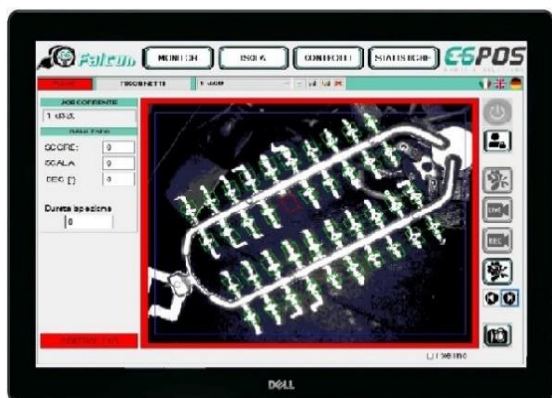# E6 FALCON®: INTEGRATED ARTIFICIAL VISION SYSTEM
3 TECHNOLOGIES IN 1
POWERED BY E6pos srl

1. Completeness check of pieces directly in line.

E6 FALCON responds to the need to verify the completeness of the piece at the moment it is produced. Typical applications are metal or plastic material **moulding**, **die casting** and **thermoforming**.

2. Qualitative analysis of pieces with *deep learning* algorithms.

E6 FALCON responds to the need to perform a thorough and **reliable** quality control on the piece produced, minimizing waste for the benefit of a significant increase in **quality** and **productivity.**

3. Robot Guide Keep an eye on your robot!

E6 FALCON responds to the increasingly present need to easily and quickly perform the picking of the parts by a robot, for various applications, with a significant reduction in time and costs. An **easy, intuitive** and **ready-to-use** solution.

Made with a modular structure that adapts to different types of configuration able to be inserted in environments with high humidity and dust.

➤ Cameras and illuminators with IP65 protection
➤ Powerful and reliable control system
➤ Single or double camera vision
➤ Maintenance reduced to the minimum
➤ **Standard Resolution** Version (E6 FALCON Basic)
➤ **High Resolution** Version (E6 FALCON Pro)
➤ Standard interface: Modbus TCP, Digital I/O. Other optional interfaces.
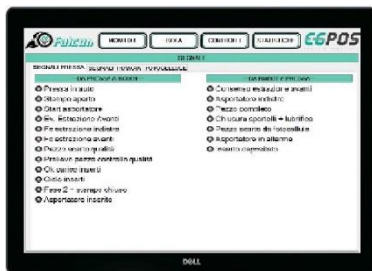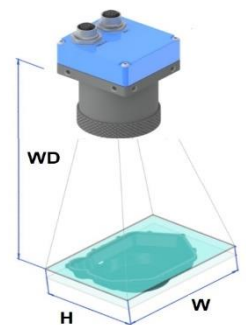
The performance of the system varies depending on the framed area and the resolution of the camera.

It is possible to perform more than one analysis in different specific areas of the piece.

Indicative performance table:

Modello E6 FALCON	E6 FALCON Basic		E6 FALCON Pro	
Camera Resolution	1.3 mpx – 1280 x 1024		5 mpx – 2592 x 2048	
Framed area(**W** x **H**)	640 x 480	320 x 250	640 x 480	320 x 250
Minimum defect found in X direction [mm]	2.50	1.25	1.23	0.62
Minimum defect found in Y direction [mm]	2.34	1.22	1.17	0.61
Operating Distance (**WD**) mm.	1610	840	1350	700

NB: The data contained in the table are obtained from the configurator depending on the measurements of the framed area, these data could be subject to variations depending on other requirements dictated by the final application.

Software
✓ Customizable Controls Configuration
✓ Production Process Monitor
✓ Management of the production statistics
✓ Managing the image archive
✓ Multi-Level **User** Management
✓ **Sharing of data in the company management**

Control system
✓ Industrial Computer, IP65 Degree of Protection
✓ Connecting to the **robot** via Digital I/O or fieldbus
✓ Remote Assistance
✓ **Industry 4.0 ready**

Working chamber
✓ **Integration with Articulated and Cartesian robots**
✓ Diagnostic management
✓ diagnostic ion
✓ Automatic production change

2D Camera
✓ 2D sampling
✓ Standard resolution
✓ High resolution version (Optional)
✓ Sturdy to ambient light variation