



MATCH

End-of-arm ecosystem

Any robot. Any gripper.
Any end effector.

THE KNOW-HOW FACTORY

MATCH

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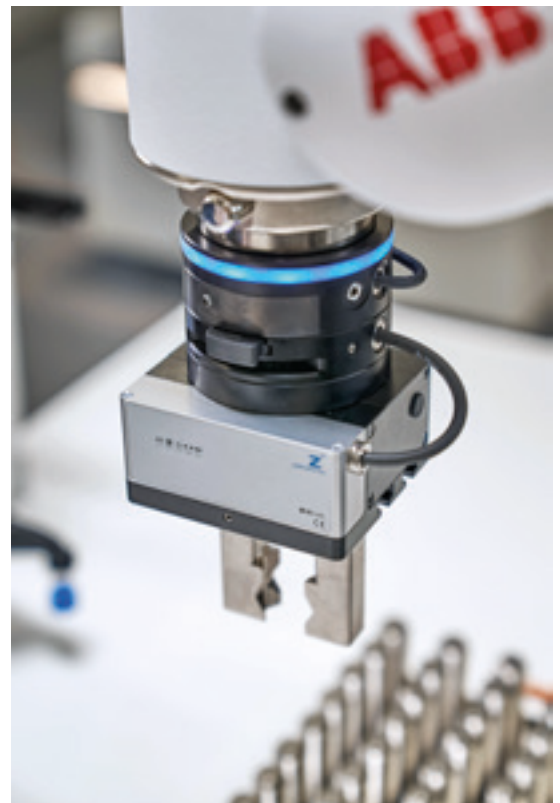
ZIMMER GROUP COMMITTED TO OUR CUSTOMERS

WE HAVE SUCCEEDED FOR YEARS BY OFFERING OUR CUSTOMERS INNOVATIVE AND INDIVIDUALIZED SOLUTIONS. ZIMMER HAS GROWN CONTINUOUSLY AND TODAY WE HAVE REACHED A NEW MILESTONE: THE ESTABLISHMENT OF THE KNOW-HOW FACTORY. IS THERE A SECRET TO OUR SUCCESS?

Foundation. Excellent products and services have always been the foundation of our company's growth. Zimmer is a source of ingenious solutions and important technical innovations. This is why customers with high expectations for technology frequently find their way to us. When things get tricky, Zimmer Group is in its best form.

Style. We have an interdisciplinary approach to everything we do, resulting in refined process solutions in six technology fields. This applies not just to development but to production. Zimmer Group serves all industries and stands ready to resolve even the most unique and highly individualized problems. Worldwide.

Motivation. Customer orientation is perhaps the most important factor of our success. We are a service provider in the complete sense of the word. With Zimmer Group, our customers have a single, centralized contact for all of their needs. We approach each customer's situation with a high level of competence and a broad range of possible solutions.



TWO STRONG PARTNERS – ONE UNIQUE PLATFORM

MATCH

This is what we call the new multi-functional end-of-arm platform from Zimmer Group and Schmalz, two technology leaders and handling specialists. Equipped with an extensive range of functions and universal communication interfaces, MATCH is compatible with all common lightweight robots on the market – an ideal system for cobots and conventional 6-axis robots.



MATCH components can be recognized by this logo in the future.

Two strong partners

The new MATCH platform from Zimmer Group and Schmalz combines the best of two gripper worlds. This collaboration created something unique: a modular system that the customer can use to meet various requirements and handle

diverse applications in robotics. Furthermore, in addition to their accumulated problem-solving expertise, both companies offer a global sales network for support and service.

Applications as varied as the system

Whether mobile and collaborative robotics or fully automated applications, just one flexible system gives the user access to a nearly unlimited range of uses from production and assembly to warehouse logistics, shipping and even laboratory automation.

Typical tasks for the system include pick-and-place, order picking, packaging and palletizing, checking and testing. Various mechanical and vacuum grippers can be selected corresponding to the workpiece and handling task. If the requirements change, the system can be quickly and easily adapted.



Standardized connection and communication

Appropriate for all common lightweight robots – an ideal system for cobots and conventional 6-axis robots.



Simple installation

Mechanical connection by quick-changer and configuration using a setup assistant.



Flexible

Any robot, any gripper, any end effector. High flexibility thanks to an extensive portfolio.



Full process control

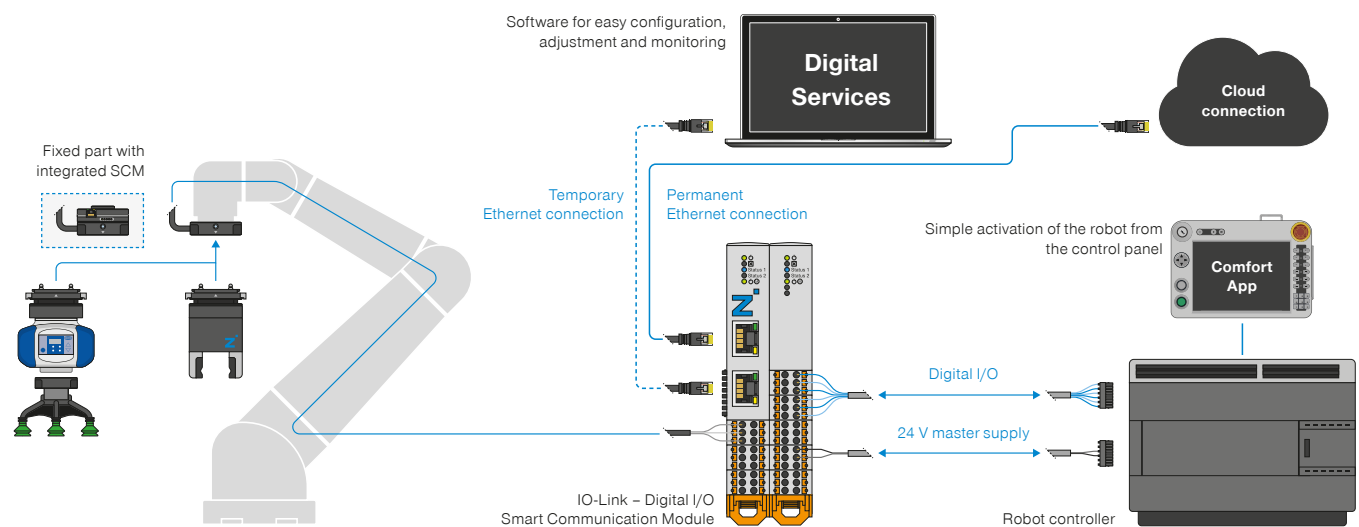
Collect, evaluate and visualize added-value data, including cloud connection.

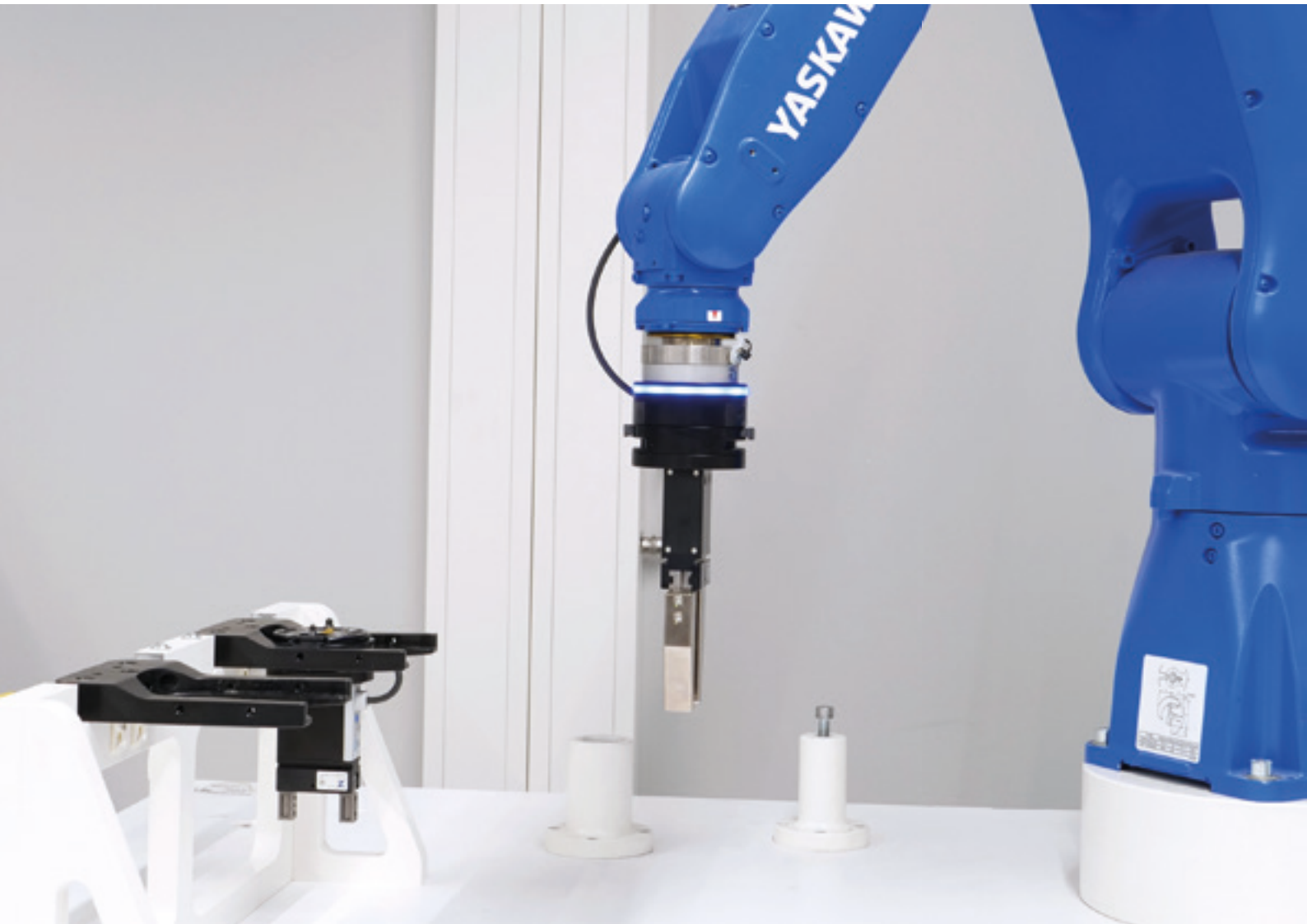
SIMPLE INSTALLATION THANKS TO DIGITAL SERVICES

Installation

Installation of MATCH is incredibly easy. The system can be mounted to the robot flange and set up conveniently with just a few manual adjustments. Configuration is intuitive and easy

to accomplish thanks to the support of the digital services and the entire ecosystem (SCM module with guideZ, expertZ, monitorZ and Comfort app/cloud connection).





ANY ROBOT, ANY GRIPPER, ANY END EFFECTOR

Compatibility with all common robots

The MATCH portfolio opens up countless application possibilities in all industries. No matter which modular solution you choose, we promise: It's a MATCH. Smooth inter-

action between robot and gripper is guaranteed by the smart connection concept.

Robot

Appropriate for all common lightweight robots – an ideal system for cobots and conventional 6-axis robots.

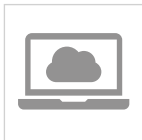


Communication module for IO-Link module

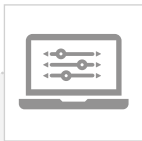
No SCM is necessary for quick-change module with digital I/O. With quick-change module RS485, the SCM is integrated.



SCM



Cloud connection



Digital Services

Quick change module (top)



Digital I/O



IO-Link



RS485

Gripping components incl. quick-change module (bottom)

A constantly expanding portfolio of compatible gripping components.



Vacuum generator



Connection of gripping components (vacuum)



Gripping components (vacuum)



TECHNOLOGY OPTIONS THROUGH STANDARDIZED INTERFACES

Standardized interfaces

The quick-change system features various interfaces. Alongside a compatible mechanical interface and a pneumatic connection, electrical connections are also available. This

variety of technological options makes it possible to use many different robot types with a wide variety of end effectors.

1 Electric

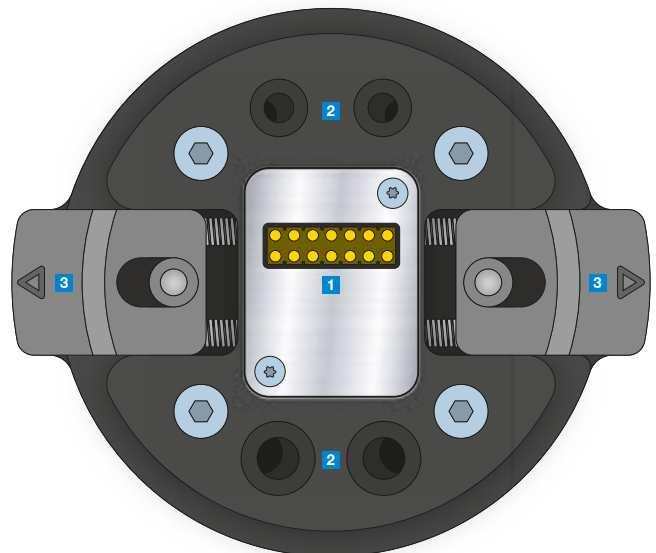
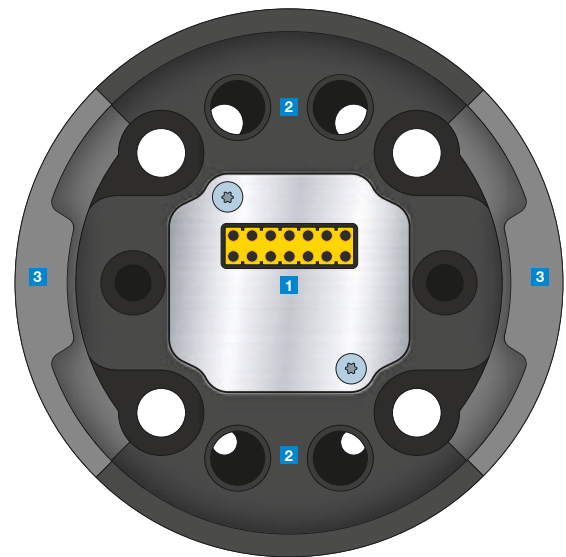
The quick-change system is hot-pluggable and can be changed during live operation. The integrated pin field transmits both the load and signal currents.

2 Pneumatic / vacuum

Four interior and two lateral fluid channels supply connected gripper systems with compressed air or vacuum pressure. The generous size enables operation of a powerful pneumatic vacuum generator for applications such as handling porous cardboard.

3 Mechanical

The high processing quality guarantees a long service life (> 100,000 cycles). Rotation prevention ensures a clearly defined position of the loose part relative to the fixed part and a clearly defined orientation of the end effector in the storage station.





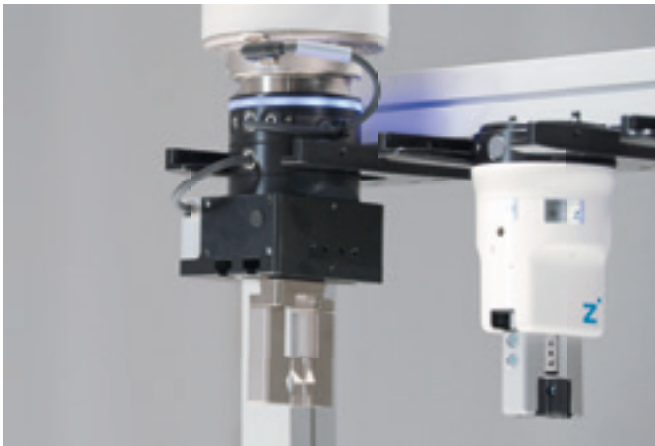
QUICK-CHANGE FUNCTION

MANUAL AND AUTOMATED

Fast, convenient exchange

The compact quick-change module provides two quick and easy ways to swap a component. In addition to an automated exchange in a storage station, known as the gripper station, exchanging by hand is also possible within seconds. Thanks

to the ergonomic click system – integrated on the end effector being changed – it is possible to carry out a manual change with just one hand. At the same time, this prevents the exchange module from falling.



Automated exchange (without external activation).



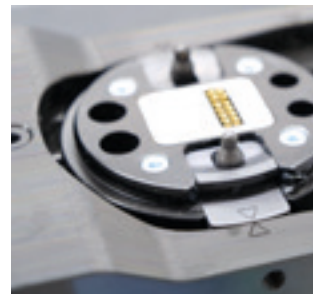
Manual exchange with one-hand function within seconds.



The quick-change system is hot-pluggable and can be changed during live operation. The high processing quality as well as the materials used (rugged locking elements) guarantee a long service life (> 100,000 cycles).



Rotation prevention ensures a clearly defined position of the end effector in the storage station. Furthermore, during a manual exchange, it ensures that the end effector itself is connected with the robot in the same orientation.



In setup mode, pins and visual markings in the storage station enable simple, clear positioning of the end effector. In continuous operation, the pin disappears in the storage station, thus enabling a greater degree of freedom in the exchange process. The storage station can be attached in three ways here.



The storage station features an optional sensor query. In combination with the standard connect signal, 100% system security is ensured. In addition, an optical LED display on the fixed part is also available.

SMART ECOSYSTEM – INTUITIVE SOFTWARE

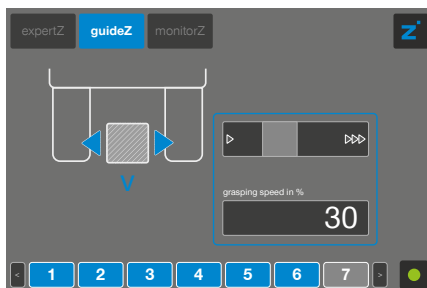
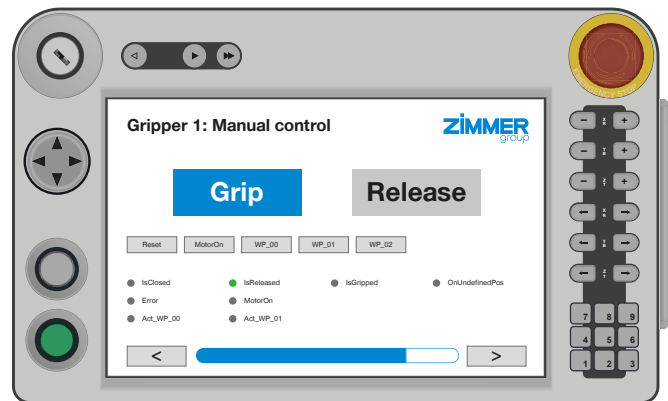
Intuitive software solution

Zimmer Group and Schmalz have their own ecosystem that the user can use for countless digital services. In addition to the SCM communication module (master gateway), the user has two other tools at their disposal: the intuitive guideZ

setup software for further configuration of the gripper and Schmalz Connect Suite for diagnostics of IO-Link devices in the cloud.

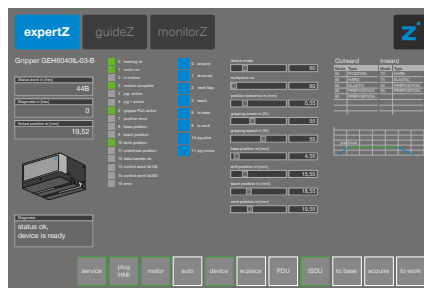
Comfort App

The Comfort app, coordinated to the robot manufacturer, makes it possible to actuate and operate the gripper conveniently and directly using the respective robot control panel. The easiest setup mode and all necessary commands for hitch-free automatic mode.



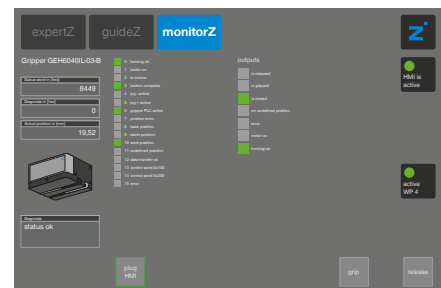
Configuring with guideZ

guideZ is a wizard for commissioning components quickly and extremely easily. It enables user-guided implementation and commissioning for anyone. Users can switch between guideZ, expertZ and monitorZ mode with one and the same software module.



Perfection through expertZ

expertZ is the software tool for all gripping experts. It makes it possible to optionally optimize the gripper parameters defined in guideZ for the specific application.



Monitoring with monitorZ

monitorZ is used to monitor gripper unit positions and statuses on a screen during operation. By detecting errors early, system availability can be permanently increased.

SCM

SMART COMMUNICATION MODULE

IO-Link meets digital I/O

The Smart Communication Module (SCM) is a master gateway that is suitable for all IO-Link components. With its two channels, the SCM can control two devices and on a functional level, offers the direct implementation of IO-Link to digital I/O. The module thus makes it possible to integrate IO-Link devices into a digital infrastructure and utilize almost the full extended range of functions of the IO-Link device.

▶ YOUR BENEFITS

- ▶ Translates IO-Link to digital inputs and outputs (digital I/O) and from digital I/O to IO-Link
- ▶ Easy control of intelligent IO-Link grippers via 24 V digital I/O
- ▶ Configuration and training take place using the corresponding intuitive guideZ software
- ▶ Can be used with one or two grippers depending on the flexibility required
- ▶ Up to 15 different workpieces can be trained for one gripper

SCM

Includes the Smart Communication Module, including the guideZ, expertZ, monitorZ software bundle



SCM + Comfort

Includes the Smart Communication Module, including the guideZ, expertZ, monitorZ software bundle + Comfort app



SCM + Comfort (ready-to-connect)

Includes the Smart Communication Module, including the guideZ, expertZ, monitorZ software bundle
+ Comfort app
+ Robot-specific connection elements



startZ package

Includes the Smart Communication Module as an external module or flange version, including guideZ, expertZ, monitorZ software bundle
+ Grippers
+ Comfort app
+ Robot-specific connection elements
+ Tool and mounting material



startZ

INNOVATION IN ONE BOX

PLUG & WORK

The robot starter box

startZ is one of the easiest options for turning your idea for a robot application into a reality in no time at all. All the necessary components are located in a single box. Everything is integrated, including the gripper, communication module with intuitive operating software, and tools.



▶ YOUR BENEFITS

- ▶ All components ready to connect in one box
- ▶ Intuitive guideZ setup software
- ▶ Manufacturer-specific Comfort app for actuating the gripper via the robot control panel
- ▶ Mounting material included
- ▶ Required assembly tools included

Gripper

The central element between the workpiece and robot. Including universal gripper fingers to ensure the first use runs without a hitch.

Communication module

The interface between the robot controller and end effector with intuitive software for setting up the gripping parameters.

Comfort app

The app for actuating the gripper from the robot control panel. The convenient solution for setup and automatic modes.

Tools

All accessories integrated, such as tools and mounting material.

Connection elements

All connection elements needed for operating and setting up the system included.

▶ SUPPORTED ROBOT MANUFACTURERS

We are constantly expanding our portfolio for startZ. A current overview of all supported robot types as well as additional information can be found on our website at

www.zimmer-group.com/en/starterbox



FULL PROCESS CONTROL IN EVERY APPLICATION

Your ecosystem

MATCH guarantees full support and process control – from commissioning to ongoing operation and process monitoring. Digital services such as HMI functions for setup and operation, collection of process data / condition monitoring, evaluation and visualization and cloud connection offer added value in all phases of the product life cycle.

More information about our MATCH quick-change system is available in the product area of Zimmer Group at www.zimmer-group.com.

▶ YOUR BENEFITS

- ▶ A system for lightweight robots, cobots and conventional robots
- ▶ Automated exchange in the device
- ▶ Manual exchange with easy-click function
- ▶ Large variety of end effectors
- ▶ Compatibility & flexibility – combining the primary handling technologies (vacuum and mechanical gripping)
- ▶ Innovative digital ecosystem
- ▶ Long service life, even in automated continuous operation



Wherever a wide range of workpieces are being handled in a pick-and-place application, MATCH offers the right solution.



Mobile robotics is playing an ever more important role in logistics. A flexible automated system that provides as many gripping tools as needed is indispensable here.

