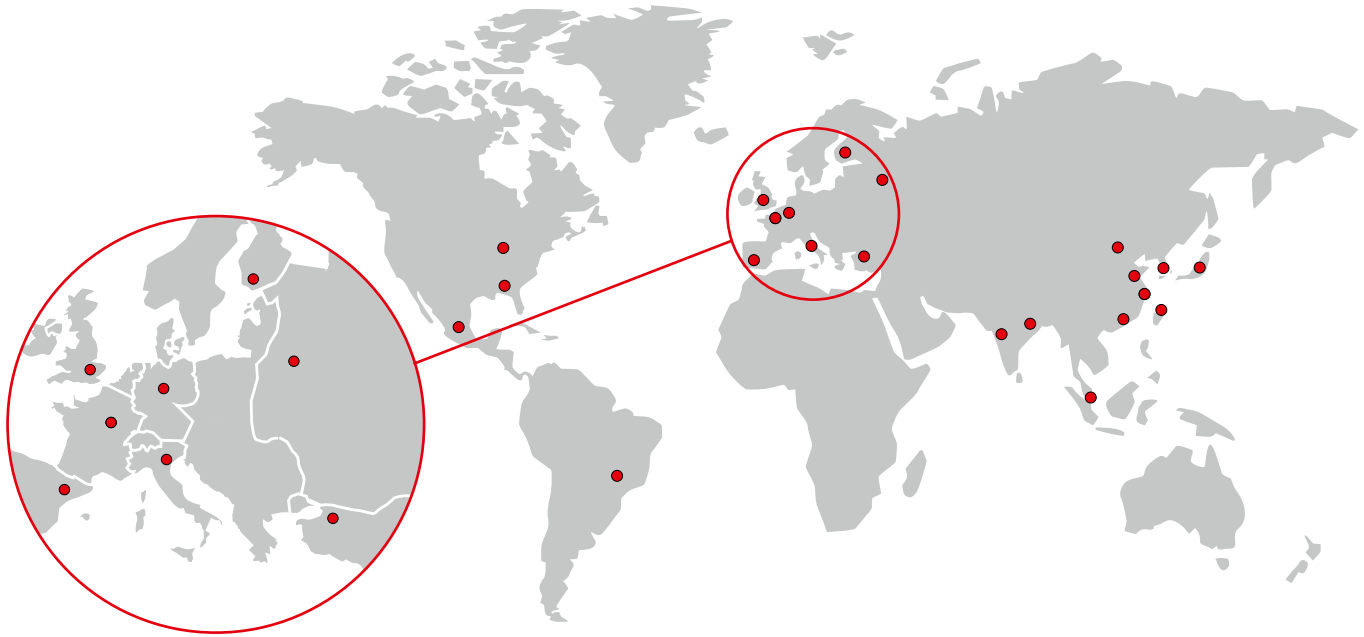


INNOVATION FOR ROBOT AUTOMATION



Automation at its best

ISRA VISION has been a leading supplier of high-performance quality inspection, robot guidance and production logistics systems for more than 30 years.

Our systems are used around the world in many different industries and applications. Our mission is to offer a comprehensive portfolio of standard solutions, covering all requirements along the process chain.

ISRA's experience and technological competence in the field of industrial image processing has been proven by thousands of successfully installed systems worldwide.

Benefits at a glance

Customers opt for ISRA's solutions for the following reasons:

- Our development activities are consistently aligned with our customers' requirements.
- We are continuously expanding our knowledge and expertise in all core areas of industrial image processing.
- Our customer relationships do not end with the delivery of new products. The Customer Support and Service Center provides comprehensive support for the use of your systems and helps you to increase your productivity – be it via our telephone hotline, remote service, on-site service, or our maintenance services.
- More than 900 employees at our sites in Europe, North and South America, and Asia are committed to your success.

ISRA VISION

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India
Tel.: +91 98 23 16 24 55

Optimize your ROI with the technology leader **ISRA**
info@isravision.com www.isravision.com

**EMBEDDED POINT CLOUD
ENGINES**



**TOUCH &
AUTOMATE**
Beyond **INDUSTRIE 4.0**

MULTI-STEREO-QUAD-CAMERA-TECHNOLOGY

3D ROBOT VISION FOR BIN PICKING

PowerPICK3D

**MAXIMUM PERFORMANCE FOR
HIGHEST FLEXIBILITY**

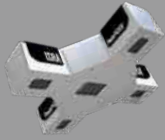


ISRA
V I S I O N

FASTEST CYCLE TIMES, MAXIMUM PERFORMANCE AND ACCURACY WITH PowerPICK3D

PowerPICK3D

Multi-Stereo-QUAD-Camera-Technology



PowerPICK3D-600



PowerPICK3D-800



PowerPICK3D-1200

NEW 3D SENSOR FOR RANDOM BIN PICKING OF COMPONENTS WITH ANY DESIGN AND SHAPE

Random bin picking is an automation solution in which a robot, equipped with 3D vision technology, takes parts out of a container filled with unsorted pieces and aligns them properly.

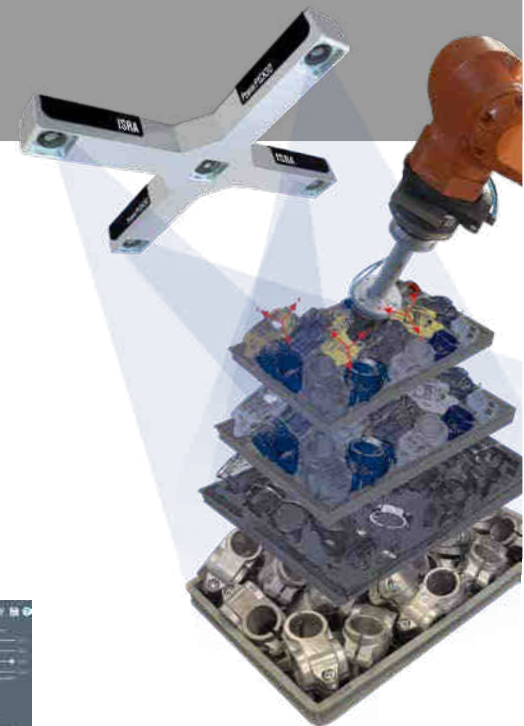
PowerPICK3D was developed to enable reliable bin picking even for small parts regardless of geometry, surface or material. Manufacturing operations rely on this bin picking solution to significantly save costs and manufacturing time. Installation is easy, and performance is maximized through various benefits.



Generation of
3D Point Cloud



Detection of Parts in
the 3D Point Cloud

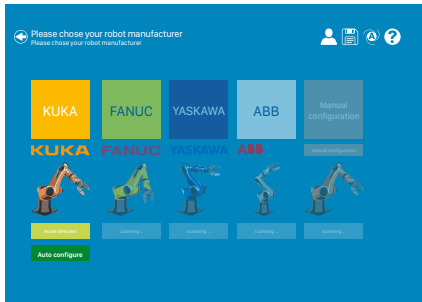


Path Planning
& Picking

Over 30 years of Robot Vision Experience of more than 10.000 installed systems in market Global Service Network | Embedded Design: Maximum performance for your industrial application | Plug & Automate: Ready to use within minutes | Reliable & Robust: Process stability powered by innovative features | Ready for the Future: Industrie 4.0 communication technology

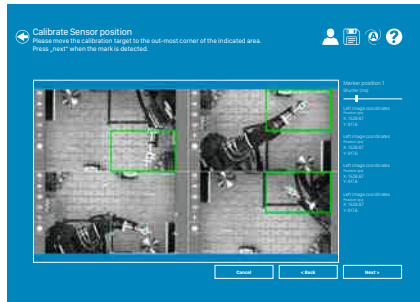
READY-TO-USE IN 10 MINUTES

Setup with 1-Click-Robot-Interface



Seamless robot communication across different robot brands

Automatic Calibration and Tuning



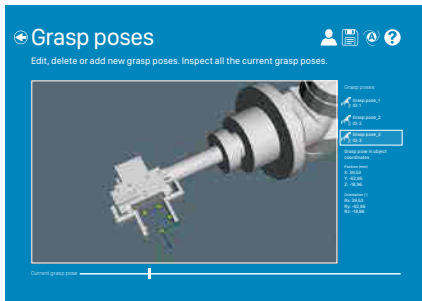
Fast and easy sensor setup

Teach-in of new Parts



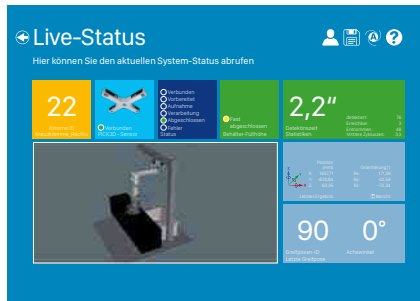
Let your system teach itself or load existing CAD model

Define Grasp Poses



Maximize the degree of emptying the bin

Automatic Robot Path Planning



Take the perfect path – collision free and fast



Touch & Automate:
New User Experience –
Sensor setup and control
by handheld devices

SPEED-UP YOUR APPLICATION TO A MAXIMUM

AUTOMATIC PATH PLANNING

TAKE THE PERFECT PATH – COLLISION FREE AND FAST

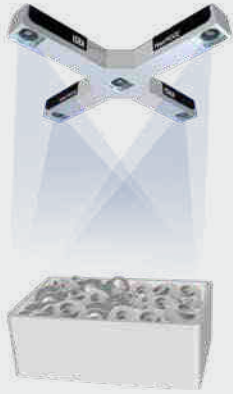


- Maximized process security using collision-free path planning
- Shortest cycle times due to optimized robot path
- Increased degree of emptying with higher reachability of parts

THE MOST POWERFUL EMBEDDED BIN PICKING SENSOR EVER

MULTI-STEREO-QUAD-CAMERA TECHNOLOGY

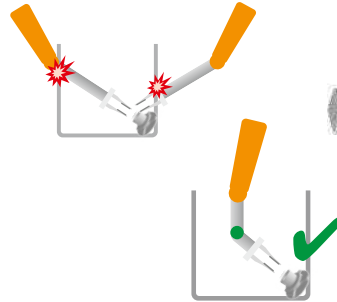
ADVANCED POINT CLOUD TECHNOLOGY FOR HIGHEST RESOLUTION AND ACCURACY



- High precision and complete part sampling
- Higher pick rate with perfect point cloud quality
- Seeing the entire bin volume

ADDITIONAL GRIPPER AXIS SUPPORT

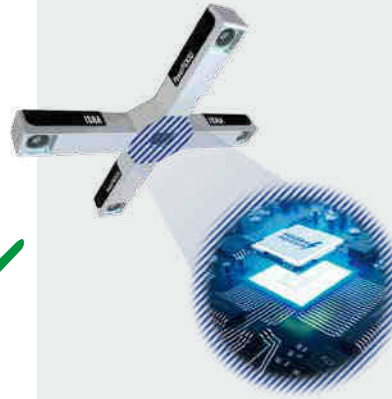
MAXIMIZE THE DEGREE OF EMPTYING THE BIN



- Remove all parts from the bin
- Increase reachability of parts in the corners of the bin

HIGH-SPEED SCANNING

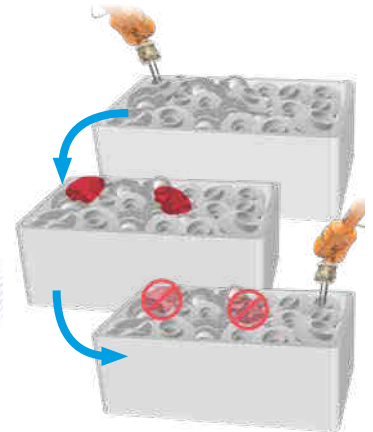
HIGH-SPEED SCAN TIME BEYOND 0.5 S THROUGH EMBEDDED DESIGN



- High-Speed scanning leads to shorter cycle times
- Increased throughput maximizes process efficiency

MULTI-PICK

PICKING OF MULTIPLE PARTS WITH ONLY ONE SCAN

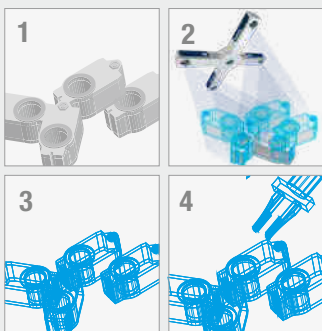


- Process reliability due to movement control
- Increased throughput due to shorter cycle times

THE EASIEST WAY TO SOLVE AN APPLICATION

TEACH-FROM-SCAN

LET YOUR SYSTEM TEACH ITSELF



- Easiest commissioning using innovative part teach-in
- Making bin picking possible for nearly all type of parts – no drawings/CAD needed
- Robust processes with higher accuracy by having a perfect model of the real part

TEACH-FROM-CAD

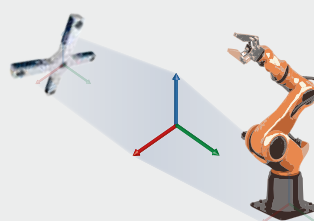
FASTEST INTEGRATION OF NEW PARTS WITH EXISTING CAD MODEL



- Convenient offline commissioning without sensor
- Easy and fast integration of new parts

FULLY AUTOMATIC CALIBRATION

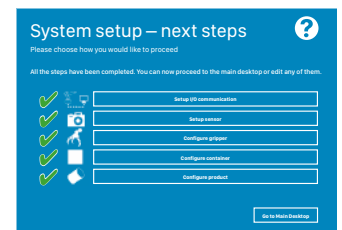
BRINGING TWO COORDINATE SYSTEMS TOGETHER – FAST AND EASY



- Faster ramp-up with reduced set-up time
- Easy handling
- Higher accuracy compared to TCP measurement

GUIDED WORKFLOW

USER GUIDED SETUP FOR SIMPLE SYSTEM CONFIGURATION



- Simple system configuration by own engineers
- No programming skills needed
- Ready-to-Use within hours

BRING YOUR PROCESS STABILITY TO THE NEXT LEVEL

EYE-SAFE ILLUMINATION

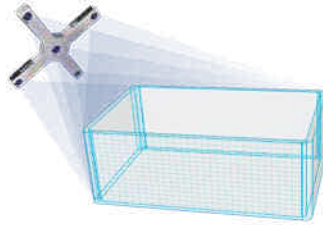
EMPLOYEE SAFETY WITH
NORM CONFORM LED
TECHNOLOGY



- Reduced costs: No extra safety measures to needed
- More safety in the work-place

3D CONTAINER DETECTION

MAXIMIZE YOUR PROCESS
STABILITY WITH CONTINU-
OUS CONTAINER TRACKING



- Higher process stability due to container detection after each scan
- Complete bandwidth of containers can be used and detected
- Higher degree of emptying the bin

AUTOMATIC DIAGNOSTIC ASSISTANT

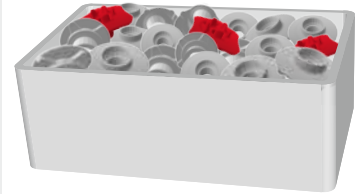
SELF-MONITORING
WITH AUTOMATED REPORT
GENERATION



- Service-friendly: Offline analysis of production
- Maximum transparency: Automatic reports to monitor the production process

UNKNOWN PARTS DETECTION

PROTECT YOUR PRODUCTION
PROCESS AGAINST USAGE
OF WRONG PART TYPES

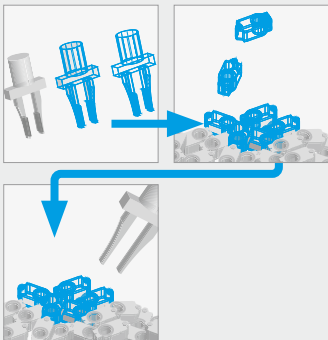


- Process reliability
- Avoidance of wrong part types in the production process
- Reduce downtime due to foreign obstacle detection and alert to PLC

PERFECT SUITED CONNECTIVITY FOR OPTIMAL APPLICATION DESIGN

DIGITAL TWIN

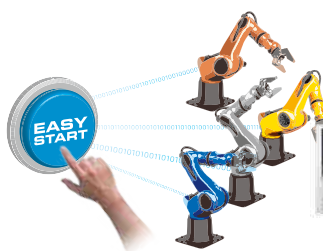
THE VIRTUAL SIMULATION
OF RANDOM BIN PICKING
APPLICATIONS



- Cost savings thanks to virtual application design
- Minimize engineering time due to reduced optimization loops
- Convenient offline application development

1-CLICK- ROBOT-INTERFACE

SEAMLESS ROBOT
COMMUNICATION ACROSS
DIFFERENT ROBOT BRANDS



- Cost reduction due to modern Ethernet-based communication
- Time savings during commissioning and installation

MULTI-SENSOR LAYOUT

PERFECT SUITED SENSOR
CONFIGURATION FOR EACH
APPLICATION



- Modular and flexible application design
- Increased throughput with parallel scanning
- No downtime during material supply

INDUSTRIE 4.0 CONNECTIVITY

WIRELESS SENSOR
CONNECTIVITY WITH
OPC UA PROTOCOL



- Simple communication with standardized interfaces
- Remote access from any device