



Innovative solutions for the woodworking industry

PERFECTION IN AUTOMATION
A MEMBER OF THE ABB GROUP



Your automation partner

Debarking



Cutting



Tenoning



Wood-plastic composites



CNC processing



for the woodworking industry



Drying



Drilling



Milling



Gluing



Painting

Your automation partner for the woodworking industry

"The real challenges are the control algorithms themselves. This is where B&R's development environment, Automation Studio, really helped us out: We were able to implement all of the control-related tasks, including the hydraulics, in record time thanks to the included software libraries."

Gerhard Mayrhofer
Electrical Engineering Manager
Langzauner GmbH



Process and evaluate data efficiently

Modern production processes generate enormous volumes of data that can provide valuable feedback about equipment utilization, productivity and energy efficiency. With this data available in real time, the potential is there for continuously optimized operation. This means filtering a flood of data into a stream of reliable information that allows you to draw the right conclusions. That's a daunting task that requires intelligent tools like these APROL solutions from B&R:

- **APROL PDA**
Centralized data acquisition and analysis
- **APROL ConMon**
Early detection for maximum uptime
- **APROL EnMon**
Optimized energy consumption and costs, ISO 50001 requirements can be easily met

2/3 shorter development time

With mapp Technology, B&R shortens software development times by an average of two-thirds. This is made possible by intelligent software blocks that encapsulate frequently occurring basic functions. Your software engineers will be able to dedicate much more time to optimizing the core process. Since B&R takes on the responsibility for ongoing maintenance of these blocks, you'll enjoy both improved software quality and reduced maintenance costs.

Basic functions covered by mapp components include:

- User and role management
- Alarm management
- Parameter management
- Loading/saving XML, CSV and text files
- Data recorder for temporary recording

mapp
TECHNOLOGY



CNC

The B&R system offers machine tool manufacturers an integrated, multi-channel system with control and CNC running on a shared processor. This allows the CNC system to read and write variables on the controller with exceptionally precise synchronization, as well as use them in both standard and user-defined function blocks, making it easier to implement user-specific machining functions. B&R's innovative mapp Technology allows machine tool manufacturers to develop their application software faster – and test it faster too – with mapp components providing extensive options for simulation and diagnostics.

- mapp Technology for machine tools
- Universal engineering tool for simulation, programming, testing and commissioning
- Open for application-specific functions



Integrated safety technology

B&R's integrated safety technology makes it possible to design truly modular machinery and equipment. With POWERLINK, safety-related and standard machine modules can be combined in a single network. B&R's integrated safety technology complies with the applicable industrial safety standards: IEC 61508, IEC 62061 and ISO 13849.

- Increased machine modularity
- A single safety application for many machine options
- Streamlined mechanics and reduced machine footprint



Mobile automation

Control technology for agriculture and forestry applications

B&R continues to open up new possibilities for the automation of mobile machines with its innovative X90 mobile controllers. The comprehensive set of standardized components is perfect for implementing flexible automation concepts.

- Robust: Die-cast aluminum housing, operating temperatures from -40°C to +85°C, resistant to vibration, shock, salt, oil and UV light
- Flexible: Space for up to 4 option boards (I/O, WLAN, Bluetooth, GPS, etc.)
- New communication possibilities via CAN, USB, Ethernet and POWERLINK



Robots as machine components

B&R offers the most advanced form of robotics integration – with robots seamlessly incorporated in the machine's control logic. Whether in a tenoning machine, paint shop or machining center, the machine control and robotics share the same processor and the same memory. Robot and machine are fully synchronized with a jitter of less than 1 µs. Having a common DC bus for machine and robot drives enables maximum energy efficiency.

- Maximum productivity through synchronization of robot and machine tool
- Common DC bus for energy efficiency
- Web-based diagnostics and remote maintenance



Space-saving advanced drive solutions

ACOPOS P3 enables a new dimension of machine and operator safety. Functions like Safely Limited Torque (SLT) and Remanent Safe Position (RSP) are essential for the safe operation of robots. The ACOPOS P3 is available as a 1-, 2- or 3-axis system. Its extremely high power density saves valuable cabinet space (up to 69% reduction in footprint).

- Small footprint for compact machine design
- Position control loop starting from 50 µs
- Suitable for SafeMOTION and SafeROBOTICS technology



Integrated automation
Global presence
Solid partnership



ETHERNET 
POWERLINK

open 
SAFETY