



Innovative technology  
and products for the  
printing industry

PERFECTION IN AUTOMATION  
A MEMBER OF THE ABB GROUP



# Your automation partner

Computer-to-plate



Digital printing



Flexographic printing



Offset printing



Gravure printing



for the printing industry



Collecting and stitching



Object decoration



Product printing



Label printing



Digital post-press





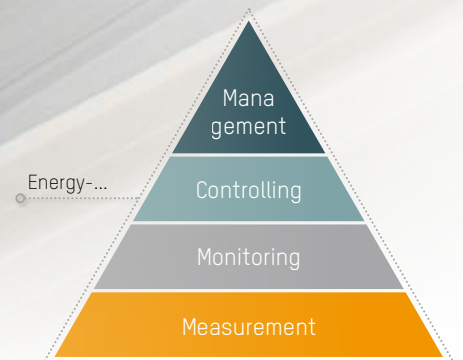
### Energy and resource efficiency

For today's print media production, optimum utilization of energy and resources is essential to profitability. ISO 50001 provides a global standard that applies to all industries.

B&R's portfolio comprises a broad spectrum of solutions that support the process of continual improvement.

- Energy measurement
- Energy flow monitoring at machine/production level
- Regenerative drive systems
- Replacement of pneumatic components

Whether fully integrated or standalone, these solutions are easy to incorporate into the existing automation landscape at minimal risk.



Measuring and recording relevant data is an important facet of effective energy management.

### Digital flexibility

Digitization is the key to providing individualized printed products. Automation systems from B&R fulfill all the requirements of modern digital production, allowing you to:

- Implement digital printing technology
- Achieve a 100% digital workflow
- Connect your production line to a worldwide communication network

Digital post-press technology allows custom finishing of individual printed items without the expensive buffers that are otherwise required. Implement a fully digital workflow by connecting machines with the real-time capabilities of a POWERLINK network.



More than 120 manufacturers of analog, digital, functional and 3D printing machines already rely on B&R automation.



#### New opportunities with innovative business models

The ability to offer license-protected software provides the technological foundation for new business models:

- Licensed options handling in the machine software
- 2 tamper-proof operating time counters
- "Try before you buy" option

#### Modularization

A modular design allows custom solutions to be built from a standardized set of machine modules.

B&R's dedication to this approach has resulted in a broad selection of distributed automation components including I/O modules, servo drives and motors as well as modular safety technology. The Automation Studio engineering environment provides advanced features for highly efficient software modularization.



# Your automation partner



*"On HP's fully digital printing press, we use highly integrated network-based safe motion technology. Flexible, modular and dynamically configurable solutions – these are all possible with openSAFETY. Utilizing network-based safe motion technology made machine integration easier and more cost effective."*

Alon Gazit

Vice President of R&D,  
Hewlett-Packard Company / Indigo Division

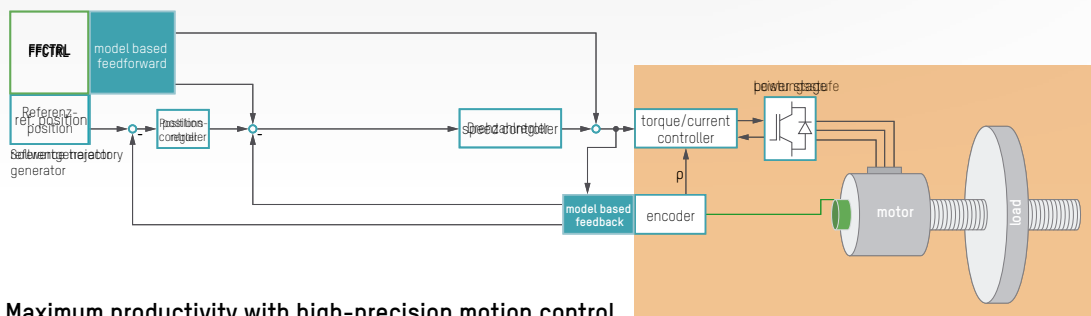
## Individualization and personalization

Trends toward increased individualization and personalization for targeted marketing campaigns are driving demands for shorter print runs and faster turnaround times.

Goals such as increased production flexibility, reduced down-time, minimized wastage and more efficient line integration can all be achieved much more easily with an integrated automation solution.

Maximum design flexibility:

- Scalable drive technology from 50 W to 120 KW
- One automation system for servo, stepper and DC motors



## Maximum productivity with high-precision motion control

The challenge at the heart of today's market is to achieve cost-effective and error-free production of short-run print jobs at reproducible high quality.

B&R offers high-precision motion control and ready-made technology solutions:

- Virtual sensing and model predictive control
- Register control
- Multi-zone tension control
- Registration mark detection and processing
- Compensation of motor cogging
- Winding calculator



# for the printing industry

*"In close cooperation with B&R, we created a standard machine that for the first time is able to print custom text and photorealistic images on nearly any three-dimensional object – quickly and in high quality."*

Dr. Bernard Beier  
Head of Advance Development, Heidelberg



## More operator safety

B&R's flexible safety technology makes it easy to implement safety solutions in accordance with EN 1010 and EN 13849.

- Smaller safety distances for more compact machines
- Response times 10x faster than conventional solutions
- Production continues at reduced speed following safety event
- Avoid costly machine downtime



## Maximum availability

High production line availability is a key requirement in the printing industry.

- Completely redundant automation system
- Predictive maintenance based on condition monitoring
- Intuitive diagnostic functions

With B&R as a global partner, your automation components are available where and when you need them.



Integrated automation  
Global presence  
Solid partnership



ETHERNET   
**POWERLINK**

open   
**SAFETY**