



Automation made easy - with smart robotics solutions.

WWW.SCHMALZ.COM

Matthias Frey, 10.02.2021

Agenda

- 1 Company
- 2 Automation Trends with Cobots
- 3 Smart Robotic Solutions
- 4 Prospect

Company

Schmalz in Figures



1500 employees

working hard for
our customers.



20 locations

for outstanding customer
service worldwide.



100 percent

family-owned.



580 copyrights

are proof of our
groundbreaking
innovations.



9 percent

of our revenue is invested
in innovative ideas and
new products.



5 time

winner in
"Germany's Best
Employers" competition.

Company

Global Presence

● Headquarters

Schmalz Germany - Glatten

● Sales and Production Companies

Schmalz Australia - Melbourne

Schmalz China - Shanghai

Schmalz India - Pune

Schmalz Japan - Yokohama

Schmalz USA - Raleigh (NC)

● Sales Companies

● Sales Partners



With **20 locations** and sales partners in **60 countries**, we are always in close proximity to our customers.

Company

Business Units



Vacuum Automation

Components, Systems, Clamping Solutions



Handling Systems

Vacuum Lifters and Crane Systems



Energy Storage

Redox Flow Stacks for Energy Storage

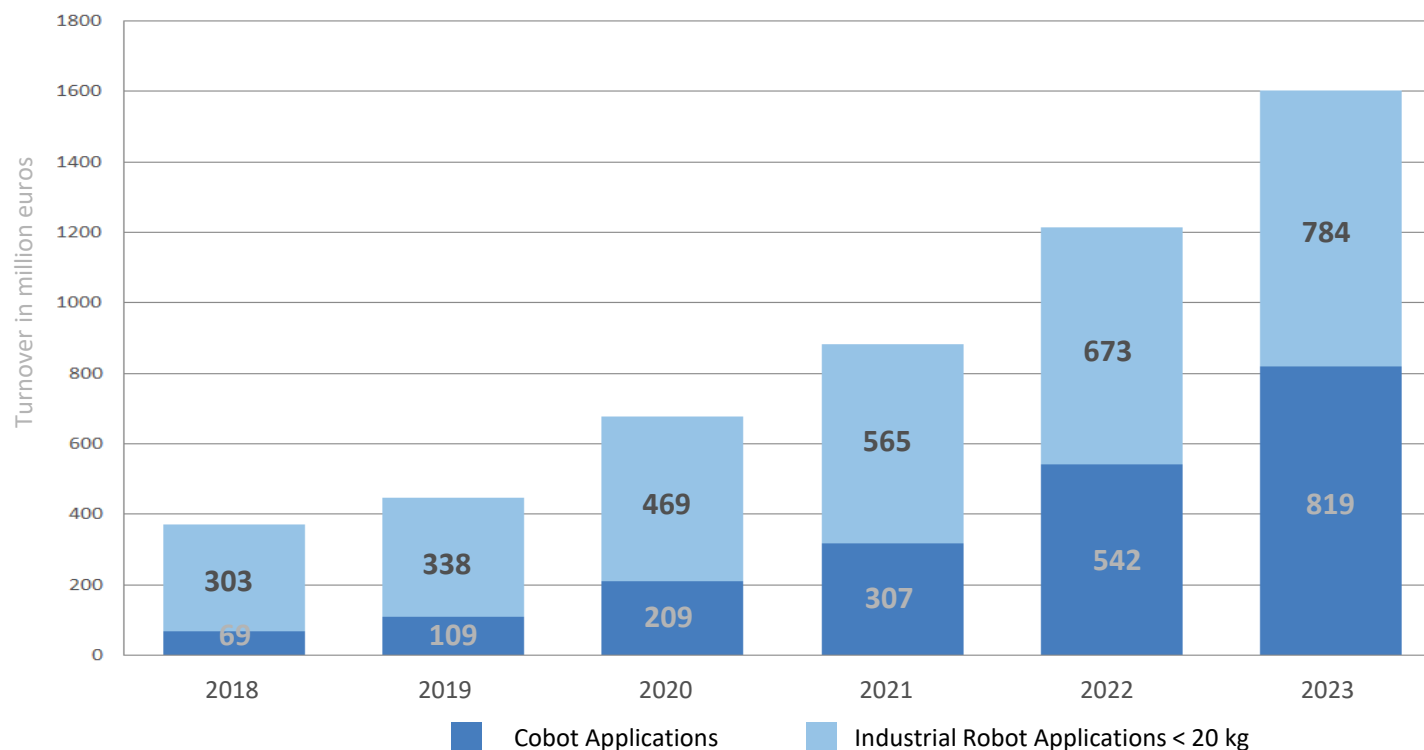
Agenda

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Automation Trends with Cobots

Robotics on growth course worldwide

Global revenue potential for Cobot end-of-arm tools



1.6 Billion Euros

in the year 2023 is

the worldwide sales potential

for robot grippers.

Source: International Federation of Robotics Report 2019
(without impact of COVID19)

Automation Trends with Cobots

Cause for the growth of Cobots



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Smart Robotic Solutions

Smart during the complete customer journey / UX



Smart Robotic Solutions

Description of Application/Automation

FINDING THE RIGHT CONCEPT

Restart

APPLICATION

1 2 3 4

SCHMALZ

How would you describe your Application?

☐ Pick & Place

☐ Packaging & Palletizing

☐ Machine Tending

☐ Assembly

☐ Quality Testing & Lab

☐ Other Application



Application Fields

Please select the type of application on the left that fits your requirements. If you do not find your application, please select "Other application".

Source: <http://www.schmalz-robotics.com/>



Source: <https://www.coboworx.com/index.html/>, <https://rbtx.com/de>, <https://unchainedrobotics.de/>

Smart Robotic Solutions

Online Selection-Tools

FINDING THE RIGHT PRODUCTS



[Vacuum Technology for Automation](#)
[Vacuum Lifters and Crane Systems](#)
[Vacuum Clamping Technology](#)
[Vacuum Technology for Robotics](#)
[Digital Services](#)
[About Schmalz](#)
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[Homepage](#) > [Vacuum Technology for Automation](#) > [Selection Aids](#) > [Selection Aid Compact Ejectors](#)

[Vacuum Components](#)
[Vacuum Gripping Systems](#)
[Selection Aids](#)
[Selection Aid Vacuum Suction Cups](#)
[Selection Aid Compact Ejectors](#)
[Selection Aid Spring Plungers](#)
[Selection Aid Area Gripping System FXP](#)
[Selection Aid Area Gripping System FMP](#)

[Product News](#)
[Industries and Applications](#)
[Services](#)
[Schmalz Select | Preferred Product Range](#)

Selection Aids for Compact Ejectors

This selection aid helps you to find the perfect compact ejector for your application based on key technical attributes.

Suction rate (max) [l/min]

 -

Nozzle diameter [mm]

 -

Degree of evacuation [%]

 -

Air consumption (during evacuation) [l/min]

 -

Industries

[Composites](#)
[Electronics](#)
[Glass](#)
[Metal](#)
[Packaging](#)

[Plastics](#)
[Solar](#)
[Universal](#)
[Wood](#)

Labeling

[New](#)

Source: <http://www.schmalz-robotics.com/>


[HOME](#)
[COBOTS](#)
[END OF ARM TOOLS](#)
[EBOOK](#)
[CONTACT](#)
[APPLICATION SOLVER](#)
[BLOG](#)
[in](#)
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Discover Our Cobots List with More than 150 Collaborative Robots

DoF

Payload (kg)

Reach (mm)

Repeatability (mm)

Country

Market Availability

[Submit](#)
[Reset](#)



ABB IRB 14000 YUMI



ABB IRB 14050 YUMI



ACUTRONIC ROBOTICS MARA



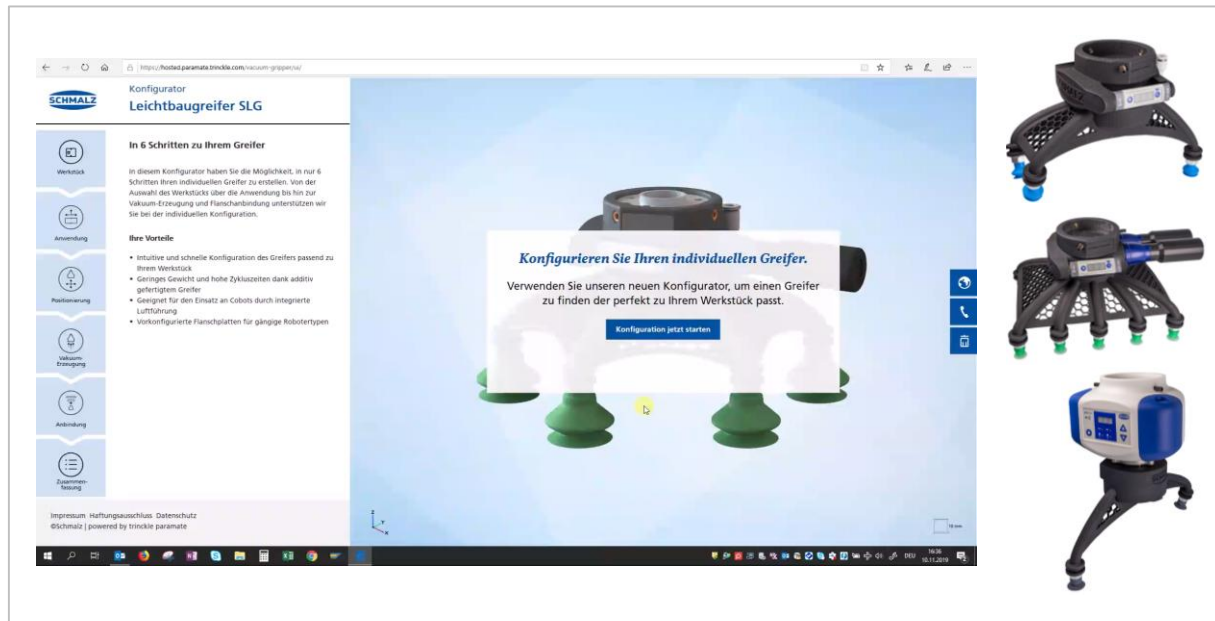
AURO 10

Source: <https://www.coboticsworld.com/>

Smart Robotic Solutions

Online Engineering-Tools

FINDING THE RIGHT DIMENSIONS



Source: <http://www.schmalz-robotics.com/>,

Fraunhofer IFF



© Fraunhofer IFF

MR_KOOP

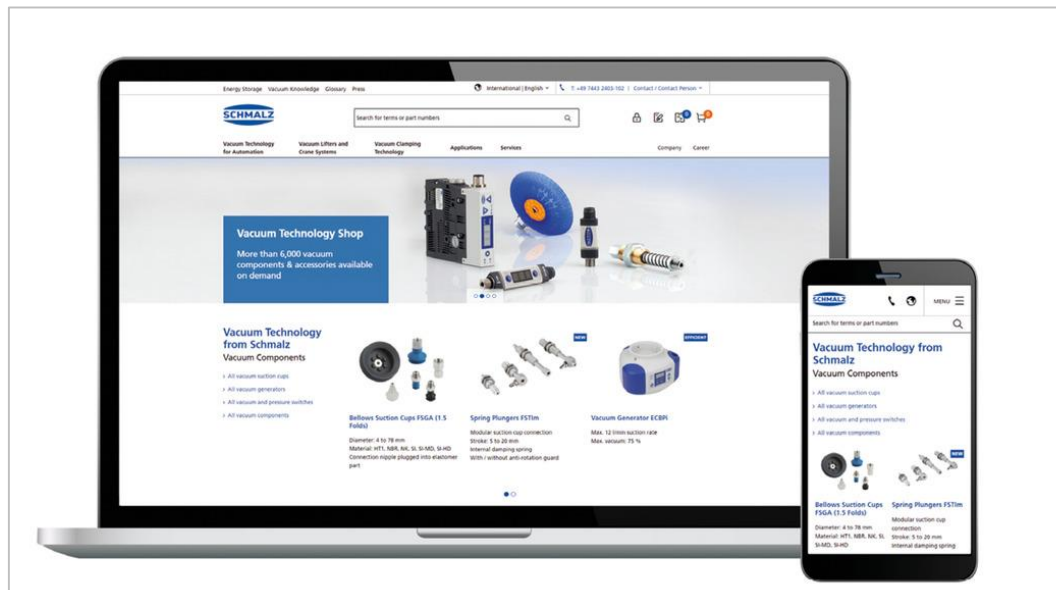
Innovative Entwicklungswerkzeuge zur effizienten Planung von industriellen Applikationen mit Mensch-Roboter-Kooperation

Source: <https://www.iff.fraunhofer.de/de/geschaeftsbereiche/robotersysteme/forschung/sichere-mensch-roboter-interaktion/computer-aided-safety.html>

Smart Robotic Solutions

Online-Shop

BUYING THE SOLUTION



Source: <http://www.schmalz-robotics.com/>, <https://www.igus.de/cart>; <https://cobot-shop.info/cart> ,


ibk IngenieurConsult
 Die Lösung.

[Suchen](#)
[Unsere Produkte ▾](#)
[Kontakt](#)

Warenkorb

		Preis	Menge	Gesamt
	KR1205 nicht gewünscht Entfernen	€31.500,00	1	€31.500,00
	Yu+ 5/100 Entfernen	€32.000,00	1	€32.000,00


plastics for longer life®

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[Branchen](#)
[Service](#)
[Unternehmen](#)
[Mein Ansprechpartner](#)
[DE/DE](#)

Warenkorb

Polymer Gleitlager

Pos. 1	 drylin® Delta Roboter Baugröße 360, Bausatz in kompakter Transportbox, ohne Motoren Art.-Nr.: DLE-DR-0005 In 2-3 Wochen versandfertig ► Bemerkungen	Anzahl 1	Einzel 3.150,00 EUR	Gesamt 3.150,00 EUR
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Versandart
 Versand nur innerhalb: Deutschland
 ► [Hinweis](#)

Versandart
 UPS Standard

Versandkosten
 0,00 EUR

Versandkosten
 0,00 EUR
Summe (Netto)
 3.150,00 EUR
 zzgl. MwSt.

[Warenkorb weiterleiten](#)
[Warenkorb anfragen](#)
[Zur Kasse gehen](#)

Smart Products for Plug and Work

SMART GRIPPERS

- Vacuum suction pads
- Area grippers
- 3D printing configurable grippers
- Finger grippers
- Flow grippers



VACUUM GENERATION

- Electric vacuum generators
- Pneumatic vacuum generators

SOFTWARE & ACCESSORIES

- Pick & Place •
- Bin-Picking •
- Packaging •
- Palletizing •

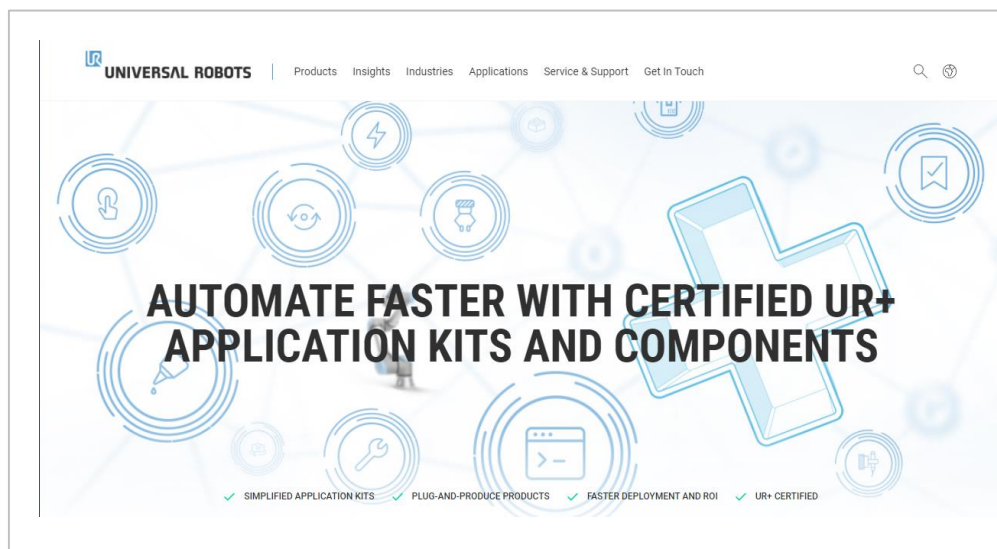
APPLICATION SPECIFIC COMPLETE SETS

- Machine loading •
- Quality inspection •
- Laboratory analysis •
- Assembly •

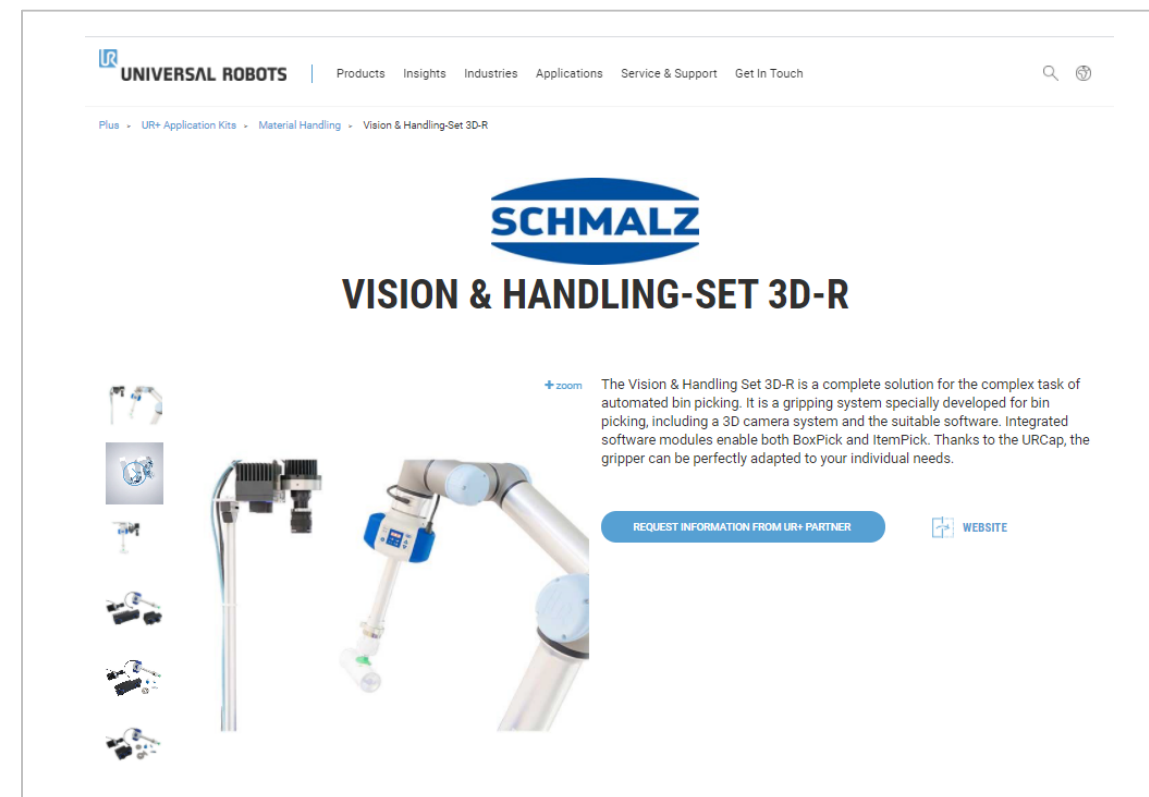
Smart Robotic Solutions

Smart Products for Plug and Work

PLUG AND WORK WITH THE SOLUTION



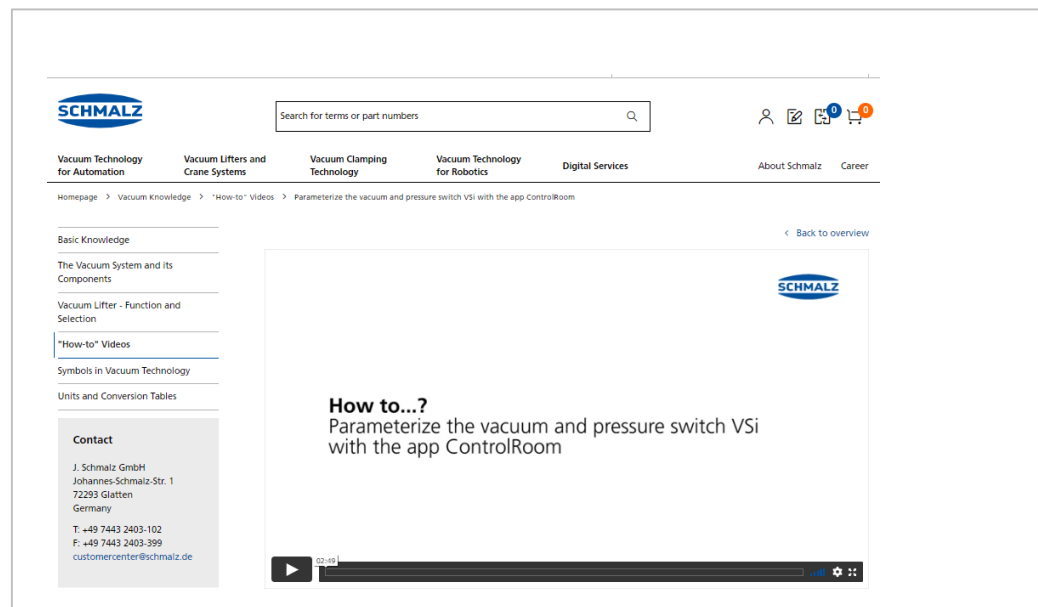
Source: <https://www.universal-robots.com/plus/>



Smart Robotic Solutions

Quick Help

“HOW TO”-VIDEOS AND QUICK START GUIDE

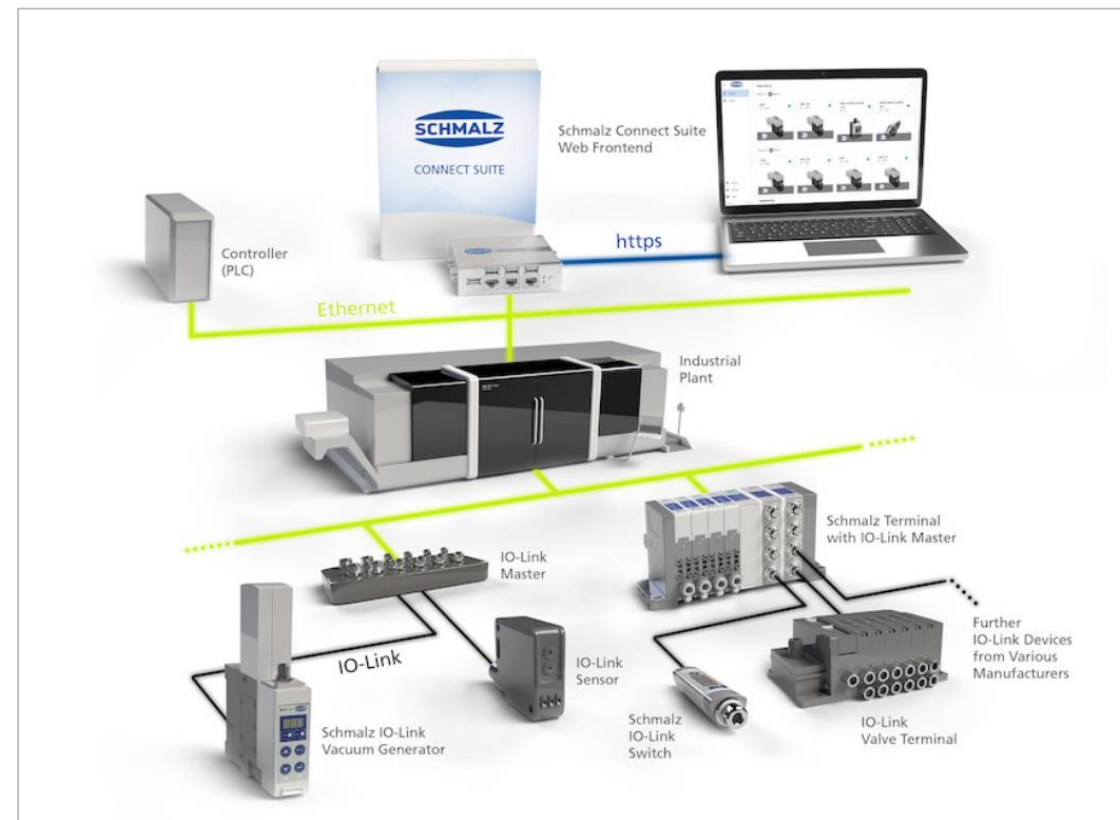
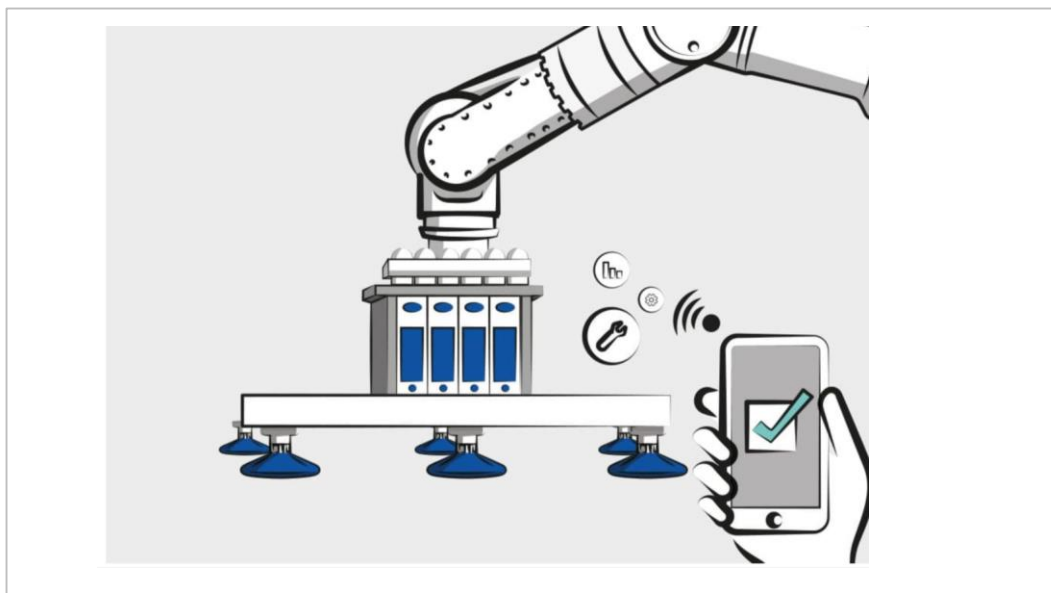


Source: <http://www.schmalz-robotics.com> , www.youtube.com, www.vimeo.com

Smart Robotic Solutions

Digital Services

OPTIMIZE AND MAINTAIN THE SOLUTION

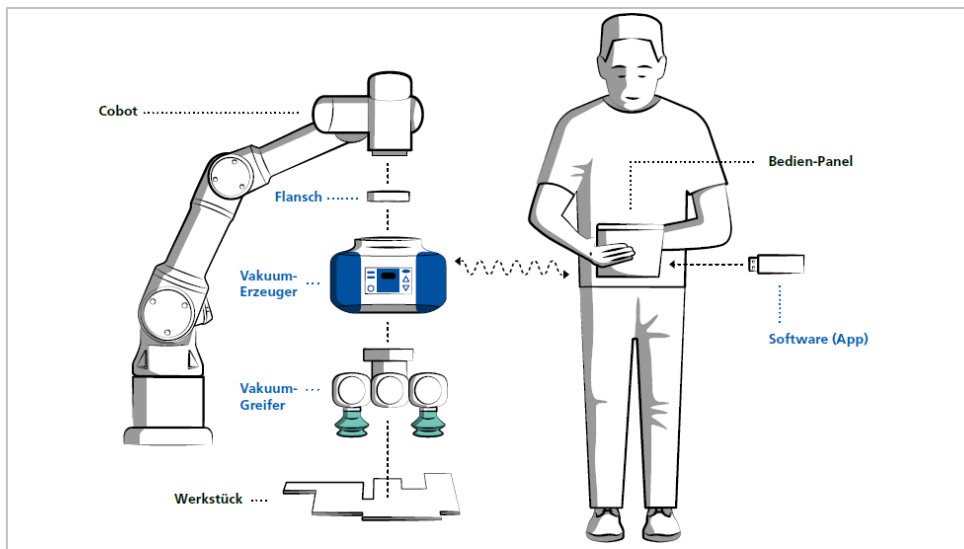


Agenda

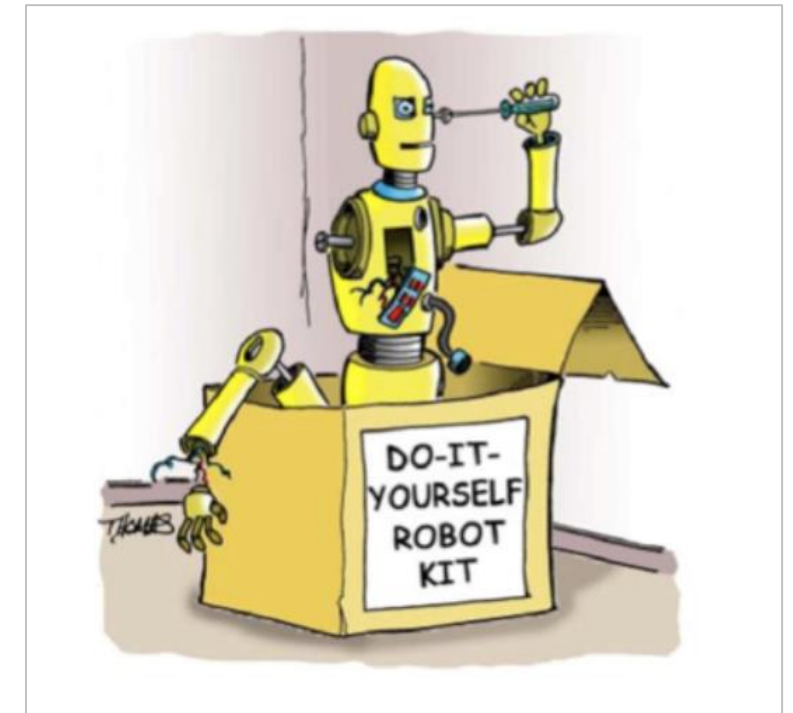
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Prospect

Where does the journey go?



Automatic automation



Source: <http://www.schmalz-robotics.com/>, <https://glasshospital.com/2011/10/16/help-wanted-diy-medicine/>

Vielen Dank.

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