



KI-Vision basiertes Greifen von unterschiedlichen Objekten

Schmalz Solution Kits ivOS



Automate with AI now and get started!

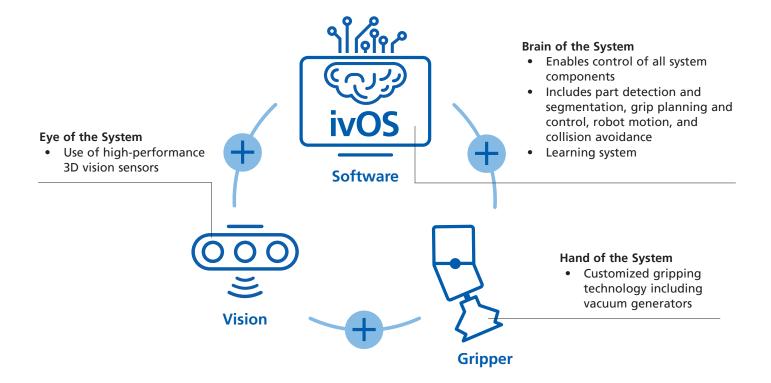
Intelligent Gripping – Automation for industrial handling that simply works.

The Schmalz Solution Kit ivOS is a flexible and powerful technology kit consisting of an application-specific vacuum gripping system, a 3D camera system and an industrial PC running the vision operating system ivOS, an Al-supported software developed by Schmalz. The solution is available for various applications and industries: Robots learn to grip unknown objects and unsorted workpieces – without model-based gripping and without CAD comparison.



"Automation is expensive, requires expertise and can't be done in my company." That is the past.

What once seemed impossible is now becoming reality thanks to AI robotics.





Flexible

Grippers, cameras, software modules and robots from different manufacturers can be easily connected and controlled



Future-proof

Automate monotonous tasks with a secure complete solution and benefit from continuous improvement



Cost-effective

Finally, handling tasks that could previously only be performed manually can be automated cost-effectively



User-friendly

The solution is user-friendly and easy to operate – no programming knowledge is required



Solution Kit ivOS Logistics

Increase the productivity of your logistics processes

Automate your order-picking processes, various pick-and-place applications, as well as palletizing and depalletizing tasks, including mixed palletizing. Our solution automatically detects and grips unknown objects, so robots can be used economically even with small batch sizes and high part variance.

Benefits:

- Increased productivity due to less manual labor and error-free processes
- Shortened lead times
- Wide variety of items and packaging can be automated (mix of large and small orders possible)
- Flexible gripper change
- Minimal space requirement

Challenges

- Shortage of skilled labor
- Increasing demands on speed, precision and flexibility
- Inefficient use of storage space
- Picking errors





Solution Kit ivOS Sheet Metal

Ready to automate sheet metal handling

Automate the loading and unloading of your grinding, deburring, straightening and laser cutting machines. Increase the productivity of your plant by up to 50% with partial automation and 90% with full automation. The system recognizes and grips unknown sheet metal parts, can turn them over and is compatible with both large robots and cobots.

Benefits:

- 2-4 years amortization time: Automation pays off very quickly, even with small quantities with high variance
- No prior knowledge necessary for operation: The graphical user interface is easy to use and does not require expert knowledge
- *Average value from customer analyses carried out to date. Contact us for an individual analysis of your parts spectrum.

Challenges

- Physically demanding and monotonous work leads to high fluctuation and absenteeism
- Labor shortage
- Increased cost pressure due to inflation and the wage-price spiral
- High parts variance and strong batch size fluctuations







Vision Operating System ivOS

Platform for integrators and machine builders

The basis for the solution kits is the vision operating system ivOS – an open and flexible AI-supported software platform.

The software platform makes it possible to configure and operate the system components gripper, camera, robot controller and AI vision software via a standardized interface. This simplifies real-time data exchange and adaptation to specific requirements. Integrators can now implement automation solutions for end customers that previously could not be effectively implemented because the automation of manual workstations or in high-mix, low-volume production environments was previously difficult to implement.





Plug and Work

The integration effort is reduced by more than 50% compared to standard market solutions



High flexibility

The simple integration of different hardware and software modules makes it possible to adapt to any customer requirement – even retrospectively



Technological Openness

Grippers, cameras, software modules and robots from different manufacturers can now be easily connected and controlled



Successful Projects

The functionality has been tested and proven, which leads to significant cost savings and faster project durations

YOUR PATH TO AUTOMATION

Are you looking to automate your handling tasks? Take the first step and get in touch with our robotics specialists. We look forward to receiving your enquiry!

robotics@schmalz.de · T: +49 7443 2403-105

J. Schmalz GmbH

Johannes-Schmalz-Str. 1 72293 Glatten, Germany T: +49 7443 2403-105 robotics@schmalz.de WWW.SCHMALZ.COM













j-schmalzgmbh