APPLICATION DATA
No. 803 – Tack Welding Machine

Single Station Welding Machine Specifications

- **Assembly:** Two-piece thermocouple heat transfer tube assembly.
- **Welder:** Industrial Dual Pulse Spotwelder.
- **Production Rate:** 360-500 parts per hour, one operator.
- **Dimensions:** 18” W x 24”D x 65”H.
- **Utilities:** Electrical, 220/1/60, Control voltage 24VDC, Compressed Air ¼ NPT, 60 psi.
- **Control:** Programmable relay.
- **Safety Features:** If an error occurs before the slide is unlocked, red indicator informs operator of fault. Fault message is displayed on the front of logic controller. Operator can press a reset button to unlock the slide. In this case, a yellow indicator informs operator that weld did not complete properly.

**Sequence:**

1. Operator loads both tubes into fixture.
2. Operator flips small tube in position; poke yoke pin integrated into tube cradle verifies that opening on the small tube is on correct side.
3. Operator slides fixture into welding position, locked with shot pin as weld head is lowered to tubes.
4. Prox. switch is made, welder is activated, and tubes are tacked together.
5. Two power pulses are used: first pulse burns off any oil and the second tacks tubes.
6. Weld head retracts, slide is unlocked and green indicator informs operator weld is made properly.
7. Operator slides fixture back out into load/unload position.