



# Marking Handbook



## THE BASIC EQUIPMENT

### POWER UNITS

We offer our customers a range of metal marking machines that provide the correct voltage and current to make the mark. The size of the marking unit required depends on the area and speed of the mark or the depth and speed of the etch. All of our units have an On-Off switch and an AC/DC switch to produce an AC dark mark or a DC etch (the reverse is true on aluminum). Most units have a rheostat to regulate the output voltage. The unit will automatically produce the current required for the job unless that current exceeds the output of the power unit, in which case a fuse or circuit breaker will "blow." All units contain banana or polarity receptacles for making contact through cord sets. Our power units range from 5 volts to 40 volts and have an ampere output from 0 to 20 amps.



The marking machine's DC setting is used for electroplating or electroetching. With normal use, the DC will etch out metal and leave a frosty whiteness. We call this electro-etching.

Our customers find that our power units and fixtures work for many years and provide trouble free use. However, corrosion can cause loss of full current flow causing a reduction in the darkness of the mark. We recommend you make sure all contacts are clean and tight. After using this equipment, be sure to clean and dry it.

Should your power unit need repair, return it to IMG of Utica. We do not charge for "bench time" and should the unit need repair, we charge just a nominal amount, as most units do last indefinitely.

If you need a dark mark on surfaces that cannot be Electromarked, one can reverse the leads on the power unit and use special electrolytes. The electrolytes plate a contrasting mark on top of the surface. This is a process known as electroplating.

You can produce deep etches with heavy duty power units. IMG units have pulsators and timers to produce more speedy and uniform results.



