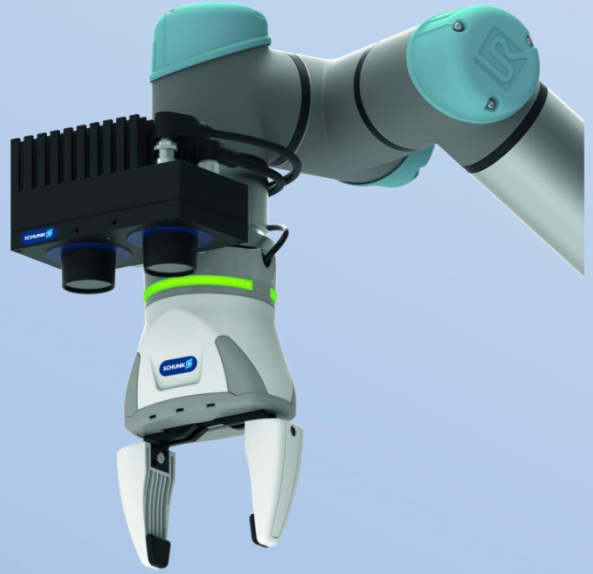
SCHUNK SGC kits

HAUSEN ON AIR

- From grippers to grasping-

Smart Grasping | EGH

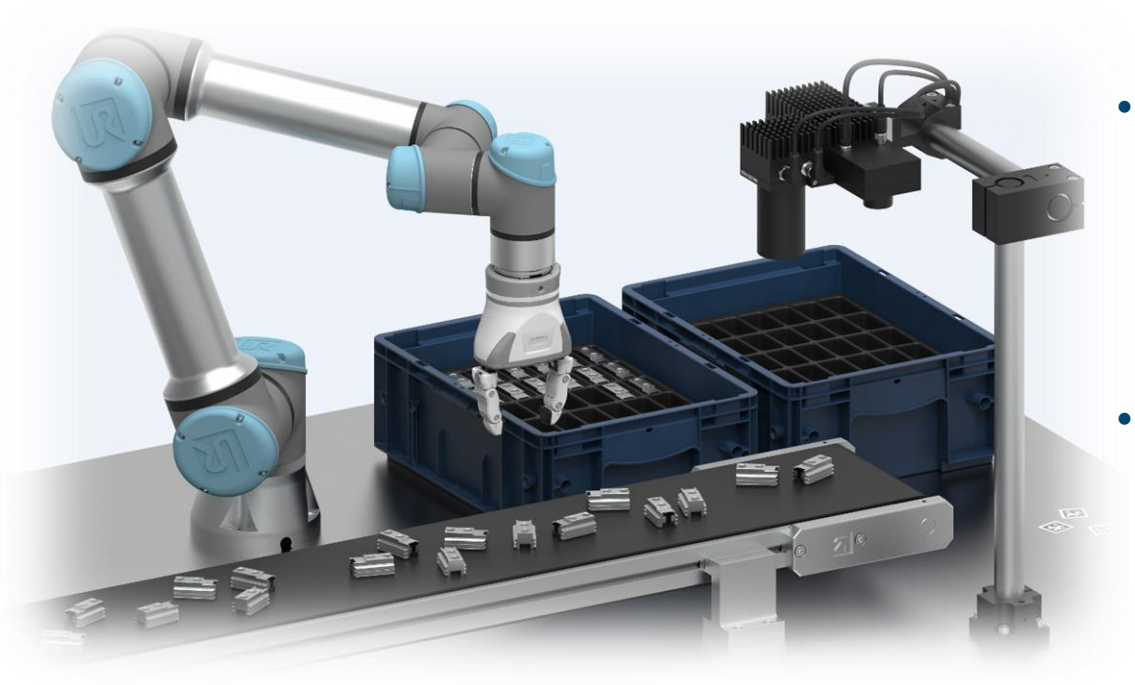


SGC

Application solution for gripping non-position-oriented workpieces consisting of camera system and gripper for easy automation with cobots.

The SGC application kit combines **intelligent object detection** and **flexible gripping** in **one intuitive set**. The camera system reliably detects workpieces on a defined surface even in poor lighting conditions and calculates possible grips **including collision checks**. During workpiece detection, the software function "**template matching**" searches for previously defined objects in a scene. If these are detected, collision-free grips and approach points are automatically calculated, transferred to the robot and the gripper is pre-positioned in the required position.

Smart Grasping – What do we offer?



- Camera-based pick-up and set-down of non-oriented workpieces with a 2-finger parallel gripper (EGH).
- **We do not offer single components. We a delivering a complete solution in a package.**

From Grippers to Grasping

Fields of applications for SCHUNK SGC

- **2D/2.5D**
- **Detecting of part geometries on a flat surface of non-oriented workpieces**
- **Collision detection between gripper, transport box and workpieces**
- Best results with flat workpieces on a flat surface (inclination less than 10%)

Not possible

- **<u>No</u> Bin picking applications**
- **Detection and picking of chaotically provided objects is not possible**
- 3D evaluation via ItemPick/BoxPick (complex and EXPENSIVE)

Overview SGC

HW
SW
Service
Basis
Optional

Adapter plates for roboter and SAS System

Calibration Kit

Camera

Manual

Application validation, teach-in support

Vision-SW

UR Cap Kamera

EGH Kit

UR Cap EGH

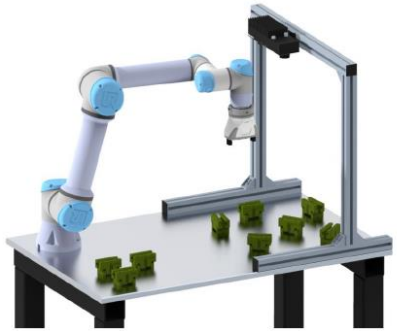
LED Projector

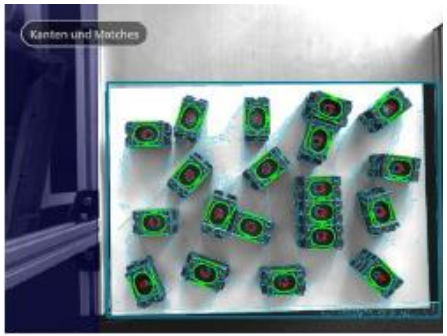
Programm example

Produkt kits | Static

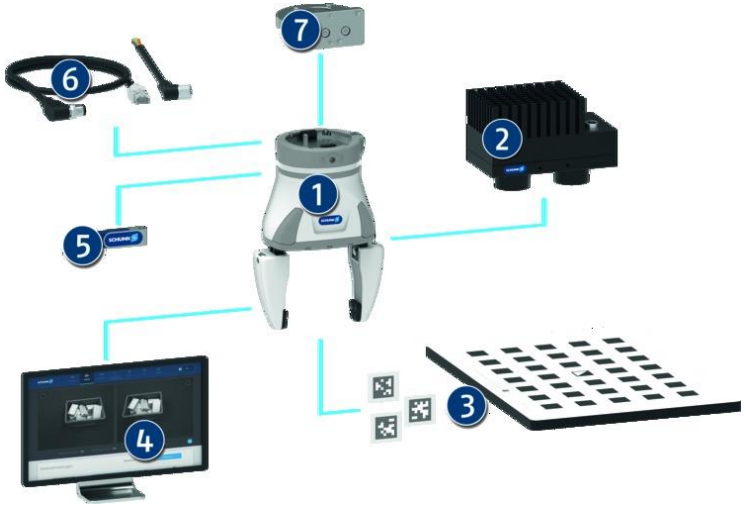
SGC 160-EGH-UR-S

Applications and Examples| How it works!





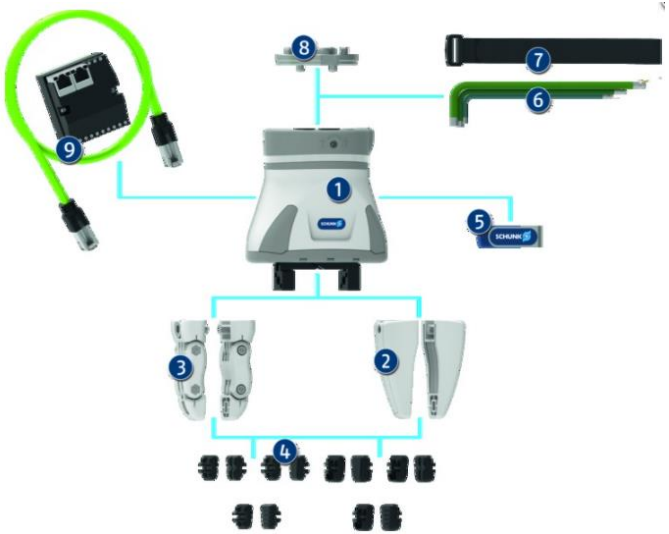
Produkt kits | Dynamic



SGC 160-EGH-UR-D

Technical Details

SGC | EGH



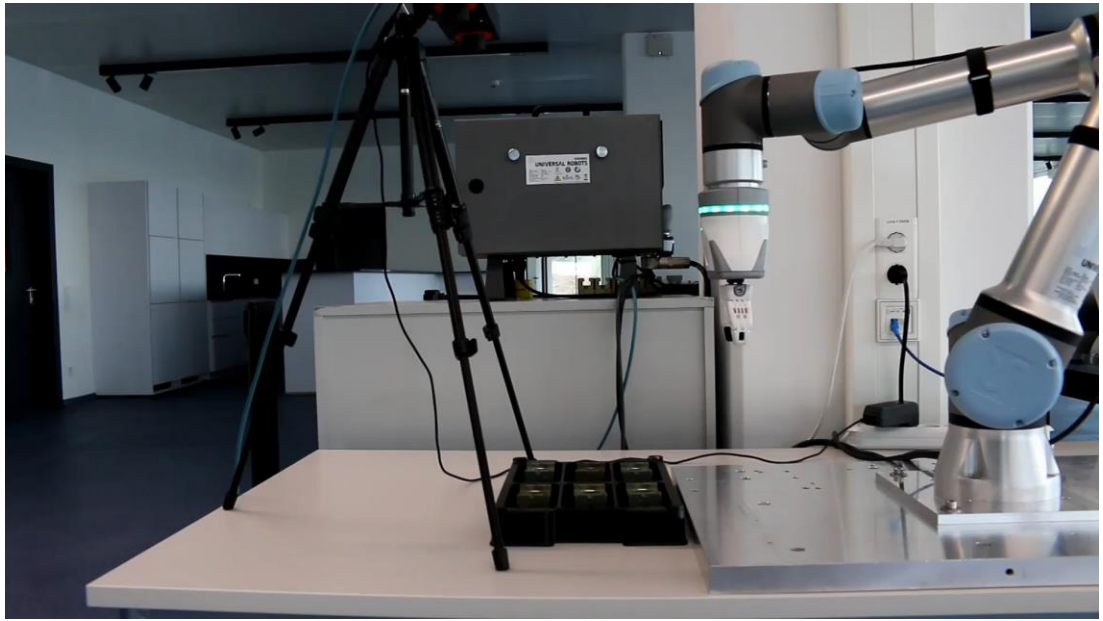
Technical data

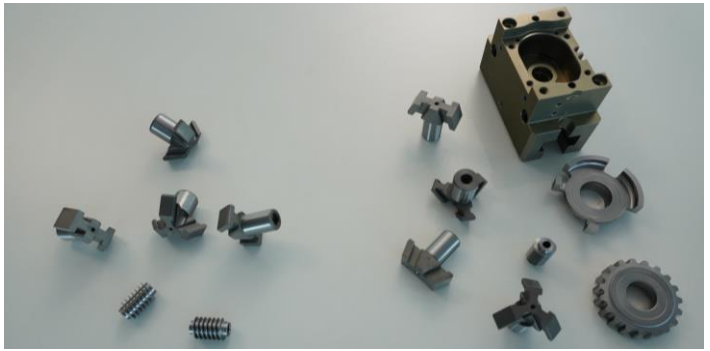
Description		SGC 160-EGH-UR-S	SGC 65-EGH-UR-D
ID		1465651	1465678
Version		static	dynamic
General operating data			
Compatible robot		UR 3/5/10/16	UR 3/5/10/16
Min./max. ambient temperature	[°C]	5/50	5/50
Nominal voltage	[V]	24	24
Operating data gripper			
Variant		EGH 80-IOL-N-UREK starter	EGH 80-IOL-N-UREK starter
Stroke per jaw	[mm]	40	40
Min./max. gripping force	[N]	0/100	0/100
Recommended workpiece weight	[kg]	0.5	0.5
Weight	[kg]	0.95	0.95
Cable connector/cable end		open wire strands	open wire strands
Cable length	[m]	4	4
Communication interface/ specification		IO-Link/V1.1	IO-Link/V1.1
Operating data camera			
Variant		rc_visard 160	rc_visard 65
Image resolution		1,280 x 960 pixels, monochrome	1,280 x 960 pixels, monochrome
Focal length	[mm]	4	4
Opening angle (horizontal/vertical)	[°]	61/48	61/48
Depth measuring range		0.5 m to infinity	0.2 m to infinity
lateral resolution (x/y direction)		0.5 mm - 2.8 mm (at 0.5 m - 3 m working distance)	0.2 mm - 2.8 mm (at 0.2 m - 3 m working distance)
Depth resolution (z-direction)		0.1 mm - 3.3 mm (at 0.5 m - 3 m working distance)	0.04 mm - 8.0 mm (at 0.2 m - 3 m working distance)
Weight	[kg]	0.84	0.68
Communication interface/ specification		GigE Vision	GigE Vision
Operating data adapter plate			
Weight	[kg]	0.101	0.209
Material		Aluminum	Aluminum

Produkt kits | Pricing

Price: 12.500 € / Set (without gripper 9.600 €)

Applications and Examples|What is possible?!





Vorteile – Ihr Nutzen

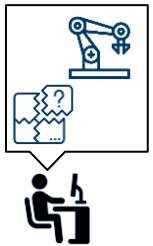
SGC

- **Vision and handling expertise from a single source** for a reliable complete solution across the entire application
- **Complete, perfectly attuned set of hardware, software, and service** for quick and easy commissioning
- **Intuitive user interface of the software** for easy configuration of the application
- **Integrated anti-collision device between gripper and transport box** for high process reliability and less downtimes
- **Plug & Work** with the interfaces suitable for all robots from Universal Robots
- **Long and freely programmable gripper stroke** for flexible handling of various workpieces

SCHUNK

Validation in the

Report:
Ideal use of components in the spec. application to Reduced customer risk.
Recommendation on process parameters
Faster commissioning for customer



Customer with application request

Product

Roboter + Product

Product validation

- ADHESO
- Magnet gripper
- Plug&Work
- Smart Grasping
- Material Removal

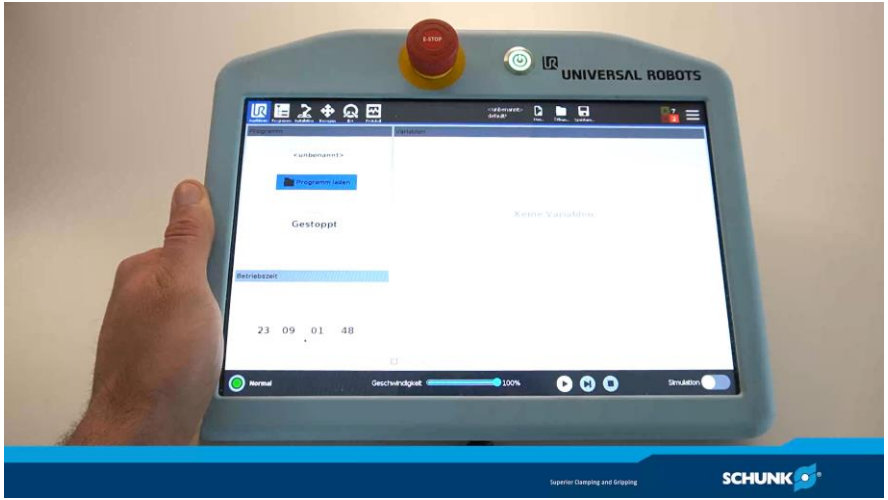
CoLab

Application validation

- Doosan
- Kuka
- Universal Robots
- Techman
- Fanuc

Exemplary CoLab
hardware setup in the
Description of the setup with list of components
Video documentation of the exemplary implementation
Customer training in CoLab

Commissiong of SGC



Applications and Examples | base jaws

Applications and Examples | Batterie cells