

Hand in hand for tomorrow



# Flexible Robotic Deburring

Relieving workers from dull, dirty  
and dangerous tasks or how to  
deal with labour shortage

Felix Eißele



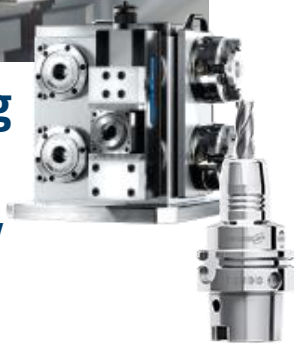
# It's time to use the full Potentials!

Benefit of a perfectly harmonized interplay of superior SCHUNK components for clamping & machining, gripping, and in automated handling of your workpieces.



## Individual clamping & machining

Toolholding and stationary workholding program & lathe chuck technology



## Individual gripping and automation

Gripping technology  
**Robotic Material Removal**  
Robot accessories  
Linear and rotary axes

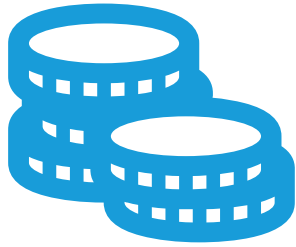


## Individual loading

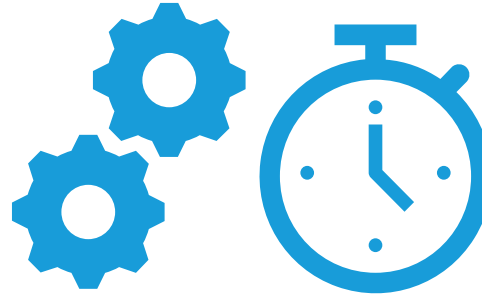
Gripping technology & quick-change pallet systems



# Why to automate?



Cost Reduction



Process optimization



Quality



Technical Progress

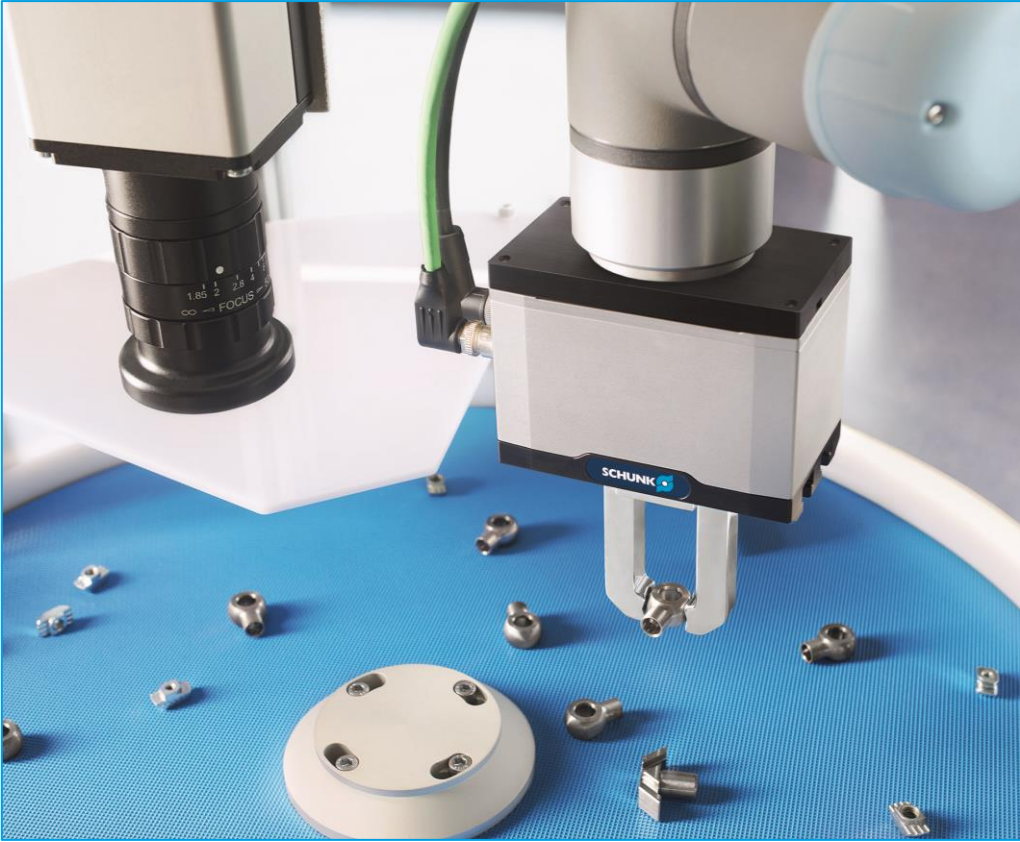


Health



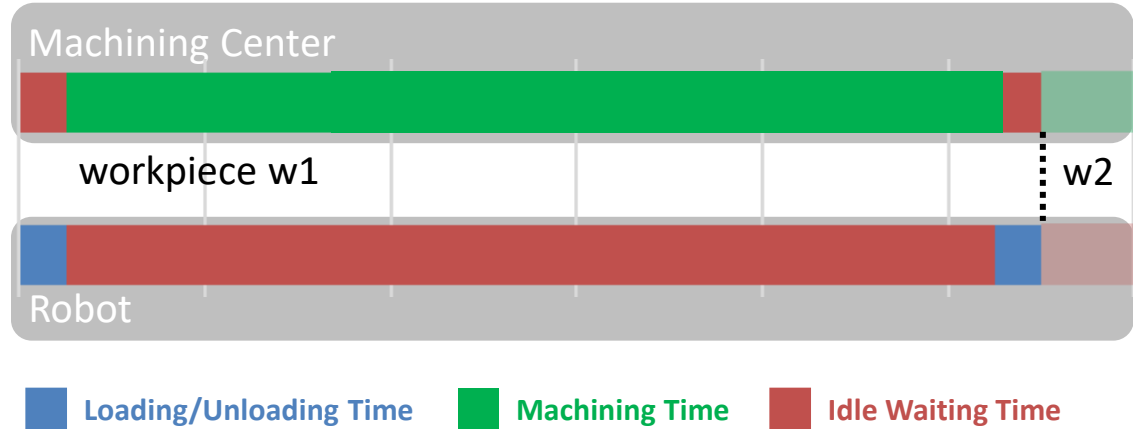
Demography  
Ergonomics

# Machine Tending



# Economic View

Machine Tending



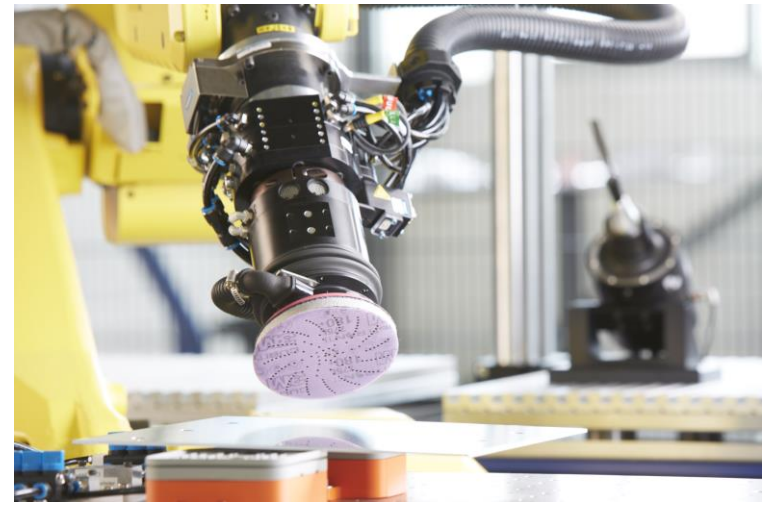
## Further task for robots

- Inspection
- Sorting
- Packaging
- **Material Removal**

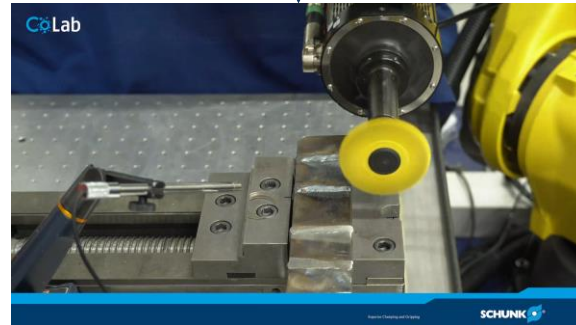
R-EMENDO (robotic + lat. emendo: improve, correct)



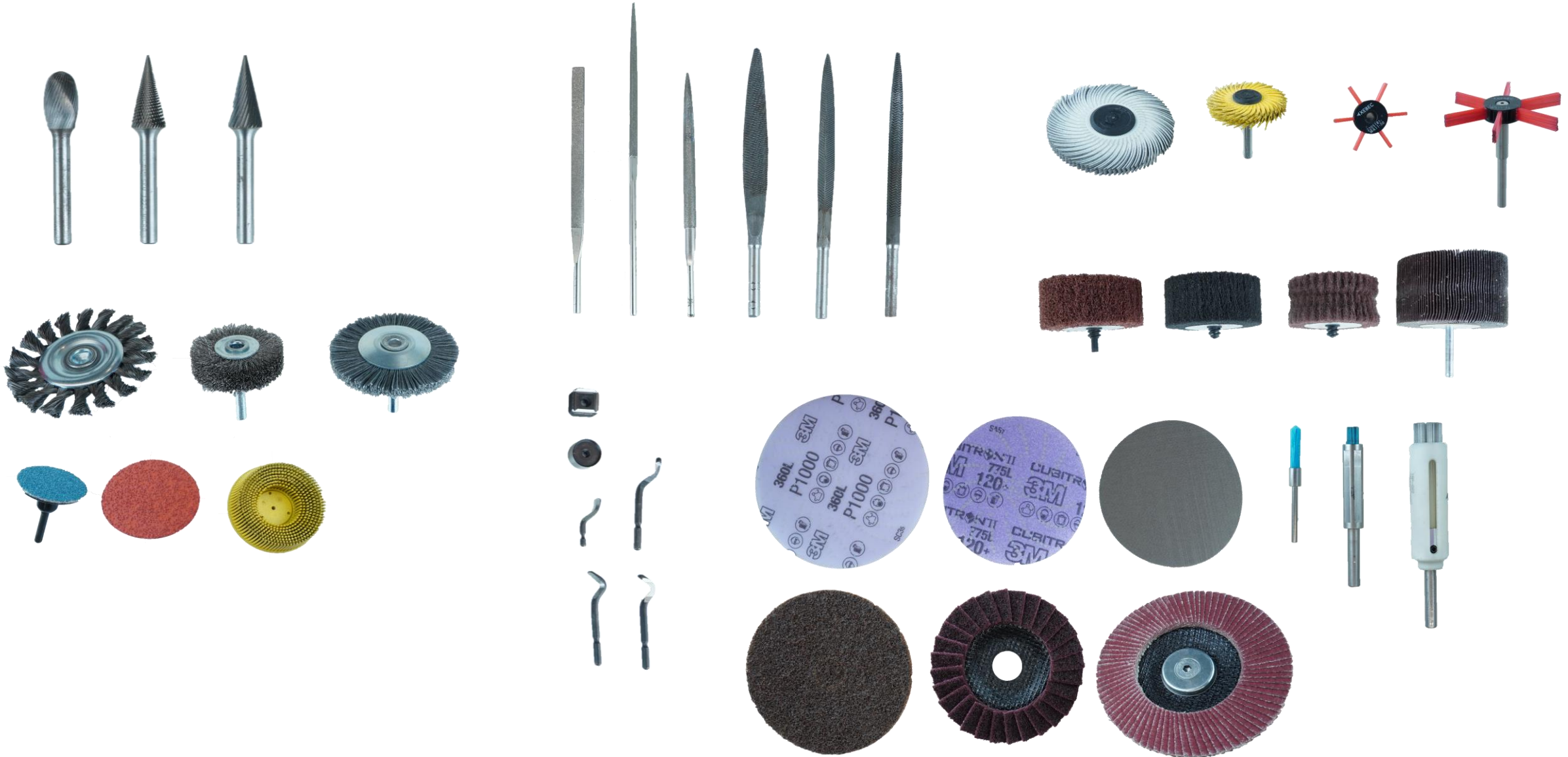
# Robotic Material Removal - Impressions



# Typical applications



# Checking recent process

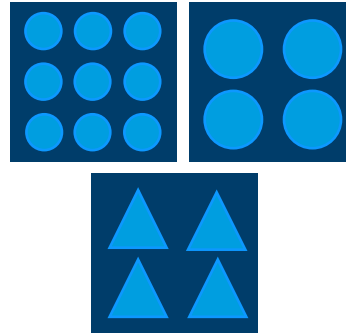




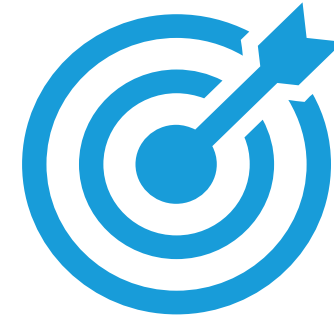
# What to consider?



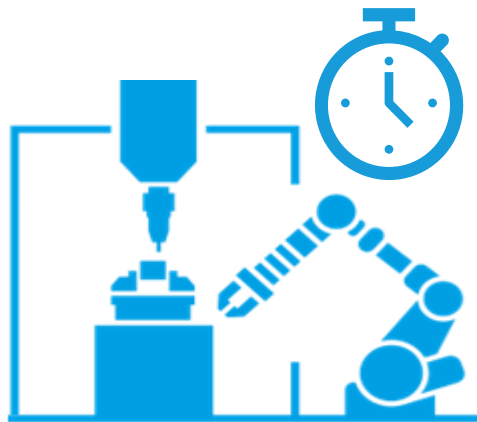
Geometry & Material



Batch size & Quantity



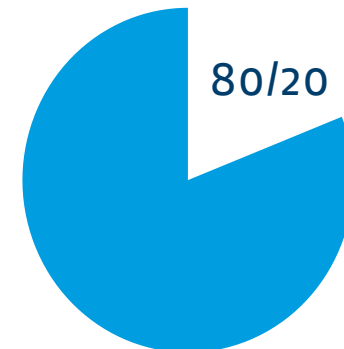
tolerances



Degree of Automation

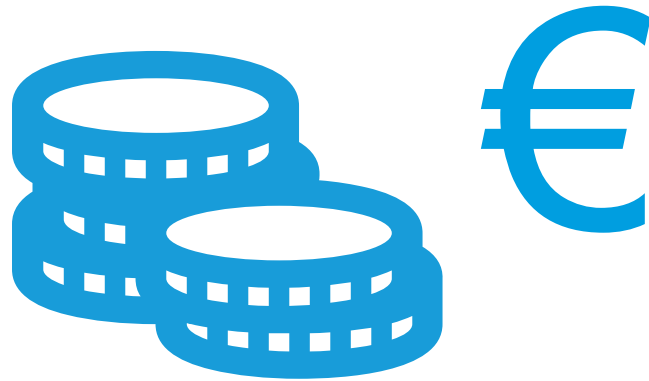


Cycle Time



Scope of process

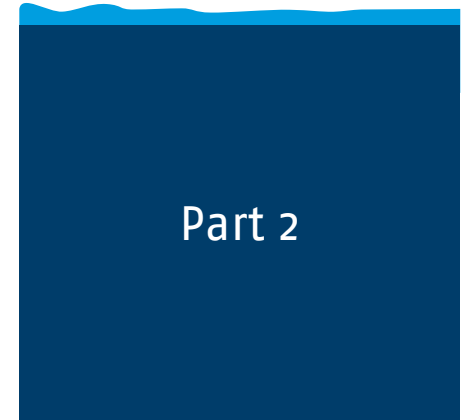
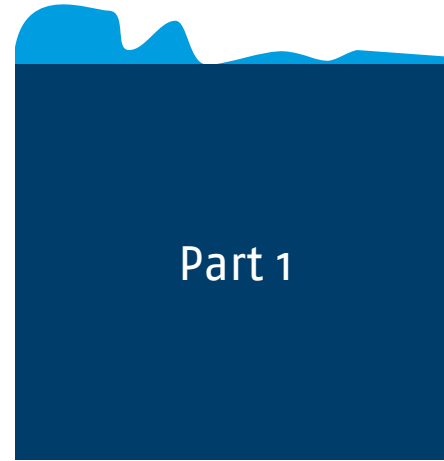
# What to consider?



Investment

# What to consider?

Input state



Target state



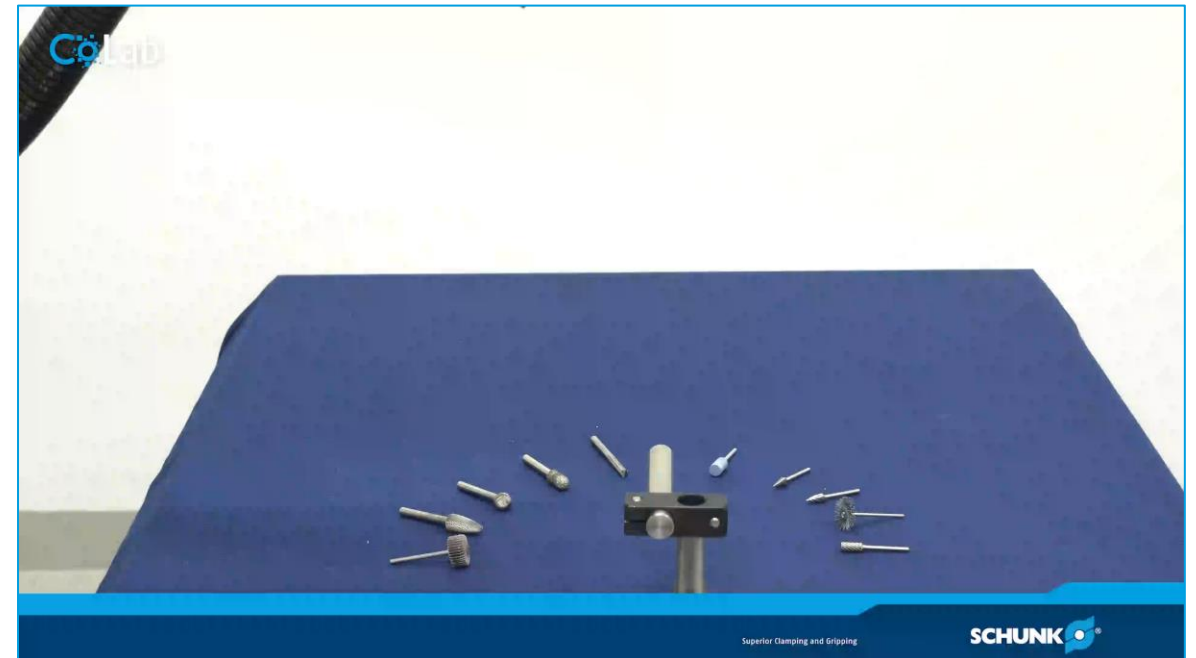
# Compliant Spindles

- **Flexible**

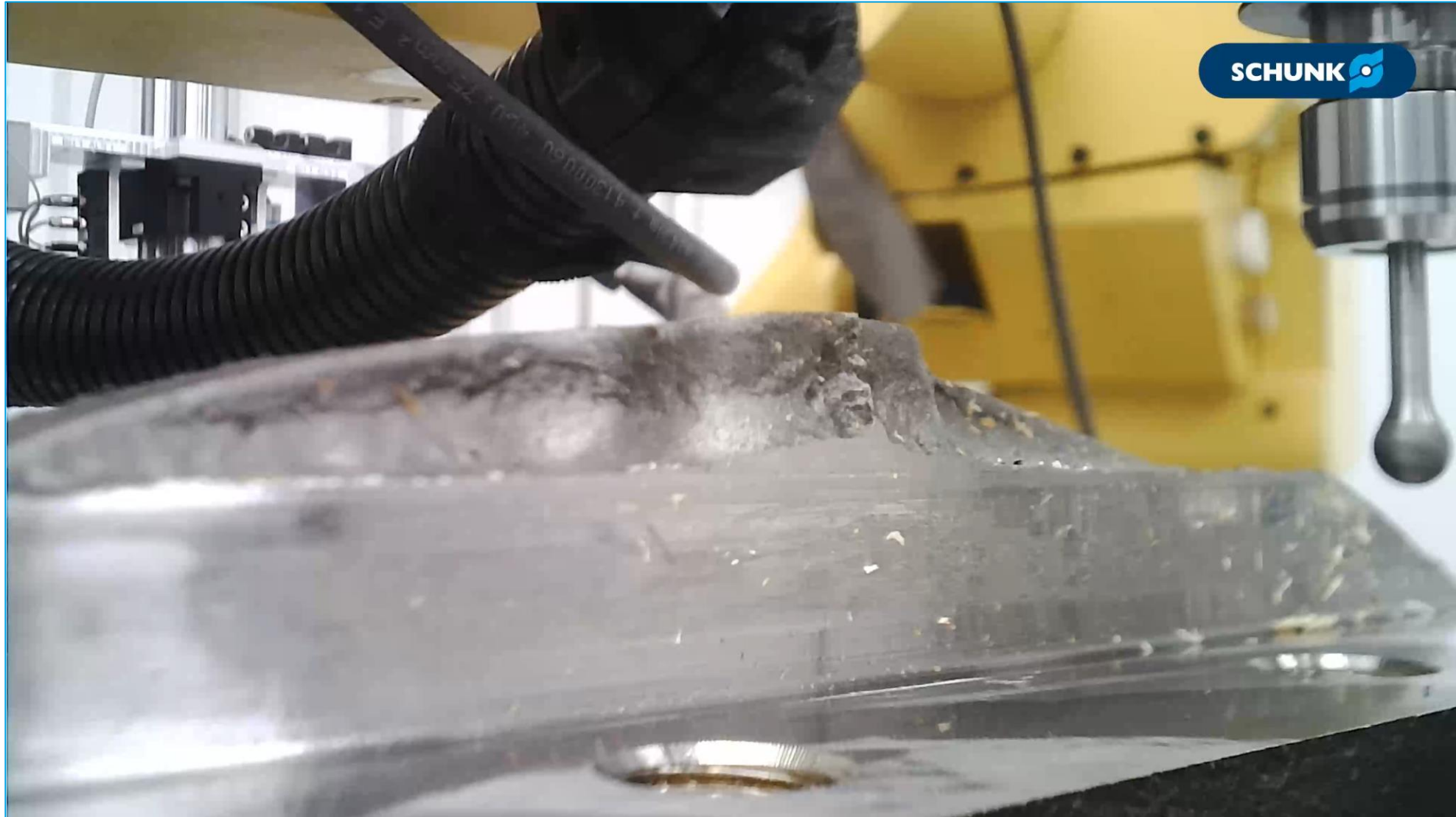
For form- & position tolerances

- **Easy**

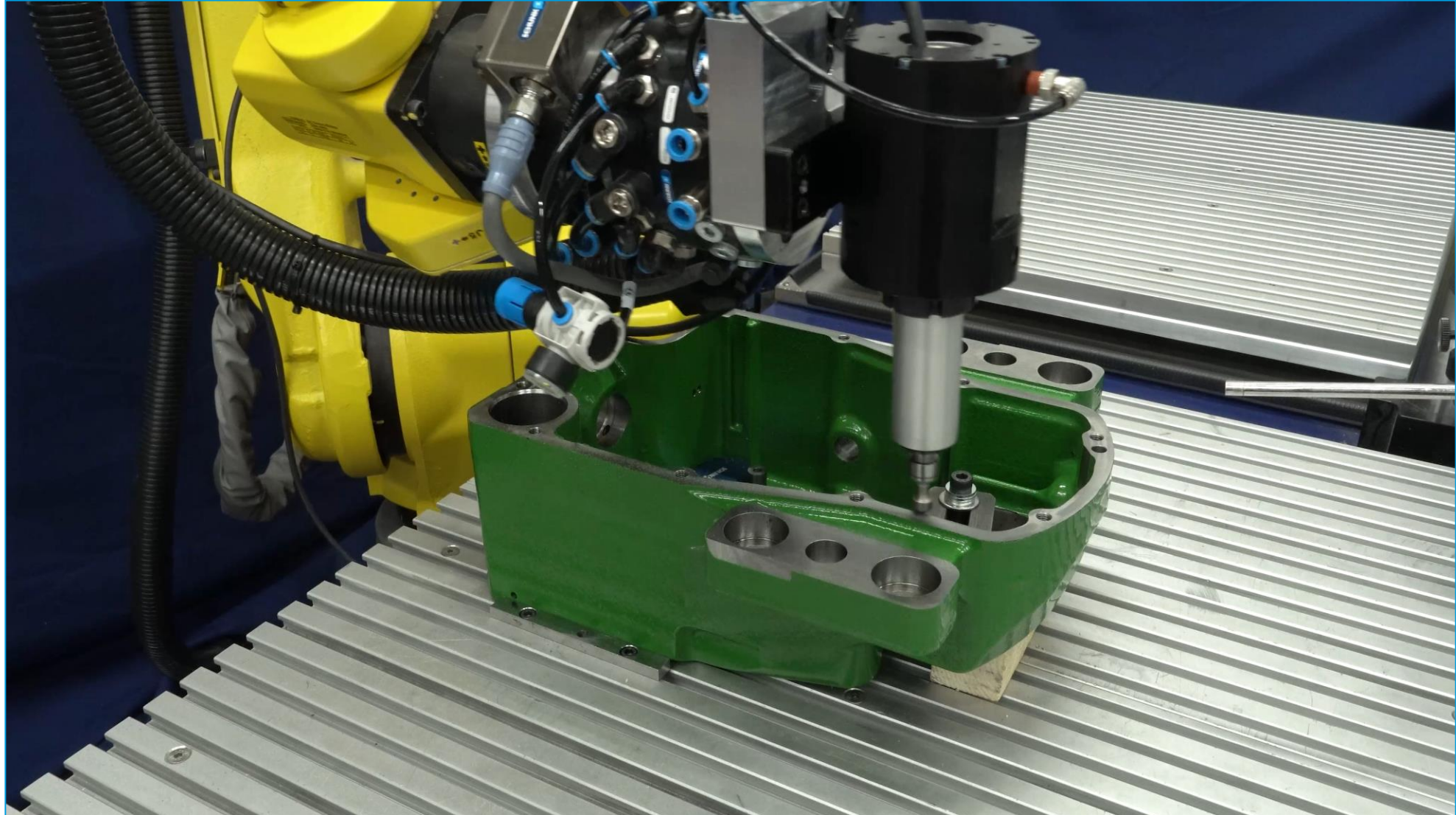
To teach & programm



# Deburring of casted parts



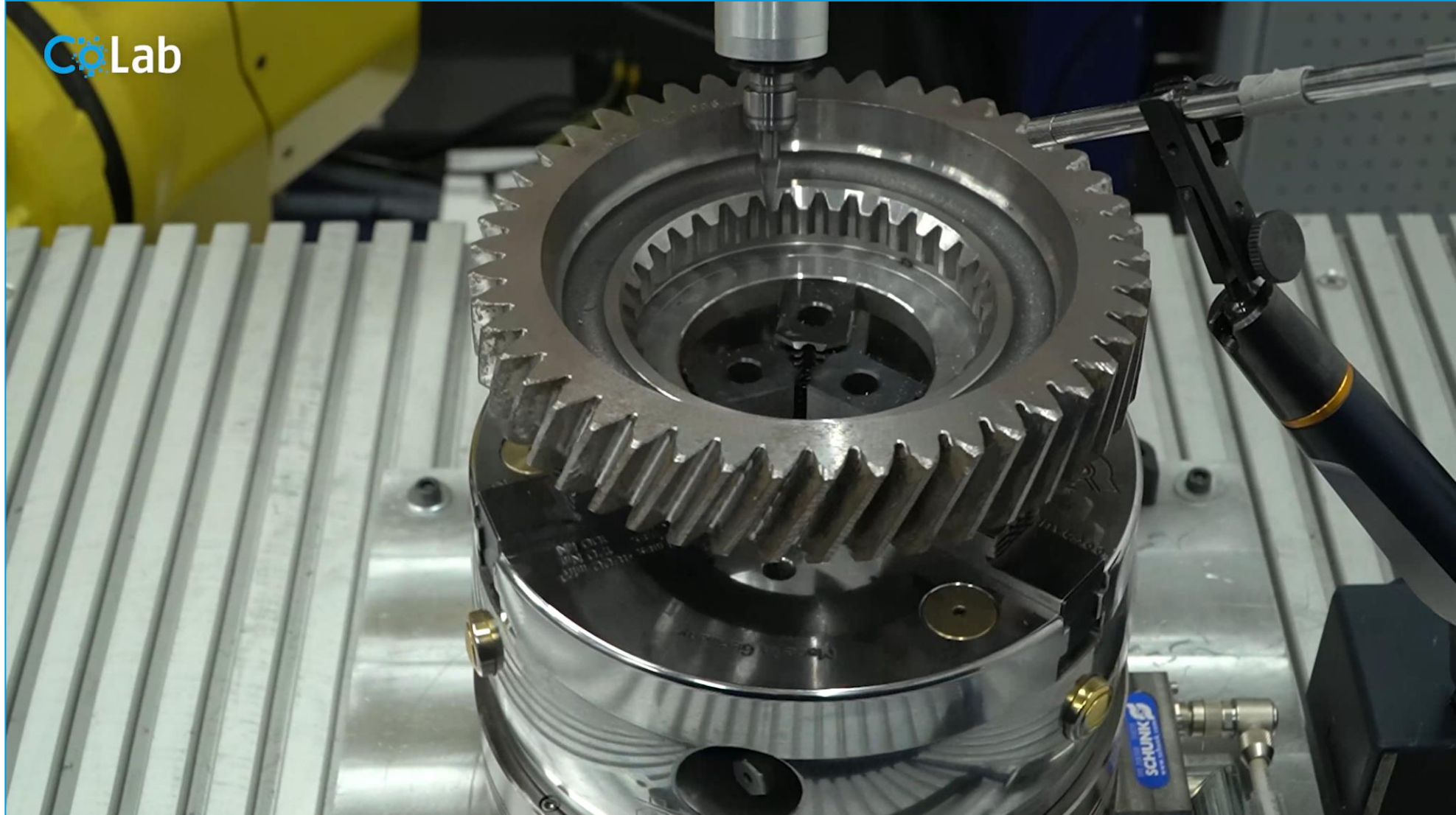
# Deburring of casted parts



# Brushing of edges & surfaces



# Deburring of gear wheels





# Chamfering & Deburring of aluminium part



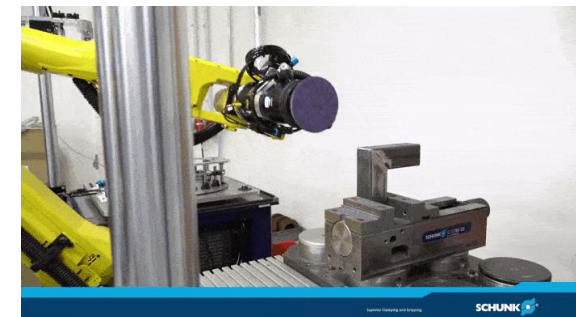
# Brushing of saw section



## The Test Cell for R-EMENDO applications offers:

- Trails with your workpiece and our products & know how
- Minimization of risk: Evaluate your processes early
- Reduced effort: Safe time & money at your process start-up
- Demonstration of your Process on site in CoLab or online

**➔ You bring the workpiece – SCHUNK offers a solution!**



# Expert Days October 25th and 26th



## Expert Days 2023

The success story continues!

We cordially invite you to the SCHUNK Expert Days on October 25 and 26, 2023 in Brackenheim-Hausen. Become part of our community!



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