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DESIGN CONSULTANT & MANUFACTURER

- * ELECTRONIC CONTROL SYSTEMS
- * IMPORT SUBSTITUTION

DILIGENT THERMOCOUPLE WELDING UNIT

Diligent Thermocouple Welding Unit is housed in strong powder coated m.s. enclosure which has shoulder strap for ease of carrying on site. It has rechargeable 12 V 4.5 Ah heavy duty Battery with inbuilt SMPS Battery Charger cum Power Supply. 1 meter long multi-strand thick copper cable with Silicon Sheath, Heavy duty Plier and strong circular Magnet are used to connect the Welding Power to the Thermocouple Wires & the surface on which TC is to be welded. the unit has facility to set the Weld Energy Charge Level to suit different gages of Thermocouple wires. The SET Value and CHARGED Value are displayed on Bar Graph display. The desired Charge Level is set on the SET Bar Graph using UP/DOWN push button. This Setting is remembered during operation. Whenever welding is to be done, command is given to start charging the unit to SET value by pressing momentarily the CHARGE Button. Once the Charge level is reached to SET Value, the AUDIO alarm sounds indicating the readiness for welding. Welding operation is performed either in MANUAL mode or AUTO Mode. In Manual mode, the Thermocouple to be welded is firmly held in Pliers at the desired spot, Magnet with wire is located nearer to this spot and then press the WELD Button after getting READY AUDIO ALARM.

In AUTO Mode, Pliers holding TC Wires and the Magnet are positioned at the scheduled spot. Press the CHARGE Button. The charge builds up to the SET value and Audio Alarm sounds. Few seconds of this, WELD command is automatically given by Auto Circuit and Weld occurs. The pliers is moved to next spot and the complete cycle repeats automatically. This is carried out till all the TCs are welded.

A Bar Graph Display is also provided to indicate the CHARGE Level of battery when Battery Push Button is pressed. An Audio Signal sounds when battery drains below 10.5V (approx). It requires recharge for proper welding quality.

The unit can also be operated directly from mains AC Supply if Battery is not available.

Diligent Thermocouple Welding Unit size is 240 mm (L) x 170 mm (W) x 170 mm (H) and weighs 4.5 kgs without battery

12 V DC Battery is rated for 4.5 Ah. Its size is 90 mm (L) x 70 mm (W) x 100 mm (H) and it weighs 1.5Kgs.

Its useful Charge Level is 60 Volts and can reach up to 80 Volts under supply voltage conditions. The maximum charge can be reached to 0.60 Coulombs.


