

## iSW50 Series

The iSW50 series ultrasonic metal welder has the excellent mechanical structure, equipped with reliable distance and pressure drive system and pneumatic system of precise proportional valve to stably and reliably output, can be applied to all kinds of metal welding, such as electrical connection, wire terminal welding, copper aluminum sheet welding, battery electrode lug.



5G Network



Internet of Things



Communication Equipment



Cloud



Ultrasonic Metal Welder

## FEATURES AND ADVANTAGES

- The 6th generation iQS operation system, multi-level password protection with hierarchical authorization.
- Supportable to MES, DPS for real-time data management.
- Profiling of the welding process
- Built-in scanning port supporting four brands of scanning guns for data traceability.
- Stable workmanship
- Multiple welding modes
- Multiple functions available for integration of an automatic production line.

## Technical Parameters

Hardware	
Output interface	7-inch color touch screen
Control System	iQS
Motion control system	Pneumatic
Frequency adjustment	IGBT auto-tuning
Z axis adjustment	digital display for linear speed
Z axis accuracy(mm)	±0.02mm
cylinder stroke (mm)	Φ100*30mm≤2mm
Air pressure control	proportional valve
Max. air pressure(mpa)	1Mpa
Max Welding time(S)	5S
Cooling system	Vertex cooling
Generator alert	abnormal current/excess current/excess power/excess temperature
Relative humidity	30%--95%, without condensation
Operation temperature	+5°C to +55°C
Air source	Compressed air must be clean, dry and free of lubricants
Voltage(V)	AC220V±5% 50/60Hz
Dimension (L*W*H)mm	300*520*600mm

Controller			
Model	iSW50-2024	iSW50-2040	iSW50-2060
Frequency(KHz)	20	20	20
Power Range	≤2400W	≤4000W	≤6000W
Language(icon)	1)Chinese 2) English 3) Japanese 4) French 5) Portuguese 6)Spanish 7)Italian 8)Korean		
Unit	mm/in		
Unit of force	Mpa/Bar/Psi/Kpa/Kgf		
Pressure unit	N/Kgf/ibf		
Triggering method	Time/pressure/position/power		
Welding method	Welding time/relative position/absolute position/welding energy/peak power/maximum pressure		
Max Welding time(S)	5S		
Amplitude control	Single amplitude/step amplitude/distance amplitude		
Quality control	Time/welding depth/absolute position/energy/power/pressure		
Pre-press vibration	1)OFF 2)preoscillation time 3)preoscillation position		
Welding stacking function	Time/position/energy/pressure		
Welding curve	4-group		
Operating air method	Standard/multi-stage		
Air pressure range(m pa)	0.05mpa≤0.65mpa		
Operation pressure(N )	44N≤5103N		
Holding method	static pressure		
Parameter management	99-group		
Multifunctional control(I/O)	3-group Input/3-group output		

Transducer	
Warranty	1year
Brand	DONGHO
Transduction ratio	95%<real ration<100%

Booster	
Amplification ratio	Titanium 1:2.0

Horn			
Model	iSW50-2024	iSW50-2040	iSW50-2060
Frequency precision(KHz)	19.80KHz-20.50KHz	19.80KHz-20.50KHz	19.80KHz-20.50KHz
Welding area( $\phi$ mm)	According to material/shape/thickness		
Product size	According to material/shape/thickness		

(We preserve the right to update the above specifications in case of any improvement of the products, we will not otherwise inform due to above change. )