

# eppos



*Tailor Made  
Vision System*

# Artificial industrial vision solutions

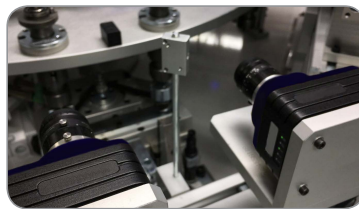
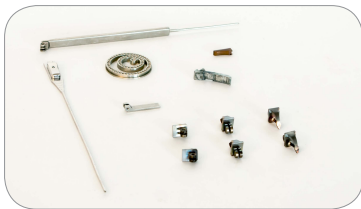
Eppos Srl, a young and lean team able to quickly present real solutions to requests of cost reduction, increase in quality levels and difficult tasks of vision control.

We have experience in many fields of factory automation where imaging technologies are used: esthetics control, 2D measurement, 3D measurement and reconstruction, robot guide and bin picking.

Our solutions are tailor made according to the needs of the customer, it's the ideal choice for any mass production factory such as:

- Automotive
- Pharmaceutical
- Tools makers
- High precision mechanical
- Watch industry
- Electronic
- Food processing

## Application Cases



# Hardware

## MULTIPLE OPTICS, MAGNETIC LEVITATION GUIDES AND ROTATING STAGES

Eppos develop custom artificial vision systems for different **inline** tasks. We combine the state of the art technology in systems that answers to the needs of production and QC:

- inline vision system / inline integration
- multiple optics;
- gel optics
- magnetic levitation guides and rotating stages
- very large field of view telecentric linear optics (Patent Pending)
- motorized zoom optics



## FIELD OF VIEW SYSTEM

	Small	Medium	Large	XL	XXL
FOV (mm)	53x40	104x78	138x115	184x154	230x192
FOV Type	Rectang.	Rectang.	Rectang.	Rectang.	Rectang.
Repeatability acc.	+/- 0.5 (µm)	+/- 1 (µm)	+/- 1.5 (µm)	-	-
Measurement acc.	+/- 3 (µm)	+/- 6 (µm)	+/- 8 (µm)	-	-
Diascopic Light	Collimated	Collimated	Collimated	LED diffused	LED diffused
Episcopic Light	Yes	Yes	No	No	No

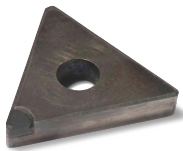
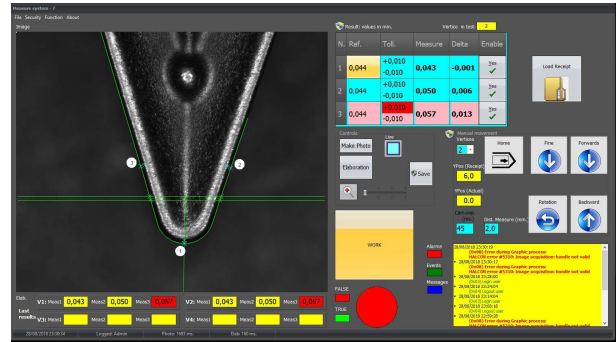


# Software

## INLINE PRO

Tailor made according to your needs and specifications, for instant checks and difficult tasks directly in the production line:

- Custom GUI
- Instant measure (less then 1 sec./pc.)
- Inline ready with I/O hardware
- custom made reports and analysis



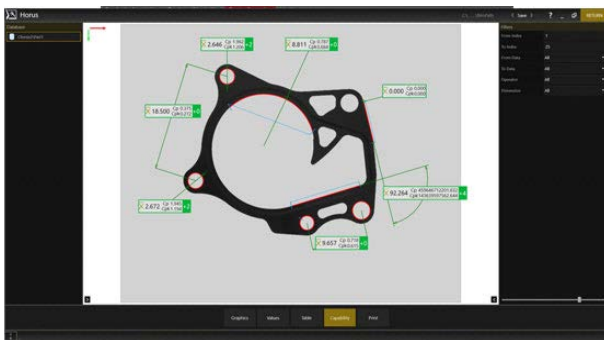
**VISION SYSTEMS FOR CUTTING TOOLS**  
We have invented and produced the first and only vision system for measuring honing of cutting tools (Patent Pending). With a resolution of 2  $\mu$ m, a magnetic levitation guide and a rotating stage, this difficult task become easy and stable.

## 3D VISION SYSTEMS

3D vision reconstruction for dimensional analysis, for robot guide and bin picking. A step ahead the classical stereoscopy, bringing this sector to a higher level for simplicity and velocity.

## HORUS

Windows OS desktop application for optical measurement, easy to use for unskilled operators, flexible for laboratory and production:



- Live measurement
- Object tracking by recognition
- Measurement Program auto-search
- Multi-program and multi-task operation
- Self-detection of geometric primitives
- Accurate control of fitting primitives
- Statistical reports
- Motorized axes and light control integration
- Enlarged FOV measurement by Image Stitching
- Multiple Camera measurement