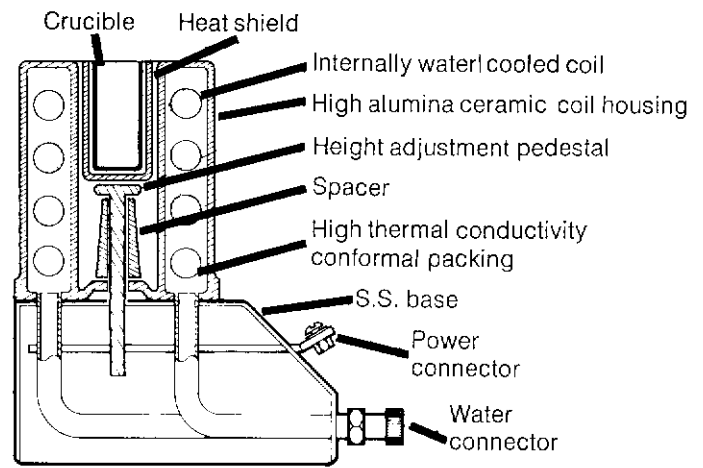


## A splatter and radiation damage free evaporation source

**No high energy particles or x-ray emissions** are produced in the In-Source 1500. In addition the uniform melt temperature eliminates violent stirring action which often results in splatter

**The new high reliability design** eliminates potential water leaks and provides rates of up to 100,000Å/min. for aluminum at 10" spacing

**Excellent control of alloy composition** makes this source a good choice for many Al/Si or Al/Cu film applications



Internal Detail of Standard Evaporation Source

### In-Source Specifications

#### Source

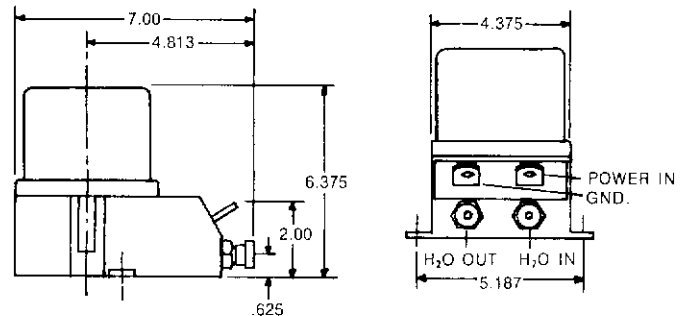
Deposition Rate: (Aluminum) 100,000Å/minute, 10" between source and substrate  
 Crucible Volume: 33cc Standard. Sizes to 58cc may be used with optional hardware.  
 Bakeout Temperature: With water: 400°C. Without water: 150°C.  
 Fittings: 1/4" Stainless Steel (Cajon tube type "O"-ring, quick couple sealed) Standard. High Pressure/Ion Plating source requires special fittings.  
 Dimensions: 6 3/8" H x 4 3/8" W x 7" D  
 Weight: 6 lbs.

#### Maximum Absolute

Inlet Pressure: 80 PSI  
 Fittings: 3/8" O.D. Swagelock type tubing  
 Temperature: 15°C minimum, 30°C maximum  
 Cable Length:  
 Power Cable: 10 feet  
 Power Supply to Vacuum System: 8 feet  
 Power Supply to System Controller: 8 feet  
 Non standard cables available on request  
 Dimensions: 8 3/4" H x 17" W x 21 1/2" D  
 Weight: 85 lbs.

#### Power Supply

Input Power: 208V AC, 3 phase, 50/60 Hz, 20A, 5 wire  
 Output Power: 80 amperes at 45 KHz  
 Regulation: 0.1% line and load combination  
 System Coolant Req:  
 Minimum Flow Rate: 1.0 GPM  
 Minimum ΔP: 30 PSI between inlet and outlet. If available ΔP is less than 30 PSI, consult instruction manual for special plumbing requirements.



### In-Source Ordering Information

Description	Part Number
In-Source 1500 Basic System including source, power supply, controller and installation kit	
In-Source 1500 plus full instrumentation readout and Versatrak power programmer	
Deposition Source	
Installation Kit, including copper strap, 2 RF power feed-throughs, dual water feedthrough, water filter and two filter cartridges	
Heat Shield (2.005" long)	
Pyrolytic boron nitride crucible (for Al)	
Aluminum oxide crucible (for gold)	