Software
General Product Information

Software Factors into Success
Projects in production, process and building automation are characterized by shorter and shorter implementation times, ever more complex structures and the increasing role of software as part of the overall solution. In fact, software is becoming an essential factor that influences the success of a project.

Engineering software is used for both machine and system development, as well as the implementation of building automation projects. Runtime software controls the devices at operating time.

Customized Software Tools
Significant challenges must be overcome to develop, operate and maintain modern machines and systems, as well as program, configure and commission building automation applications. Customized software tools are available as needed for every task – embedded within integrated engineering processes or as stand-alone tools for a set of dedicated functions.

CODESYS as an Integrated Environment
All WAGO Controllers are equipped with the high-performing CODESYS industry-standard development environment. This enables software development in the IEC 61131-3 PLC programming languages (ST, FBD, LD, IL, SFC and CFC). As a trusted programming environment, CODESYS guides developers, enabling them to reuse and further develop existing projects without relearning software. This means that modern paradigms are available, such as Object-Oriented Programming (OOP) and modern visualization technologies.

Pre-Made Software Solutions
Pre-made software solutions and applications simplify automation. Such solutions involve reusable software that can be used for a specific application by making simple adjustments. This approach saves time and money.
Pre-made software solutions can be found in Section 1.

Open to Proven Standards
The software is open to well-established standards, making it an investment in the future. The software supports all prominent fieldbuses, for example. This allows WAGO components to be seamlessly integrated into engineering software via standardized device description files. In addition, connecting controllers to fieldbus systems via WAGO Engineering Software is incredibly simple, opening up all the advantages of existing field devices.
Finally, WAGO Software is based on modern IT standards and development methods for long-term viability.

Extensive Import and Export Functionality
The software tools demonstrate an impressive ability to exchange project data with the external software tools involved in the development process – preventing costly, error-prone double entry.

Industry-Specific Configurators
Whether industry, process or building automation, every sector and industry has specific requirements. Therefore, plug-ins specifically customized for the needs of individual industries are available in addition to the common software base. For example, these plug-ins can be used to measure energy or easily configure a DALI network.

Advantages:
- Customized software for every automation task
- Extensive import functions from external design tools
- Plug-ins for industry-specific development environments
- Comprehensive software solutions for various industries
- Simple and secure licensing
Software
General Product Information

Software for Mechanical Engineering

Software is used in every phase of machine and system automation – from design to successful machine operation.

Design
- CAD and ECAD
- Component selection
Software Development
- Configuration
- Parameterization
- Programming
- Simulation
- Visualization
Commissioning
- Testing
- Diagnostics
Machine Operation
- Updating
- (Remote) maintenance
- Monitoring
- Controlling, regulating, operating and monitoring

Engineering Software

Quickly implementing complex machine functions is critical in modern mechanical engineering applications. PC-based engineering software supports all development activities. The focus is on simple configuration, timely programming and efficient commissioning of automation network components.

Engineering tools are typically not permanently linked to the machine – they only communicate with the machine during startup and maintenance.

Runtime Software

The machine is controlled by runtime software that determines behavior, while enabling both operation and current status monitoring for the user. It also transmits operating data to higher-level systems. With comprehensive, tried-and-tested software function blocks (IEC libraries), development goals are reached more quickly.

Unlike engineering software, runtime software operates continuously – it is a part of the machine and ensures correct operation.

Mobile Software (Apps)

Software on mobile devices offers productivity advantages in an industrial environment as well. This integration enables users to quickly and easily operate and monitor automation processes via smartphone or tablet – from virtually anywhere.

Mobile software typically communicates only with the machine’s controller for a specific application.