



# Production Engineering

A leading distributor of resistant welding supplies

## WELDING

Elkonite high density metals can be welded to themselves or to other metals, using the TIG or MIG process. Welds have good strength but low ductility.

Rod - Anviloy weld rod .105" diameter x 8.00" minimum length.

Equipment - A TIG setup with a 300 amp power supply. Use argon shielding gas.

Procedure - Use a high d.c. setting adjusted to maximum output. Preheat the work area using the electrode. Do not preheat with acetylene torch. When the work-piece is heated, begin the weld. Do not work beyond preheated area. Allow the weld to cool in the shield of argon gas. Do not quench. No post treatment required.

Welding is not recommended for Elkonite, see silver brazing.

### TYPICAL PROPERTIES OF WELDS USING ANVILOY 1150 WELD RODS

(International System of Units)

Room Temperature		
Ultimate tensile strength (psi)[MPa]		132,000 [910]
Yield strength 0.2 percent offset (psi) [MPa]		104,000 [717]
Elongation in 1"(percent)		3
Elevated Temperature	<u>1200°F</u>	<u>2000°F</u>
Ultimate tensile strength (psi)[MPa]	85,000 [586]	25,000 [172]
Elongation in 1" (percent)	3	4
Charpy Impact test	<u>Notched</u>	<u>Unnotched</u>
(Ft. Lbs.) [J]	10 [14]	30 [41]

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