

# Digital Factory solutions from Siemens

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As part of the PLM (Product Lifecycle Management) philosophy, Digital Factory consists of different sub-areas of production. Digital Manufacturing through Digital Factory is a key component of the IT strategy of the manufacturing companies. It forms the bridge between ERP system and the fundamental components of PLM.

The key areas of digital manufacturing are the following: layout planning, manufacturing and logistics process simulation and optimization, value stream simulation, ergonomics, robotics and automation, production planning and scheduling. Digital Factory effort is to analyse, mapping and digitize this platform to produce a realistic picture of the production. With this digital twin of production it can be further optimize and innovate the process of real production without having a need to implement the proposals even before it has been found its reality and economic efficiency.

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Siemens provides its customers high-performance software systems for the development of these digital twins.

The Digital Twin of a manufacturing company's value chain has got three facets; the product, the production process and the production equipment. This information is managed in one data model which enables the simulation, test, validation, and optimization of both the product and the production process in a complete digital environment.

graphIT Ltd. is a Hungarian reseller of the Siemens PLM products, including Solid Edge, NX, Teamcenter, Plant Simulation, Process Simulate and Preactor. With 20 years of experience in different industries, graphIT has a deep knowledge on implementing enterprise-wide PLM solutions.

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The goal of the presentation is to introduce the data model of the Industry 4.0, and demonstrate how the Siemens PLM tools can help companies to enter into the new era of the digital manufacturing, and enable the possibilities of their Digital Factory. The presentation also shows examples from industrial projects where Digital Factory solutions were introduced and implemented by graphIT Ltd.