

DIGITAL INDUSTRIES SOFTWARE

Master the precision of the perfect part

Deliver greater operational efficiencies and better shop floor management with Digital Part Production



siemens.com/plm/dpp

Trend #1

Consumer-driven demand for highly customized machines increases product complexity.



Trend #2

Smart manufacturing, explosive growth in the number of industrial machines connected via the Internet of Things (IoT).



Trend #3

Hyperautomation, ability to connect previously siloed teams and leverage the possibilities of machine learning.

Trend #4

Global competition, flexible, agile start ups increase pressure on OEMs and squeeze profit margins.



To remain competitive in today's high-pressure industrial machinery industry, manufacturers need new solutions to maintain market share and deliver **innovation** in record time.

More than ever customers require **highly customized products** that are designed to meet their specific needs - one size no longer fits all.

The rise of **smart manufacturing** has opened up new opportunities for companies. Thanks to IIoT, they now have access to more information than ever before, but many fail to store and re-use it via the cloud. Consequently, companies are not fully leveraging the possibilities and benefits it could bring, such as time-savings and fewer development errors.

New, low-cost players entering the market, unhindered by traditional manufacturing practices, can develop machines faster and at a fraction of the price and make the most of new technologies to deal with increasing **product complexity**, leaving OEMs with the option to adapt now or face losing market share.

It is becoming clear to many that a **comprehensive digital solution** is needed to deal with these challenges.

You need **cloud-based solutions** to drive you through the whole manufacturing process, to allow you to **master the precision of the perfect part** while offering you **greater operational efficiencies** and the ability to **better manage your shop floor. Digital Part Production** from Siemens is that solution.

Key drivers



Customization and smaller lot sizes drive costs up if implications are not understood.



Need for high precision parts to ensure reliability and quality.



Today's industrial machines must be connected and make use of advanced technologies.



Global competition and low-cost providers are squeezing profit margins and lead times.

Fully merge your physical and digital processes

Digital Part Production by Siemens, a complete solution to boost quality and reduce time to market.

Digital Part Production is designed to help industrial machine manufacturers implement solutions that deliver greater operational efficiencies and better shop management.

A single digital thread.

Enables you to fully merge both digital and physical processes via the cloud. Linking engineering to manufacturing, planning and execution, previously siloed teams are aligned with the same information at their fingertips, helping you deliver higher quality products, optimize processes and ultimately compress delivery times. Integrated CAD, CAM and CNC tools cut data transfers and duplication, and automate shop floor processes, reducing the risk of costly and time-consuming mistakes.

Reduce costs and time to market.

Highly automated CAM enables you to deliver consistently high precision parts with an estimated 30-40% improvement in overall efficiency, getting higher quality products out of the door to your customers faster. Automate programming and re-use proven data to give teams insights to develop better products and streamline manufacturing.

Harness the digital twin.

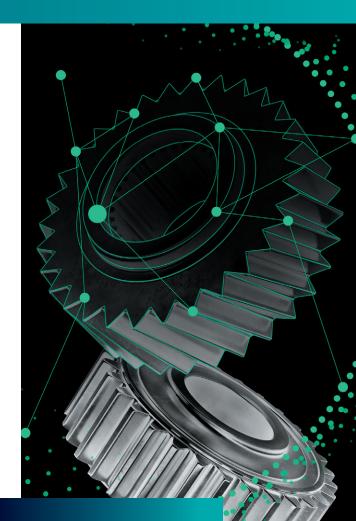
With a **comprehensive digital twin** you have a **designed 3D** model to simulate machine parts, offering you greater **design flexibility**. Through the cloud, all stakeholders can access and view project information at anytime, while the digital twin simulation provides a complete overview on how changing part designs impact the whole manufacturing process; namely, any changes made to the model are automatically updated in the CAM. **Synchronized part production** offers one environment for **seamlessly integrated** part preparation, programming, and production, improving collaboration across your organization.

High quality, high precision parts.

To design and produce high quality parts that **differentiate** you from your competitors, it is necessary to create **complex geometries**, impossible to achieve with traditional manufacturing methods. **Additive manufacturing** lets you develop strong yet light designs that meet the highest of requirements, so you can offer **innovative solutions at better prices points**.

Fully merge the digital and physical world.

With **closed loop connectivity** you will gain insights from the physical machine creating a feedback loop with the digital twin to further improve the next generation of designs and reduce costs. Gain **complete visibility** into the production status and schedule to find the best path forward for production and **ensure operational efficiency**.



Siemens offers a complete end-to-end digital solution to help you thrive in today's highly competitive industrial machine market.

A new path forward

As global competition grows it becomes vital to maximize productivity and avoid costly, time-consuming mistakes. Digital Part Production automates the overall production process to help you deliver high-quality precision parts to market faster, while cloud-based solutions drive end-to-end manufacturing optimization for enhanced cost-savings.

Now its your turn to...

Standardize manufacturing processes, connect people, systems and machines to the digital thread, a single source of truth for the whole lifecyle, to improve information sharing and collaboration.

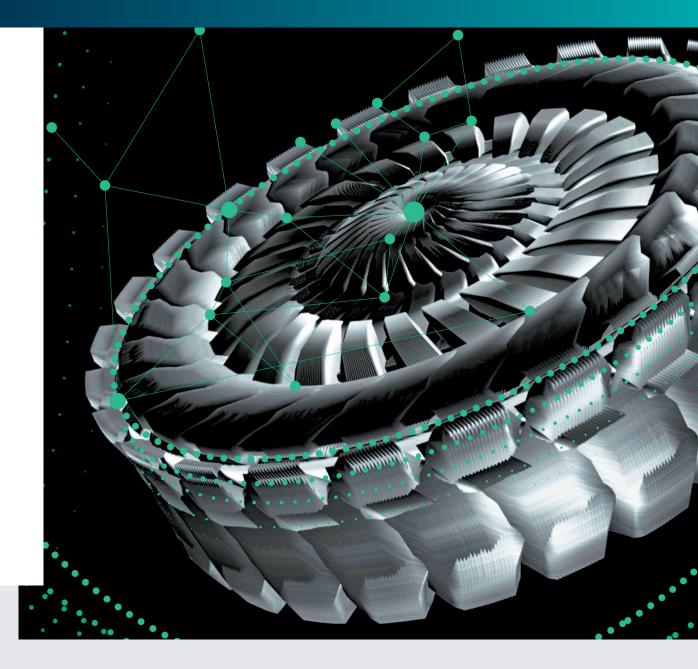
Automate shop floor decision making, minimize scrap, improve part quality to lower costs and risks.

Merge the digital and physical, identify potential issues in the real world using accurate simulations in the comprehensive 3D digital twin.

Shorten lead times, reduce set up with integrated, automated CAD/CAM/CNC programming.

Eliminate manual data transfers and duplications that often lead to costly mistakes.

Master the precision of the perfect part with Siemens Digital Part Production.



About Siemens Digital Industries Software

Siemens Digital Industries Software is driving transformation to enable a digital enterprise where engineering, manufacturing and electronics design meet tomorrow. Xcelerator, the comprehensive and integrated portfolio of software and services from Siemens Digital Industries Software, helps companies of all sizes create and leverage a comprehensive digital twin that provides organizations with new insights, opportunities and levels of automation to drive innovation. For more information on Siemens Digital Industries Software products and services, visit <u>siemens.com/software</u> or follow us on <u>LinkedIn</u>, <u>Twitter</u>, <u>Facebook</u> and <u>Instagram</u>. Siemens Digital Industries Software – Where today meets tomorrow.

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