Controls for Resistance Welding

EN1500
Seam Welding Controls

- **Simple to Program**
  Push buttons and a three-step procedure make easy work of programming any welding schedule.

- **Two Year Warranty**
  A two year warranty is offered on all ENTRON parts and assemblies. Expert phone support and application service are available at no cost.

- **Change Current “On the Fly”**
  While welding, change current “on the fly” with Manual Current Adjust (optional).

- **Direct Replacement for EN500**

- **Unique Design**
  Specifically designed for ALL types of seam welding, including roll spot.

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**Features**
- Seam Sequence
- Preheat/Postheat
- Up/Down Slope
- Continuous/Intermittent
- Beat/Non-Beat Operation
- End of Sequence Output
- Hierarchical Initiation Structure
- Optional Manual Current Adjust

**Capabilities**
- 50 Unique Schedules
- Weld & Valve Control Relays
- One Valve Output
- Multiple Job Set-ups
- Easy to Program
- Program Only the Functions Required
- Spot/Roll Spot

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*Exclusive ENTRON two year warranty*
**EN1500 Series Controls**
Seam Welding • Multiple Schedule/Multiple Sequence Controls
Date: February 2007    Supercedes: April 1998

**SPECIFICATIONS**

**Absolute Count:** Push Button Data Entry with Display
- Squeeze Count: 0 to 99 cycles, 50/60 Hz
- Preheat Count: 0 to 99 cycles, 50/60 Hz
- Weld Count: continuous seam or intermittent seam
- Cool Count: 0 to 99 cycles, 50/60 Hz
- Postheat Count: 0 to 99 cycles, 50/60 Hz
- Hold Count: 0 to 99 cycles, 50/60 Hz
- Slope control/Up and Down Slope: 0 to 99 cycles, 50/60 Hz
- Digital Phase Shift Current Control, 10 to 99% in 1% current steps, all weld current functions

**It is NOT necessary to program functions NOT required, program only functions required**

**Standard RWMA/NEMA Programmable Functions**
Including the following as examples:
- Up Slope and Down Slope
- Seam Weld (Continuous or Intermittent)
- Multi-Weld Count/Multi-Current Select
- Pre-Heat/Post-Heat
- Priority heat select individual or switch on the fly
- Switch weld schedule on the fly upon limit switch input

**Additional Features**
- Error Code/Fault Outputs
- 87° First Half Cycle Delayed Firing, Anti-Saturation Circuit
- Dynamic Automatic Power Factor Equalization
- Dynamic Automatic Voltage Compensation, ±20% of Nominal Line
- Emergency Stop Circuit
- Interlocking Pressure Switch Circuit
- Single Stage Pilot/2 Stage Pilot
- Beat/Non-Beat Operation
- Operational Lights: Power On, Weld Current
- Indicator Lights for all functions on display panel
- Valve Transformer: 50VA 230/460-150V
- Single Valve output standard, all controls
- (Optional) Change Current “On the Fly” (while welding) with Manual Current Adjust

**The EN1500 Series Control** is a microprocessor based resistance welding control. It has been designed specifically for Seam Welding applications. One outstanding feature of the EN1500 control is its ability to allow the operator concurrent adjustment of weld heat intensity during an initiated sequence (this feature is optional).

- **Store up to 50 UNIQUE SCHEDULES**
  - Every parameter of each schedule individually accessible
  - Each schedule can store 11 distinct and totally different parameters
  - All schedules retained in memory with power off
  - It is NOT NECESSARY to program functions not required

- **Single contactor circuitry; Process control outputs**

- **Additional Standard Features:**
  - Priority Heat Select
  - Contactor Failed Detection (Circuit breaker with shunt trip, optional)

- **Control can be INTERFACED with external Programmable Logic Control (PLC); Advanced interfaces available**

- **Meets or exceeds RWMA/NEMA standards**