

Rexroth IndraMotion for Packaging – Automation solutions for food processing and packaging machines

Scalable, open and intelligent



Rexroth IndraMotion for Packaging – Designed to lower your automation costs

Rexroth IndraMotion for Packaging is the new, scalable system designed to get the cost out of the controls to reduce your automation costs by providing:

- **highly-scalable hardware to enable you to buy only what you need to dramatically reduce your hardware costs**
- **single software for motion, logic and HMI across various hardware platforms to reduce your training and integration costs**
- **open standards to allow you the freedom to choose lower-cost, higher-performance products and not be locked into a single supplier**

Rexroth offers a complete range of automation components that you can quickly and easily deploy on innovative system architectures:

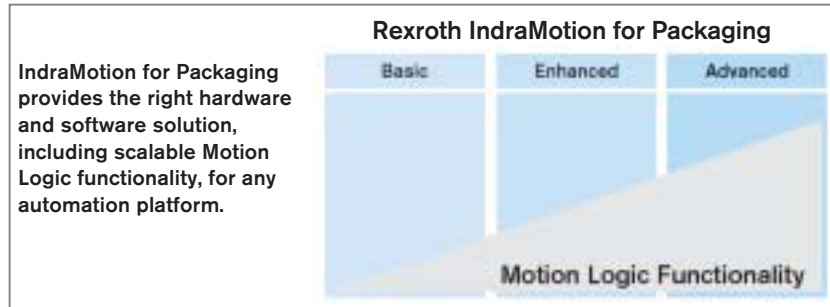
- scalable controls across drive-, controller- or PC-based hardware platforms
- integrated Motion Logic
- standardized IEC 61131-3 programming and compliance to PLCopen standards
- intuitive engineering and runtime software tools
- application-specific technology functions
- scalable drive platform with high-performance rotary and linear motor technologies
- a wide range of HMI devices and I/O systems

IndraMotion for Packaging incorporates Rexroth's wealth of industry experience and knowledge to provide complete solutions for all types of food processing and packaging machines. Enjoy the benefits of IndraMotion for Packaging in all of your applications – from single machines to complete production lines:

- Fill and Seam/Cap Machines
- Labelers
- Molding Machines
- Intelligent Sorting Conveyors
- Form, Fill and Seal Machines
- Cartoners
- Casepackers
- Pick-and-Place Robots
- Palletizers



IndraMotion for Packaging from Rexroth – open, complete and scalable solutions designed to lower your automation costs.



IndraMotion for Packaging enables the best engineering and business solution for your particular application. We offer three complete and highly-scalable solutions to meet your control architecture and system functionality needs:

Basic

Compact, drive-based systems with specific functionality and axis count – for applications such as carton erecting and labeling.

Enhanced

High-value, controller-based systems with optimized functionality and axis count – for applications such as cartoners and vertical form, fill and seal machines.

Advanced

High-performance controller- and PC-based systems with high-level functionality and axis count – for applications such as palletizers, top loaders and horizontal form, fill and seal machines.

	Basic	Enhanced	Advanced
System solution			
Platform	IndraMotion MLD	IndraMotion MLC	VisualMotion
Drive-based	●	–	–
Controller-based	–	●	●
PC-based	–	–	●
Motion Logic functions (excerpt)			
Number of axes (ELS)	6	16	40
Virtual master axes	●	●	●
Cascadable master axis groups	–	–	●
Cross-communication interface	–	○	○
Integrated Motion Logic with IEC 61131-3 compliant IndraLogic PLC kernel	●	●	●
User-definable PLC tasks (cyclic, asynchronous, event-driven)	4	8	16
Free program memory (RAM)	192 KB	8 MB	1 MB
Free non-volatile memory	253 Byte (on board) 32 KB (optional)	64 KB	128 KB
PLCopen compliant function blocks	●	●	●
Positioning	●	●	●
Coordinated motion	–	–	●
Electronic cams	●/–	●/–	●/●
Drive-based/controller-based	●/–	●/○	●/○
Programmable Limit Switch (PLS) Software/hardware	●/–	●/○	●/○
Encoder interface	●/–	●/–	●/○
Drive-based/controller-based	●/–	●/–	●/○
Application-specific technology functions	●	●	●
Interfaces			
Ethernet TCP/UDP/IP	●	●	●
SERCOS interface	●	●	●
RS232	●	●	●
PROFIBUS Master/Slave	–/○	●/●	○/○
DeviceNet Master/Slave	–/–	○/○	○/○
ControlNet Slave	–	–	○
INTERBUS Slave	–	–	○
I/O centralized/distributed	●/–	○/○	○/○

● Standard ○ Optional

Rexroth IndraMotion for Packaging – open architecture

Open architecture holds the key to ensuring that the investment you make in automating today's production machines will provide the payback you want in the future. Standardized interfaces provide you with the flexibility you need when designing your machine and controller configurations. The open architecture and scalability of Rexroth's IndraMotion for Packaging enables you to deploy standardized and modular production lines to significantly enhance your productivity and efficiency.

Rexroth made no compromises when it based its IndraMotion for Packaging systems on worldwide standards. The standardized hardware and software platforms offer complete, open solutions. Regardless of your requirements, IndraMotion for Packaging offers efficient, well-engineered architectures including drive-, controller- and PC-based systems. You can use them as standalone systems or integrate them into multi-control network topologies to deploy total line automation – from food processing to final packaging.

The benefits to you:

- open, scalable architecture using industry-standard interfaces
- complete solutions including motion control, PLC and application-specific technology functions
- simple deployment based on harmonized system components – from the controls, HMIs and drives to the I/O components
- distributed, drive-based safety technology compliant with EN 954-1, Category 3
- transparent, system-wide handling based on standardized configuration, parameterization and programming software

Engineering and HMI



Motion Logic



Controller and I/O

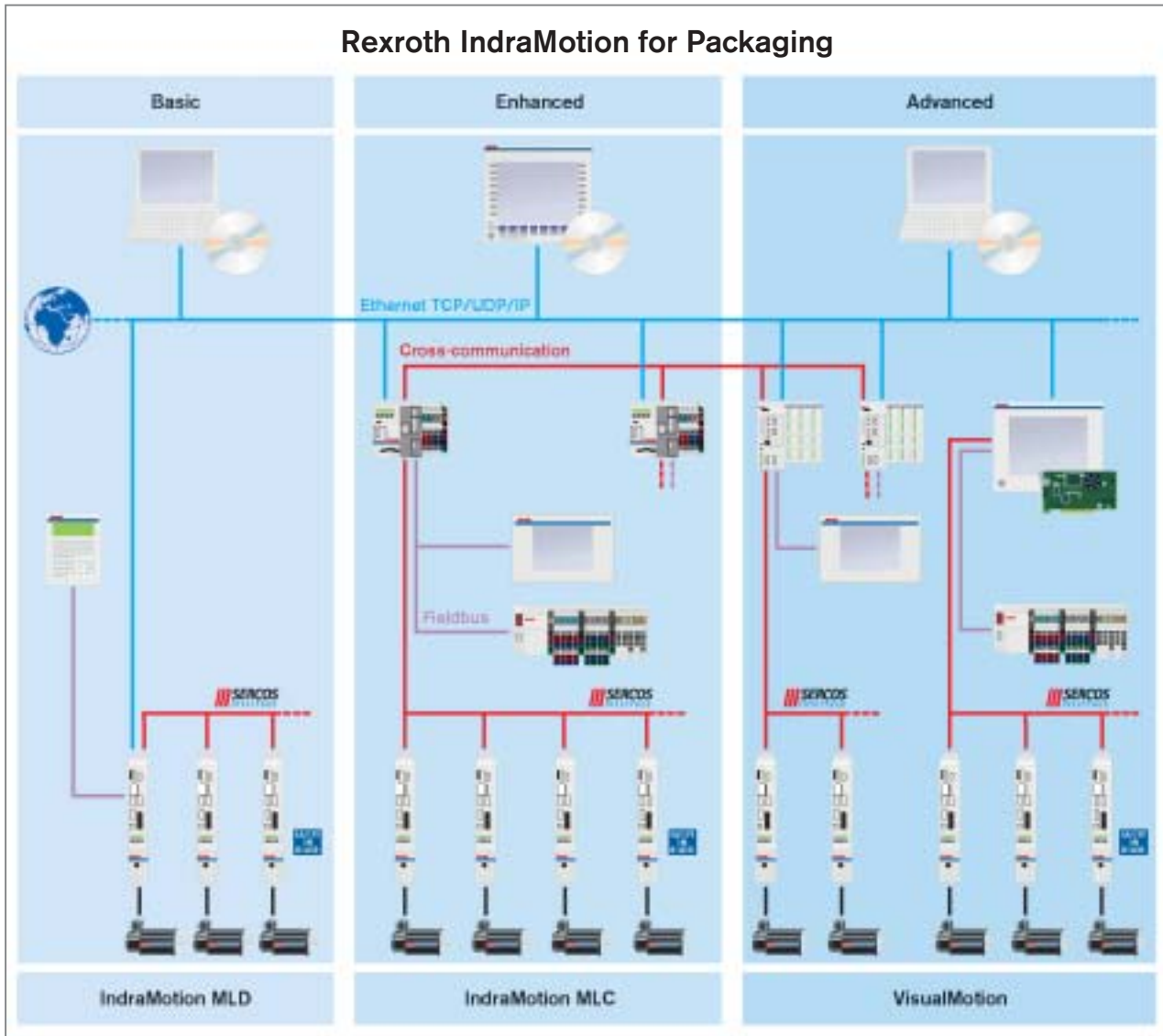


Drives



Using open standards as the foundation, IndraMotion for Packaging includes everything you need to design successful automation systems. The solutions are scalable and can handle all levels of your automation solution.

Rexroth IndraMotion for Packaging



Basic

Compact, drive-based solutions for applications with up to 6 axes that require specific functionality. These drive-based systems feature integrated Motion Logic and safety technology that is compliant with EN 954-1, Category 3.

Enhanced

High-value, controller-based solutions for centralized or distributed architectures with a maximum of 16 axes per controller and broader functionality. 64 controllers can be linked via Ethernet and the cross-communications interface. These systems can also be linked to advanced systems.

Advanced

High-performance, controller- or PC-based solutions for centralized or distributed architectures capable of handling up to 40 axes per controller and high-level functionality including coordinated motion. 32 controllers can be linked via Ethernet and the cross-communications interface. These systems can also be linked to enhanced systems.

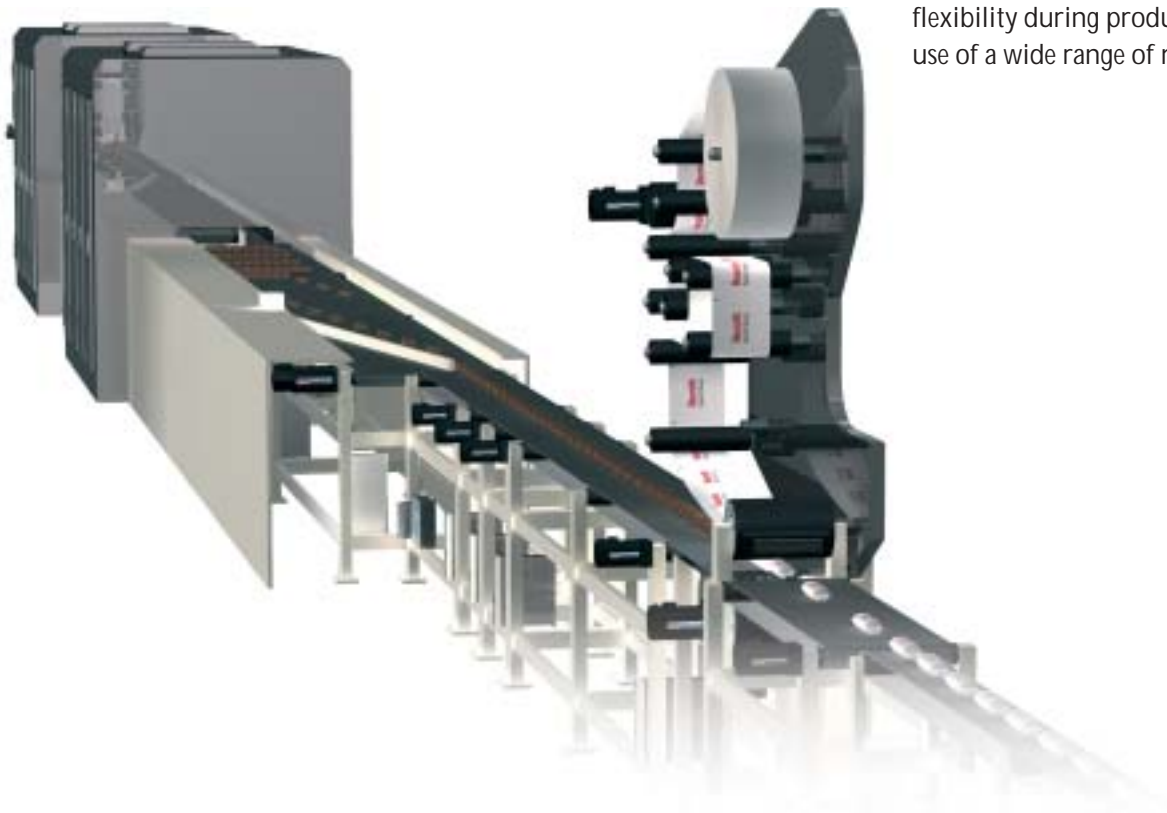
Rexroth IndraMotion for Packaging – intelligent engineering

Use IndraMotion for Packaging to implement your leading-edge designs for highly-productive, flexible, GenNext™ machines. Take advantage of scalable system architectures, integrated Motion Logic and full-featured software tools which cover the entire engineering workflow to save both time and money. Turnkey motion control functions and the standardized, IEC 61131-3 compliant IndraLogic PLC kernel support modular system and machine designs.

Motion functions, such as virtual and real master axes, electronic gearing and cams, combined with application-specific technology functions, including registration, tension and temperature control, give you the tools you need to design complete solutions for complex production processes. Because you are using PLCopen compliant motion function blocks, your applications are transportable, reusable and standardized for a common look and feel.

The benefits to you:

- universal programming environment for all of your solutions based on the standardized, integrated IndraLogic PLC kernel
- transparent system integration using international standards such as IEC 61131-3 and PLCopen function blocks
- turnkey technology functions and extensive software libraries minimize your engineering costs
- open architecture facilitates integration of manufacturer-specific solutions
- maximum productivity and flexibility during production and use of a wide range of machines



IndraMotion for Packaging maintains precise registration as horizontal form, fill and seal machines exceed speeds of 1,500 CPM.

Efficient engineering

IndraMotion for Packaging and its complete set of software tools save you time and money throughout your entire engineering process. From design planning, parameterization and programming right through to visualization and diagnostics, you benefit from the following features:

- standardized engineering environment at every stage
- greater transparency from standardized programming
- reuse of software modules reduces your costs
- simple integration of customer-specific know-how
- libraries can be locked to protect intellectual property and still allow code reusability

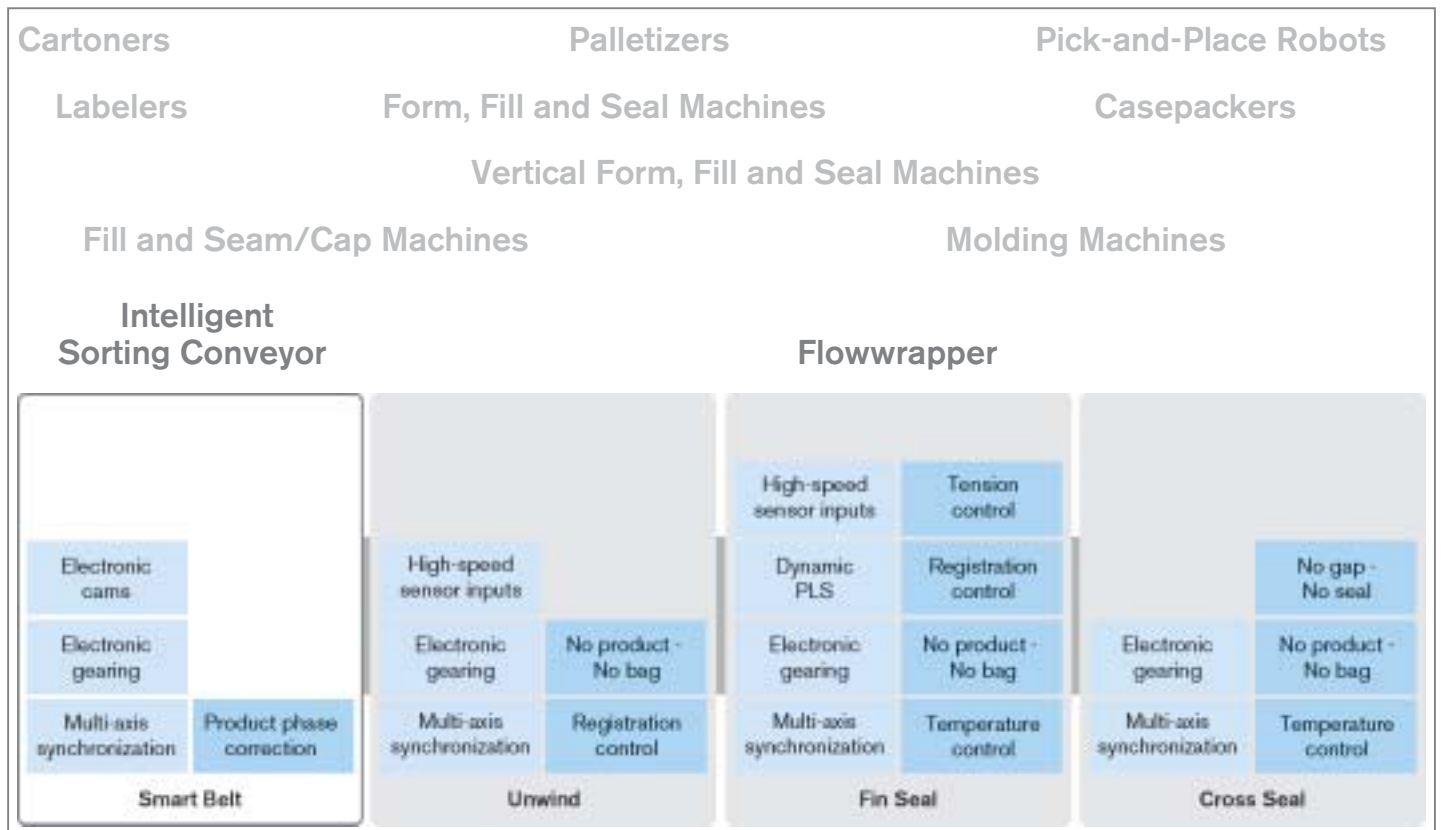
Motion functions:

- multi-axis synchronization (Electronic Line Shaft)
- positioning
- electronic gearing
- electronic cams
- dynamic PLS (Programmable Limit Switches)
- high-speed sensor inputs

Application-specific technology functions:

- registration control
- tension or unwind control
- temperature control
- no product – no bag
- no gap – no seal
- product phase correction

IndraMotion for Packaging offers ready-to-use software modules which significantly reduce your engineering time and effort. Here is an example of an intelligent sorting conveyor and a horizontal form, fill and seal machine:



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