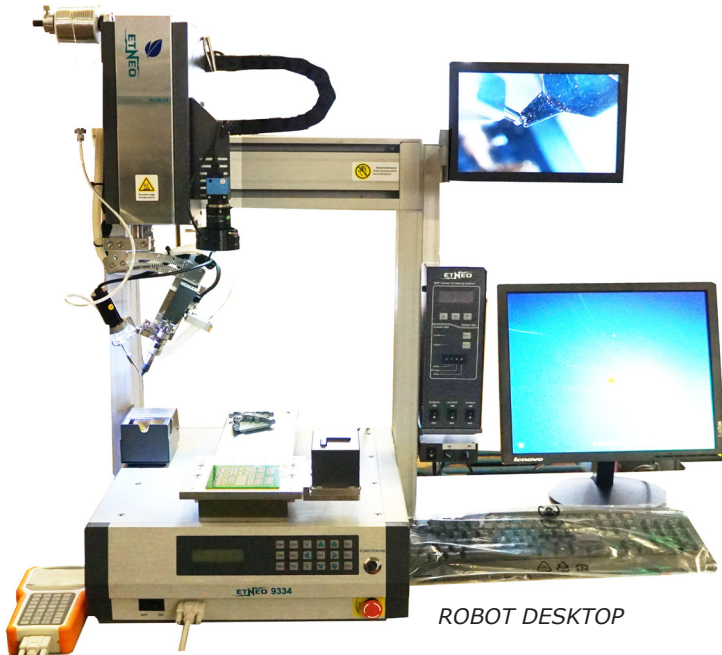


# Vision technology, with soldering calibration

The miniaturization of any apparatus, implies the need of quality in all production steps, possibly error free. In addition the automatic production, requires an increasing use of advanced vision tools directly integrated in the assembly robot or machines. Here are some Etneo solutions.



ROBOT DESKTOP



## DESKTOP VISION APPLICATION

Four-axis robot, for applications in micro-electronics. The parts to be processed are marked by references defined by the user. During the calibration, the robot is "seeing" those references, therefore the iron unit will go to the points defined by the soldering program. Otherwise it will stop in alert mode. The second camera will check the proper execution of the solder. This is the standard system offered by Etneo, which includes among other features an automatic index capability of the soldering tip geometry. The micro cameras provided are high-definition ones, equipped with proper lighting. The calibration software is available for Windows, easy to program and integrates with Teaching pendant general management.



## CUSTOM VISION SYSTEM

The vision systems that drive the robot, they typically require an heavy machine programming and Teaching time, the hardware also needs to be specially engineered and manufactured. Addressing these solutions requires careful consideration of resources and possible benefits due to significant investments needed.

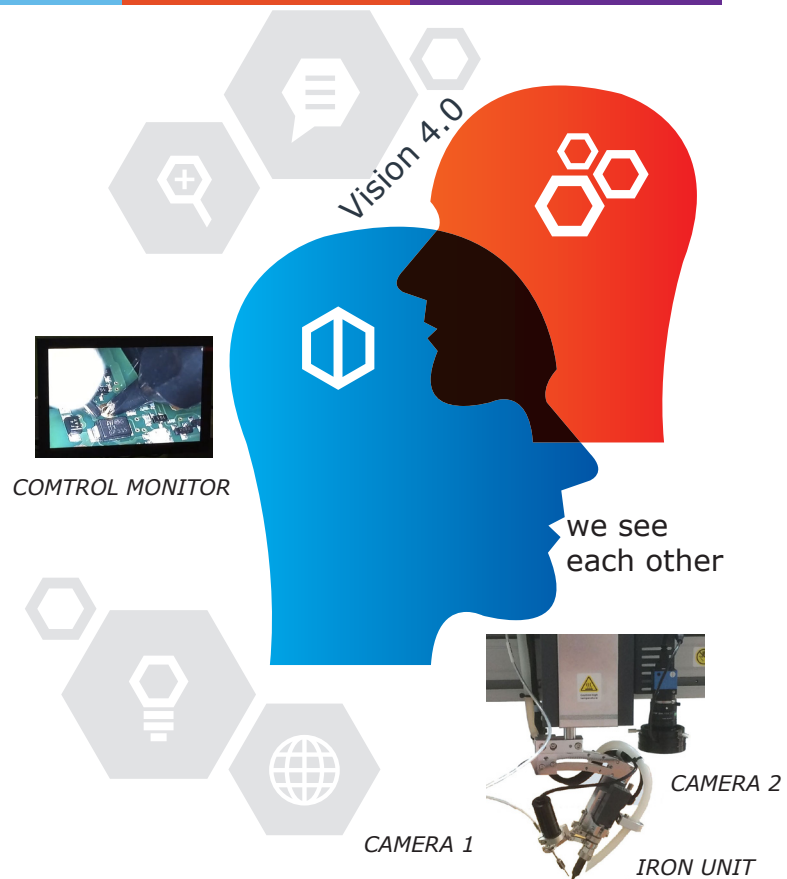


Teaching  
Pendant

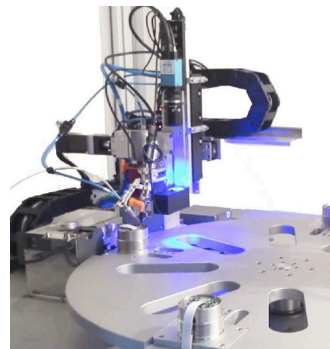


## CONSULTING CONTACTS

Please contact our offices for further information and to book a demo in our equipped laboratories.



“ Vision solutions to perform easy parts alignment and soldering control. ”



## ROTARY INDEX TABLE

Example of vision system with lighting and filtration installed on an Index table. The system incorporates an automatic height sensor for the soldering tip.



Vision System installed on desktop Robot equipped with twin shuttle system The robot on the right is a gantry type, which can be supply with a calibration vision tools and management software.

