YN-D2012-G 12000W Ultra-High Power Ultrasonic Metal Welding Machine, D-Series Flagship for Copper and Aluminum Busbar Energy Storage Welding

YN-D2012-G

Product Overview

Specifications

Parameter	Specification
Input Voltage	380V
Operating Frequency	20KHz
Output Power	12000W
Welding Area	35-120mm²
Machine Dimensions	1750×1050×2150mm
Machine Weight	988KG
Applicable Materials	Copper, aluminum, and copper-aluminum composite busbars
Working Environment	No sparks, no fumes, compliant with green manufacturing standards

Product Features

• 12000W Ultra-High Power Output : Designed for heavy-duty industrial use, enabling rapid solid-state welding of large cross-section conductors like copper and aluminum busbars, with high weld strength and significantly improved efficiency.
• Wide Welding Area Coverage : Supports workpieces from 35-120mm², adaptable to various busbar connection needs in power transmission, distribution, and energy storage equipment, reducing mold change frequency.
• Precision Digital Amplitude Control : 20KHz high-frequency vibration combined with a digital adjustment system ensures weld point consistency, reduces cold weld risks, and improves yield rate.
• 988KG Heavy-Duty Machine Structure : Constructed with high-strength steel and precision machining processes, ensuring stable and reliable long-term operation, effectively suppressing vibration deviation and extending equipment lifespan.
• Energy-Saving, Eco-Friendly, and Pollution-Free : No flux required, no sparks or fume emissions, compliant with green manufacturing requirements, reducing workshop environmental management costs.

Applications

• **New Energy Lithium Battery Production Lines**
es Power battery tab welding, module Busbar connections, energy storage battery Pack assembly, weld resistance ≤100μΩ, extensive experience supporting daily production lines.
• **Automotive Wiring Harnesses and Connectors**
rs High-voltage harness terminals, motor lead wires, IGBT module welding, replacing traditional crimping, reducing contact resistance by over 60%.
• **Copper-Aluminum Transition Welding**
ng Direct solid-state connection of copper-aluminum dissimilar metals, no transition piece required, widely used in charging piles and the electrical power industry.
• **Precision Electronic Components**
ts Micro terminal and sensor pin welding, minimal heat-affected zone, suitable for medical electronics and instrumentation.

Certifications

CB	3C	CQC	UL	FCC	CE	GS	UKCA
SAA	RCM	PSE	KC	KCC	NOM	BIS	BSMI

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