

# VISOR® Robotic

## System description

### A diverse specialist

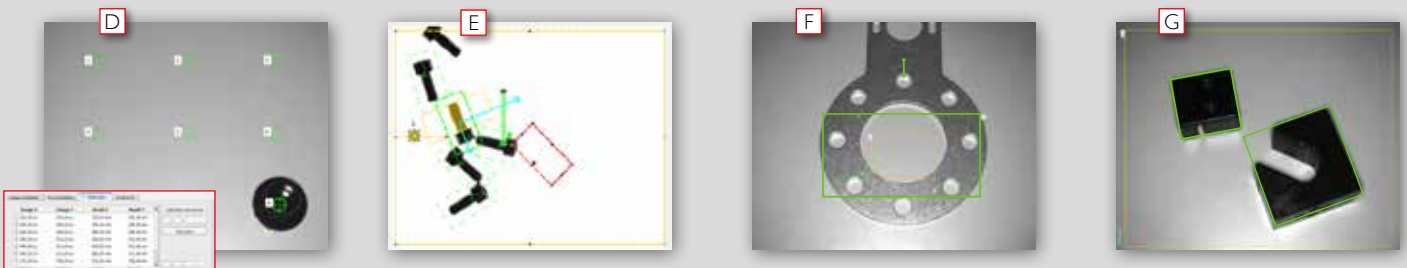
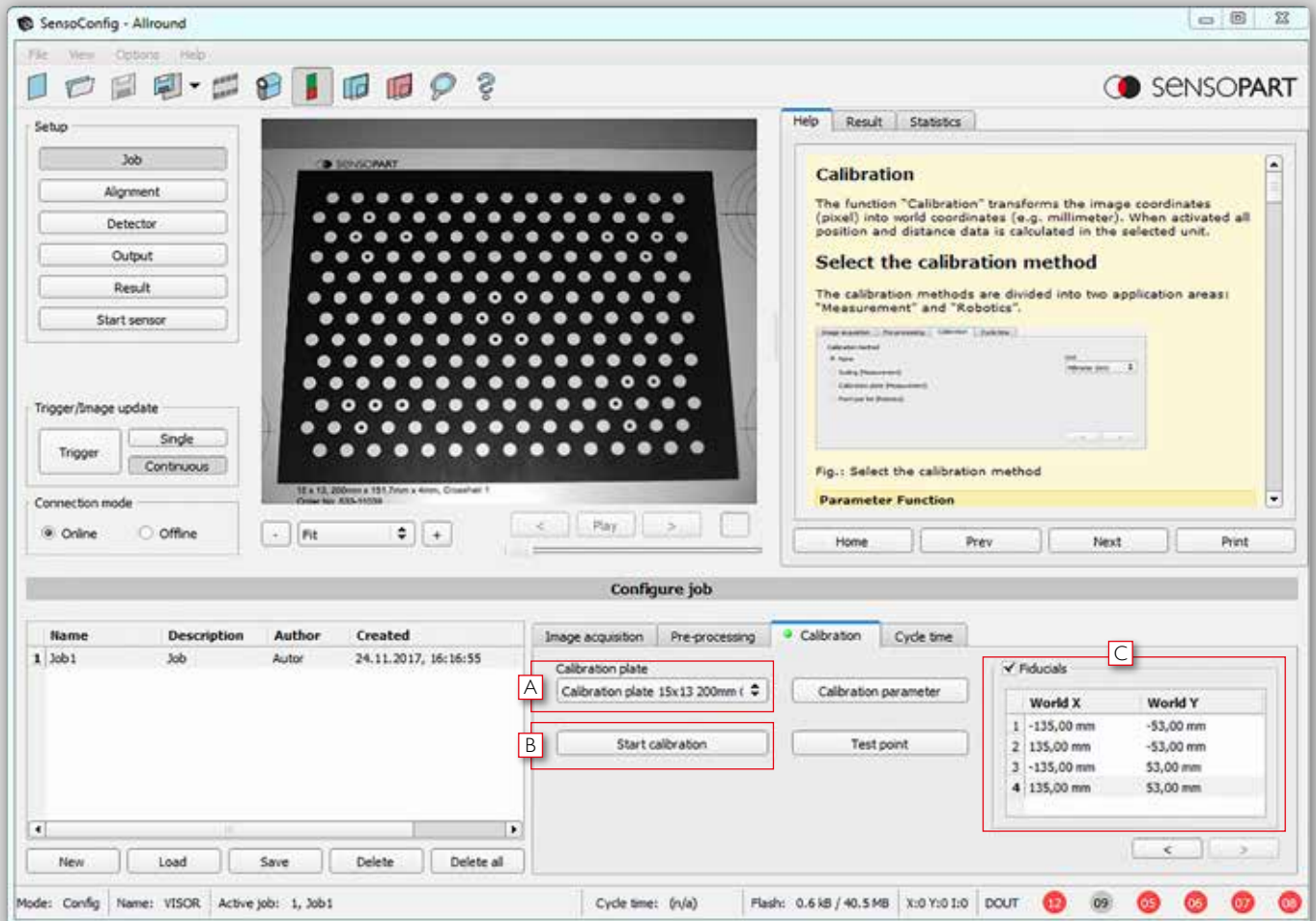
Expectations of today's robotics solutions are steadily rising in the context of Industry 4.0, paired with a simultaneous desire for greater ease-of-use. And this is precisely where the VISOR® Robotic demonstrates its outstanding ability. Available in several versions, it offers the perfect solution for a variety of automation tasks. Designed with integrated and standardised interfaces, VISOR® Robotic can be easily incorporated in existing installations and systems, and thanks to different calibration methods and flexible data structures, it is also suited to a diverse range of procedures.

### HIGHLIGHTS VISOR® ROBOTIC

- User-friendly configuration and display software
- Different detectors for locating up to 10,000 components
- Grippeing space check – check for available space around gripper
- Result offset correction in VISOR® software for simple adjustment of gripper point
- Two calibration methods for robotics applications:
- Offset of work plane through Z-offset function
- Integrated and standardised interfaces (PROFINET, EtherNet/IP, TCP/IP)
- Flexible output protocol
- The right version for every application
- Extensive archiving options for image and data

### Product variants: the VISOR® Robotic

Features/sensors	V10/V20 Advanced	V20C Advanced
<b>Functions</b>		
Resolution V10 in pixels	736 x 480 Mono	–
Resolution V20 in pixels	1280 x 1024 Mono	1280 x 1024 Color
Image rate per second V10   V20	50   40	–   20
Number of jobs   detectors	max. 255   max. 255	max. 255   max. 255
Position tracking	✓	✓
Calibration	✓	✓
Contour (X-,Y-translation, rotation)	✓	✓
Pattern comparison (X-,Y-translation)	✓	✓
BLOB	✓	✓
Calliper	✓	✓
Grey threshold	✓	✓
Contrast	✓	✓
Brightness	✓	✓
Freeform Tool	✓	✓
<b>Interfaces</b>		
Inputs   outputs	2   4	2   4
Freely definable switching outputs/ inputs, PNP or NPN	4	4
Encoder input	✓	✓
I/O expansion	✓	✓
RS422   RS232	✓   ✓	✓   ✓
Ethernet/data transmission	✓	✓
EtherNet/IP	✓	✓
PROFINET	✓	✓
SensoWeb	✓	✓
<b>Lens</b>		
V10 integrated, 6 mm   12 mm   25 mm	✓   ✓   ✓	–   –   –
V20 integrated, 12 mm	✓	✓
C-Mount V10   V20	✓   ✓	–   ✓
<b>Operation/visualisation</b>		
Viewer software with user guidance	✓	✓
Hierarchical user rights	✓	✓



### Guide to user interface

- A Select calibration plate:** choice of four different sizes.
- B Start calibration:** VISOR® is calibrated in just one click.
- C Fiducials:** image coordinates mapped to robot coordinates at four points.
- D Calibration method point pair list:** calibration with point pair list (robot) for automatic calibration on object.
- E Gripping space check:** a freely accessible object is always output if available.
- F Result offset:** define the result point and therefore the position that the robot moves to on the component.
- G Blob detector:** localise components regardless of their shape and size. No need to teach a reference.