GMX-L20A 5500W

Overview

Branson[™] GMX-L20A Ultrasonic Metal Welder is designed and built to assure you the highest degree of reliability and weld quality. Ultrasonic metal welding provides our customers with a superior solution, superior performance, improved throughput, and reduced maintenance.

With over 40 years of experience in metal welding, Emerson continues to lead the design of high-end ultrasonic metal welding solutions. With the growing demand for welding products with larger size, more layer thickness and larger wire diameter, such as welding of large cross-section wires in new energy vehicles or charging stations, as well as thicker materials such as busbars or foils and joints used in battery modules and electrodes, Emerson continues to improve technology to provide faster, cleaner, and more reliable welding solutions for advanced industrial applications.





Key features

- Precision roller bearing slide assures smooth operation and extreme accuracy.
- Precise adjustments for accurate setting of both upper and lower positive stops.
- Dovetail mounting allows quick change fixturing.
- Solid steel horns for fast set up and minimum tooling cost-or- Titanium horns with economical replaceable tips.
- Optional vortex cooling allows high-speed operation without heat buildup.

ADVANTAGES OF ULTRASONIC WELDING				
Process control	Ultrasonic welding monitored through time, energy, power and height limits			
Cost and environmental savings	Elimination of consumables such as solder, flux, crimp connectors and braze materials			
Speed	Typical weld cycles under 0.5 seconds			
Low operating costs	Less than 1/30 of the energy of resistance welding			
Tool life	Precision machined, multi-lobe tools manufactured with high-quality tool steel provide long l simple setup and precise weld accuracy			
Insulation dispersal	In most cases, high frequency scrubbing action eliminates the need to pre-clean parts or strip insulation from magnet wire			
Low operating temperature	Minimal heat generation, therefore metal parts will not anneal and there is no need for cooling water			
Automation potential	mation potential Efficient size, minimal maintenance and orientation flexibility make Branson ultrasonic equipment the best choice for automatic assembly			

For more information: www.Emerson.com/Branson





Specifications

SPECIFICATIONS			
Frequency	20kHz		
Compressed air	80 psi (5.5 bar) clean, dry air		

Power Nominal AC Input		Current Rating	
5.5kW	360-528V, 50-60 Hz, Three Phase	15 Amp Max.@200V / 20 Amp fuse	





Features

Attribute	GMX-L20A	
Connectivity	Ethernet 1000/100/10 Mbps for direct Branson Insights connection with MES	
	Recipe remote recall via Ethernet	
OS System	Industry Leading real-time OS	
UI App	Modern & Smart design user-friendly	
Time to start	Fast cycle start up	
Display	7" Polychrome, capacitive LCD	
	Optional for extended display (additional monitor)	
Result Display	3 Graphs by Power, Height, Frequency	
Language	Multiple Languages	
Actuator	Optimized pneumatics for better safety	
Height Encoder	Digital encoder, 5µm resolution, covers full cylinder stroke	
Height Calibration	Simplified process with accuracy correction	

Examples of HMI Screens & Recipes



- (5.8 (147.19)

MENU RECIPE NAME New Recipe				
	Time (s) 🕚	Power (W) 👂	Pre-Height (mm) 🔳	Post Height (mm) 🔳
Sctual	0.000	0	0.00	0.00
Max 5	5.000	6600	15.00	15.00
Vin (0.000	0	0.00	0.00
	Energy (j) 🥎	Amplitude (µm) 🚟	T-Pressure (PSI) 🗵	W-Pressure (PSI) 🕱
Sctual	0.0	0	0.0	0.0
Setting	100.0	36	30.0	30.0

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