



## Annealing brass electrical contact for crimping

**Objective** To anneal a small area of an electrical contact for crimping

**Material** Brass female spade electrical contact with single transverse loop at end 0.5" (12.7mm) long, 0.25" (6.3mm) wide and 0.03" (0.8mm) thick, 1000°F (538°C) heat paint

**Temperature** 1000°F (538°C)

**Frequency** 310 kHz

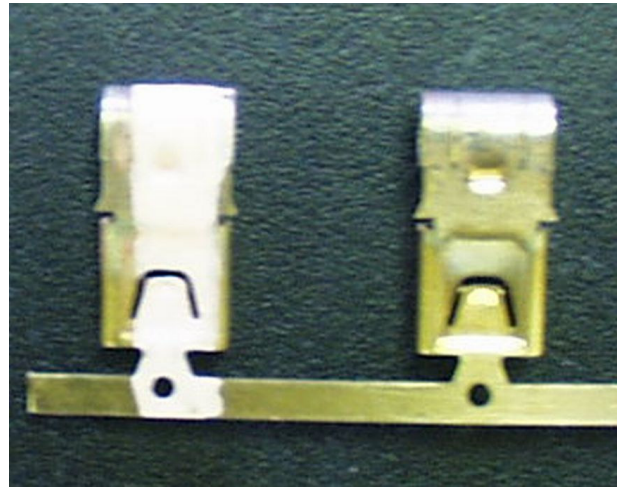
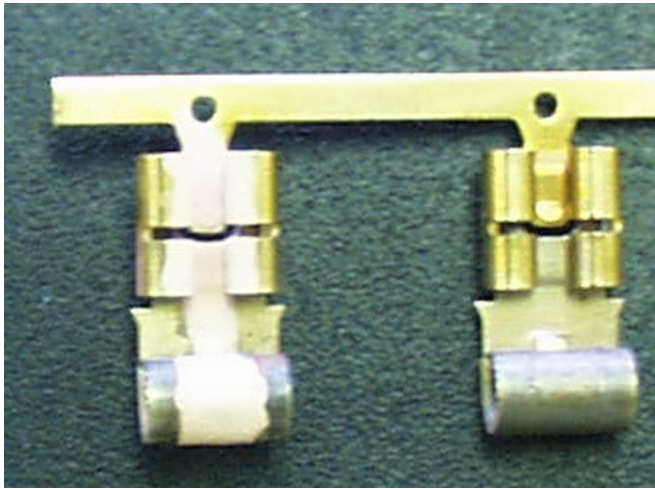
**Equipment**

- Ambrell 10 kW induction heating system, equipped with a remote workhead containing two 1.0μF capacitors for a total of 0.5 μF
- An induction heating coil designed and developed specifically for this application.

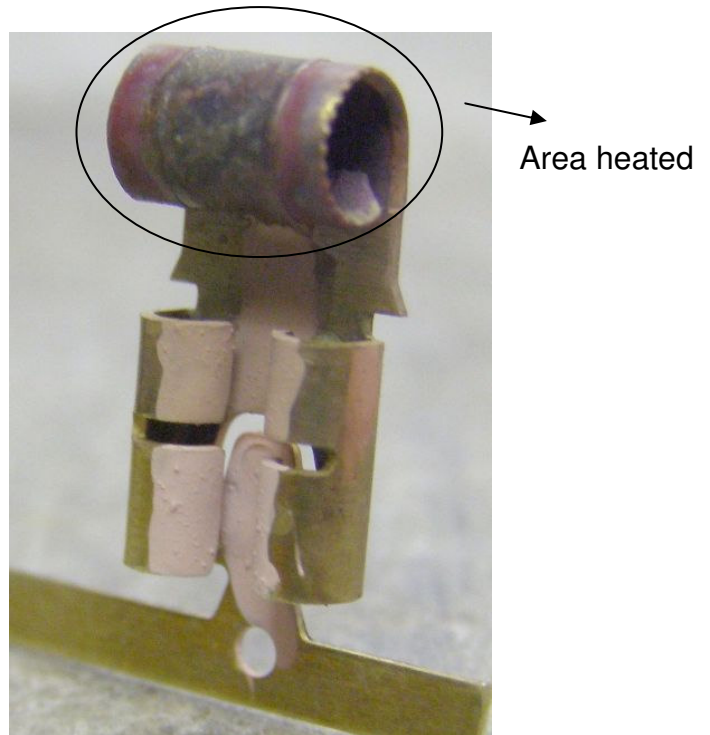
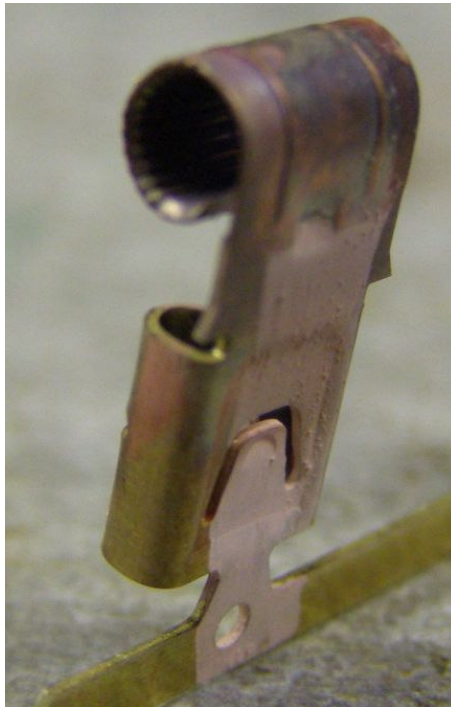
**Process** A one turn hairpin coil is used to heat the electrical contact to 1000°F (538°C) in 1.5 seconds. The contacts are in strips at 0.75" (19mm) centers and will run continuously at a rate of 50' (15.24m) per minute.

**Results/Benefits** Induction heating provides:

- Hands-free heating that involves no operator skill for manufacturing
- Pinpoint accuracy
- Consistent results



Electrical contact with 1000°F  
(538°C) temperature paint



Heating is so precise that only the  
very end is heated to the desired  
temperature and melts the 1000°F  
(538°C) temperature paint