

AUTOMATION SOFTWARE LASAL

OBJECT-ORIENTED PROGRAMMING



ENGINEERING TOOL LASAL

CLEARLY AND QUICKLY TO THE APPLICATION SOFTWARE

Implement machine applications comfortably and efficiently - with the all-in-one software tool LASAL: Object-oriented programming (IEC 61131-3 standard) combined with graphic representation and ready-to-use templates make it possible.

LASAL CLASS

Object-orientation in control programming stands for high flexibility. With object-oriented programming the modularization of machine functions is also possible in the software. This means that real machine components are represented in the form of software objects. In the object, code and corresponding data elements are combined. The code can be written in the programming languages ST, LD, SFC, IL, ANSI-C as well as Interpreter.

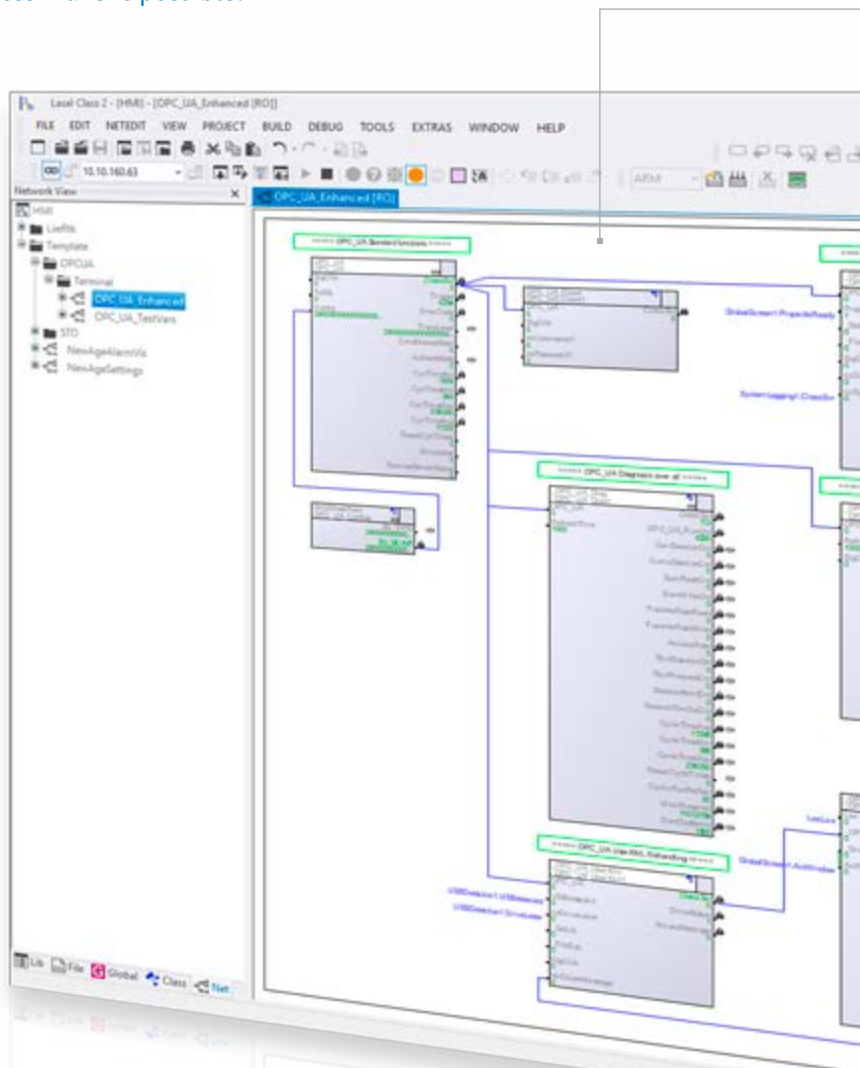
The objects can be combined in a modular system and simply „wired“. Once created and tested, they can be stored in libraries and continually reused - the software is therewith sustainable.

Simply Implement the Complex

The high reusability of the encapsulated function blocks saves time and costs. Thanks to techniques such as inheritance, derivation and aggregation, new configurations of components can be implemented with minimum programming. This allows you to get your application operation-ready faster.

Modern Engineering

Predefined templates support you in implementing your software. In addition to the standard template with functions such as language and alarm management, the LASAL libraries contain further templates like PID regulator, temperature monitoring, complex filter and regulation modules.



LASAL SPEAKS 4.0

For networked and open communication in the smart factory, LASAL offers predefined Add-Ons and packages for implementing OPC UA and MQTT protocols. Manufacturer-independent, flexible data exchange between machines or between machines and higher-level systems such as ERP, MES, EDGE and Cloud are possible.

EVERYTHING IN VIEW AT ALL TIMES

Thanks to the graphic representation you maintain an overview even with complex projects: Functionalities, interrelationships between objects, data traffic and interfaces can be easily interpreted.

ALL-IN-ONE

One engineering tool for all phases of automation

EFFICIENT & CLEAR

Object-oriented programming ensures high modularity and reusability

QUICKLY READY

Numerous predefined software templates and efficient tools integrated

SHORT DEVELOPMENT TIMES

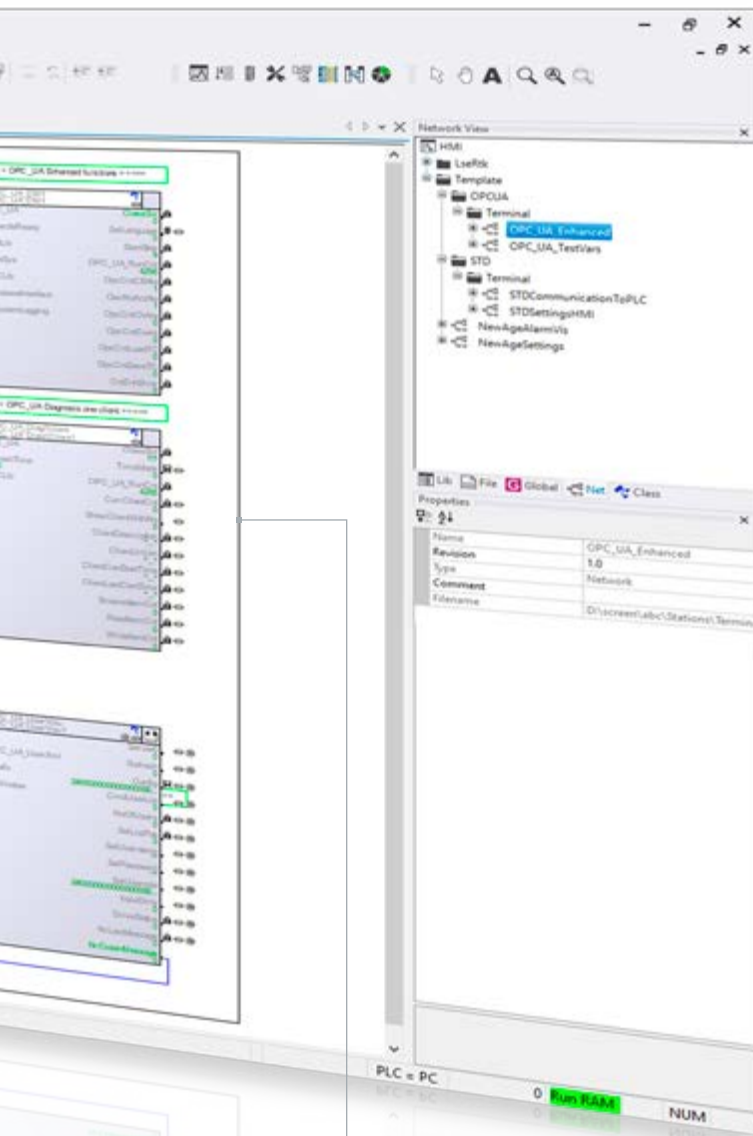
Scripting, Matlab Simulink, debugging tools etc. via the graphical hardware editor

ADD-ONS: READY-TO-USE

With the LASAL Add-Ons, you create software applications faster and easier. In addition to the finished sequence control project, the LASAL Add-Ons also contain the fitting visualization. The ready-to-use templates are constructed like wizards and cover a broad range of machines. This reduces software development times up to 70 %.

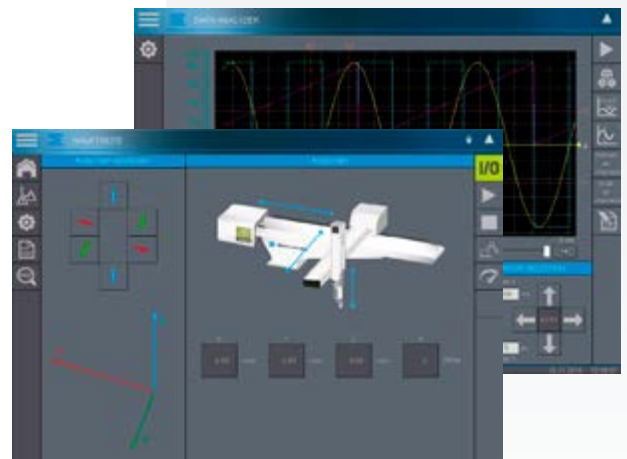
Examples:

- Data Analyzer
- Recipe management
- OPC UA, VNC
- Robot kinematics (Delta, SCARA, portal)



OBJECT-ORIENTED PROGRAMMING

With object-oriented programming, code and data are combined in logical units (objects). The data are encapsulated and cannot be changed from the outside. The encapsulated objects communicate via interfaces with the „outside world“.



ALL AUTOMATION TASKS ON ONE PLATFORM

LASAL combines all automation tasks in one modern engineering platform and provides simple handling of modular machine and system concepts: From control pro-

gramming through visualization, motion control and Safety technology to service functions such as remote maintenance and diagnostics.

Efficient Motion Control

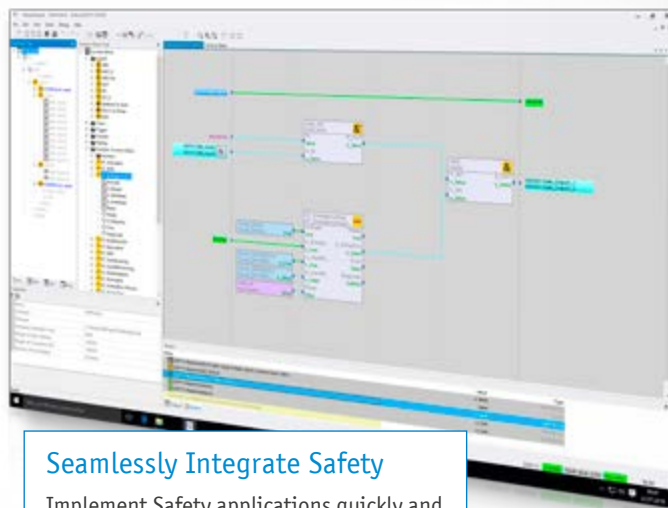
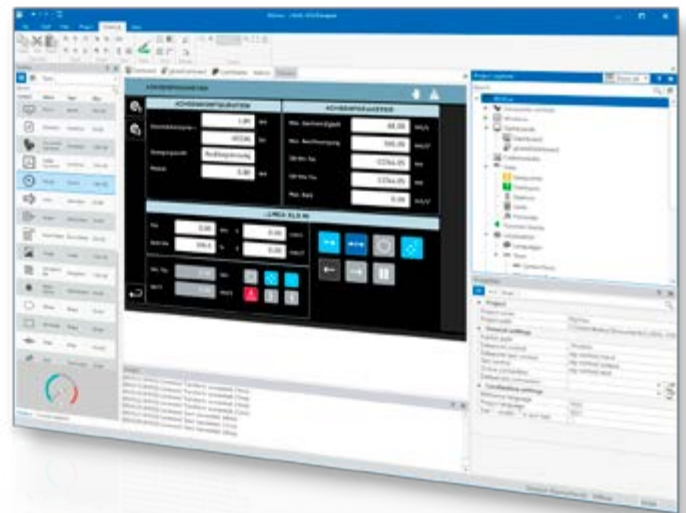
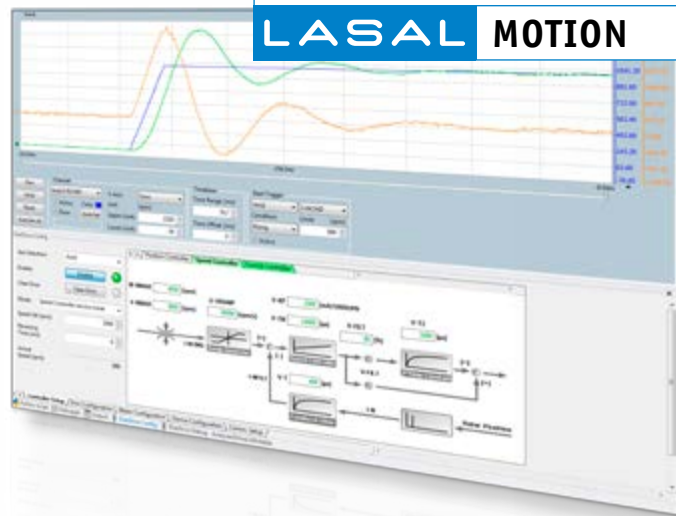
LASAL MOTION simplifies all drive technology tasks. Even complex axis motion can be implemented without any programming.

LASAL MOTION

Comfortable Visualization Design

For user-friendly implementation of diverse visualization tasks, LASAL SCREEN and the web-based LASAL VISUDESIGNER (HTML5, CSS3, JavaScript) are provided.

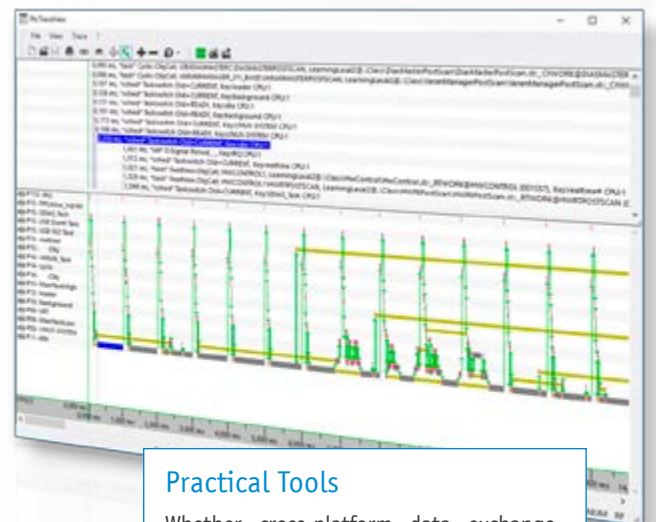
**LASAL VISU
LASAL SCREEN**



Seamlessly Integrate Safety

Implement Safety applications quickly and comfortably - with the LASAL SAFETYDesigner. Predefined function blocks simplify creating Safety concepts.

LASAL SAFETY



Practical Tools

Whether cross-platform data exchange, software updates or worldwide remote access - LASAL supports you with efficient tools such as debugging, boot stick updates via e-mail.

LASAL SERVICE