

# IndraMotion for Handling – turnkey automation solution for all handling tasks

IndraMotion for Handling is the system solution for efficient coordination of axis movements in fully automated production. This intelligent design is based on uniform control and drive platforms and on international software standards. The precisely matching components allow you to implement your handling applications in any configuration you desire.

The essential highlights of IndraMotion for Handling are: easy operation, teaching and programming of time-optimized motion sequences to ensure highest product quality. This turnkey automation solution with open-source software facilitates engineering and maximizes the flexibility in your individual application.

Based on the IndraLogic and IndraMotion MLC or IndraMotion MLD systems, this solution has been optimized to meet the requirements of handling, assembly, palletizing and pick-and-place applications as well as of machine tools.

## Your benefits

- Maximum performance and functionality through innovative control platform
- Free PLC functionality according to IEC 61131-3
- Open standardized communication interfaces
- Flexible scalability for various HMI devices
- Easy teaching, defining and programming of motion sequences through HMI, PC or PLC
- Turnkey open-source solution with PLC basic program
- Complete PLC library and PLCopen function blocks
- Multiple kinematics for various applications
- Quick expansion and easy connection of I/O and function modules
- Drive-integrated technical safety system, certified according to EN ISO 13849-1, Cat. 3 PL d and EN 62061 SIL 2
- Intuitive engineering with IndraWorks



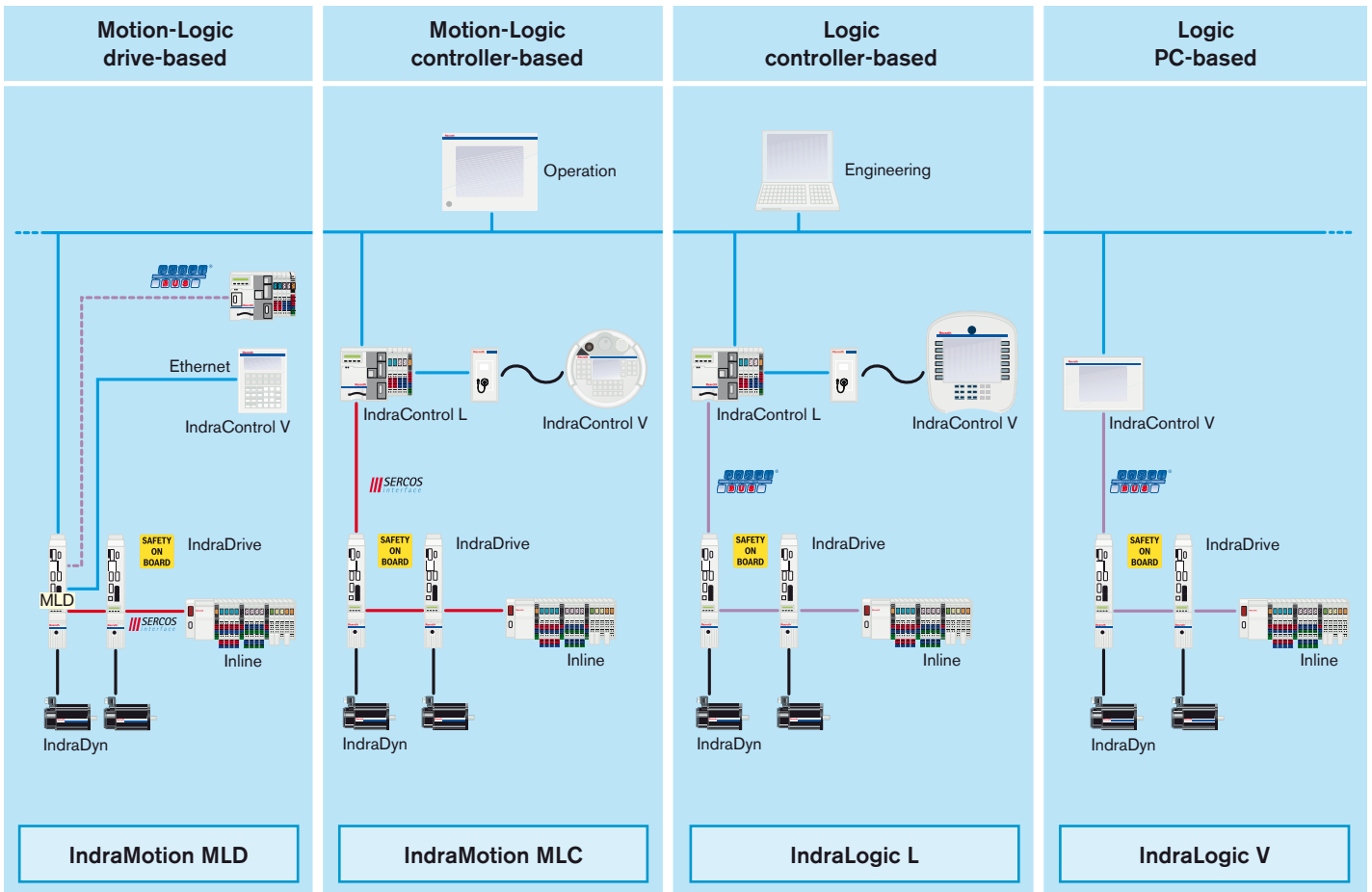
IndraMotion for Handling – the perfect automation design for time-optimized multi-axis movements in handling and assembly applications.



## Turnkey, flexible and efficient

- Exact positioning with highest precision accuracy
- Easy operation and programming
- Time-optimized motion sequencing for minimum cycle times

# Your benefit



IndraMotion for Handling provides all degrees of freedom for centralized and distributed automation, with numerous options for control and visualization devices.

Additional information		
Automation system	IndraMotion MLD	Chapter 2.6
Automation system	IndraMotion MLC	Chapter 2.7
Automation system	IndraLogic L	Chapter 2.9
Automation system	IndraLogic V	Chapter 2.9
Engineering framework	IndraWorks	Chapter 3.1
Visualization devices, embedded PC	IndraControl VEH, VEP	Chapter 3.2
Visualization devices, controller-based	IndraControl VCP, VCH	Chapter 3.2
Control hardware	IndraControl L	Chapter 3.3
Centralized and distributed input/output modules in IP20	Inline	Chapter 3.4
Distributed input/output modules in IP67	IndraControl S67, Fieldline	Chapter 3.5 and 3.6
Drive family	IndraDrive	"Drive System Rexroth IndraDrive" product catalog

# IndraMotion for Packaging – flexible automation system for the food processing and packaging industry

IndraMotion for Packaging ensures shorter cycle times and quicker format change, with simultaneous increased precision. This system allows you to automate your processes more easily, flexibly and quickly – covering the entire range from the single machine to the linked production system. Scalable control platforms and international software standards allow you to implement your various applications in any configuration you desire.

IndraMotion for Packaging will always provide the technically and economically optimal system solution for your application – according to your control architecture and functional requirements:

- IndraMotion MLD – for drive-based topologies with up to 10 axes, e.g. for carton erectors, labelers
- IndraMotion MLC – for controller-based topologies with up to 64 axes, e.g. for cartoning systems, vertical tubular bag machines
- IndraMotion MLP – for embedded-PC-based topologies with up to 32 axes, e.g. for palletizing machines, pick-and-place applications or flow wrappers

## Your benefits

- Scalable controls on various platforms
- Integrated motion logic functions, standardized according to IEC 61131-3 and PLCopen
- Time-saving engineering through process-specific technology functions and comprehensive software libraries
- Wide range of HMI devices and I/O components
- Scalable drive platforms with highly dynamic motors
- Flexible through various technology functions
- Intuitive software tools for engineering and operation
- Open and scalable architectures with standardized communication interfaces
- Drive-integrated technical safety system, certified according to EN ISO 13849-1 Cat. 3 PL d and EN 62061 SIL 2



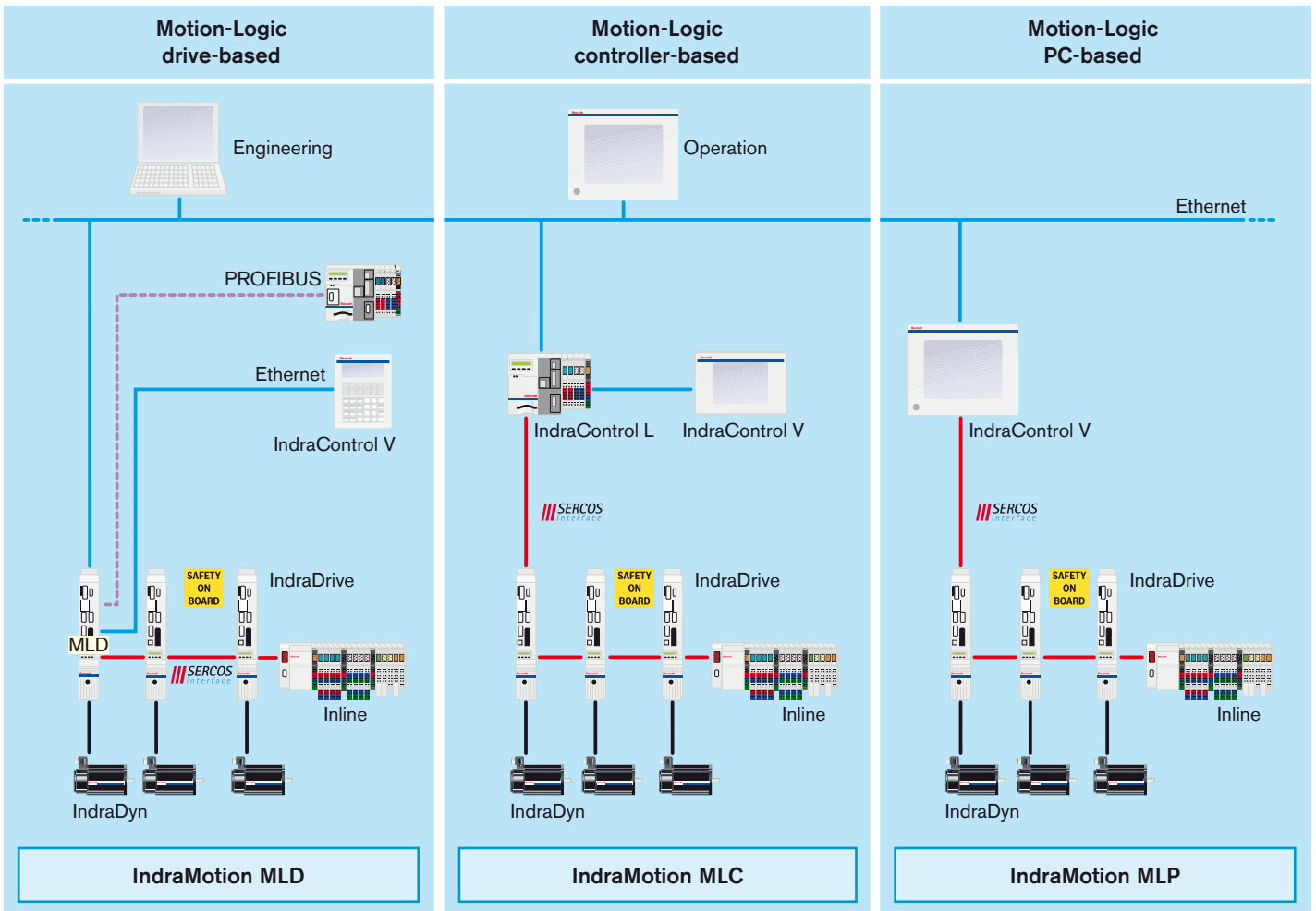
IndraMotion for Packaging – open and scalable complete solution for successful automation designs in the food processing and packaging industry.



## Flexible, open and intelligent

- Universal solution for all types of machines
- Standardized interfaces for use worldwide
- Innovative solution for shorter cycle times and faster format changes

# Your benefit



IndraMotion for Packaging, the flexible automation system with scalable control structure is tailored to perfectly meet the requirements of the food processing and packaging industry.

### Additional information

Automation system	IndraMotion MLD	Chapter 2.6
Automation system	IndraMotion MLC	Chapter 2.7
Automation system	IndraMotion MLP	Chapter 2.8
Engineering framework	IndraWorks	Chapter 3.1
Visualization devices, high-end industrial PC	IndraControl VPP	Chapter 3.2
Visualization devices, standard industrial PC	IndraControl VSP	Chapter 3.2
Visualization devices, controller-based	IndraControl VCP	Chapter 3.2
Control hardware	IndraControl L	Chapter 3.3
Centralized and distributed input/output modules in IP20	Inline	Chapter 3.4
Distributed input/output modules in IP67	IndraControl S67, Fieldline	Chapter 3.5 and 3.6
Drive family	IndraDrive	"Drive System Rexroth IndraDrive" product catalog

# IndraMotion for Printing – innovative automation system for the printing and converting industry

IndraMotion for Printing is the innovative automation solution for all applications in the printing and converting industry – from commercial, packaging and newspaper printing machines to the converting of card board, film and paper. Shortest cycle times and faster format changes paired with high-precision, with IndraMotion for Printing you automate your process quickly in a simpler and more flexible manner. International software standards and scalable control platforms provide you with all the freedom for implementing your high precision printing machine or flexible inline production system.

The fusion of motion, robot and logic control combined with a wealth of industry-specific technology functions such as “color register control” guarantees an optimal solution for your application:

- IndraMotion MLD – for drive-based topologies such as tension control, or format variable cross cutters
- IndraMotion MLC – for controller-based topologies with up to 64 axes such as commercial, newspaper, packaging, sheet fed, digital, label, flexo, rotogravure and corrugated printing, as well as machines for processing envelopes, cartons, tissues, stationery, bags and diapers

## Your benefits

- Scalable controls on various platforms
- Integrated motion logic functions, standardized according to IEC 61131-3 and PLCopen
- Time-saving engineering through process-specific technology functions and comprehensive software libraries
- Wide range of HMI devices and I/O components
- Scalable drive platforms with highly dynamic motors
- Flexible through various technology functions
- Intuitive software tools for engineering and operation
- Open and scalable architectures with standardized communication interfaces
- Drive-integrated technical safety system, certified to EN ISO 13849-1 Cat. 3 PL d and EN 62061 SIL2



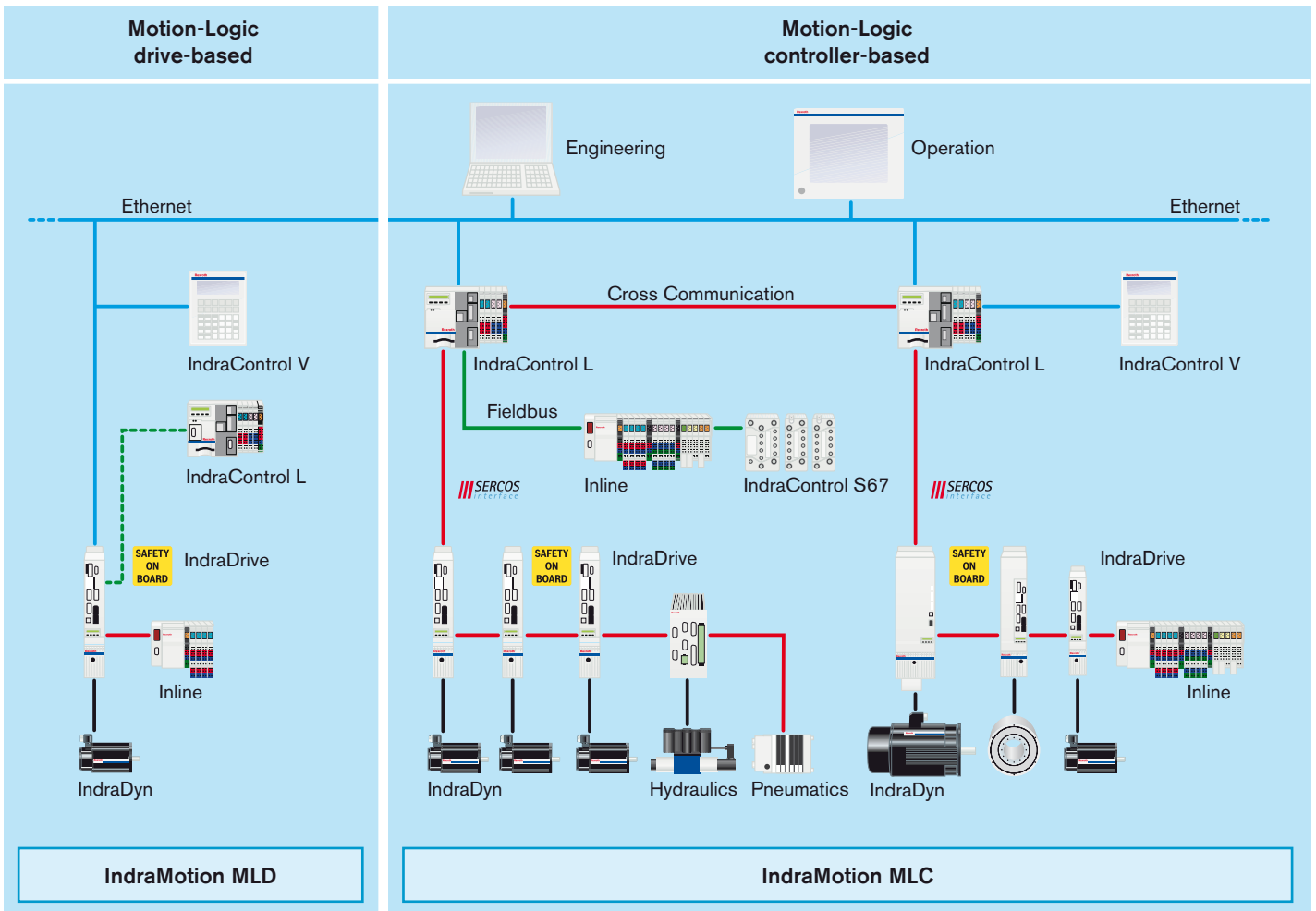
IndraMotion for Printing – open and scalable complete solution for successful automation designs in the printing and converting industry.



## Simple, scalable and powerful

- ! Highest productivity through faster format changes
- ! Simple programming by the use of industry specific technology functions
- ! Minimum paper waste thanks to highest precision

# Your benefit



IndraMotion for Printing, the well conceived automation system with scalable control structure is tailored to perfectly meet the requirements of the printing and converting industry.

Additional information		
Automation system	IndraMotion MLD	Chapter 2.6
Automation system	IndraMotion MLC	Chapter 2.7
Engineering framework	IndraWorks	Chapter 3.1
Visualization devices, high-end industrial PC	IndraControl VPP	Chapter 3.2
Visualization devices, standard industrial PC	IndraControl VSP	Chapter 3.2
Visualization devices, controller-based	IndraControl VCP	Chapter 3.2
Control hardware	IndraControl L	Chapter 3.3
Centralized and distributed input/output modules in IP20	Inline	Chapter 3.4
Distributed input/output modules in IP67	IndraControl S67, Fieldline	Chapter 3.5 and 3.6
Drive family	IndraDrive	"Drive System Rexroth IndraDrive" product catalog

# IndraMotion for Metal Forming – individual automation system for material transport

**IndraMotion for Metal Forming is the modular and scalable system solution for cost effective single-axis and multi-axis applications in belt systems and parallel running separation equipment.**

**Preprogrammed controls, compact control units and intelligent drives with a wide range of rotational and linear motors ensure maximum productivity and highest product quality.**

The customized automation design is based on the IndraMotion MLD and IndraMotion MLC system solutions. With its integrated and branch-specific extended technology functions, it is exactly tailored to the requirements of modern production plants. Whether the material to be machined is metal, plastic, paper or wood – IndraMotion for Metal Forming solves any and all synchronization and positioning tasks with cost effective efficiency. To meet the various requirements in your production plant, IndraMotion for Metal Forming is available in the following versions:

- Single-axis applications with IndraMotion MLD-S
  - Roll feeds
  - Feed straighteners
  - Flying cut-off
  - Cross cutter
  - Unwinder
  - Straightener
- Multi-axis applications with MLD-M and MLC
  - Belt systems
  - Parallel running separation equipment
  - Profiling systems
  - Profiling presses
  - Zigzag feed

#### Your benefits

- Scalable drive platforms with highly dynamic motors
- Standardized programming tools according to IEC 61131-3 and PLCopen
- Drive-integrated technical safety system, certified according to EN ISO 13849-1 Cat. 3 PL d and EN 62061 SIL2
- Intuitive engineering with the IndraWorks software framework
- Low assembly and installation requirements as well as fast start-up through matching and pre-system components
- Exact synchronization between press and feeding equipment
- Optional technology and communication interfaces
- Ready technology functions for branch-specific “ready-to-apply” solutions
- Easy incorporation of distributed drive solutions in existing or new control designs
- Easy implementation of process functions

**IndraMotion for Metal Forming – modular and scalable system solution for perfect and economic material transport.**

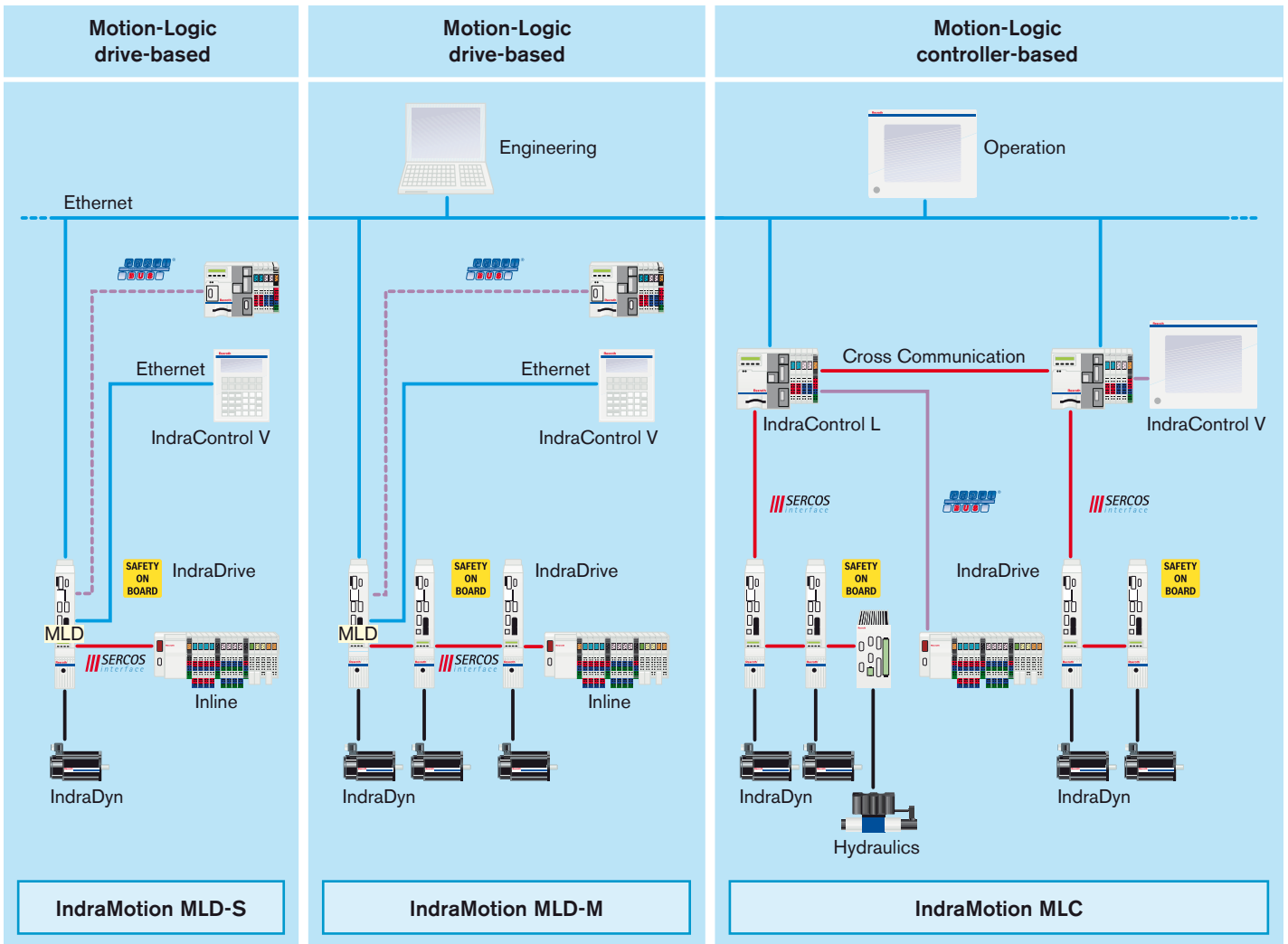




## Complete, perfect and economic

- ! Innovative function blocks, such as function libraries, user libraries, technology packages and user programs
- ! Saving of external peripheral components
- ! Longer machine life through reduced mechanical wear

# Your benefit



Whether drive-based or rack-based, whether single-axis or multi-axis application, IndraMotion for Metal Forming is a modular and scalable system that will always provide the proper solution.

### Additional information

Automation system	IndraMotion MLD	Chapter 2.6
Automation system	IndraMotion MLC	Chapter 2.7
Engineering framework	IndraWorks	Chapter 3.1
Visualization devices, controller-based	IndraControl VCP	Chapter 3.2
Control hardware	IndraControl L	Chapter 3.3
Centralized and distributed input/output modules in IP20	Inline	Chapter 3.4
Distributed input/output modules in IP67	IndraControl S67, Fieldline	Chapter 3.5 and 3.6
Drive family	IndraDrive	"Drive System Rexroth IndraDrive" product catalog

# IndraMotion MTX – highly productive CNC solution for all machine tools

Rexroth IndraMotion MTX is the individually scalable CNC platform with integrated PLC for successful machining and forming designs. Excellent performance data and comprehensive technology functions open new horizons for maximum productivity and flexibility.

Whether you control a standard machine or a fully automated production system – IndraMotion MTX always ensures highly dynamic processing with minimized down times in your application. The following system versions are available:

- IndraMotion MTX compact – space-saving rack version for distributed control technology
- IndraMotion MTX standard – plug-in control in a industrial PC
- IndraMotion MTX performance – high-capacity plug-in control in a sturdy industrial PC
- IndraMotion MTX advanced – high-capacity plug-in control in a special high-end industrial PC for highest requirements

## Your benefits

- Advanced technology functions for turning, milling, drilling, grinding, bending, nibbling, punching, shape cutting and handling
- Open system platform with modular configuration
- Uniform operational design for easy programming
- Performance and function individually scalable
- Innovative CNC kernel with comprehensive technology functions and libraries
- Shortest CNC cycle times, even for high-speed machining
- Minimum PLC processing times
- Flexibly configurable user interface
- Particular machine-specific functions
- Open standards for easy connection of higher-order ERP systems



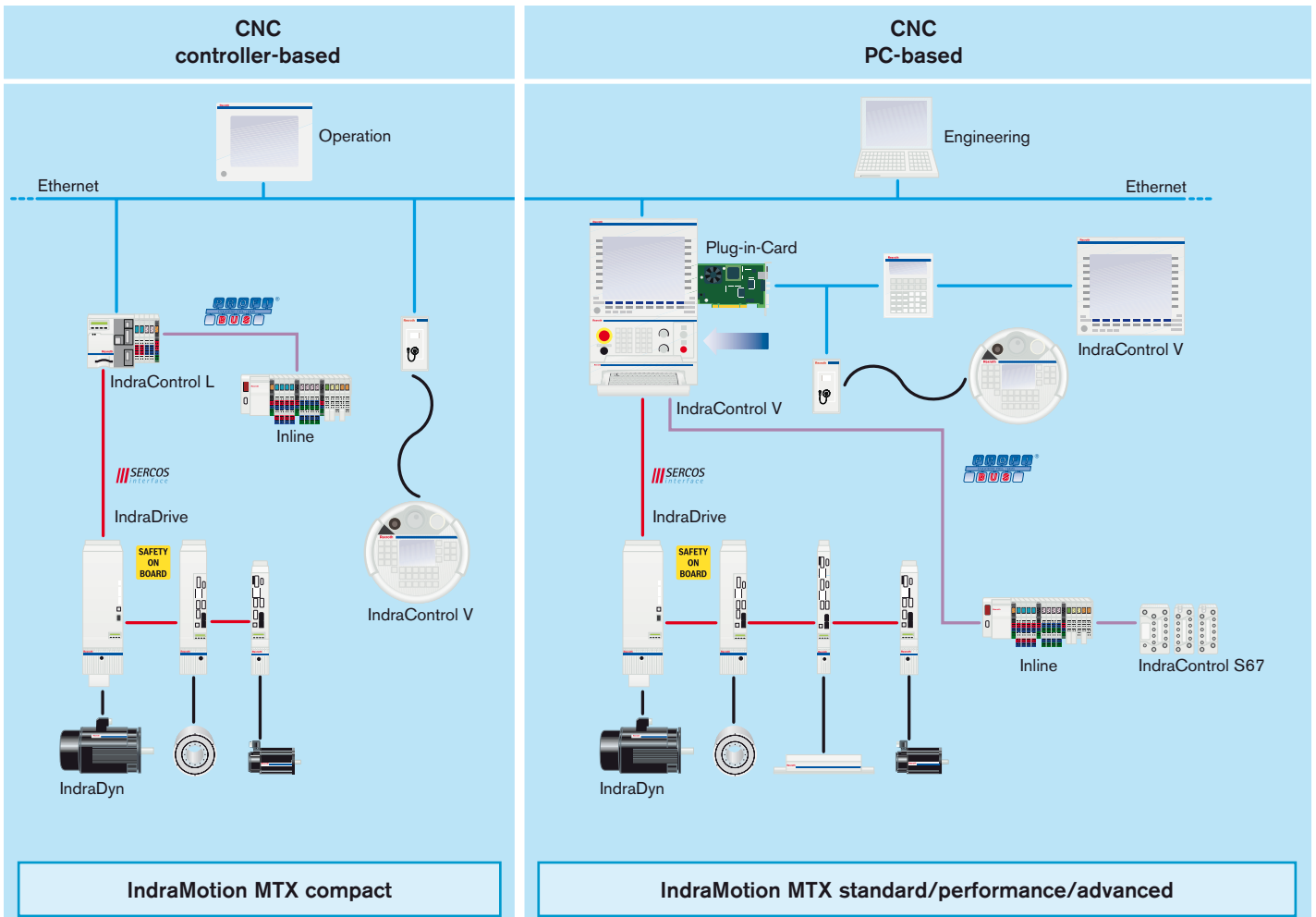
IndraMotion MTX is the customized CNC solution for turning, milling, drilling, grinding, bending, nibbling, punching and shape cutting.



## Open, complete and efficient

- ! Highest manufacturing precision down to the nanometer range
- ! Modern CNC solution for excellent performance
- ! Shortest CNC and PLC cycle times for dynamic machining

# Your benefit



With its modular system design, its open control structure and its international standard interfaces, IndraMotion MTX solves any machining task in CNC technology with utmost dynamics and precision.

### Additional information

Engineering-Framework	IndraWorks	Chapter 3.1
Visualization devices, high-end industrial PC	IndraControl VPP, VPB	Chapter 3.2
Visualization devices, standard industrial PC	IndraControl VSP, VSB	Chapter 3.2
Visualization devices, displays	IndraControl VDP	Chapter 3.2
Visualization devices, embedded PC	IndraControl VEP	Chapter 3.2
Visualization devices, controller-based	IndraControl VCP, VCH	Chapter 3.2
Machine control panels, keyboards	IndraControl VAM, VAK	Chapter 3.2
Control hardware	IndraControl L	Chapter 3.3
Centralized and distributed input/output modules in IP20	Inline	Chapter 3.4
Distributed input/output modules in IP67	IndraControl S67, Fieldline	Chapter 3.5 and 3.6
Drive family	IndraDrive	"Drive System Rexroth IndraDrive" product catalog