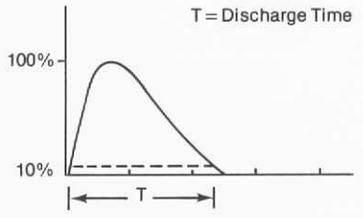
STORED ENERGY
POWER SUPPLIES

FAMILY FEATURES

- VOLTAGE REGULATED SOLID STATE DESIGN ON A SINGLE PRINTED CIRCUIT BOARD—insures that the output is independent of changes in line voltage, improves reliability, and simplifies repair.
- CHARGING CIRCUIT—uses triacs in a unique manner which provides high reliability and precise charging, without overshoot, at all energy settings. OVERVOLTAGE PROTECTION LOCKOUT protects the capacitor bank from damage due to circuit malfunction or improper calibration. AUTO RECHARGE feature means faster operation, since the charging circuit automatically starts to recharge 50 milliseconds after the power supply fires.
- TURNDOWN CIRCUITRY—allows the operator to reduce the energy setting by using the heat control. The excess energy stored in the capacitor bank is electronically dissipated internally.
- WELD FIRE LOCKOUT—helps prevent poor welds by inhibiting firing of the Power Supply, during the charging and turndown periods, until the energy stored in the capacitor bank is within 1% of the pre-selected value.
- DUAL RANGE—increases the resolution of the meter and the heat control.
- HIT RATE—the rate at which the power supply can make consecutive welds on an intermittent basis. Hit Rate is a function of energy setting and input line voltage.
- REPETITION RATE—the maximum rate at which a power supply can operate, on a continuous basis, without exceeding the thermal rating of any of its component parts. Rep Rate is a function of the energy setting.
- UNIPULSE OUTPUT TRANSFORMER—insures repeatable outputs at any specified "Rep Rate."
- PULSE WIDTH—measured at the 10% points on the leading and trailing edge of the output waveform. The welding characteristics of some materials, such as copper, are significantly improved by modifying the length of the output pulse. The output characteristics of Unitek Power Supplies are measured with a 1 milliohm load.
- RISE TIME is the time required for the output waveform to reach its maximum value. In order to insure a quality weld, Fast Rise Times require low inertia Weld Heads which maintain a nearly constant force during the welding cycle.
- **All Unitek Stored Energy Power Supplies are designed for 115/230 Volt, 60/50 Hz. operation.**
  Use 230/60 Suffix to specify 230 volt, 60 Hz. Power Supplies.
  Use 230/50 Suffix to specify 230 volt, 50 Hz. Power Supplies.

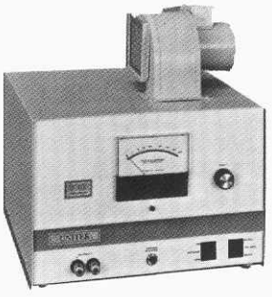


UNITEK 60

Production Line POWER SUPPLY

- Specifically designed for production line environment.
- Minimum number of controls simplifies operation.
- 170 welds per minute at 30 watt seconds. 125 w.p.m. at 60 w.s.
- 60/12 watt-seconds. Dual Range. Two Output Pulse Widths.

UNITEK 60HR



High Rep Rate Production Line POWER SUPPLY

FOR AUTOMATIC MACHINES

- Specifically designed for high-speed automatic welding machines.
- Minimum number of controls simplifies operation and improves reliability.
- Overdamped metering circuit insures excellent readability and reduces meter fatigue.
- External blower with filter.
- 550 w.p.m. at 10 w.s. 190 w.p.m. at 60 w.s.
- 60 watt-seconds. Two Output Pulse Widths.

STORED ENERGY
POWER SUPPLIES

UNITEK 125

Production Line POWER SUPPLY

- Specifically designed for production line environment.
- Provides 5 pushbuttons for the selection of energy, a convenience in some production applications.
- 125 w.p.m. at 60 w.s. 64 w.p.m. at 125 w.s.
- 125/25 watt-seconds. Dual Capacity. Dual Range. Two Output Pulse Widths.

UNITEK 250

Production Line / Laboratory POWER SUPPLY

- General purpose power supply which satisfies more than 80% of the stored energy welding applications.
- Front panel controls assist production line and laboratory users who routinely encounter a wide variety of applications.
- 300 w.p.m. at 25 w.s. 65 w.p.m. at 250 w.s.
- 250/50 watt seconds. Dual Range. Three Output Pulse Widths.
- Polarity Reversal and Pulse Width Switches.
- Five Weld Energy Pushbutton Selectors.

UNITEK 250DP

Production Line POWER SUPPLY

WITH SEQUENTIAL DUAL PULSE FEATURE

- SPECIAL PURPOSE POWER SUPPLY which reduces expulsion, weld spatter, and deformation in some welding applications by delivering two preselected energy levels, sequentially. The weld energy programmed on Selector #5 is immediately followed by the energy programmed on Selector #4. Typically the first pulse should be preset to about one-third the energy of the second pulse. The first pulse can also be used to displace platings, or contamination, so that the base metals can be welded with the second pulse.
- 300 pulses per minute at 25 watt seconds 65 p.p.m. at 250 w.s.
- 250/50 watt seconds. Dual Range. Three Output Pulse Widths.
- Polarity Reversal and Pulse Width Switches.
- Five Weld Energy Pushbutton Selectors.

UNITEK 500

High Energy Production Line POWER SUPPLY

- Provides precisely-controlled, high energy for those welding applications which cannot be successfully performed, on a production basis, with "half-cycle" A.C. resistance welding.
- 75 w.p.m. at 250 w.s., 40 w.p.m. at 500 w.s.
- Remote Output Transformer: 12" H x 9" W x 10" D, 84 lbs (30.5 x 22.9 x 25.4 cm, 37.8 Kg).
- 500/100 watt-seconds. Dual Range. Three output pulse widths.