SEMI AUTOMATIC MACHINE TO WELD TERMINAL PINS TO COILS

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This device has been designed and built as an intermediate solution between the completely manual welding of the terminal pins to the coils, and the fully automatic solution.
The semi-automatic device allows automatic welding of coils to terminal pins, of manually preassembled coils/terminal pins.

Summary

MACHINE COMPOSITION

- A walking beam transfers the preassembled terminal pin/coil from the loading position to the welding station. After welding the parts are offloaded into a stainless-steel container.
- Working table made in stainless steel, complete with device to unload and guide the terminal pin/coil assembly on the walking beam.
- Pneumatic device to align the terminal pin/coil assemblies under the welding electrode to guarantee repeatability of the welding process (always at the same point) of the coil.
- 15 KVA spot welder, complete with process control.

ADVANTAGES

The semi-automatic welding machine solves all the disadvantages of the completely manual welding system. The advantages are:

- Allow automatic welding of coils to terminal pins of manually preassembled coils/terminal pins
- Higher productivity rate not determined by the operator's skills
- Accuracy
- Safe working area
- Short set up time

An exclusively automatic solution is not convenient for small or medium production rates, and specially not if the terminal pin diameter, wire and coil diameter and type of plastic plug changes with every batch. In such cases a semi-automatic or manual welding is recommended.

TECHNICAL CHARACTERISTICS

Cycle time	sec.	3-4
Terminal pin length	mm	45-200
Terminal pin diameter	mm	2,5-4
Coil length	mm	100-1200
Coil OD	mm	1,8-4
Power supply	V	to be defined
Installed power	KVA	15
Pneumatic supply	Ate	6
Water supply	l/min	2
Welding machine		to be defined
Dimensions	mm (a x b x h)	2325x1245x1770
Weight	kg	400
Set-up times[1]	min	2-3

[1] When changing the coils or pins, the operator will have to:

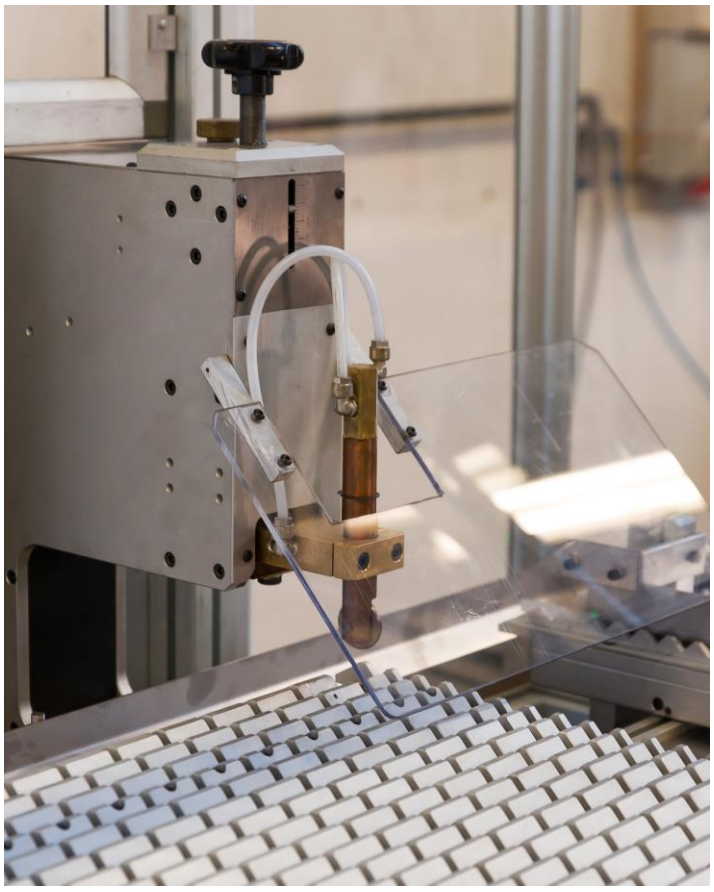
- Adjust the welding parameters, just as in any manual welding system.
- Adjust the reference stop according to the length of the terminal pins
- Adjust the positioning device of the terminal pin-coil in the welding station

AVAILABLE VERSIONS

Mod.120/50.MEA100	Complete with welder with current controller, with possibility to store 30 weld programs
Mod. 120/50.MIP250	Complete with welder with inverter controller, with possibility to store 255 weld programs

OPTIONS

Mod. 120/50.000050	Set of parts subject to wear
Mod. 120/50.000055	Set of spare parts



LAYOUT