XMPro Named as a Sample Vendor for Digital Twins in Gartner® Hype Cycle™ for Discrete Manufacturing Technologies, 2026

XMPro's Agentic Operations Platform runs governed digital twins for industrial products across design, manufacturing, and in-service operations.

XMPro Named as a Sample Vendor for Digital Twins for Products category in the Gartner® Hype Cycle™ for Discrete Manufacturing Technologies, 2026

DALLAS, TX, UNITED STATES, July 14, 2026 /EINPresswire.com/ -- XMPro, the agentic operations platform for asset-intensive and mission-critical industries, today announced it has been named as a Sample Vendor for Digital Twins for Products in the Gartner Hype Cycle for Discrete Manufacturing Technologies, 2026, published 6 July 2026.

"In our opinion, Digital Twins for Products carrying a 'Mature mainstream' maturity rating in this year's Discrete Manufacturing Technologies Hype Cycle marks a meaningful shift: digital twin is no longer an emerging capability, it is a working component of modern industrial operations. XMPro has been running operational digital twins for industrial products, factories, and equipment for years. This recognition reflects the operational side of digital twin: the part that connects a design-time model to a real, in-service asset under bounded autonomy."

— Pieter van Schalkwyk, CEO, XMPro

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>
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According to Gartner, "A digital twin is a software-based model that represents insights about the state of a physical or chemistry-based product. Digital twin elements include models, data, simulation, one-to-one association, and near-real-time monitorability. Digital twins for product

software platforms are designed to enable a range of use cases, including design and engineering, analytics, IoT, simulation models, telemetry, and application state changes." (1)

Gartner assigns Digital Twins for Products a "Transformational" benefit rating in the Hype Cycle, with market penetration of more than 50% of target audience and "Mature mainstream" maturity. (1)

On why digital twins for products matter, Gartner states: "Digital twins of products accelerate product development, manufacturing, and usage simulations, contextualizing real-time and synthetic data. Digital twins help avoid costly mistakes by predicting behaviors of products to achieve outcomes — such as sustainability — and breakthroughs in new and existing smart and servitized products. Intelligent simulation and physical AI is further shaping the future of digital twins products, opening new opportunities for scale and adoption." (1)

On business impact, Gartner states: "Digital twins enable simulation and optimization of complex products and business models by integrating high-fidelity virtual and real-world data from both products and factory floors. They accelerate time to market, improve reliability, and reduce life cycle costs while enabling continuous innovation through feedback loops. They also support regional adaptation, mass customization, sustainability, risk reduction through virtual testing, and new revenue models like product as a service." (1)

On drivers, Gartner states: "AI-powered digital twins are increasingly enabling intelligent, real-time monitoring, simulation, and optimization of products throughout their life cycle, supporting predictive maintenance, process efficiency, personalization, automation, and quality assurance." (1)

On obstacles, Gartner states: "Many manufacturers struggle to accurately map real-world physical processes into digital models, resulting in digital twins of products that deliver unreliable insight and fail to reflect operational reality." (1)

Gartner also states: "Most enterprises face a significant challenge in blending OT and IT to develop and maintain digital twins." (1)

"We believe the mature-mainstream story for digital twins for products is not that the concept has been proven, it is that the operational half of digital twin has caught up with the engineering half," said Pieter van Schalkwyk, CEO of XMPro. "For years, digital twin has meant the CAD-and-simulation model on the engineering side. The operational digital twin, the one that runs alongside the physical asset in production and reasons on live telemetry under governance, is now what closes the loop. XMPro built the Agentic Operations Platform around that operational digital twin: StreamDesigner integrates directly with SCADA, PLCs, historians, MES, and ERP. Composite AI grounds every reasoning step in physics, process logic, and causal models. The Operational Identity Model encodes real product, line, and equipment context. MAGS coordinates specialized agents around the twin under bounded autonomy. APEX provides the

lifecycle, governance, and audit surface. That is what turns a static model into a living twin in operation."

How we think XMPro's Agentic Operations Platform Aligns to Digital Twins for Products Requirements:

The XMPro Agentic Operations (AO) Platform combines industrial intelligence infrastructure with the Multi-Agent Generative Systems (MAGS) framework on top of a composite AI core, designed from the start to run operational digital twins for products, factories, and equipment under governance.

Operational digital twin runtime: XMPro connects a product's engineering model to its in-service telemetry, contextualizing real-time and synthetic data to reflect the actual operating state of the physical asset. Digital twins carry live health, usage, and performance signals, not just design-time properties.

OT and IT blended through StreamDesigner: XMPro connects directly to SCADA, PLCs, historians, MES, and ERP systems via StreamDesigner, building governed intelligence pipelines that combine operational technology and enterprise data sources into a single digital twin state.

Physics-grounded, causal reasoning (composite AI). XMPro combines generative AI for reasoning with symbolic AI, first-principles models, and causal AI for task execution. Digital twins reason against physics and process logic, not language-model heuristics alone, addressing the unreliable-insight risk manufacturers face when digital models do not reflect operational reality.

Domain specialization through the Operational Identity Model (OIM): XMPro digital twins are configured against the OIM, which encodes institutional product knowledge, equipment relationships, factory-line metadata, and operational constraints. Twins reason against this domain context rather than generic enterprise data.

Agent-driven optimization (MAGS): Specialized AI agents run alongside the digital twin, monitoring product state, predicting failures, orchestrating maintenance, and optimizing production. Agents coordinate under bounded autonomy and escalate to human operators when confidence thresholds are not met.

Governance, audit, and cybersecurity (APEX Control Tower): APEX provides centralized lifecycle management, governance controls, and supervisory monitoring across digital twin operations. Every twin and every agent has an identity, a policy boundary, an audit trail, and an objective function. Access controls and audit logs protect sensitive product and operational data.

XMPro's APEX platform and Multi-Agent Generative Systems (MAGS) framework are available immediately for discrete manufacturers seeking to deploy operational digital twins for products with bounded autonomy and full audit in factory, in-service, and life-cycle environments.

For more information, visit www.xmpro.com.

(1) Source: Gartner, Hype Cycle for Discrete Manufacturing Technologies, 2026, Sudip Pattanayak, Marc Halpern, Scot Kim, 6 July 2026.

About XMPro
XMPro is the agentic operations platform that takes industrial enterprises from monitoring to autonomous operations, on one platform, at their own pace, without changing tooling. The XMPro AO Platform combines industrial intelligence infrastructure with Multi-Agent Generative Systems (MAGS) to give AI agents the operational context, institutional knowledge, and governed execution surface they need to run industrial operations autonomously. XMPro serves Fortune 500 companies across manufacturing, mining, energy, utilities, and other asset-intensive sectors. Headquartered in Dallas, Texas, XMPro has been solving complex challenges for global industrial companies since 2009.

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