

iAG Series

It's innovative high performance machine for more applications. It is equipped with DONGHO pneumatic system, iQS system, DONGHO-certified Proportion Valve technology, available in multiple welding modes. It's a fully electronic welder and device which meets the requirements of industries of medical treatment, automotive manufacturing and consumer electronics in the aspect of consistency, data traceability and safety through Ethernet connectivity for operation process, multi-level password protection, data connectivity for support of Industry 4.0 applications, and IDCS interconnection service for remote monitoring and data collection. With Dongho welders, the product quality can be perfectly controlled in conjunction with the scanning gun for collecting the barcodes in moulds and workpieces, as a result of connection to MES system.



5G Network



Internet of Things



Communication Equipment



Cloud

FEATURES AND ADVANTAGES

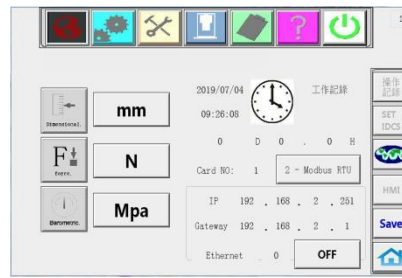
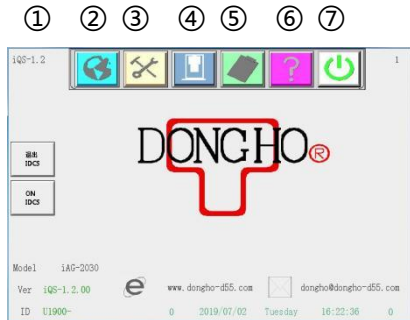
- Powerful welding process control with weld graph.
- Digital amplitude setting, amplitude segmentation and distance segmentation available
- The 6th generation iQS, multi-level password protection
- 100% digital ultrasonic generator and line voltage regulation
- Modularized structure for easy expansion
- Seven welding modes: peak power, time, pressure, energy, grounding, relative distance and absolute distance
- UTC multi-core control: high processing rate for enhancement of tracking precision, configured with MES, DPS system and connected to PC
- Configuration for real-time data management.



Ultrasonic Welder Series

Operation Panel

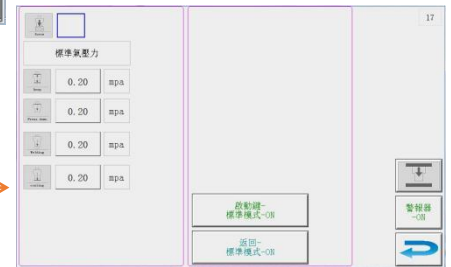
- ① Series Code
- ② Data unit
- ③ Func.Parameters
- ④ Monitor data
- ⑤ Data record
- ⑥ Helps
- ⑦ Switch



Data unit page



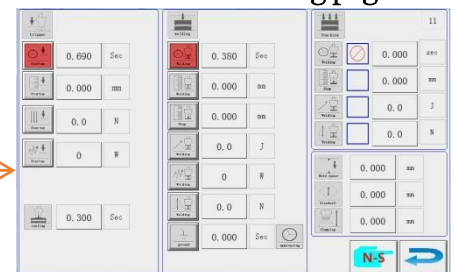
Func. Parameter page



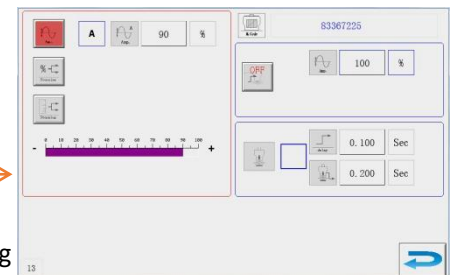
Pneumatic setting page



Data monitoring page



Welding function page



Amplitude control page

- ⑧ Driving air pressure mode selection: standard air pressure/multi-stage air pressure; settable welding horn unit hold pressure, welding horn unit descending pressure, air pressure for fixture clamping, holding pressure, etc.
- ⑨ Four function blocks on Welding Page: 1. trigger mode setting; 2. welding mode setting; 3. piling function setting; 4. Position measuring function (position sensor shall be equipped).
- ⑩ Three function blocks on Amplitude Control Page: 1. Amplitude mode setting (single stage/Stepping/distance amplitude); 2. Pre vibration function; 3. Shake-off function

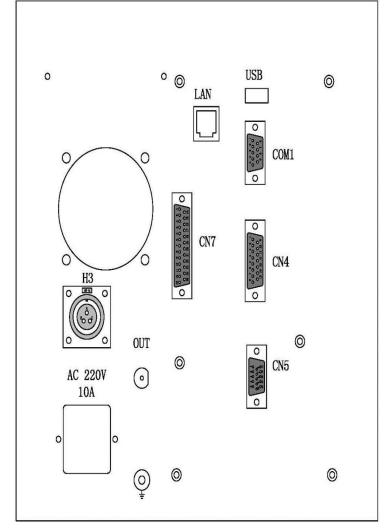
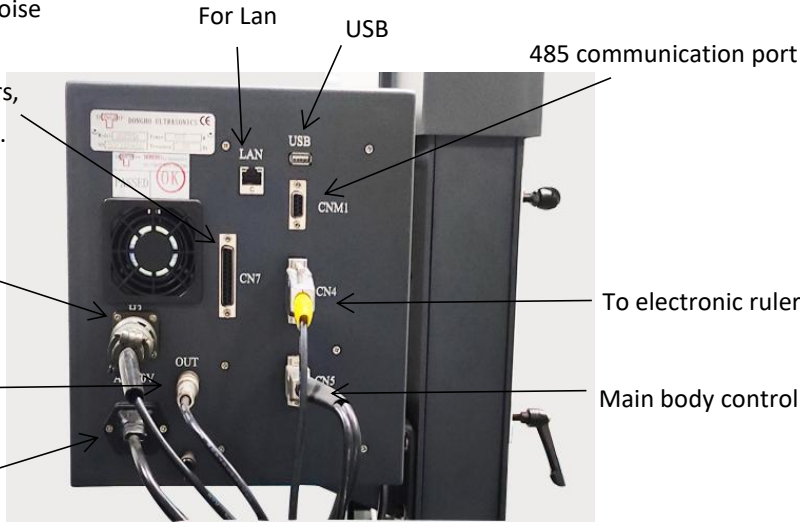
iAG GENERATOR BACKSIDE

Port for auxiliary functions, like noise insulation case, auto-reeling rollers, safety curtain, etc.

Motor for main body movement

Connection to transducer

Power cord



iAG SERIES DIMENSIONAL SIZE

Technische Daten:
Technische specification:

Hub max: 300 mm
Stroke max: 300 mm

Air Pressure: 6 Kgf
Schliesskraft : 1800 N
Nominal force at: 1800 N

Cylinder Trip: 100 mm

Base size: 400x668x1111 mm
3D Shape size: (1386.5)

+Control box
Base size: 502x752x1111 mm
3D Shape size: (1386.5)

Fixed specification: 340 mm
Location specification: 2- \varnothing 11.0

Max: 1386.5
Min: 1086.5

Max: 847
Min: 247
Trip: 100

120 380 400 502 340 444.3 668 752 223.7 1111

386
306
120
160
200
260
300
350
270

DONG HO ULTRASONIC		DRIP-10
Pneumatic ultrasonic series iAG-L Base/3D Shape size	Ein DONGHO Ultrasonic www.dongho-d55.com dongho@dongho-d55.com	 A-2 A

TECHNICAL PARAMETERS

Hardware	
Output interface	7" Color screen
Operating system	iQS
Motion control system	Pneumatic
Frequency adjustment	IGBT auto tuning
Z-axis precision (mm)	±0.02mm
Maximum delivery compression air pressure(Mpa)	1 Mpa
Maximum welding time(S)	≤5s
Cooling System	Vortex cooler
Generator alarm	Frequency abnormal/over current/over load/over temperature
Relative moisture	30% - 95%, non condensing
Operation temperature	+5°C - +55°C
Air source	Compressed air has to be clean, dry and free of lubricant
Voltage source (V)	AC 220V±5% 50/60hz

Converter	
Warranty	1 year
Brand	DONGHO
Conversion ratio	95% < real ratio < 100%

Data collection way	
Data display	Dynamic data block /trigger data block/weld data block
Product identification	Bar code/QR code
Scanning gun brands supported (USB port)	Honewell/Code Reader/Datalogic/Infoscanner
Data transfer	USB read and storage
Dynamic data transmission	Ethernet/RS485/RS232/MES

TECHNICAL PARAMETERS OF iAG-F

Controller						
Model	iAG-F S2025e	iAG-F S2030e	iAG-F S2040e	iAG-F S3015e	iAG-F S3512e	iAG-F S4008e
Frequency/KHz	20KHz	20KHz	20KHz	30KHz	35KHz	40KHz
Power range/W	2500W	3000W	4000W	1500W	1200W	800W
Trigger mode	Time/Pressure/Position/Power					
Welding mode	Weld time/Relative position/Absolute position/Weld energy/Peak power/Max.pressure					
Pneumatic control	proportional valve					
Operation pressure method	standard/multiple stage					
Amplitude control	Single amplitude/stepping amplitude /distance amplitude					
Multifunctional control(I/O)	3 sets of input					
Pre-vibration function	1)OFF 2)time 3)position					
Cylinder stroke(mm)	100mm≤2mm			80mm≤3.2mm		
Max.weld time	5 Seconds					
Voltage source (V)	AC220V±5% 50/60Hz					
Dimension(L*W*H)mm	500*750*1100mm			470*720*950mm		
Weight(kg)	106kg			75KG		

Sonotrode						
Model	iAG-F S2025e	iAG-F S2030e	iAG-F S2040e	iAG-F S3015e	iAG-F S3512e	iAG-F S4008e
Freq. accuracy	19.80KHz-20.20KHz			29.80KHz-30.20KHz	34.80KHz-35.20KHz	34.80KHz-35.20KHz
Welding area	Not more than 150mm as per materials/shapes, etc.	Not more than 170mm as per materials/shapes, etc.	Not more than 250mm as per materials/shapes, etc.	Not more than 100mm as per materials/shapes, etc.	Not more than 50mm as per materials/shapes, etc.	Not more than 40mm as per materials/shapes, etc.
Product size	Not more than 150mm as per materials/shapes, etc.	Not more than 170mm as per materials/shapes, etc.	Not more than 250mm as per materials/shapes, etc.	Not more than 100mm as per materials/shapes, etc.	Not more than 50mm as per materials/shapes, etc.	Not more than 40mm as per materials/shapes, etc.

TECHNICAL PARAMETERS OF iAG

Controller							
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Power range/W	2500W	3000W	4000W	1500W	2000W	1200W	800W
Trigger mode	Time/Pressure/Position/Power						
Welding mode	Weld time/Relative position/Absolute position/Weld energy/Peak power/Max.pressure/Ground detect						
Pneumatic control	Proportional valve						
Operation pressure method	standard/multiple stage						
Amplitude control	Single amplitude/stepping amplitude /distance amplitude						
Multifunctional control(I/O)	3 sets of input/3 sets of output						
Pre-vibration function	1)OFF 2)time 3)position						
Welding stacking function	time/position/energy/pressure						
Cylinder stroke(mm)	100mm≤2mm			80mm≤3.2mm			
Max.weld time	5 Seconds						
Voltage source (V)	AC 220V 50/60Hz						
Dimension(L*W*H)mm	500*750*1100mm			470*720*950mm			
Weight(kg)	106kg			75KG			

Sonotrode							
Model	iAG S2025e	iAG S2030e	iAG S2040e	iAG S3015e	iAG S3020e	iAG S3512e	iAG S4008e
Freq. accuracy	19.80KHz-20.20KHz			29.80KHz-30.20KHz		34.80KHz-35.20KHz	39.8KHz-40.20KHz
Welding area	Not more than 150mm as per materials/shapes, etc.	Not more than 170mm as per materials/shapes, etc.	Not more than 250mm as per materials/shapes, etc.	Not more than 100mm as per materials/shapes, etc.	Not more than 130mm as per materials/shapes, etc.	Not more than 50mm as per materials/shapes, etc.	Not more than 40mm as per materials/shapes, etc.
Product size	Not more than 150mm as per materials/shapes, etc.	Not more than 170mm as per materials/shapes, etc.	Not more than 250mm as per materials/shapes, etc.	Not more than 100mm as per materials/shapes, etc.	Not more than 130mm as per materials/shapes, etc.	Not more than 50mm as per materials/shapes, etc.	Not more than 40mm as per materials/shapes, etc.

(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.)