about every process step and so improve their value chain even when the pieces inspected are defect-free. This is particularly important for new production methods, such as additive manufacturing."

"Data analytics and machine learning combined with the best image chain – this is the future of our x-ray systems. It will turn them into a powerful optimization tool for our customers' production processes."

Thomas Wenzel
President, X-Ray
Systems (IXS) division

"Every day, we have the ability to open up a new world, make visible things we have never before seen, and convince customers to use x-ray technology who would never have thought of it" – this is what excites him about his work, says Wenzel, who holds a computer science degree and a PhD in engineering. As a specialist for computed tomography, process-integrated test systems, data analysis and machine learning, he knows how the IXS division can exploit growth opportunities from digitalization through new product development.