

Manufacturing

Embracing smart manufacturing to drive global growth

BWT

To accelerate international expansion, laser solutions specialist BWT aimed to improve the efficiency of its high-tech manufacturing processes. Working with Lenovo Professional Services, the company deployed smart factory solutions—boosting operational efficiency by 30% and helping BWT drive business growth.



Lenovo

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Who is BWT?

Founded in 2003 and headquartered in Beijing, China, BWT is a global leader in the field of laser solutions, distributing its products to more than 60 countries worldwide. The company's laser systems support a wide range of use cases, including industrial applications, medical treatments, scientific research, and IT. The company operates production and R&D centers across Jiangsu and Shenzhen in China, as well as a wholly owned subsidiary in Germany to service international markets.



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The Challenge

Over the last decade, BWT has grown significantly in China and around the world. The company aims to continue its domestic and international growth journey—but manual processes for production scheduling, materials management, and quality control created a drag on operational efficiency.

Zhiwei Mei, Deputy General Manager of Laser Business Group at BWT says: “To help enable the next phase of our growth strategy, we decided to take a fresh look at our manufacturing processes. In particular, we saw a great opportunity to improve key metrics such as inventory turnover and customer satisfaction by embracing lean manufacturing methodologies in our factories.”



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“As a first step on our business transformation journey, we aimed to convert our primary manufacturing center in Tianjin, China into a smart factory. To realize that vision, we looked for a partner with deep experience in the high-tech manufacturing industry.”

Zhiwei Mei

Deputy General Manager of Laser Business Group,
BWT

Teaming up with transformation experts

By partnering with experts from Lenovo Professional Services, BWT successfully implemented the smart factory concept at its manufacturing facility in Tianjin. The new solution is powered by a modern manufacturing execution system (MES)—enabling streamlined planning and scheduling, higher operational efficiency, and reduced costs.

“Lenovo has recently completed a digital transformation for its own manufacturing practices, which gave us confidence they had the solutions and the first-hand experience to make our project a success,” Zhiwei Mei confirms.

Services

Lenovo Professional Services
Lenovo Whiteboard Consultative
Sessions

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“Lenovo Professional Services carefully examined our existing workflows and helped us develop new digital processes that incorporate warehouse automation, supply chain planning, and much more. Lenovo offers us a true end-to-end service, including consulting, design, development, implementation, operations, and ongoing maintenance services.”

Zhiwei Mei

Deputy General Manager of Laser Business Group, BWT

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Results

By digitally integrating all stages of the manufacturing process—underpinned by a modern MES solution—BWT enables its manufacturing teams to carry out key activities such as production scheduling, materials management, and quality control more quickly and accurately.

Zhiwei Mei elaborates: “Thanks to our work with Lenovo Professional Services, we’ve improved the operational efficiency of our Tianjin facility by 30% and reduced energy consumption by up to 40%. Process optimization is also reducing the need for employee overtime—cutting our labor costs by 20%.”



30% improvement in operational efficiency



40% reduction in energy consumption



20% reduction in labor costs



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“Our partnership with Lenovo is helping us to drive significant enhancements to our manufacturing capabilities. Thanks to our lean manufacturing processes, we’re now in a strong position to boost inventory turnover, increase customer satisfaction, and drive business growth in China and beyond.”

Zhiwei Mei

Deputy General Manager of Laser Business Group,
BWT

Why **Lenovo**?

Early on in the vendor selection process, Lenovo stood out to BWT as a leader in smart manufacturing.

“Lenovo clearly demonstrated that they understood the challenges of transitioning to smart manufacturing and had the experience and expertise to help us solve them,” comments Zhiwei Mei. “For example, Lenovo showed us the importance of adopting unified data standards across our planning, manufacturing, and supply chain operations.”

Zhiwei Mei adds: “The fact that Lenovo has successfully deployed smart manufacturing solutions many times for many different clients—including its own hardware manufacturing business—convinced us that we had made the right choice.”



How can high-tech companies optimize manufacturing?

Laser solutions specialist BWT teamed up with Lenovo Professional Services to build its very first smart factory.

[Explore Lenovo Professional Services](#)