SW-D600S-48/Motor Drive
Ultrasonic Small Metal Welder

Compact and High Performance with Various Monitoring Function
For Cu・Al Thin Wire Harness and Foil Welding

- High Frequency 48kHz/High Power 600W for Metal Welding
- High Resolution Motor for Fine Control
- Various Control Mode for Various Welding
- Various Monitoring Function for OK/NG Judgement
- Easy Operation by Touch Panel

◆ Displacement Control for Good Appearance and Stable Strength

Various Control Mode
- Peak Power
- Energy
- Time
- Continuous Oscillation
- External Sensor
- Displacement Sensor
- Thermal Sensor and etc.

Displacement Sensor

Depth Control (Horn Subduction Amount)
Oscillation is stopped when depth amount reaches to set value from oscillation start position.

◆ Welding Sample

- 0.5SQ Cu Strand Wire × 2
- 0.75SQ Al Strand Wire × 2
- Cu Foil 10μm × Al Plate 0.1mm Welding

◆ Welding of Dissimilar Metals

Cu Foil 10μm × Al Plate 0.1mm Welding
Clear boundary at joint interface
⇒ It’s Solid Phase Welding, not Fusion Bonding

Good Result

Solid Phase Welding
Weak Intermetallic Compounds are suppressed by low temperature welding.
**Recommended System Configuration for Good Traceability**

**Main Specification**

<table>
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<tr>
<th>Ultrasonic Welder SW-D600S-48</th>
<th>Motor Drive Head</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency/Output</td>
<td>48.5kHz/600W (Continuous Oscillation 300W)</td>
</tr>
<tr>
<td>Oscillation Method</td>
<td>Digital ATHMOS</td>
</tr>
<tr>
<td>Amplitude Setting</td>
<td>30~100% (1% step)</td>
</tr>
<tr>
<td>Control Mode</td>
<td>Time/Energy/Peak Power/External Sensor/Continuous Oscillation</td>
</tr>
<tr>
<td>Monitor (for OK/NG)</td>
<td>Frequency/Time/Energy/Peak Power/External Sensor</td>
</tr>
<tr>
<td>Number of Program</td>
<td>31 programs</td>
</tr>
<tr>
<td>Interface</td>
<td>I/O/Analog/RS-232C/LAN/CF Card</td>
</tr>
<tr>
<td>Power Source</td>
<td>Single-Phase AC100~240V ±10%</td>
</tr>
<tr>
<td>Size/Weight</td>
<td>W150×D370×H310mm/Approx. 8.5kg</td>
</tr>
</tbody>
</table>

*Displacement Sensor is option.

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Please contact Avio sales for free welding test.

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