

# Soldering Stations

for process automation to be integrated or ready to use

Etneo Italy provides to the automation machine builders a complete set of units to automate the soldering process. The Etneo stations include the software to generate the solder profiles, namely the conditions of a process, such as pre-heating / flux activation / reflow / cooling and control of the alloy speed being dispensed. The data are parameterized and made available via I/O. The quality of the process is guaranteed by a series of alarms and feedback, automatically prompted or recalled by the Operator.

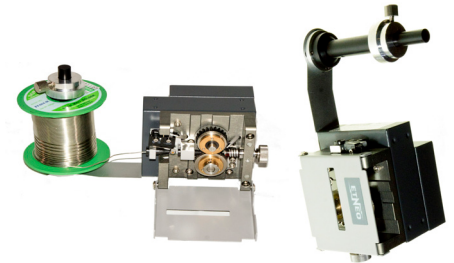


Basic Automation Kit

Iron units heads for Gantry robots type desk-top, for anthropomorphic robots and for motorized axes, equipped with micro adjustments to precisely guide the tin wire. Heater power from 150 to 200W. Interchangeable tips cartridge or single, with positioning index.



Automatic solder wire feeder with sensor of alloy presence and feeding alarm. The feeder includes an exclusive system of ZERO SOLDER BALL. Available for alloy with diameters from 0.3 to 1.5. mm. I / O for digital connections. Can be supply separate from the station (as per the picture) or on its top.



## Accessory

### N2 GENERATOR

For lead free applications keeps the soldering area non contaminated, it improves the wetting, the appearance and serves as preheating as well. It connects to a source of compressed air, which is converted into pure nitrogen 99.9%. The flow is regulated by a flowmeter and conveyed with an adapter through resistance and the tip.



### RANGE OF SOLDERING TIPS AND CARTRIDGES

Etneo offers tips and soldering cartridges for their robots and systems as well as compatible with most manufacturers' known systems. The tips and the Etneo cartridges are characterized by the affordable price combined with a premium quality. Etneo offers Custom tips with special design.



### IRON UNIT HEAD FOR ROBOT 5/6 AXIS

The head flange has been made for Kuka ed Epson antropomorphous Robots



Tip Cleanig devices with rotary brushes and /or sponges

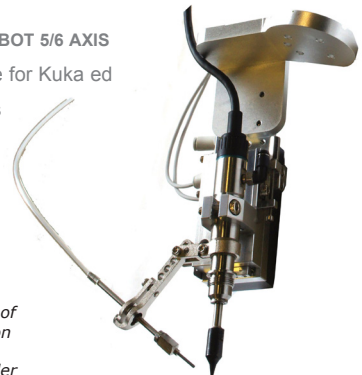


### TOUCH SCREEN SOLDER AUTOMATED STATION

Advanced station with large memory of soldering profiles, called up directly by local or remote. It manages the wire feeder ZERO SOLDER BALL and uses the cartridge soldering tips. Compatible with all Etneo Iron units heads.



Example of Etneo Iron unit and wire feeder for Kuka Agilus.

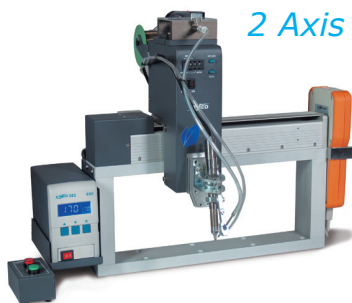


## Soldering solutions "IN LINE" with dedicated parts, ready to use

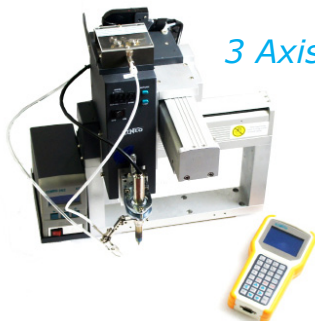
2 Axis DT



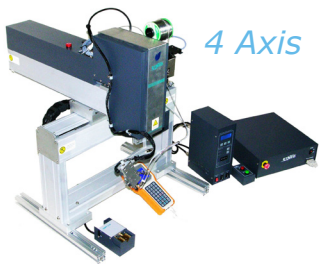
2 Axis



3 Axis



4 Axis



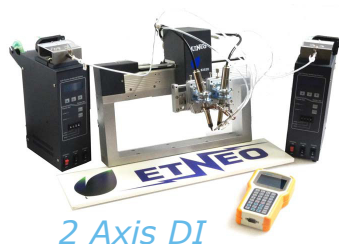
Smart Vision



Micro CCD on Iron Head and Monitor mounted on a Robot side.



2 Axis DI



### TWO AXIS - X - Z - DOUBLE SOLDERING STATIONS

The IN-LINE systems are complete solutions with soldering software, accessory and hardware to perform a fine production process.

#### KEY FEATURES & BENEFITS

Custom axis lengths - Process stations Iron unit and controller mounted as gantry to offer easy integration in lines Conveyor or rotary tables type.

Programmable dispensing of the alloy, both for diameters and for the functions - Alarm management to the process requirements - I / O interface signals for communications with the devices - High accuracy and speed - Specific tips cleaning systems for alloys in use (LEAD FREE) - Change the soldering tip without loss of alignment.- Repeatability and reliability to operate on working shifts.

### TWO AXIS - X - Z - SINGLE HEAD SOLDERING

One of the more used unit, both for stand alone (on the assembly bench) or In Line applications. By means of the Teaching pendant are programmed the solder conditions and the related parameters. The User Interface I / O allows the functions dialogue.

### THREE AXIS - X - Y - Z

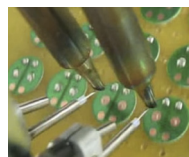
The availability of the Y axis is ideal for greater automation and precision requirements. The Etneo units are supplied with fume extraction systems, cleaning and communication Box.

### FOUR AXIS - X Y - Z - THETA

The most advanced 4-axis Robot. The rotation of 340 degrees of the solder head allows to perform solder on complex parts. Etneo integrates on its robot two Smart Vision systems, the first that drives the axes to the target joints and a secondary vision for programming when in difficult reachable areas and the subsequent monitoring of the soldering quality. Those cameras include their own lighting and anti-glare lenses.

### TWO AXIS - X - Z - 2 o 3 o 4 IRON UNITS

This units are available with 2/3/4 or more iron units heads on one axis. Ideal when several contiguous points have to be soldered simultaneously. Moreover, all Etneo systems are able to do slide soldering, ideal for both PTH and SMT connectors.

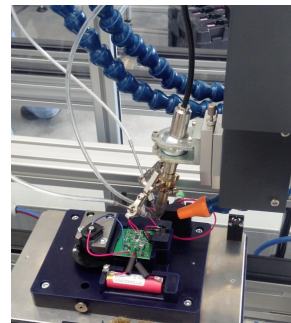


Point double soldering, SMT

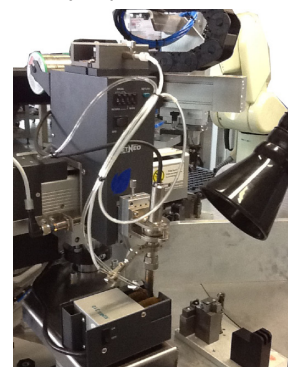


Slide soldering, PTH

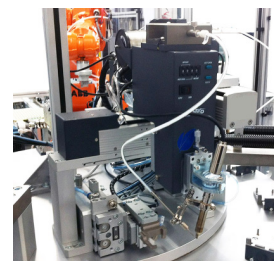
## Installations



Special one tip to solder 2 points simultaneously on Conveyor pallets



Rotary Tables



Complex Automation

