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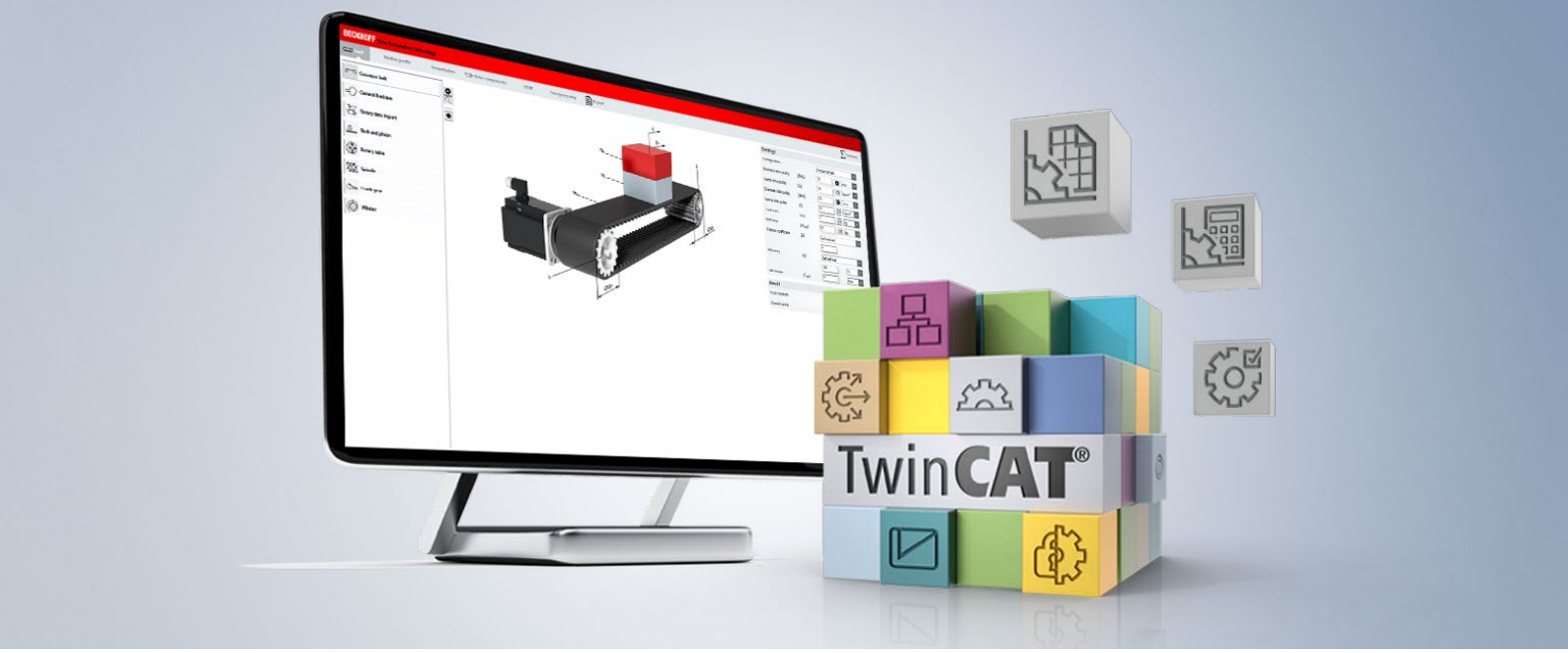


Fact sheet

TwinCAT tools for drive systems

Advanced machines and systems require precise, efficient, and perfectly coordinated drive systems. How can you master the challenge of perfectly planning, commissioning, and optimizing your drive systems?

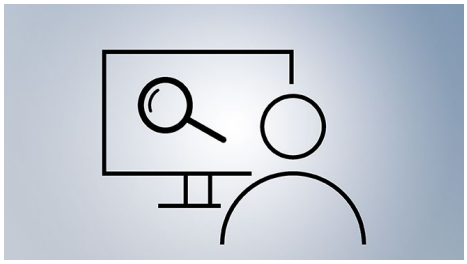
Beckhoff makes this previously time-consuming and resource-intensive task quick and easy to implement from start to finish by providing the right engineering tools. These innovative software solutions support you at every stage of motion engineering and ensure a seamless process from initial dimensioning with TwinCAT Motion Designer, through commissioning with TwinCAT Drive Manager, to automated optimization with TwinCAT Autotuning.

Experience the simplicity and power of our solutions and impress with intelligently automated motion engineering.

Advantages at a glance

+ **Comprehensive:** The TwinCAT tools systematically guide you through all tasks related to drive/motor selection, commissioning, and optimization.
+ **Integrated:** The software tools are part of the TwinCAT platform and are deeply integrated into it.
+ **Open:** You can even use TwinCAT Motion Designer as a stand-alone solution if you need to – without TwinCAT integration and including for third-party products.
+ **Free of charge:** TwinCAT Motion Designer, TwinCAT Drive Manager, and TwinCAT Autotuning are available for download free of charge.

▶ www.beckhoff.com/motion-software



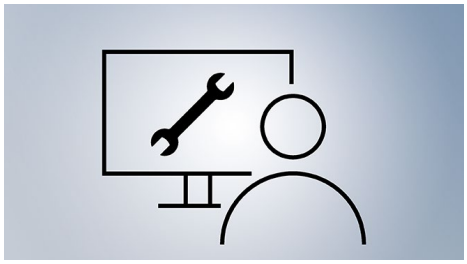
TwinCAT Motion Designer
The dimensioning assistant

Drives are at the heart of the design of every machine and plant. TwinCAT Motion Designer makes dimensioning quick and accurate. This powerful configuration tool supports you right from the start.

Highlights

- **Parameterize mechanics and load cases**
  Typical mechanics and load cases are predefined. The application-specific parameters just need to be entered to select the drives/motors. That's it – you're ready to go.
- **Create complex motion profiles**
  You can define the movement of the drive axes just as quickly and easily with TwinCAT Motion Designer and obtain specific motion profiles.
- **Always the right combination**
  The Motion Designer ensures that the gearbox, motor, and drive fit together perfectly.
- **Technical reports at the touch of a button**
  You will receive automatically generated documentation of the drive/motor selection. Technical data sheets, 3D models, and parts lists can also be called up at the touch of a button.

Learn more here:
▶ www.beckhoff.com/te5910



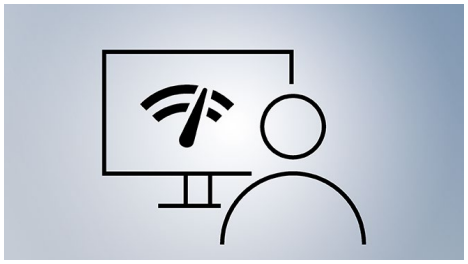
TwinCAT Drive Manager
The commissioning platform

Beckhoff's TwinCAT Drive Manager enables you to complete the commissioning of all axes in next to no time. The focus is on the key drive parameters, along with features for initial fine-tuning.

Highlights

- **A wide range of applications**
  TwinCAT Drive Manager supports you in the commissioning of multi-axis servo systems, servo drives, decentralized drives, servo and stepper motor solutions, servo terminals and variable frequency drives.
- **Automatically generated StartUp list**:
  Drive Manager guides you through the commissioning process. The tool extracts the relevant parameter data from the motor's electronic nameplate and generates a StartUp list.
- **Plug-and-Play in less than two minutes**
  With the automatically generated StartUp list and our One Cable Technology, commissioning takes less than two minutes per axis.
- **Scope View included**
  Scope View gives you an instant overview of the motor operated by the NC control system, allowing you to tune the axis and minimize tracking errors directly.

Learn more here:
▶ www.beckhoff.com/te5950



TwinCAT Autotuning
The optimization tool

Reducing oscillations and vibrations increases the precision and reliability of your machine. To achieve this, all control parameter settings must be optimized. This can be done quickly and accurately with TwinCAT Autotuning.

Highlights

- **Tuning in a matter of seconds**
  TwinCAT Autotuning determines all essential parameters of the application at the push of a button and optimizes them in seconds.
- **Iterative and automated instead of manual**
  Frequency analyses and interpretation of all parameters are performed automatically and iteratively until the optimal setting is achieved.
- **Ideal for designs with many servo axes**
  The time saved increases in line with the number of axes, since all calculated parameters can be loaded directly into the servo drives via the Drive Manager.
- **Transparent optimization results**
  The optimization results are displayed with amplitude and phase progression in the Bode plot graphic. This ensures transparency and clarity.

Learn more here:
▶ www.beckhoff.com/te5960

Discover more now:
TwinCAT MC3: Next generation motion control

TwinCAT MC3 is Beckhoff's next generation of motion control. With proven functions and new capabilities for an unlimited number of programmable axes.

Main highlights

- complete system integration
- scalable performance
- hardware independence
- support for fluid power (hydraulics)

Learn more here:
▶ TwinCAT MC3

Learn more here:

▶ www.beckhoff.com/motion-software