

SW-3500-20/SH-H3K7

NEW



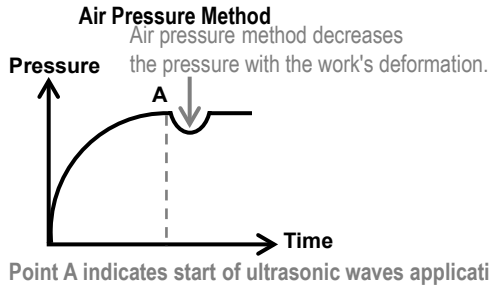
Ultrasonic Metal Welder

Highly Reliable Welding of Aluminum Cables to Copper Terminals
Welds Copper/Aluminum Harnesses, Bus Bars, and Foil Laminates

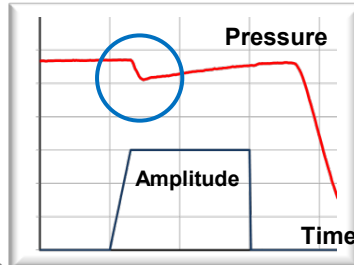
- **Spring Pressure Sync Mechanism**
Excellent response to the pressure variations prevents slip between horn and work, reduces ultrasonic energy loss and minimizes dust and waste.
- **High Rigidity Pressure Mechanism**
Maintains very small deflections to ensure uniform weld side pressure.
- **Unique, Original Design Ultrasonic Oscillation Frequency Automatic Tracking System**
Ensures stable vibration amplitude during high loads.
- **High Performance Depth Control (1µm Resolution Linear Scale)**
Oscillation is controlled by feedback of sinking of work and work height.
- **4 Types of Oscillation Control Method**
Time, Work Sinking Value, Work Height, Applied Energy



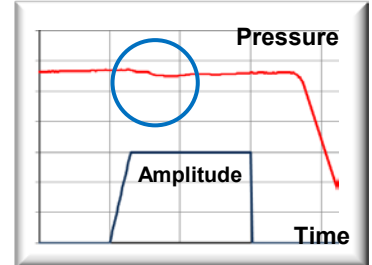
Spring Pressure Sync Mechanism



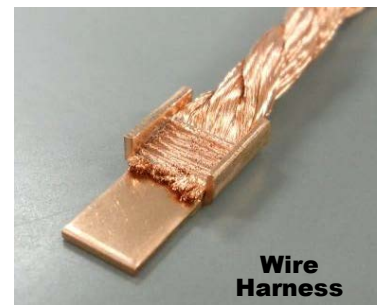
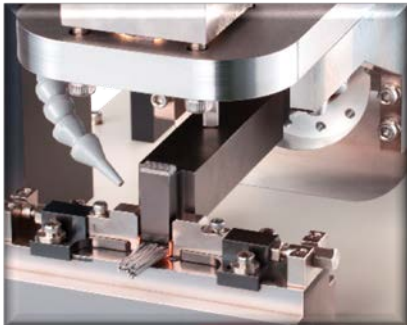
Without Spring Sync Function



With Spring Sync Function (Avio)



Oscillation Time 0.1 sec



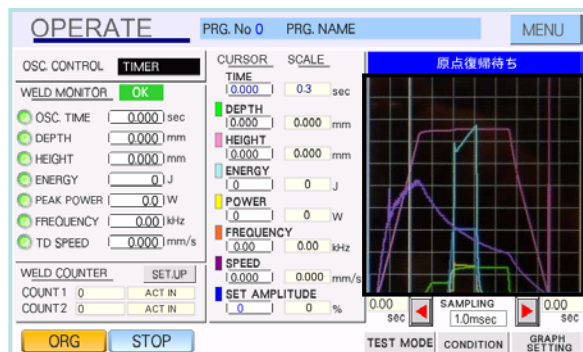
NIPPON AVIONICS CO., LTD.

SW-3500-20/SH-H3K7 Ultrasonic Metal Welder

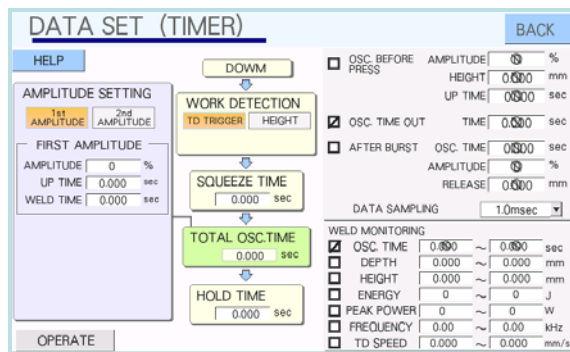
- **Easy Management**
- **Easy Operation**
- **Easy System Integration**
- Easy Management with Graphic Monitor Function
 - Ultrasonic Peak Output
 - Ultrasonic Energy
 - Sinking Amount of the Work
 - Work Height
- Simple Operation, Easy-to-read Display
 - 7-inch LCD Touch Panel
 - Intuitive Operation
 - Graphic Display
- Setting and Management of Data via Serial Communication (RS-232C)
 - Weld Conditions
 - Monitor Value
 - Judgment Result

Model	Feature	Specification
Ultrasonic Generator SW-3500-20	Maximum Output Power	3,500 W
	Nominal Frequency	20 kHz
	Oscillation Method	Automatic Tuning Hold Master Oscillator System (ATHMOS)
	Amplitude Adjustment	Variable (30 - 100%, 1% step)
	Control Mode	Time/Depth/Height/Energy
	Power Source	3 φ AC 200 V, 20 A
	Dimension	W250 x D450 x H375 mm
	Weight	20 kg
Ultrasonic Head SH-H3K7	Pressure Follow-up Mechanism	Spring + Air
	Adjustable Pressure Range	1,700 N - 3,700 N
	Stroke	50 mm
	Supply Air Pressure	0.5 MPa (Clean, Dry Air)
	Dimension	W380 x D600 x H935 mm
	Weight	102 kg (Horn and Anvil excluded)

Operation Screen



Welding Condition Setting Screen



CAUTION

BEFORE OPERATION, read the Operation Manual carefully. This unit should be located away from water, moisture, steam, dust and soot to prevent fire, electrical shock, and operational problems.

*The appearance and specifications are subject to change without notice.

**Requests for Sample Testing are Welcomed.
Please Contact Us.**

NIPPON AVIONICS CO., LTD.
URL <http://www.avio.co.jp/>

Welding Products Division
Sales Department

Shin-Yokohama Plant
4206, Ikonobe-cho, Tsuzuki-ku, Yokohama City, Kanagawa
224 - 0053, JAPAN
TEL: +81-45-930-3596
FAX: +81-45-930-3597