



# Brazing & Soldering **APPLICATION DATA** No. 542 – Tubular Heating Elements



## “Braze Mate” Model 100 Machine Specifications

- **Assembly:** Incoloy tubular heating element to stainless or mild steel flange.
- **Paste Filler Metal:** Fusion STL-1260-650 (BAg 24), 1305°F/707°C liquidus.
- **Production Rate:** 30 parts per hour, one operator.
- **Dimensions:** 36”W x 48”D x 34” load height.
- **Utilities:** 120V, single phase, 5 Amp, 24VDC; natural gas (48 CFH); 80 psi air (9 CFM); water (1 gallon/minute) and drain.
- **PLC:** Allen Bradley MicroLogix with AB PanelView operator interface.
- **Safety Features:** Perimeter guarding on 3 sides of machine with safety interlocks.

### Sequence:

1. Operator loads heating element and flange into stainless steel fixture.
2. Operator dispenses paste filler metal to joint areas with hand-held applicator gun.
3. Touch switches pressed to actuate automatic brazing cycle.
4. Gas/air burners advance into position, adjust to high flame output, and bring filler metal to brazing temperature.
5. Heat cycle times out, burners retract into low flame condition.
6. Timed air and water cooling.
7. Operator removes brazed assembly and repeats the cycle.



*Premeasured deposits of silver-based paste filler metal are applied to joint areas.*



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*Precision heat pattern oscillates, distributing filler metal evenly, creating leak-proof joints.*

