



## Light Bulbs

**Objective** To heat two 0.5" getters to a red glow inside a light bulb in order to fire the getters within 8 seconds. Presently the bulbs are lowered onto an eight station turnstile with an index time of 8 seconds.

**Material** Metal Halide Lamp containing two 0.5" diameter getters of unknown composition.

**Temperature** 1300°F to 1500°F

**Frequency** 350 kHz

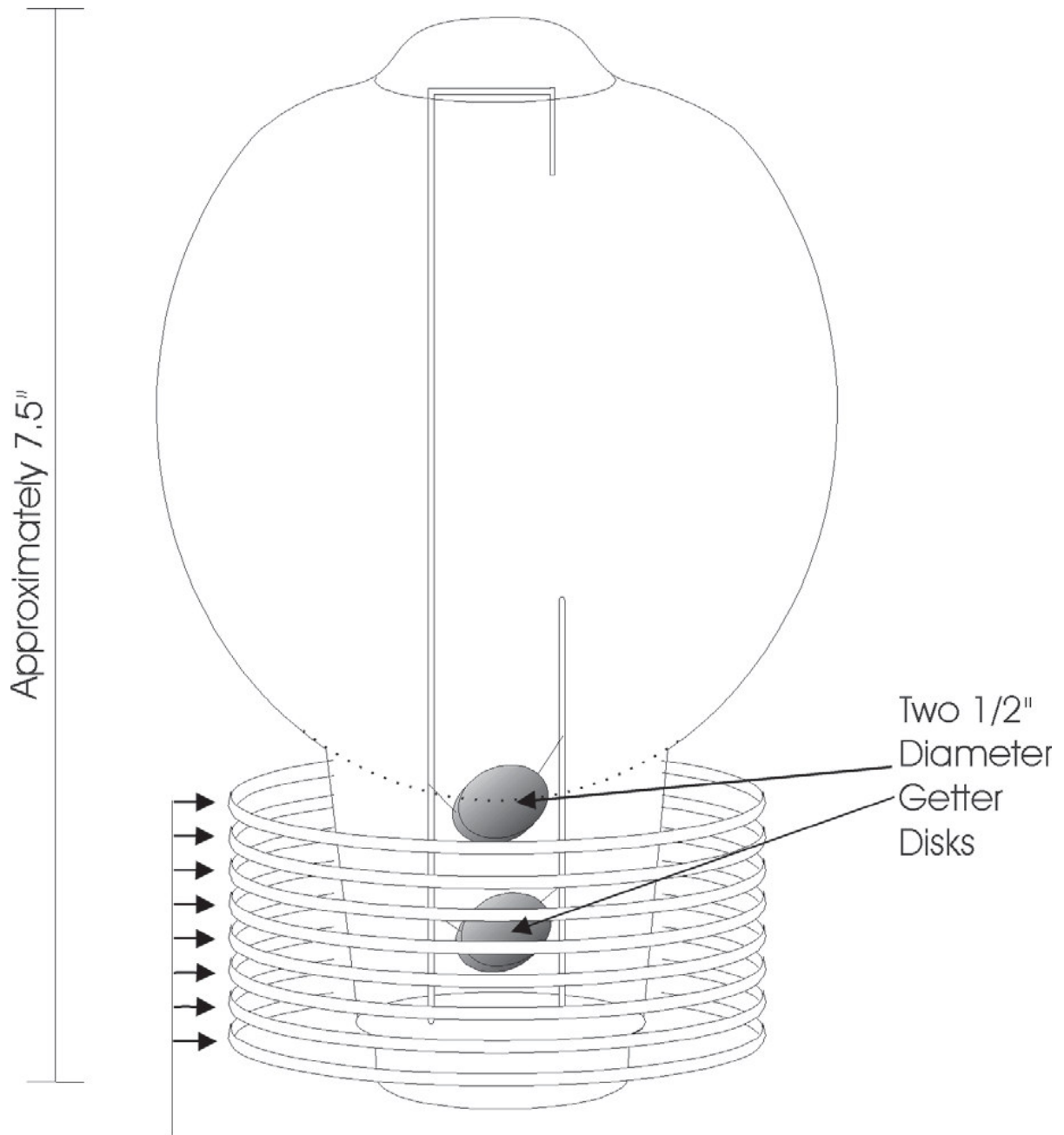
**Equipment** Ameritherm 3 kW solid state induction power supply including one remote heat station containing one (1) capacitor totaling 0.66  $\mu$ F, and a unique coil comprised of four (4) parallel two (2) turn coils.

**Process** By using the Ameritherm 3 kW solid state induction power supply the following results were achieved:

- Results**
- Both getters were fired within 2.5 seconds through the use of a unique helical coil comprising of four (4) parallel two (2) turn coils and the 4-20 mA fast ramp input.
  - The 2.5 second firing cycle allows for the coil to be move around the part and away within the indexing time of the turnstile table.

Application illustration on the next page

Download and print our Applications Lab Process Sheet (<http://www.ameritherm.com/PDFs/4110038b.pdf>). Answer the questions on the form to help us understand your process and performance requirements. Call with the info on the form to see if you should send us your parts for a free evaluation. If you have questions, call or e-mail us ([info@ameritherm.com](mailto:info@ameritherm.com)). We'll be in touch!



Four (4) Parallel Two Turn Helical Coils

Download and print our Applications Lab Process Sheet (<http://www.ameritherm.com/PDFs/4110038b.pdf>). Answer the questions on the form to help us understand your process and performance requirements. Call with the info on the form to see if you should send us your parts for a free evaluation. If you have questions, call or e-mail us ([info@ameritherm.com](mailto:info@ameritherm.com)). We'll be in touch!