

**Automation solutions**  
**for intralogistics**  
**from Bosch Rexroth**



# Complete, harmonized, and easy-to-use warehouse automation solutions

Increase safety, quality, and productivity in automated and manual operations with the automation experts of Bosch Rexroth.

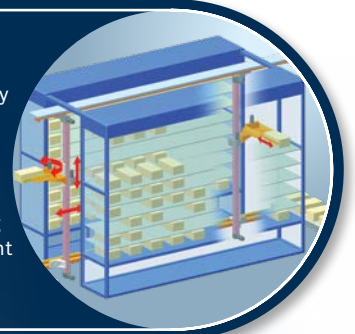
## MULTI-AXIS SYSTEMS



- Smart Function Kits with pre-installed operating software for handling, pressing, and dispensing applications
- Pre-assembled components lead to quick commissioning of new multi-axis systems

## AUTOMATED STORAGE / RETRIEVAL SYSTEM

- ctrlX DRIVE, servo motors, ctrlX CORE, ctrlX I/O, and safety controllers for coordinated movement of materials
- IndraDrive Mi cabinet free integrated servo motors for weight optimized load handling devices with a compact footprint and shorter process times



## PALLETIZING ROBOT



- IndraSize utilizes the motion profile and mechanics of an application to provide the optimum servo motors and drives
- LinSelect simplifies the selection of linear actuators for multi-axis systems
- Visual programming and code examples reduce machine development time and improve throughput

# Benefit from warehouse automation – increase efficiency, reduce costs, and improve quality according to your needs.

## MANUAL PRODUCTION SYSTEMS



- Ergonomic works-stations or production lines with a focus on lean manufacturing
- Adjustable height
- Fully assembled or as a kit

## AUTONOMOUS MOBILE ROBOTS

- ACTIVE Shuttle automates the flow of materials in dollies and totes
- Increased safety with camera-based 3D obstacle detection
- Integrated touchscreen display for direct interaction
- ROKIT Locator software supports SLAM navigation in highly dynamic environments without additional infrastructure



## TRANSFER SYSTEMS / CONVEYORS

- Transfer systems with multiple pallet sizes available (T1 – T7)
- VarioFlow plus conveyors offer an extensive modular chain system
- Standard components can be combined in a variety of ways to optimize material flow



## DIGITAL TWIN

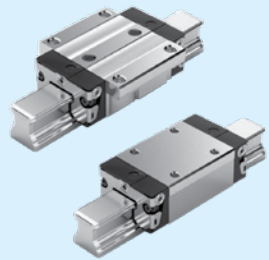


- AI powered modeling solution of industrial assets
- Sensor data is utilized to predict problems with critical machines before they arrive
- Customizable platforms analyze data to provide insights and actions to improve OEE

# Automation Technologies

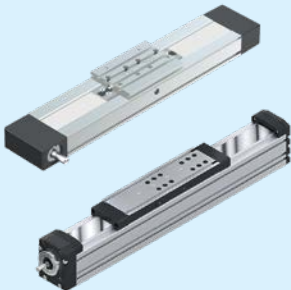
## A Complete Automation Solution for Intralogistics

### Linear Technologies



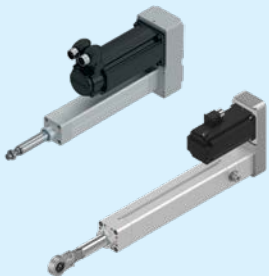
#### Ball Rail Systems

Our ball runner blocks and guide rails add value to manufacturing processes thanks to fast, high-precision guidance and long service life. In highly competitive markets these systems consume 90% less energy and offer critical efficiency. They operate with minimal noise and optimum travel behavior.



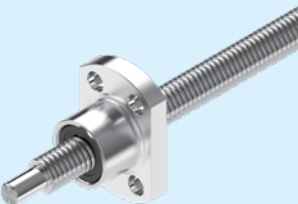
#### Linear Axes

Bosch Rexroth offers precise, ready-to-install guide and drive systems with high performance features in compact dimensions. We have over 1,000 standard components to provide unique solutions to any application. Pre-installed motors, drives, sensors, and software tools are available for a complete package from one supplier.



#### Electromechanical Cylinders

Our electromechanical cylinder (EMC-HP) is used for heavy duty applications with high load forces under tough conditions. The integrated precise planetary screw allows accurate movement and positioning and a long service life. EMCs are a high-performance alternative to pneumatic and hydraulic cylinders.

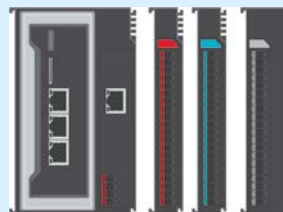


#### Ball Screws

Ball screw assemblies are the efficient solution for the precise conversion of rotary to linear motion. We have developed a product range that fulfills the most diverse requirements. To make sure your application runs with the utmost accuracy and operational reliability, the individual components in our range have been precisely matched to one another.

### Electric Drives & Controls

**ctrlX**



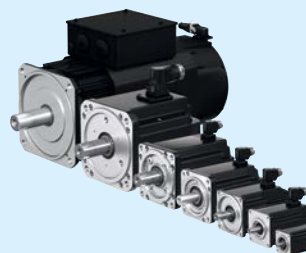
#### ctrlX AUTOMATION

ctrlX AUTOMATION surmounts the classic boundaries between machine controls, the IT world, and the Internet of Things by providing a complete automation suite. The ctrlX CORE is an all-in-one automation controller with a Linux real-time operating system, consistently open standards, app programming technology, web-based engineering, and a comprehensive IoT connection.



#### ctrlX SAFETY

Bosch Rexroth is redefining safe automation: ctrlX SAFETY is the most compact safety solution of its kind and has the fastest reaction times. The compact yet scalable system can be used as required—from the drive-integrated SafeMotion solution in ctrlX DRIVE to the complete ctrlX SAFETY control system.



#### Servo Motors

Our compact synchronous servo motors meet all requirements from standard applications to high-end applications. Our motors combine optimum dynamics with maximum precision of position, rotary speed, and torque values. Ideal for complex multi-axis systems.



#### Servo Drives

Bosch Rexroth has developed the most compact modular drive system in the world with ctrlX DRIVE. Apart from space-saving dimensions and maximum scalability, ctrlX DRIVE boasts unlimited combinations, sophisticated engineering tools, and high energy efficiency. We also offer the IndraDrive Mi cabinet-free drive system which simplifies machine design and offers up to 90% less wiring.

## Aluminum Framing/ Conveyors



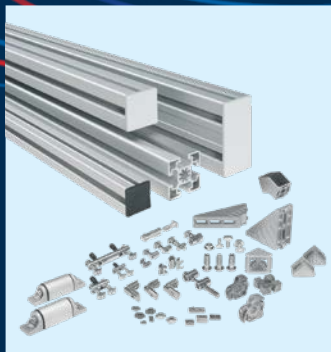
### Conveyor Systems

Transfer of parts, sub-assemblies, and structures needs care in both physical handling and traceability. With Rexroth conveyors many options exist, from the VarioFlow *plus* flexible plastic chain conveyors to pallet-based TS assembly conveyors for light to heavy applications. Best of all, the lines all accommodate RFID tracking.



### Workstations

The main concern of modern production is to avoid waste. The MPS Manual Production Systems or work stations from Rexroth have been developed strictly in line with aspects for lean production, enabling simple and fast planning, and implementation of lean production installations.



### Aluminum Structural Framing

Our aluminum framing line is the most extensive. With hundreds of profile variants and thousands of products for joining, finishing, and moving elements, any type of support structure, enclosure, or machine base is possible.



### Guarding Systems

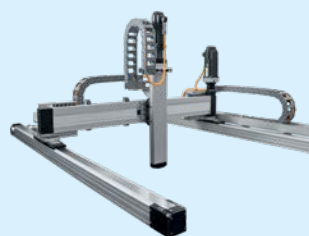
Bosch Rexroth offers a wide range of machine and perimeter guarding options for creating physical enclosures, guards, and barriers to protect workers. Partitions can be constructed from pre-assembled, ready-to-use components that install quickly and easily integrate into other Rexroth aluminum framing structures.

## Robotics



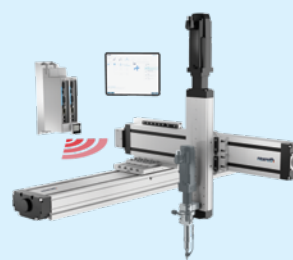
### AMRs

ACTIVE Shuttles are AMRs that are great for loading and unloading machines. This AMR can be easily integrated via Plug and Go. Jobs can be fed in manually or automatically with the standard interfaces provided (sensor, PLC, MES/ERP, etc.). Integrated obstacle management enables timely braking and recognition of obstacles in its path.



### Multi-Axis Systems

Our 30 years of linear axis expertise have gone into the new multi-axis modular system and the completely revised LinSelect selection tool. LinSelect allows for seamless selection, configuration, and ordering. You'll receive linear systems made of proven and perfectly matched components, including all attachment parts, cables, motors, and drives – all from a single source.



### Smart Function Kits

We offer fully assembled multi-axis systems with pre-installed operating software. Customers choose from a variety of applications such as handling, pressing, and dispensing. The pre-configured solutions are ready to install, which leads to quick commissioning. Minimal programming is required with an intuitive, browser-based Web HMI that is usable on various end devices.



### Smart Flex Effector

A new sensor-based compensation module that enhances the capabilities of robots and cartesian systems. The end effector has an active measuring function in six degrees of freedom that enables correction movements in real time. The flex effector is perfect for handling and joining applications with tight tolerances.

# Custom Solutions for Intralogistics



**Let's move your  
warehouse forward**

From start to finish, Bosch Rexroth does more to engineer and deliver the most complete, harmonized, and easy-to-use automation solutions today's manufacturers want. With a technology portfolio that offers the broadest selection, our solutions go beyond advanced components to include digital engineering tools and customized support that enables you to solve the most intricate engineering challenges.

With more than 225 years of engineering expertise, you can trust us to help you expand your productivity, giving you the advantage you need to get to market faster. Application-driven. Results-focused. Service-oriented. That's warehouse automation from Bosch Rexroth.

## WHY BOSCH REXROTH?

- We are your one-stop shop for automation products and solutions
- We have extensive knowledge of Industry 4.0 and creating Digital Twins of machines for valuable insights that reduce downtime and maintenance costs
- We have a complete portfolio of automation products that work alongside humans to improve processes in warehouses
- We have local teams of engineers that utilize software tools like MTPro and FlexSim to design and model the optimal process for an application
- We partner with customers from initial design through implementation to ensure we are providing the best automation solution
- We are a large organization with a global footprint – offering project and service support worldwide



## Bosch Rexroth Corporation

Corporate Headquarters  
14001 South Lakes Drive  
Charlotte, NC 28273  
Telephone (800) REXROTH  
(800) 739-7684  
info@boschrexroth-us.com  
www.boschrexroth-us.com

## Find your local contact person here:

[www.boschrexroth-us.com/contactus](http://www.boschrexroth-us.com/contactus)

## Follow us on Social Media:



**Facebook:**

<https://goo.gl/xrLV28>



**Twitter:**

<https://goo.gl/kKmov6>



**Youtube:**

<https://goo.gl/VO84XQ>



**LinkedIn:**

<https://goo.gl/4CkqOG>

