

**SIEMENS***Ingenuity for life*

SINUMERIK Virtual Commissioning Services

Simulation shortens real commissioning time up to 70 percent

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Machine concepts can be implemented faster, more individually, and more flexibly thanks to a consistent complete system of mechanical components, electrical systems, and automation. The crucial aspect: Virtual Commissioning.

The challenge: Shortening commissioning time

With requirements for flexibility and efficiency increasing all the time, individual automation solutions need to be implemented faster despite their growing complexity.

Commissioning is the capital-intensive period in the development of new machine tools. To minimize the risk of damage during commissioning in these situations, commissioning tests are usually performed more slowly. Minor engineering errors like a missing sensor often result in time-intensive testing. This can quickly jeopardize the delivery date or result in a longer time to market. This means that flexible solutions are needed that can facilitate the early detection of faults and reliably shorten the commissioning period.

SINUMERIK Virtual Commissioning Services

With the use of Sinumerik 840D sl hardware-in-the-loop – or in other words, connecting the virtual machine model to the real-life control system – we help prepare and support the real-time commissioning process on a project-specific basis through Virtual Commissioning.

STEP

1

SINUMERIK Virtual Commissioning Consulting

The consulting service offers a reliable estimate of the specific project in terms of its feasibility and outlay and allows demand-based decision-making. Typical and individual commissioning scenarios are jointly determined and checked for implementability. At the same time, the associated modeling and test outlays are estimated.

STEP

2

SINUMERIK Virtual Commissioning Implementation

Our experts handle implementation based on the recommendations from the consulting service. State-of-the-art software tools are used to develop a spatial and mathematical model of the machine's behavior. The necessary software is licensed by our Service organization for the duration of the project.

We work closely with you to virtually test the commissioning scenarios agreed on during the consulting phase in order to identify potential faults and clear them at an early stage. The risk of cost-intensive damage and delivery delays is significantly reduced by Sinumerik Virtual Commissioning Implementation.

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Optional: SINUMERIK Virtual Commissioning Training

If a faster delivery time and faster innovation cycle due to process parallelization are desired not just for specific projects, the training by experienced service representatives offers the best introduction to the comprehensive approach of Sinumerik Virtual Commissioning.

SINUMERIK Virtual Commissioning Services: Benefits at a glance

- Reduced risk of damage during the real-life commissioning process
- Shortens real commissioning up to 70 percent
- Faster machine delivery time and innovation cycles by parallelizing the processes
- Demand-based use of commissioning simulation using project-specific consulting
- Improved planning security thanks to early fault detection
- No investment costs, thanks to complete licensing through our Service organization
- Qualification through on-site training by service representatives with practical experience

SINUMERIK Virtual Commissioning Services: the benefits

Up to 70 percent faster

The Sinumerik Virtual Commissioning Services help shorten the real commissioning time for machine tools controlled with Sinumerik 840D sl by as much as 70 percent - while simultaneously reducing the risk of damage. Sinumerik Virtual Commissioning Services help identify faults at an early stage so that they can be cleared, allowing users to reliably plan and meet delivery deadlines. Demand-based use is ensured through our project-specific services.

No investment in software or licenses

Sinumerik Virtual Commissioning Services don't require any investment in software and licenses. Our Service organization takes care of the licensing for the duration of the project.

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