Intelligent Assembly Solutions

**EZ Welder™**

**Ultrasonic Assembly Systems**

Models 1000EZ and 1000EZX -1000 watts
Models 2000EZ and 2000EZX -2000 watts

**FEATURES**

- **Dukane Exclusive** one touch **hot keys** for quick programming of weld control. Weld time, Hold time, Amplitude.
- **Hot Key** One Touch digital amplitude control in 1% – increments 100-40%.
- Weld time, hold time, cycle time, part count, energy* and out of limit condition* (*EZX) displayed in operate mode.
- **Patented Pulse-Width Modulation** design delivers power more efficiently with substantially less stress on the electrical components for superior reliability, and extended service life.
- **Unique Linear Ramp Soft Start** accelerates the transducer and tooling up to operating amplitude eliminating mechanical and electrical starting stress.
- **AUTO-TRAC tuning** using phase lock loop technology automatically locks the generator to the resonant frequency of the transducer and tooling even under varying conditions of temperature and loading.
- **Dukane exclusive FLOW-THROUGH COOLING** provides on demand thermostatically controlled cooling system that separates electronic components from the cooling air flow chamber.
- **Advanced transformer and inductor designs** increase efficiency and reliability of electronic components.
- **Line regulation** compensates for line fluctuations assuring consistent amplitude.
- **Load regulation** assures constant amplitude at various loads improving assembly consistency.
- **Universal Voltage Input** automatically compensates for line voltages between 90-130, or 180-260 volts.
- Sophisticated full-time electronic **overload protection** senses overload conditions and shuts down in less than 1/1000 of a second, preventing damage to vital components.
- **System power output** indicates normal or possible overload operating condition during the weld cycle.
- **One millisecond sample** rate samples cycle parameters one thousand times per second for excellent precision and repeatability.
- 4-line **LCD display** for easy user interface and display of weld part data.
- **Self diagnostic error messages** simplify trouble shooting and programming mistakes.
- **Programmable bad or suspect part limits** indicate all parameters outside the tolerance established for an acceptable part (EZX).
- **Visual and Audible alarms** alerts the operator of any suspect or bad part conditions (EZX).
- **Standard End of Weld** ground detect feature with programmable scrub time allows for cut and seal type applications of textiles, etc.
- **System outputs** - ultrasound active, system fault, overtemp, overload, on line/off line status. Isolated bad part good part (EZX), ready and indwell.
- **Power display** for checking acoustic stack characteristics.
- **System outputs maintained or pulse menu** selectable for flexibility in communication with automation.
- **22 VDC output** to supply power for user automation controls limited to 250ma.
- **Menu selectable part counter** - All or exclude bad/suspect parts.
- **Universal IEC 320 power cord receptacle** accommodates most worldwide power requirements.
- **ISO9001 Certification** assures you of the highest quality and Dukane’s commitment to continuous improvement.
PRESS SYSTEM

- **Narrow 4.5" (114mm) profile** for close center-to-center distances in multihed and automation installations
- **Rugged construction** using the highest quality components provides superior performance, precision, and reliability
- **Compact, single-rail linear ball slide assembly system** offers accurate positioning, stable movement, and friction-free resistance
- **5" (127mm) stroke** with mechanical bottom stop adjustable in .001" (.025mm) increments
- **Top-of-stroke limit switch** for automation application
- **Easy to use front panel position indicators** with universal icons instantly show settings of position and bottom stop, and optional slow speed
- **Chrome-plated column and aluminum booster** are standard
- **OSHA-required lockout for air supply** is standard
- **Ergonomic base and cycle activation switches** reduce operator fatigue
- **Status indicators in base** for Power, In Cycle, and Abort clearly communicate system conditions
- **Twist-release emergency stop switch** meets international safety standards
- **Locking pneumatic stroke speed** adjustable controls horn travel down to work piece
- **Calibrated dynamic trigger** system with LED indicator initiates weld cycle at a precise user selectable force
- **Hinged transducer door** for quick and easy tooling change overs
- **Adjustable safe pretrigger** position reduces sonics on time (EZX)
- **End of weld- absolute distance** provides repeatable consistent part height. Perfect for tight tolerance part height requirements. (EZX)

Electrical Requirements

90–130 Volts AC, 50/60 Hz or 180–260 Volts AC, 50/60 Hz

(Input Power Requirements vary with Frequency Output and the Rated Power of the Generator)

Approximate Weight — 40 pounds (18.2 kg)
Shipping Weight — 50 pounds (22.7 kg)

Press Dimensions

Base width: 18.56" (471mm)
Base depth: 24.83" (631mm)
Column height: 40.00" (1016mm)
Column diameter: 3.50" (91.9mm)
Maximum height: 62.00" (1574mm)
Housing width: 5.87" (149mm)
Column C.L. to Horn C.L.: 12.38" (314mm)
Useable throat: 8.50" (216mm)
Stroke: 5.00" (120mm)
Weight: 150.00 lbs (68Kg) less tooling