



# Integrate excellence into all your devices

Harness the complexity of integrated, multi-disciplinary product design for optimized devices **with Siemens Design Excellence.**

[siemens.com/de](https://www.siemens.com/de)

**SIEMENS**

Trend #1

Expanding competition means new products need to be compliant and get to market faster.



Trend #2

Medical devices are increasingly complex as consumers demand easy to use smart and connected products.



Trend #3

Greater regulatory scrutiny is putting pressure on manufacturers to guarantee compliance and safety of their products.



Trend #4

New focus on digital evidence for device verification and validation.



Medical device manufacturers are having difficulty to increase or at least maintain their market share in this highly competitive industry.

The trend to value-based healthcare and predictable delivery networks forces them to guarantee compliance while increasing speed to market and reduce cost.

On the one hand, **medical devices must become smarter and more connected** as patients and healthcare providers expect state-of-the-art technology, usability, flexibility and effectiveness in medical devices.

On the other hand, there is a huge opportunity for those who can satisfy the demand for low-cost healthcare in countries that can't afford the more expensive diagnostic treatments.

Furthermore, in an increasingly restrictive regulatory environment, **compliance needs to be at the heart of every step of the design process.**

New products must be both safe and effective, and also comply to all applicable regulations.

In addition, the regulatory bodies themselves are recognizing the limitations of the traditional processes, such as testing, for example. They are actively encouraging the companies to leverage simulation technology for validation and verification in order to optimize the safety and performance of their products.

**Are you ready to master the challenges of medical device design and manufacturing?**

## Benefits



Reduce time / cost



Ensure compliance



Improve quality



Collaborate through the cloud with design tools to plan, develop and deliver quality devices faster



Contextualized Digital Twin to drive design authoring and simulation

# Mastery of Design Excellence. Deploy digital solutions to navigate complexity and produce innovative, compliant devices.

## Optimize design and performance of competitively differentiated, premium devices

A digital transformation of the design process is crucial to enable manufacturers to **master the complexity of today's** market by controlling development costs and timelines as well as enabling core design teams to function collaboratively.

Automation, standardization and optimization of product lifecycle process and design authoring leads to **cost savings and more rapid development**. Digitalization enables data to define, measure, analyze, improve and control the extraordinarily complex task of bringing a product to market.

Siemens Design Excellence is a multi-discipline design solution for optimized devices that allows globally distributed design teams to work with a common set of tools and provides a pathway to **design process mastery**.

Achieve this through streamlined engineering processes from concept to production on a cloud solution that unifies your entire product development in a single access portal.

In today's increasingly complex and competitive medical devices market, with an ever-changing regulatory landscape, **Siemens Design Excellence offers you a comprehensive digital design architecture**.

It combines digital evidence capabilities with the use of **simulation technologies** for virtual, digital performance testing of devices. This lets you to produce evidence for decision support and implement **verification and validation activities** that reduce costly physical tests and iterate quickly and efficiently using scalable, cloud-based collaboration technology.

That facilitates complete visibility, **collaboration** across the design process and built-in compliance which helps you maintain a **competitive edge** and will allow you to meet the needs of patients and medical institutions.

**Siemens introduces Design Excellence in medical devices, a holistic digital solution that offers medical device manufacturers the technology they need to rise to the challenges of today's industry.**



If you want to thrive in the highly complex medical devices industry, you need:

- **Advanced Design & Evidence Re-use** across products and programs. Data based – not document based – for intelligent platforming.
- **Robust, Concurrent Design** enabling quick domain specific progress with class leading design tools feeding into efficient workflow merges.
- **Design File Integrity** – accessible, integrated, high quality data throughout the product lifecycle for robust compliance and product maintenance.
- **Comprehensive Risk Management** traceability, application and decision support through requirements, design, and verification & validation.
- **Digital Evidence** to reduce costly physical tests and iterate quickly.

Master complexity in your design process to maintain a competitive edge and unlock your design potential with Siemens Design Excellence for Medical Devices.



**About Siemens Design Excellence:** Siemens Design Excellence is a multi-disciplinary design collaboration solution with multi-physics simulation capabilities which allows you to produce competitively differentiated, premium value medical devices.

For more information on Siemens Design Excellence solution, visit [siemens.com/plm/de](https://www.siemens.com/plm/de) or follow us on [LinkedIn](#) and [Twitter](#).

**Siemens Design Excellence**

Where today meets tomorrow.

Americas: +1 314 264 8499  
EMEA: +44 (0) 1276 413200  
Asia- Pacific: +852 2230 3333

© Siemens 2021. A list of relevant Siemens trademarks can be found [here](#).

Other trademarks belong to their respective owners.

