

WELDING MACHINE

SW SERIES

HIGH-PRECISION ASSEMBLY
TECHNOLOGY



PORTABLE



EASY



**DESIGN
ROBUST**

TECHNICAL FEATURES

CAPACITOR DISCHARGE WELDING MACHINE SW SERIES

TYPE	CAPACITOR DISCHARGE WELDING MACHINE SW SERIES
Supply voltage	220V / 50 Hz
Charging voltage	20 – 200 V (adjustable)
Ø – L of the pin	M3-M8 (M10) / 5-35 (>35) mm
Adequate sheet thickness	≥ 0.5 mm
Weldable material	Stainless steel, steel, aluminum, brass
Welding speed	25-30pcs/min
Capacitor Capacity	99000 µF
Capacitor (voltage/cycles)	250 VDC – 2 million cycles
Clamp cable / Output	Section 25 mm ² / Copper T2
Fuse	10 to 250 VAC
Automation	Optional RS485
Welding time	1-3 ms
Control and connection	Microprocessor – DKJ50-70 Terminal
Weight	25 kg
Dimensions	550 x 211 x 238 mm

SW SERIES WELDING GUN



- PIN DIAMETER: **M3-M8 (M10)**
- AXLE LENGTH: **5-35 mm (> 35 mm)**
- WELDING CABLE LENGTH: **3 m**
- GUN DIMENSIONS: **182x130x35 mm**

POSITIONING AND PRELOADING

The welding gun is positioned perpendicular to the surface of the workpiece. The pin is placed precisely on the sheet metal, ensuring optimal electrical contact, which is a prerequisite for starting the welding process.

CONTROLLED INSERTION

The constant, calibrated pressure exerted by the gun guides the pin along the vertical axis, allowing it to be inserted precisely into the weld pool at the optimal time of the process.

DISCHARGE AND IGNITION

The energy is released instantaneously, generating a high-intensity electrical discharge. The current simultaneously melts the pin tip and the sheet metal surface, creating a highly localized weld pool.

END-OF-CYCLE CONSOLIDATION

The molten metal cools and solidifies within milliseconds, resulting in a strong, reliable and permanent weld between the stud and the component.