

# WEINMANN Emergency: Powering Precision and Compliance in Global MedTech

How PTC's unified digital backbone transformed collaboration, complaint handling and regulatory readiness.



WEINMANN Emergency is a global pioneer in emergency medical technology, delivering advanced ventilators and mobile systems that empower first responders when every second matters. Guided by its mission to "Simplify Saving Lives," the company develops robust, high-performance devices, such as the MEDUMAT Standard<sup>2</sup> and MEDUVENT Standard, engineered for autonomous use in the most challenging environments.

Headquartered in Hamburg, Germany, WEINMANN has earned international recognition for its precision engineering and unwavering reliability. Its solutions are deployed by emergency services, hospitals and defense organizations across the globe, supporting critical care in ambulances, helicopters and field units. With a focus on intuitive design and seamless functionality, the company continues to set benchmarks in quality, innovation and compliance, cementing its role as a trusted ally in frontline medical response.

"We're committed to improving emergency care through innovation. We also want to ensure that our innovation is matched by operational excellence and audit readiness across every department," said Oliver Kürsten, Head of Management + IT Services, at WEINMANN Emergency.

## Challenges: Fragmented Systems, Rising Pressure

As WEINMANN Emergency's product portfolio grew and regulatory demands intensified, the company faced mounting pressure to unify its internal processes and ensure seamless access to data across departments. From engineering and quality assurance to service and compliance, teams needed a digital infrastructure that could support collaboration, accelerate innovation and maintain audit-readiness throughout the product lifecycle. Fragmented systems and manual workflows were no longer sustainable; the organization needed a scalable, future-proof foundation for operational excellence.

"We knew we had to evolve. The complexity of our products and the pace of regulatory change demanded a unified, intelligent system. One that could support innovation without compromising compliance or speed," said Kürsten.

Operating in one of the most tightly regulated industries, WEINMANN faced a series of challenges that strained both agility and accountability. The introduction of the [EU Medical Device Regulation \(MDR\)](#) raised the bar for documentation, traceability and audit readiness. Meanwhile, decentralized data storage across departments made it difficult to manage product changes and complaints with the consistency and speed required.

Reliable access to documentation was critical, especially during ad-hoc audits, but was far from guaranteed. Siloed systems and manual processes created bottlenecks, undermining cross-functional collaboration and slowing response times. Teams lacked a shared view of product data, making it harder to align on quality standards and regulatory requirements.

Prior to its transformation, WEINMANN relied heavily on paper-based and Excel-driven workflows. These legacy methods offered limited traceability and made [ISO 13485 compliance](#) difficult. Collaboration across sites was also cumbersome, and complaint handling remained reactive rather than integrated, making it increasingly difficult to meet rising customer expectations and regulatory scrutiny.

## Solution: One Unified Platform, Global Alignment

To address these challenges, WEINMANN selected PTC [Windchill](#) as its centralized Product Lifecycle Management (PLM) system. This strategic solution unified CAD and complaint data into a single platform, enabling seamless collaboration across departments and locations. The system's [CAPA](#) and Complaint Management modules provided structured, cross-functional workflows that supported consistent and efficient resolution of quality issues. Windchill was deployed across multiple locations and departments, enabling unified access to CAD data and complaint handling in a single system.



### PDSVISION

#### Partner Spotlight

WEINMANN's Windchill implementation was managed by **PDSVISION**, a trusted global advisor in digital engineering, specializing in PLM, CAD, simulation and IoT solutions that drive enterprise-wide transformation. Their global approach ensured that all teams, regardless of geography, could collaborate seamlessly, maintain consistent quality standards, and respond efficiently to regulatory demands. With deep technical expertise and a customer-centric approach, PDSVISION delivers tailored implementations that help manufacturers like WEINMANN Emergency unlock efficiency, compliance and innovation across the product lifecycle.

"We chose PTC because it offered a scalable, integrated platform that could unify our product data, streamline compliance, and support cross-functional collaboration. It wasn't just about features. It was about finding a system that could grow with us and adapt to the complexity of medical device development," Kürsten added.

Document control was significantly improved, with audit-proof traceability and versioning that aligned with MDR requirements. Rather than over-customizing, WEINMANN began with standard templates and tailored them thoughtfully to fit their internal processes. This approach ensured flexibility without compromising system integrity or usability.

## Results: From Reactive to Resilient

The transformation delivered measurable improvements across global operations. Change management processes are now transparent and traceable, enabling audit readiness and regulatory compliance. Complaint handling has become faster and more consistent, thanks to the systemic support provided by the CAPA module. Teams across global locations now work from a single source of truth, with real-time access to up-to-date data.

"This transformation has fundamentally elevated how we operate. We now have global transparency, faster complaint resolution and streamlined workflows that are both efficient and audit ready. It's not just a system upgrade. It's a strategic shift that empowers every team to deliver with confidence and precision," Kürsten added.



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Collaboration has also improved dramatically, with digital workflows supporting remote work and cross-site coordination. IT operations have been simplified as centralized systems reduce complexity and maintenance overhead. The organization now benefits from streamlined workflows that are not only efficient but also audit-proof, an essential capability in the medical technology sector.



"Windchill gives us a single, integrated system that connects teams, streamlines compliance and accelerates innovation," added Kürsten. "It's become the backbone of our product lifecycle, supporting global collaboration, regulatory excellence and faster decision-making across the board."

## Looking Ahead: Scaling Innovation with Confidence

WEINMANN continues to build on its digital foundation with innovations like WEINMANN Connect, a cloud-based platform that links devices like MEDUMAT Standard<sup>2</sup> for remote diagnostics and service coordination. As the company evolves, its PLM backbone will remain critical to scaling quality, compliance and customer satisfaction.

"WEINMANN Connect marks the next step in our digital evolution, linking devices, data and service in real time. As we scale globally, our PLM backbone remains essential to delivering quality, ensuring compliance and exceeding customer expectations at every touchpoint," Kürsten concluded.

## Customer Overview | WEINMANN

<b>Headquarters</b>	Hamburg, Germany
<b>Industry</b>	Medical Technology
<b>Employees</b>	Approximately 273 globally
<b>Revenue</b>	Approximately \$53 million
<b>PTC Products</b>	Windchill

## Benefits

- **Unified Data Backbone** - Centralized platform integrates CAD and complaint data, eliminating silos and enabling a single source of truth across departments and global locations.
- **Audit-Ready Compliance** - Transparent, traceable workflows support EU MDR and ISO 13485 requirements, ensuring fast, reliable access to documentation during audits.
- **Accelerated Complaint Resolution** - CAPA and Complaint Management modules streamline issue handling, making responses faster, more consistent and cross-functionally aligned.
- **Improved Cross-Site Collaboration** - Digital workflows enable seamless coordination between teams, whether remote, on-site or across international locations.
- **Simplified IT Operations** - Centralized systems reduce complexity, lower maintenance overhead and improve operational efficiency.
- **Scalable and Flexible Architecture** - Standard templates tailored to WEINMANN's processes allow for customization without compromising system integrity or usability.
- **Enhanced Decision-Making** - Real-time access to up-to-date product data empowers teams to act quickly and confidently across the product lifecycle.
- **Global Rollout Capability** - Windchill supports enterprise-wide deployment, ensuring consistent quality and compliance standards across all divisions.
- **Innovation Enablement** - Serves as the digital foundation for future-forward initiatives like WEINMANN Connect, linking devices and data for remote diagnostics and service coordination.