SIEMENS
Ingenuity for life

Desigo CC
supports the healthcare industry to bring reliable and safe products to society

http://siemens.com/desigocc

Why almost everything is connected

Covid-19 has already changed a significant part of our lives, our society as well as our industries. It has also reminded us that most everything is connected. Especially when it comes to the entire logistics chain, product supply, delivery and storage routines for critical items such as pharmaceutical products, vaccines, antibiotics, blood supplies or various medicines. Now, the entire landscape looks completely different.

The pandemic is also influencing the way companies operate. Transparent, safe and secure environments to work, to research and to store critical items, are becoming more important. Moreover, the need to operate a plant in the most efficient way is increasing, since workers' exposure to health risks shall be minimized. Therefore, an industry trend on the rise is the ability to monitor facilities remotely. This requirement is shaping the entire facility's lifecycle, starting even from the specification and design phase.

Critical storage facilities are turning into data centers for products

This change brings an emerging digitalization need that will also significantly drive growth in the pharmaceutical industry, and the expected boost of profitability will reach approximately 21% with the complete digitalization of the manufacturing process and the supply chains (source: Accenture).

Computerized systems will be the key levers of digitalization, making it possible to establish sophisticated operations for securing, analyzing, archiving and reporting critical information for products in every phase: from research and development to design, testing, production and ultimately storage and distribution. Digitalization is impacting every step and thus, it turns Life Science facilities into data centers for critical items.

Remote simultaneous monitoring, reporting, and controlling of critical data, such as ventilation efficiency, temperature, humidity, or pressure will be essential for storage spaces. Furthermore, autonomously controlled

environments on a 24/7 basis reduce the need for physical presence to a minimum, which will bring the operation and maintenance strategies to the next level.

For all these changes, Siemens Smart Infrastructure has the answer

Desigo CC allows you to take this step toward digital transformation, ensuring that all these critical requirements will be met. It is the integrated building management platform for managing high-performing facilities. It offers a choice of automatic operations supporting you, not only to optimally manage storage facilities, but also to ensure a fast response, if limits are reached.

Desigo CC provides reliable and automatic data archiving and monitoring, audit trail mechanisms and multiple reporting capabilities including a special reporting functionality for the Mean Kinetic Temperature (MKT).

This report expresses the cumulative thermal stress experienced by a product at varying temperatures during storage and distribution. MKT differs from other means because higher temperatures are given greater weight when the average is calculated. Since having everything monitored is very important, the Desigo CC management platform allows you to ensure that monitoring is performed in an automated way, even from remote locations. The monitored objects concept, implemented with various validation profiles (simple auditing, forced commenting, pre-selected commenting, re-authentication and 4-eye verification), will ensure reliable monitoring of your facility. Furthermore, having a transparent distributed system is equally important, and the hierarchical topologies of Desigo CC can achieve that. Facility operators can access the system via graphics and reports, and both can contain a mixture of datapoints not only across various disciplines, but also across distributed (i.e. segregated) systems.

This is the only way to have graphics showing both critical and non-critical datapoints on the same pages while critical data is segregated securely, so that regulations for data integrity and validation compliance are still adhered to. Transparency of your data, data integrity and advanced reporting capabilities ensure the perfect production and storage conditions for Life Science products and solutions.

For more information, visit:
www.siemens.com/desigocc
www.siemens.com/life-science
www.siemens.com/smart-hospitals

Statistics

Purpose:
Statistics on analog value and mean kinetic value if it is a temperature value

Selected Element
System13.ApplicationView:ApplicationView.Trends.TrendViewDefinitions.MULTITRENDLINES

Period

From	Mar 31, 2020 12:00 AM
To	Apr 1, 2020 12:00 AM
Interval	None

Summary Table

Point Description		Number Of Records	MKT	Minimum	Average	Maximum	Std Deviation
BACLAOTEST01	(°F)	2842	79.14	-10 Mar 31, 2020 12:03 AM	49.28	110 Mar 31, 2020 4:20 PM	36.91
BACLAOTEST02	(°C)	2731	86.57	0 Mar 31, 2020 12:00 AM	56.8	115 Mar 31, 2020 4:21 PM	34.28
TEMPLAO_01_SampleName	(°C)	3156	88.71	-5 Mar 31, 2020 12:00 AM	55.66	115 Mar 31, 2020 4:15 PM	37.59

About the author
Stamatios Stamatopoulos

Stamatios has always been passionate in learning new skills and in exploring agile workarounds when tackling a problem. He studied electrical and computer engineering at the National Technical University of Athens, and joined Siemens in 2006 as a project engineer. There he gained experience in building technology, product and solution sales as well as consulting business. Since 2018, he is managing the global portfolio developments for management station software at Siemens Smart Infrastructure, Global Headquarters in Zug, Switzerland. Stamatios is driven by the challenge of providing solid solutions that create state-of-the-art environments. He is a fan of holistic development plans for every aspect of human life.