

Product Name :
Tig (Argon Arc) Manual Welding Equipment

Product Code :
wm0004



Description :

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Technical Specification :

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TIG Welding Plant encased in well finished Portable Sheet metal drip Proof casting, incorporates following main components.

1. High Frequency Unit :
Consisting of well balanced LRC Circuit, spark Gap unit and an air core Transformer to prevent mains frequency from entering into the Oscillating Circuit
2. A solenoid Valve, for starting the gas supply and stoping it after pre-determined time, remotely controlleable from the foot pedal switch.
3. DC Suppressor or Wave Balancer (Alternative to D.C. Suppressor):

Recommended for welding of Aluminium, Magnesium and their alloys, when Welding with AC power the unit improves stability, eliminates 'Clipping' and balances the unbalanced AC Waves.

4. H.F. Unit with Wave Balancer (Combined unit):

An unique unit to economize, and minimize the investments.

Specially developed for combined work of S.S. & Aluminium. Encased in one housing to save the requirement of space.

5. Argon Arc Touch: Air or Water Cooled touches from 50 to 600 Amps. Capacities of sturdy, brass construction, specially designed to be light and balanced. Torch is supplied with water cooled cable, fuse unit and welding cable > water Cooled shield or Ceramic shield. Suitable set of Collets to hold Tungsten Electrodes, of different sizes as per the applications, with collet spanner.

The following are essential and supplied on specific request only :

1. Tungsten Electrodes
2. Ceramic Shield
3. Flowmeter regulator
4. Coolant pump (water recirculating device)
5. Trolley for TIG Welding requirements
6. Gas & water shut off valve-mechanically operated to economize flow of gas and water.

POWER SOURCE :

'TIG' Welding Power Source should have drooping Volt-Amps. Characteristic, should preferably incorporate bypass condenser and contactors to control the mains supply. Can have AC or DC output depending upon the application.

For AC TIG Welding, Oil cooled or Forced Air cooled welding Transformers with dual open circuit voltages of 80 and 100 Volts, model-300 Amps or 450 Amps are recommended for welding of Aluminium, magnesium, their alloys particularly and other weldable materials.

The heat concentration is equally divided between the work piece (Job) and the Electrode. The AC Arc helps, particularly to remove the refractory oxide, which forms on some light metals and alloys.

For DC TIG Welding, DC Welding Rectifier sets type-200T, 300T, 400T, 500T and 600T are ideal for use on all weldable metals and S. S., heat resistant Steels, mild Steels, Chrome Nickel and Copper Nickel alloys, Copper, Lead, Titanium, Molybdenum, Zirconium and Silver. In case of DC Welding, major portion of heat is concentrated at positive end of the Arc, therefore the Electrode should be connected to the negative terminals.

AC/DC combined welding Transformer rectifiers are economically very ideal for the job of S. S. &

whenever required of Aluminium. The sets are combined model to get the AC or DC output as per the applications. Models-200M, 300M, 400M, 500M, and 600M, are recommended for the purpose, which reduces the necessity of 2 different power source for S.S. & Aluminium TIG Weldings.

ADDITIONAL EQUIPMENT FOR D. C. TIG WELDING:

Special attachment, provided with basic D.C. power Source to achieve minimum output current up to 2 Amps suitable for thinner metals which can be supplied on specific request.

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