

Do You Have A Magnet Problem?

The following statements are true regardless of the type or size of a Temescal Supersource GunTM
To do this test, Set the High Voltage to 10,000 Volts.

1. See that there are no shunts and the permanent magnet is properly installed
2. Set the lateral and Longitude to Zero and the thumb wheel to #1. amplitude to Zero
3. Slowly increase the emission current to view the beam spot. At this time, the beam should be at the far edge of the crucible. (See # 1 on the drawing)
4. If the beam is further out, up on the copper, the magnet is too weak. (See # 2 on the drawing) You may lower the voltage until the beam is now at the far edge of the crucible or, return the magnet to Temescal to be re-Gaussed. Note: if you reduce the voltage, the power available will be less than normal. (Voltage X Current = Power) and the beam may be somewhat distorted, also.
5. If the Beam is on the "melt", or closer to the filament-end of the gun, the magnet is too strong (see #3 on the drawing) Do the following: add shunts.

