

iAL Series

The ultrasonic welding system of iAL series welders can be used to weld thermoplastic materials, and to weld and separate textiles and plastics no matter the workpieces are large or extra large in size for applications. Dongho machine frameworks are rigid and durable, designed in modules which can ensure the consistence and flatness of products during the rapid and high-pressure operation. Such rigid equipment are equipped with precise guiderail and mature driving components, it is Dongho patented welder. After integrating the controlling system with the ultrasonic generator, this machine can carry out process control to its maximum extent. Different welding modes can achieve optimized ultrasonic welding treatment on the workpieces.



5G Network



Internet of
Things



Communication
Equipment



Cloud

FEATURES AND ADVANTAGES

- The 6th generation iQS operating system
- 100% digital amplitude setting
- Clearance offset function and double-feedback control framework
- Auto frequency tracking and locking system
- Safe and convenient sensing switch of new touch mode for easier usage
- Welding parameters record and QA diagnosis and control

APPLICATION

iAL rigid and durable ultrasonic welding system is applicable to the production fields with workpieces in large size, such as the medical treatment industry, automotive industry, commercial or consumer electronics markets for riveting, cutting and sealing of thermoplastic materials.



Ultrasonic Welder Series

TECHNICAL PARAMETERS

Hardware	
Output interface	7" color touch screen
Control System	iQS operating system
Motion control system	Pneumatic control
Frequency adjustment	IGBT Automatic frequency chasing
Z axis adjustment(mm)	±0.02mm accuracy
cylinder stroke (mm)	100mm±1mm
Max. air pressure(mpa)	1mpa
Max Welding time(S)	≤5s
Cooling system	12x12 cooling fan
Generator alert	Frequency Error/Over current/Power overload/Over temperature
Relative humidity	30% - 95%, condensate free
Operation temperature	+5℃ - +55℃
Air source	Compressed air must be clean, dry and free of lubricant
Voltage(V)	AC220V±5% 50/60Hz

Controller		
Model	iAL S1550	iALB S1550
Frequency/KHz	15KHz	15KHz
Power/W	5000W	5000W*2
Trigger mode	time	
Welding mode	Time/Energy	
Amplitude Control	Single amplitude/constant amplitude/light amplitude	
Quality control	Time/Energy/Power	
Operating air method	Standard	
Air pressure range(kgf)	0.5kgf≤8kgf	
Dimension(L*W*H)(mm)	1200*1150*1950mm	
Weight(kg)	350kg	405kg

Converter	
Warranty	1 year
Brand	DONGHO
Conversion ratio	95% < real ratio < 100%
Booster	
Booster ratio	Steel 1:2.8

Horn		
Model	iAL S1550	iALB S1550
Frequency	14.80KHz-15.200KHz	
Accuracy		
Welding area	Not more than 300mm as per materials/shapes, etc.	Not more than 600mm as per materials/shapes, etc.
Product size	Not more than 300mm as per materials/shapes, etc.	Not more than 600mm as per materials/shapes, etc.

Data collection way	
Memory space	128MB
Data transfer	USB read and storage

(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.)