

## GROUND SETUP

The ground system is a very important aspect of the installation of the electron beam equipment. The vacuum tank and the power supply must be connected to a good earth ground. Under normal conditions, a good earth ground will consist of a  $\frac{3}{4}$  inch diameter copper-clad rod driven into the floor at the vacuum tank location. It should be connected to the vacuum tank and power supply cabinet by a #8 or larger copper cable. Make the connection to the ground stud on the rear of the power supply cabinet. Do not use braided wire, and take care that the connection to the vacuum tank is made to a clean metal surface.

If the equipment is to be installed in the upper floors of a building where this installation is impossible, the system ground may be accomplished by connecting to the steel structure of the building. This should be done only after insuring that the building structure itself has a good earth ground. If no building ground exists, rods must be driven in sufficient number and connected to the building structure to insure a good suitable ground.

**Do not depend on water pipes for the system ground connection.**

Because of the multiple joints and their associated tape or sealing compounds, no assumption can be made as to the impedance of the pipe to earth ground. Keep in mind that this is a high frequency as well as a DC ground.

