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Digital Enterprise Virtual Experience at Hannover Messe 2021

Quick and easy simulation of drives with Sinamics DriveSim Basic

- **New Sinamics DriveSim Basic software solution for fast and easy simulation of drive constellations**
- **Seamless integration of models into commercially available simulation programs**
- **Validated function units accelerate development phase**

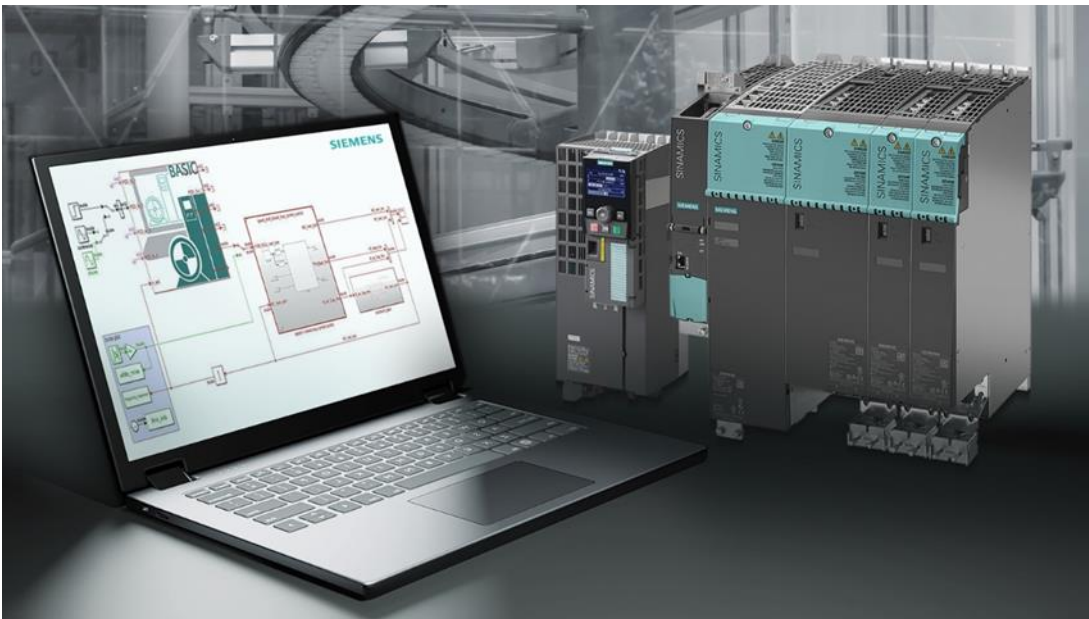
With Sinamics DriveSim Basic, Siemens presents a new software solution with which for the first-time drive constellations and their behavior in machines and plants can be simulated, adapted, and optimized. With the new solution, Siemens offers a quick and easy entry into the simulation of drive technology and enables machine and plant manufacturers to accelerate their own development phase.

Sinamics DriveSim Basic bridges the gap between the logical and mechanical simulation worlds. The application focus is on simulation support of the customer application, i.e. the components that interact with the drive. The simulation provides answers to drive questions even before a concrete product selection has been made. For the virtual commissioning of the PLC control with known Profidrive telegrams or complex mechanics on the virtual drive shaft, the model provides a reliable representation of the drive system in the required level of detail.

One possible application scenario is the coupling of PLC and mechanical model via Sinamics DriveSim Basic. The calculated load profiles can then be loaded into the TIA Selection Tool or the Sizer and a drive selection can be made. The necessary drive parameters and the interfaces known from reality are available for the simulation. The user configures only the part of the drive that he needs for his simulation purpose. A time-consuming complete virtual commissioning of the drive is not required, which

saves time and costs. The models in Sinamics DriveSim Basic link seamlessly to the existing drive documentation and have been validated against the real Sinamics drives using the same test vectors.

For easy handling, Sinamics DriveSim Basic is available as a standardized FMU (Functional Mockup Unit) model. The software offers the same FMU file for every Sinamics drive. The Sinamics S120 and G120 drives including the motor can already be represented. Further drives will follow. This FMU can be imported directly into the simulation program used. Sinamics DriveSim Basic is compatible with many commercially available simulation programs, such as Simit, Simcenter Amesim, NX Motion or Matlab Simulink. Together with other virtual Siemens solutions such as Simatic S7 PLCSIM Advanced or NX Mechatronics Concept Designer, a consistent model-based development process can be implemented.



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This press release and a photo are available at <https://sie.ag/2Q141rG>

For further information regarding the Siemens Digital Enterprise Virtual Experience at Hannover Messe 2021 please see www.siemens.com/press/hm21

For more information on drive simulation, see www.siemens.com/drive-virtualization

Contact for journalists

Katharina Lamsa

Phone: +49 172 8413539

E-mail: katharina.lamsa@siemens.com

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