

# EASY.ROBOT.VISION.

#### Alexander Resch

a.resch@sensopart.de Product Management Vision SensoPart Industriesensorik GmbH 79228 Gottenheim

# **A**genda



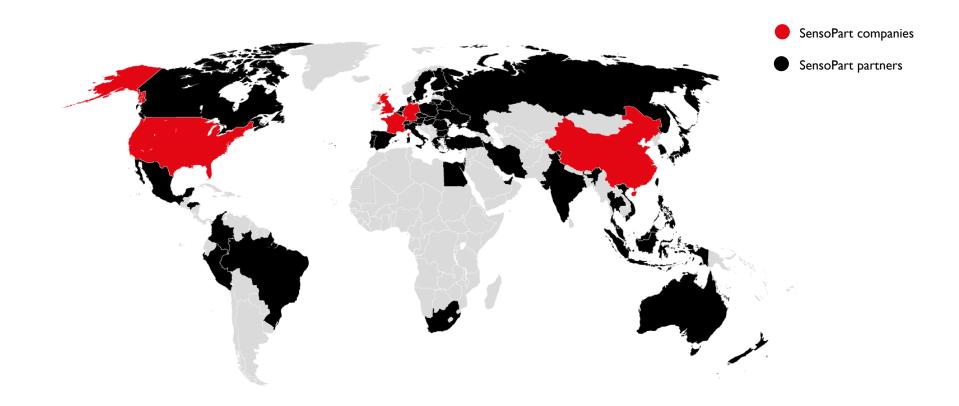
Applications

Communication through calibration

Demos

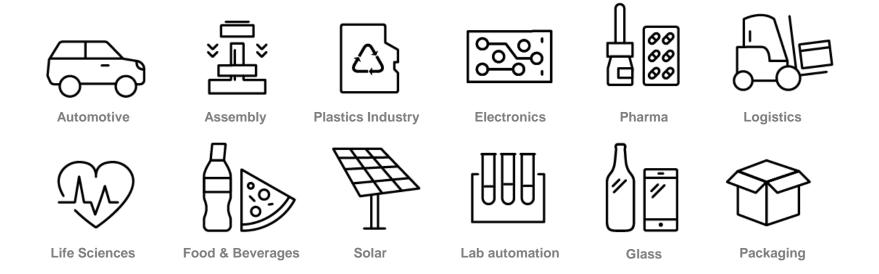
#### SensoPart worldwide



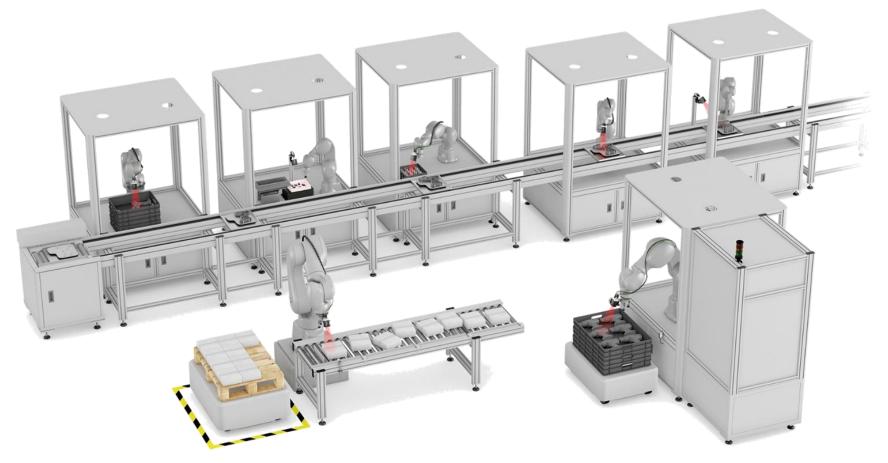








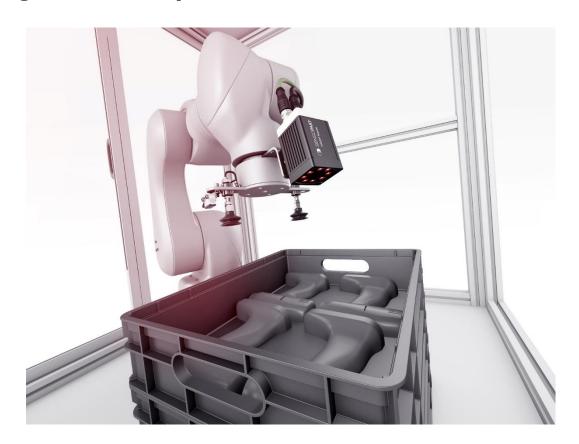






### Smoothly: Feeding material using universal tray

- Presence check and simultaneous determination of gripping poses for multiple objects
- Secure, contour-based picking from universal tray under external variances
- Reliable adjustment to changing environments
- Accurate placement on workpiece carrier





# Imperturbably: Robot feeding via shaker conveyor

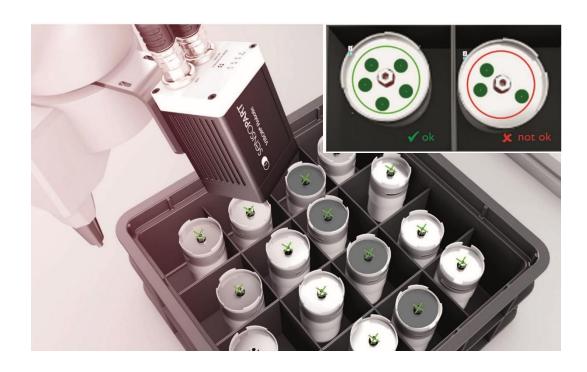
- High throughput, but unstructured positioning of parts
- BLOB- and contour-based detection, counting and simultaneous gripping space check
- Precise positioning of parts in the power drill



# **Clean: Automatic application of lubricants**



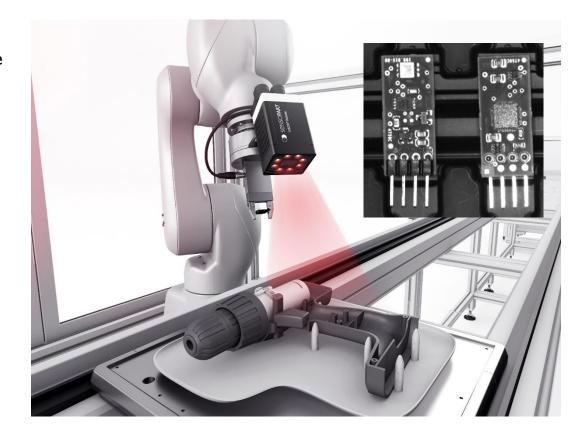
- Precise application of lubricants
- No smearing or smudging
- Inspection of amount and distribution via BLOB detection und counting
- No malfunctions due to imprecise application





#### **Confident: Placement of electronics in the power tool**

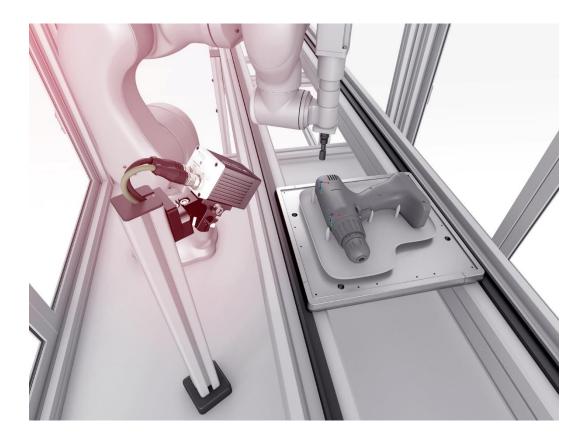
- Safe pick and place of electronic components out of trays and into case usind highly precise robot calibration
- Simultanous, optical quality assurance of electronic components
- Contour-based positioning in the case







- Determination of housing orientation via 3D-contour detection
- Precise approach of 3D-screwing positions
- Reduced program length with calculations on the vision system

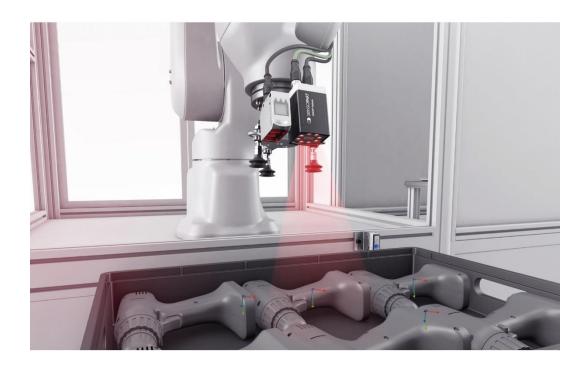






# Perfect Condition: Equipping of a testing station

- Flexible identification of power tools with arbitrary variant diversity
- Precise insertion into and removal from testing station with accurate, geometry-based referencing
- Efficient usage of testing station because of high availability







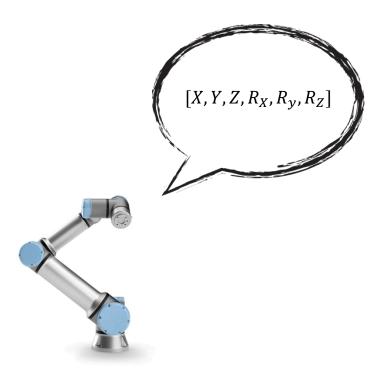
# In piles: Palettizing of packaged power tools

- Individually coordinated palletization through identification via code reader
- Reliable gripping under positional variance on the conveyor by using contour- or BLOB-based detection
- High frequency positioning on pallets



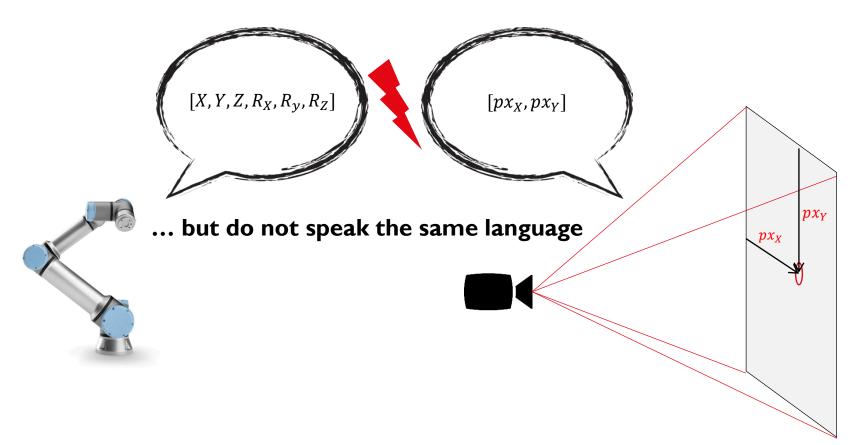






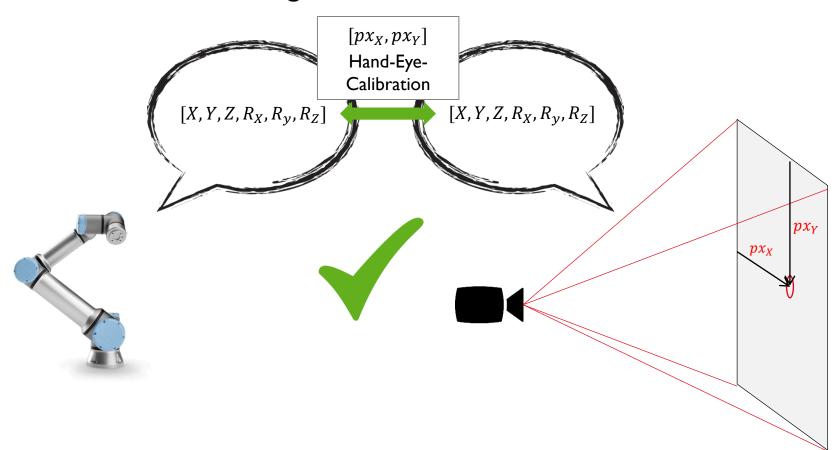
# Robot and camera are talking to each other...







# Robot and camera are talking to each other...



#### **Key Facts**



- Highly integrated Fully assembly line with one single vision system, the VISOR® Robotic
- Easy start up in a matter of minutes
- Customizable integration and communication with various systems and manufacturers

















# THANK YOU

EASY.ROBOT.VISION.

Alexander Resch

a.resch@sensopart.de Product Management Vision SensoPart Industriesensorik GmbH 79228 Gottenheim