



April 23, 2015

Nippon Avionics Co., Ltd.

<http://www.avio.co.jp/english/>

Compatible to Precision Thermo-compression Bonding/Soldering by Pulse Heat

Release of Desktop Pulse Heat System (Turn Table Type) TCW-2000 for the European Market

Thermo-compression bonding with stable quality is achieved by implementing high-accuracy positioning control and temperature profile.



Nippon Avionics Co., Ltd. (Head office: Shinagawa-ku, Tokyo, Japan; hereinafter referred to as “Avio”), a subsidiary of NEC Corporation, is proud to announce the release of **Desktop pulse Heat System (Turn Table Type) TCW-2000**, which is our long seller pulse heat unit, in Europe on April 23, 2015.

The pulse heat can provide a uniform temperature profile without any variance by feeding back the temperature of the heater tip/tool to the power supply with the thermo-couple and controlling the temperature at high speed.

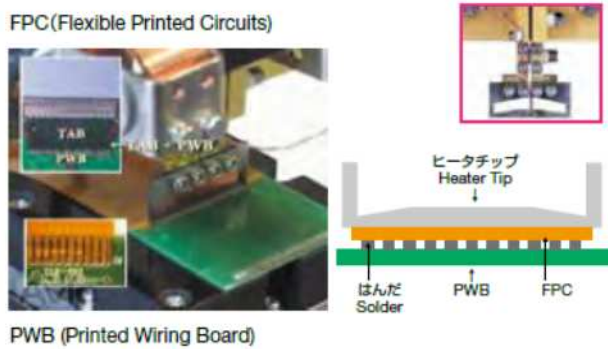
By combining the pulse heat power supply with high-precision motor head (resolution 1 μ m), this new product can improve the positional accuracy in the Z-axis direction and keep the most-suitable displacement amount, in addition to the conventional high-definition temperature control function. These functions make it possible to provide a more reliable thermo-compression bonding.

Employing the turntable to allow for easy and safe cell-production of high-definition and high-quality thermo-compression bonding. It will contribute to the improvement of the productivity in various micro-welding status of various fields such as electronics, automotive, medical and energy.

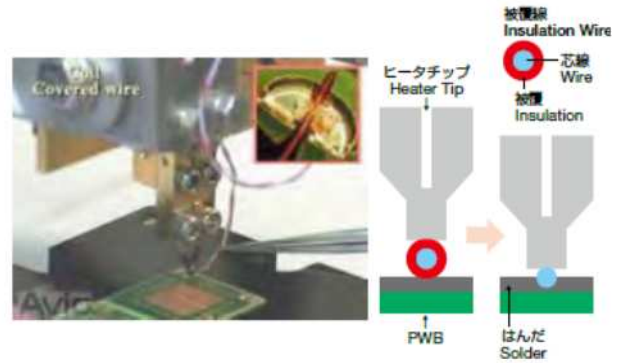
It is a compact ,easy-to-setup desktop device and space saving.

<Thermo-compression Bonding Applications by TCW-2000>

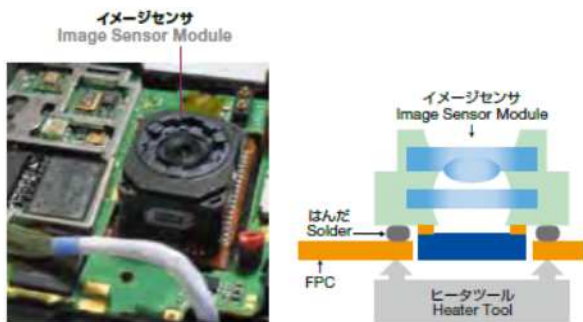
■ FPC+PWB Reflow Soldering



■ Insulation Wire Soldering



■ Camera Module Assembly



■ Plastic Parts Fabrication



<Application Examples>

Information devices (Smartphone, Tablet PC), Electronic components, Electric components for automobile, Medical equipment parts, Secondary batteries, etc.

<Features of New Product>

1. High-precision, High-quality

Thermo-compression bonding with extremely low level of variation can be achieved by systemizing both the temperature control of pulse heat and the motor drive of the system head with resolution of 1 μ m pulse.

It is suitable for thermo-compression bonding/soldering of fine wire or fine-pitched works.

Enhanced monitoring functions serve to quality control.

2. Welding Various Types of Works

Up to 7 condition settings can be registered, which enables easy type-switching.

It can weld various types of works by changing the system head (option) and heater tip/tool(sold separately).

3. Space-saving / High Productivity

Easy-to-install compact desktop device achieves high productivity (cell production) in a small space.

4. High Level of Safety

The door lock system (Opening and closing door lock), which prevents the heat from being touched by hand when in operation, is installed to offer a superior level of safety.

<Specifications>

Feature	Specification
Size of Turntable	400 mm in diameter
Size of Loading Jig	160 mm×160 mm
Stroke	Max.50 mm, 1 μmSTEP
Pressure Method	Spring
Z-axis Drive Method	Motor
Turntable Drive Method	Motor
Power Source	1φ, AC200 - 240 V 50/60 Hz, 3 KVA Conforming to CE Standard
Operating Range of Temperature and Humidity	Temperature: 0 - 40 °C, Humidity: 35 - 85% (No Condensation)
Dimension / Weight	870(W)×650(D)×565(H) mm (including Pulse Heat Power Supply) 84.6 kg (including Pulse Heat Power Supply and Weld cable)
Options	Tape-feeder, Smoke Evacuator

*System head, Heater tip and Heater tool are not included in this system (sold separately).

System Head (Option)	Heater Tip Type	NA-111 (Pressure: 0.7 – 5 N)
		NA-112 (Pressure: 5 – 65 N)
	Heater Tool Type	NA-151 (Pressure: 1.2 – 7 N)
		NA-152 (Pressure: 5 – 70 N)
		NA-153 (Pressure: 20 – 140 N)

<Sample Welding>

Avio offers welding sample service performed by experienced, high-skilled engineers so the customer can verify the performance of this system applied to their own sample. Please feel free to apply for this service.

For Questions Regarding the Above or the Request a Free Welding Sample Service, Please Contact:

Sales Department, Welding Products Division
 4206, Ikonobe-cho, Tsuzuki-ku, Yokohama, 224-0053, Japan
 Tel: +81-45-930-3596
 e-mail: product-mj@ml.avio.co.jp