**3D Simulation**

**Sim:one**

Simulation tool

Using the software tool Sim:one, users can make it possible to test and analyze real CNC programs and the sequence of movements in the machine locally on their PC. The software not only enables potential risks to be detected and eliminated at an early stage, but the productivity of the machine can also be increased to the maximum.

**Product features**

**Software package**

The software package from Schleicher Electronic is tailored individually to the needs of customers. Thus the 3D model is created from the CAD data of the machine and the connection to the control system is adapted. Individual functions are possible as well as customized license models.

**Functions**

- Individually scalable 3D simulation in OpenGL graphics
- Integration of various machines, work pieces and tools
- Support for complex machine kinematics
- Offline mode for analyzing recorded machine logs
- Online mode for monitoring real machine movements, even from a distance

**Requirements**

- Executable on Windows PC (from Windows XP) with hardware graphics acceleration
- Executable on Schleicher ProNumeric XCo and XCI

**Added value**

- Increase in machine productivity
- 3D simulation of complex machines and their environment
- The most precise observation of movements, coupled with the control system
- Identification of potential risks
- Advance testing of control operation is possible
- Early detection of possible sources of error
- Online observations of remote accesses
- Acceleration in development of systems
- Offline creation of machining programs
- Analysis, testing and optimization during the development process of the machine
- Low rejection rate when setting up the machine, particularly for expensive workpieces
- Certainty in cost calculation including machine runtime during simulation

**Manual Mode**

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**Schleicher Electronic Berlin GmbH**

Wilhelm-Kabus-Str. 21-35
10829 Berlin, Germany

Tel: +49 - 30 33005-0
info@schleicher.berlin
www.schleicher.berlin
3D Simulation
Sim:one

Functioning using an example of a polishing machine in Taiwan

If the benefits during the development of the new machine are obvious, there is also major potential during operation: the machining programs can also be created offline by the operator of the machine and can be analyzed, tested and optimized in the simulation, without endangering the machine or workpiece, before they are passed on to the machine. This was traditionally done on the actual machine, which cost valuable and expensive machine time that can now be used productively. With the 3D simulation software, a multifunctional tool for increasing productivity of machines is now available to Schleicher customers.