The excellence of the unit determines the performance of the entire system!!

Point soldering unit (PSU-500)

1. Ceramic tip is used for soldering!
   The soldering ceramic tip provides more than 2000 hours of operating life with less need to change soldering conditions. The costs of regularly soldering tips can be kept minimal.

2. Stability of solder amount and saving solder usage
   The soldering method of PSU500 is that cutting off thread solder and soldering with ceramic tip. The method maintains the stability of solder amount per joint. There is no waste solder because solder does not stick on ceramic tip, it can save 30% solder usage.

3. Stable heating system
   The ceramic heater is used as the soldering tip in our system. And the heating rate of our soldering ceramic tip is high as 100°C/sec. So our soldering ceramic tip provides stabilized heat supply and it makes high-speed stabilized soldering possible.

4. Digital soldering
   By entering details of the soldering know-how into the system, the robot then takes care of all soldering with expert’s skills. Almost all soldering conditions have been digitalized.

5. High yield
   PSU500 provides high yield because primal factors of instability on soldering which are changes of the shape of a soldering tip through the operation, instability of solder amount and changes in heat amount have all been eliminated.

6. Very few solder ball and flux scattering
   There are very few solder balls or flux scattering when solder melts because solder is heated between two heaters.

7. Shorter soldering time
   Soldering time depends on the amount of heat required for soldering work piece. PSU500’s soldering tips heats up instantaneously, so PSU500 should reduce your soldering time by half compared to the conventional systems.

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<td>Soldering time</td>
<td>0-2000°C/sec</td>
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<td>Soldering tip</td>
<td>Ceramic tip</td>
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<td>Soldering temperature</td>
<td>1000-3000°C</td>
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<tr>
<td>Soldering capacity</td>
<td>100-1000</td>
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<tr>
<td>Soldering voltage</td>
<td>110V/220V</td>
</tr>
<tr>
<td>Soldering power</td>
<td>300W</td>
</tr>
<tr>
<td>Soldering function</td>
<td>PSU500</td>
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Cosmic Corporation
3-23-8 Higashi Nippori, Arakawa-ku, Tokyo, Japan 〒116-0014
Telephone: +81-3-3805-1378  FAX: +81-3-3805-1379
E-mail: cosmic@cosmic-corp.co.jp
Homepage: http://www.cosmic-corp.co.jp

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Point Soldering Unit / Robot
New proposals of digital soldering system
COSMIC CORPORATION
The ultimate tool for the solution of various defects in soldering

If you have a problem with soldering including lead-free soldering, please contact us.

The soldering unit with Cartesian robot
This point soldering robot is a multi-functional soldering unit with Cartesian robot. This robot is also accommodated to small lot production of a variety of items.

The standardized unit for lead-free solder
PSU/2SO is accommodated to lead-free solder without nitrogen (N₂), which does not require extra costs. Perfect performance on through-hole soldering.

Two soldering ceramic tips surround through-hole or area to be soldered. This method prevents heat escaping and it provides more efficient soldering operations.

Very few soldering balls
The scattering of soldering ball has been reduced dramatically by cutting thread-solder. Because there is not much flux-explosion when the cut solder melt and if the cut solder explode, most of burst solder balls should remain between two heaters.

Data input
Both PC and robot terminal can be used to input data on all axis at the same time, and up to 16 kinds of data are stored within the unit as standard.

Various editing input methods
All required functions such as insert, delete and modify the data are included as standard.

Automatic cleaning
A ceramic heater is used as a soldering tip. Solder dose not wet on the ceramic tip so the ceramic tip is hard to get dirty compare to metallic soldering tip.

Thus PSU/2SO does not require the tip cleaning each time. The ceramic tip need to be cleaned every 500 or 1000 point of soldering.

○ X-axis 100 to 400 mm Y-axis 100 to 500 mm Z-axis 330°
○ High accuracy with low cost.
○ There is no lodging even when soldering a narrow pitch like 0.8 mm because our robot is highly rigid.

Monitor camera is installed for soldering!!

Easy cleaning!!

Correction system of positions and height!!

Soldering example

Soldering of wire lead and component

Soldering of terminal

Optional accessories
P/N HITMSU-50

MODEL: PDSBC2030 (Desk top type)

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<tr>
<th>Specifications</th>
<th>PDSBC2030 (Desk top type)</th>
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<td>100x100x100 mm</td>
</tr>
<tr>
<td>Moving range (X-Y-Z)</td>
<td>100x100x100 mm</td>
</tr>
<tr>
<td>Controller</td>
<td>CPU: Intel Core i7 7th Generation</td>
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<tr>
<td>Memory</td>
<td>16GB DDR4</td>
</tr>
<tr>
<td>Hard disc</td>
<td>2TB SSD</td>
</tr>
<tr>
<td>OS</td>
<td>Ubuntu 18.04</td>
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<tr>
<td>Printer</td>
<td>A4 size high-speed printer</td>
</tr>
<tr>
<td>Monitor</td>
<td>21” high-definition monitor</td>
</tr>
<tr>
<td>Optional accessories</td>
<td>P/N HITMSU-50</td>
</tr>
</tbody>
</table>

Soldering example

Soldering of flat cable or connector

Soldering of flat wire

Soldering example

Soldering of inserted components

Soldering of SMD terminals

Monitor camera
P/N ANACAM-50

The soldering tip cleaning unit
P/N BLAST-300