SINUMERIK Run MyVNCK

Enhance your virtual machine by integrating the original NC control software

With SINUMERIK Run MyVNCK, machine builders and end-users can create their own control-specific virtual world, as Run MyVNCK embeds the original CNC kernel into a virtual machine. NC programs can be processed and simulated in the same control environment with Run MyVNCK.

The challenges when machining high-end workpieces

You must consider the following points to guarantee the smoothest production possible and optimal machine utilization on your manufacturing floor:

- Do your NC programs run collision-free?

- Is the program syntax error-free?

- How long will it take to machine the workpiece on the machine?

- How can new part programs be run-in as quickly as possible?

The solution—integrate SINUMERIK Run MyVNCK into your process chain

All of these questions can be answered based upon a virtual machine with Run MyVNCK. Siemens offers a solution that allows machine availability to be significantly increased: an optimized CAD / CAM-CNC process chain for job preparation, including simulation in an identical control environment. This allows a virtual machine to be integrated seamlessly into your normal product development process.

As a result, manufacturers can have a virtual, identical job preparation station, independent of the state and availability of a real CNC machine. They can then plan, optimize and verify production steps in this virtual environment.

usa.siemens.com/cnc

Investment security through offline programming

The virtual machine plays an essential role in ensuring that, when you invest in a new machine or adapting an existing machine, it pays for itself as quickly as possible.

This means that the new workpiece can already be run-in on a virtual machine at the PC with the defined machining strategy, while the real machine is available for other tasks or machining another part. Machine tool users can increase their cycle times and do not have to wait for their machines to become available in order to test new workpieces.

The original SINUMERIK CNC software is used

By using the original CNC software in a virtual machine and a virtual production environment, machine tool users have the necessary degree of security to optimize their job preparation and the utilization of their machine.
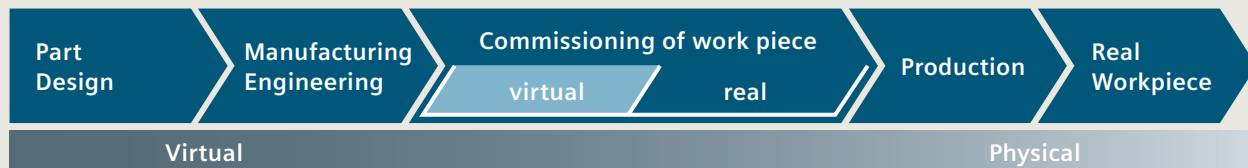
Only then can NC programs be verified and evaluated almost 100% offline — therefore avoiding possible programming errors and collisions. Workpiece costs can also be reliably calculated using the main machining time computed using Run MyVNCK.

What is the added value of SINUMERIK Run MyVNCK for a virtual machine?

- Based upon the original software and the language of the SINUMERIK 840D sl
  - Original NC code
  - Complete scope of the SINUMERIK language
  - 100% syntax check

- Simulate the precise machining, whether the program is from a CAM system or from the machine (including G-code and the shopfloor)

- Support for machine builder and customer cycles

- Offers machine users the highest precision for
  - Motion
  - Acceleration
  - Declaration
  - Control operations
  - Time calculations

What is the added value for end-users?

- **Higher machine availability** thanks to offline programming and optimization

- **Increased productivity** through programs optimally run-in on a virtual machine

- **Security:** by using the original CNC kernel, NC programs can be verified almost 100% offline — also ensuring collision-free machining

- Highest possible **precision** by using the original CNC kernel, e.g. for time calculations, NC algorithms, etc.

- Effective **personnel training** in an environment close to the actual CNC machine itself

Part Design	Manufacturing Engineering	Commissioning of work piece		Production	Real Workpiece
		virtual	real		
Virtual				Physical	