

Revolutionary Bin Picking

# **Solution Kit**

## **ivOS Pick-and-Pack**

[WWW.SCHMALZ.COM/IVOS](http://WWW.SCHMALZ.COM/IVOS)



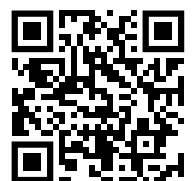
# ***Pick Accelerator – powered by Schmalz Solution Kits***

Schmalz presents a new, powerful bin picking platform using the Pick Accelerator as an example. The specific solution enables picking in the warehouse at unprecedented speed! This is made possible by the unique interaction of innovative gripper technology, modern 3D sensor technology and the latest algorithms for gripping point determination – all included in the Schmalz Solution Kit ivOS Pick-and-Pack.



## FACTS ABOUT THE USE CASE

- Up to 2,700 picks per hour
- Simultaneous, intelligent control of two Scara robots and two 3D cameras
- Gripper with integrated energy supply and fifth axis for clearing the box
- Fast gripper change < 1 second
- Payload up to 10 kg



Video zum Use Case  
ansehen





## Solution Kit ivOS Pick-and-Pack

With new solution kits, Schmalz accelerates and simplifies the setup of application-specific bin picking solutions. The basis is the Vision Operating System ivOS – an open and flexible platform for application integration.



### APPLICATIONS

- Specific solution package for integrators and machine builders to quickly and easily set up bin-picking applications
- Use for picking and packing of unknown goods in the warehouse
- Use of our extensive know-how for gripper design – ivOS recognizes each workpiece, selects the suitable gripper with the appropriate gripping strategy and picks the order
- Easy configuration of all system components via graphical user interface

### BENEFITS FOR INTEGRATORS AND MACHINE BUILDERS

#### Plug & work

for simple and time-saving integration

#### Technology openness

enables the use of all common robots, sensors, pick software and interfaces



#### Fast adaption

to customer-specific requirements and new workpieces

#### Complete engineering package

includes CAD data, circuit diagrams, technical layouts and much more

### THE SOLUTION KIT INCLUDES



#### Gripping technology

Grippers and vacuum generators are designed for high-speed picking. The grippers can be selected from a wide range and changed in seconds. The swivel function optimizes gripping of parts that are difficult to reach.

#### 3D vision sensors

We rely on high-performance 3D camera technology from leading manufacturers. The parallel use of several different cameras always provides the optimal result for each sub-task.

#### ivOS Software Pick-and-Pack

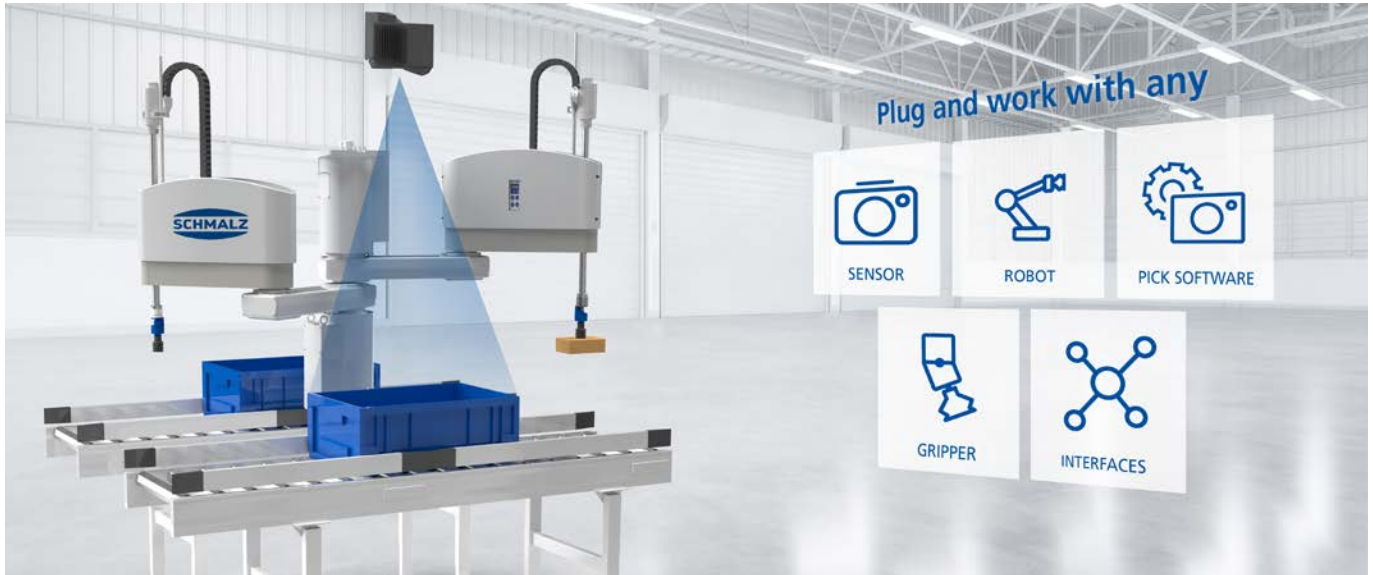
Our specific software configuration enables the control and configuration of all system components. Different pick algorithms can be used in parallel – this guarantees the best pick!







## Vision Operating System ivOS



With ivOS, Schmalz has developed an operating system for bin picking. Integrators and machine builders receive an overarching, intelligent system that allows them to easily connect and control grippers, cameras, picking software and robots from different manufacturers. Modern interfaces enable comprehensive data exchange in real time, for example with warehouse management systems.

### Open and flexible platform for integrators and machine builders

- High connectivity and high level of integration of all components
- Bring your own device – integration of own hardware and software
- Modules such as the pick software can be easily exchanged for continuous improvement – retrofit is also possible

### STRONG PARTNERS – OPEN ECOSYSTEM

Robot	Sensor	Pick software	Interfaces
<b>EPSON</b> <b>FANUC</b>  <b>KEBA</b> <b>KUKA</b>  <b>UNIVERSAL ROBOTS</b>	<b>MECH MIND</b> <b>roboception</b>  <b>wenglor</b> <b>ZiVID</b> <small>the innovative family</small>	<b>Fraunhofer IPA</b> <b>FIZYR</b>  <b>roboception</b> <b>sereact</b>  <b>SIEMENS</b>	<b>EtherCAT</b> <b>MQTT</b>  <b>OPC UA</b> <b>PROFINET</b>  <b>ROS</b>

### Become a partner now!

You would like to be part of our ecosystem? We look forward to hearing from you.

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