



LUMETRON XL-6K Capacitor Discharge Spot Welding Machine



The **LUMETRON XL6K C.D. Spot Welding Machine** is designed and manufactured by Lumetronics for special purpose Micro Spot Welding applications. It finds particular use in lamp manufacturing for welding of tungsten filaments, molybdenum foils, molybdenum wires and thoriated tungsten rods. It can also be used for welding of thermocouples, ferrous/non-Ferrous foils, relay contacts and wire connections, electronic components like resistors, capacitors etc., contact springs and other similar applications.

It is a precision Thyristor Controlled, Capacitive Discharge Welder with a continuously variable Weld Energy Control. This variable energy design offers better weld quality and consistency compared to older designs employing variable timing, constant energy control. The components being welded do not get heated up, and consequently, their oxidation due to welding is considerably reduced. Addition of the Inert Gas shroud welding accessory allows total elimination of weld oxidation by use of a shroud of inert gas which is released on the weld component during welding. The quicker welding cycle results in a higher production throughput. Moreover, its compact and aesthetic design allows various units to be installed on the production floor with ease.

Features

- * Totally self contained unit requiring a 230 V AC, 50 Hz, single phase supply.
- * Thyristor Controlled, Capacitive Discharge system.
- * Continuously variable 'Weld Energy Control' from 10 to 100 %.
- * Compact work table design with laminated table top.
- * Electrical Control Panel located on right hand side of operator for easy access and control.
- * Analog Weld Energy 'Percentage' meter.
- * Adjustable foot operated Weld Pedal.
- * Precision engineered Weld Head with Pressure sensitive Weld function. Weld Squeeze pressure can be varied for different weld applications.
- * Copper Cadmium, Tungsten tipped or other special Electrodes depending on the application.

Options

C.D. SPOT WELDER OPTIONS

INERT GAS SHROUD ASSEMBLY 'LUMETRON XL6KA':

- * Spot Welding under a 'Shroud' of Inert Gas to avoid Weld Junction Oxidation (Blackening).
- * Solenoid operated valve and nozzle assembly with pressure regulator and electronic timer.
- * Gas Cylinder and connecting hose are not in the scope of supply.

FOIL FEEDING/CUTTING DEVICE, MANUAL 'LUMETRON XL6KB':

- * To feed Moly foil directly from the spool during welding.
- * Manually operated device with 3 stage operation of Feed, Weld & Cut.
- * Eliminates pre-cutting of the moly foil. Prevents oxidation and wastage.
- * Cut length of foil can be adjusted.
- * While ordering, please specify:
 - * Material, Thickness, Width & Cut Length, Spool Size, Companion material, Assembly Drawing of components, Sample Assembly

MAGNIFYING GLASS 'LUMETRON XL6KC':

- * Large diameter magnifier with adjustable position.
- * Provides high magnification for precise welding of small parts.

LOCAL ILLUMINATION LAMP 'LUMETRON XL-6K-D':

- * Provides bright illumination on the welding area.
- * High intensity 12 V Halogen Lamp with reflector and flexible stem to enable adjustment in any direction.
- * Independent On/Off control switch.

Specifications

Type	: Capacitor Discharge, Variable Energy, Thyristor Controlled.
Capacity	: 300 Joules Max. (300 Watt-Seconds)
Metering	: Energy Meter, 0~100%, DIN Std. 96 Square.
Indicators	: Weld ON , Mains ON
Controls	: Mains On/Off, Weld On/Off with Auto Discharge in Off Position, MCB, Energy Control, Weld Pressure Control
Electrodes	: Copper, Copper Cadmium, Copper Beryllium, Copper Chromium, Tungsten or as per requirement.
Supply	: 230 V AC, 50 Hz, Single Phase, +/5 %
Fuse Rating	: 5 Amp. max.
Dimensions	: (W x D x H) 1000 x 550 x 1100 mm approx.
Weight	: 52 kgs. approx.

