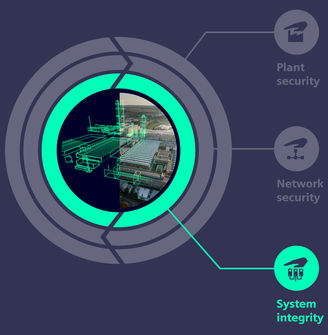
SIEMENS

System integrity in pharmaceutical OT

Protect your automation systems and devices in pharmaceutical OT proactively with updates, monitoring, risk assessments and integrated security – based on IEC 62443 and proven in our own plants.
siemens.com/cybersecurity-industry

SYSTEM INTEGRITY



What it is

System integrity refers to the state where a system works free from unauthorized or accidental manipulation. Thus, it operates as intended and according to its specifications, critical for validated pharmaceutical processes.

Why it matters

Your OT is crucial for business continuity in both discrete and process industries. However, threats to OT are increasing rapidly with connected systems risking patient safety and GxP compliance.

+30%
... healthcare ransomware attacks in 2025 compared to the previous year[1]

+20%
... of all files in healthcare organizations are accessible to every employee[2]

+36%
... ransomware attacks **across all sectors in 2025** compared to the same period in 2024[3]

[1] https://industrialcyber.co/reports/healthcare-ransomware-attacks-surge-30-in-2025-as-cybercriminals-shift-focus-to-vendors-and-service-partners/
[2] https://www.achema.de/de/magazin/artikel/pharma-und-cyberkriminalitaet
[3] https://industrialcyber.co/reports/healthcare-ransomware-attacks-surge-30-in-2025-as-cybercriminals-shift-focus-to-vendors-and-service-partners/

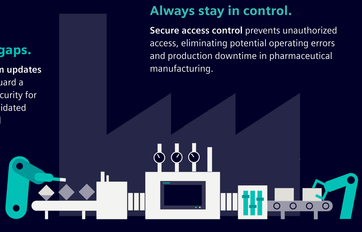
SYSTEM INTEGRITY

What system integrity means for your company

Address your weak points.
Asset testing and vulnerability management help you take targeted action and prevent potential damage crucial for GxP compliance.

Always stay in control.
Secure access control prevents unauthorized access, eliminating potential operating errors and production downtime in pharmaceutical manufacturing.

Leave no gaps.
Regular system updates help you safeguard a high level of security for continuous, validated pharmaceutical operations.



How you benefit

Proactivity:
Mitigate security risks before they impact critical pharmaceutical operations.

Vulnerability Management:
Make it less likely that cyber attacks actually hit your OT, protecting sensitive R&D and production data.

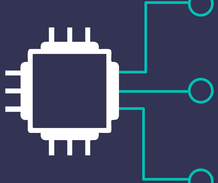
Competitiveness:
Increase confidence in the reliability and integrity of your systems, ensuring regulatory adherence.

SYSTEM INTEGRITY

From goals to action.

How we support you

Products and systems from Siemens have embedded features and functions that protect your intellectual property



Security integrated
- Comprehensive protection at the control level for validated pharmaceutical systems.
- Prevents copying of configuration data and any attempts to manipulate such sensitive data (e.g. recipes).

Vulnerability management
- Intuitive cloud-based software for improving cybersecurity on the shop floor
- Gives industrial operators and automation experts the key to support vulnerability mapping and security management in regulated environments.

Secure access control
- Unauthorized access prevention
- Eliminates operating errors and production downtime (e.g. crucial for GxP).

Did you know ...

... that we develop, test and optimize advanced security concepts at our own manufacturing sites?

... that we apply them on a large scale to our own automation and network products?

We use the same best practices to optimally protect your assets, too!

SYSTEM INTEGRITY

BTW

By the way, system integrity is one of the building blocks of Siemens' "Defense in Depth" concept, aimed at simultaneous protection of all plant levels:

- Plant security
- Network security
- System integrity