

## **MEDIUM FRAME ELECTRON BEAM SOURCES**

ITL Vacuum Components offer top of the line electron beam sources manufactured by Island e-beam LLC. These are used within the physical vapor deposition (PVD) industry, including applications in optics, micro-electronics, medical, metallurgical and telecommunications.

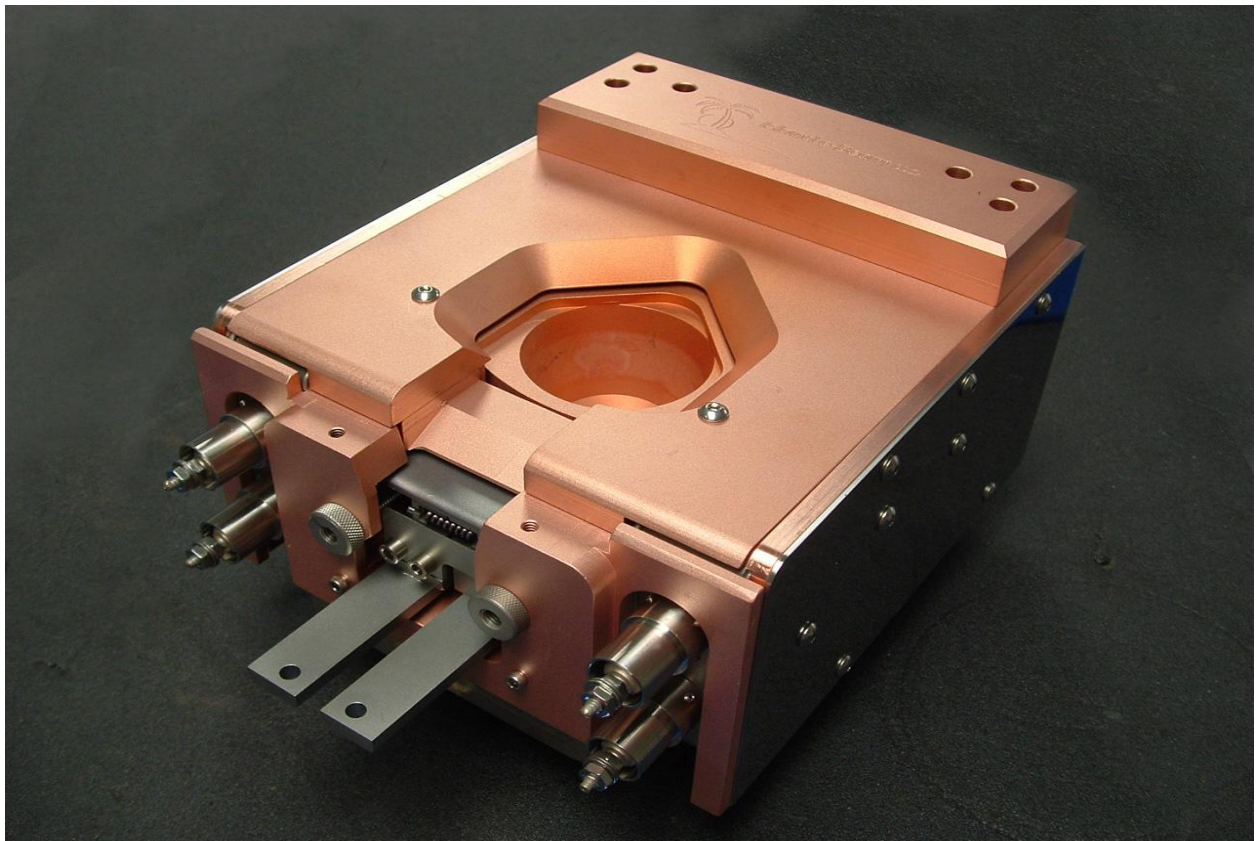
With 3 standard frame sizes available and many pocket sizes to choose from, this brand offers powerful, fully tested electron beam sources to suit most applications.

Our sources come standard with direct water cooled crucibles, helping produce a uniform source temperature. Resulting in stable deposition rates, versus an indirect water cooled source.

Each source has a modular plug in designed emitter assembly for ease of maintenance, made with high temperature materials and long life filaments for reduced down time.

We also offer any of these 3 frame size sources in a “turnkey” flange mounted assembly, that includes all feedthroughs for water/power/sweep/pocket rotation/shutter.

Please feel free to contact us to discuss your requirements



## Features

### **Emitter Assembly**

- 270 degree arc emitter module
- Modular plug in design
- Consistent electrostatic field
- Long life anode and deflection shield
- Easy filament replacement
- Only one ceramic insulator
- Open cathode design
- Increased emission

### **Electromagnetic sweep coil assembly**

- Based on Helmholtz design principle producing a very uniform magnetic field
- Reduced tunnelling
- Potted cores for increased dielectric strength and thermal conductance

### **Magnetic Field Assembly**

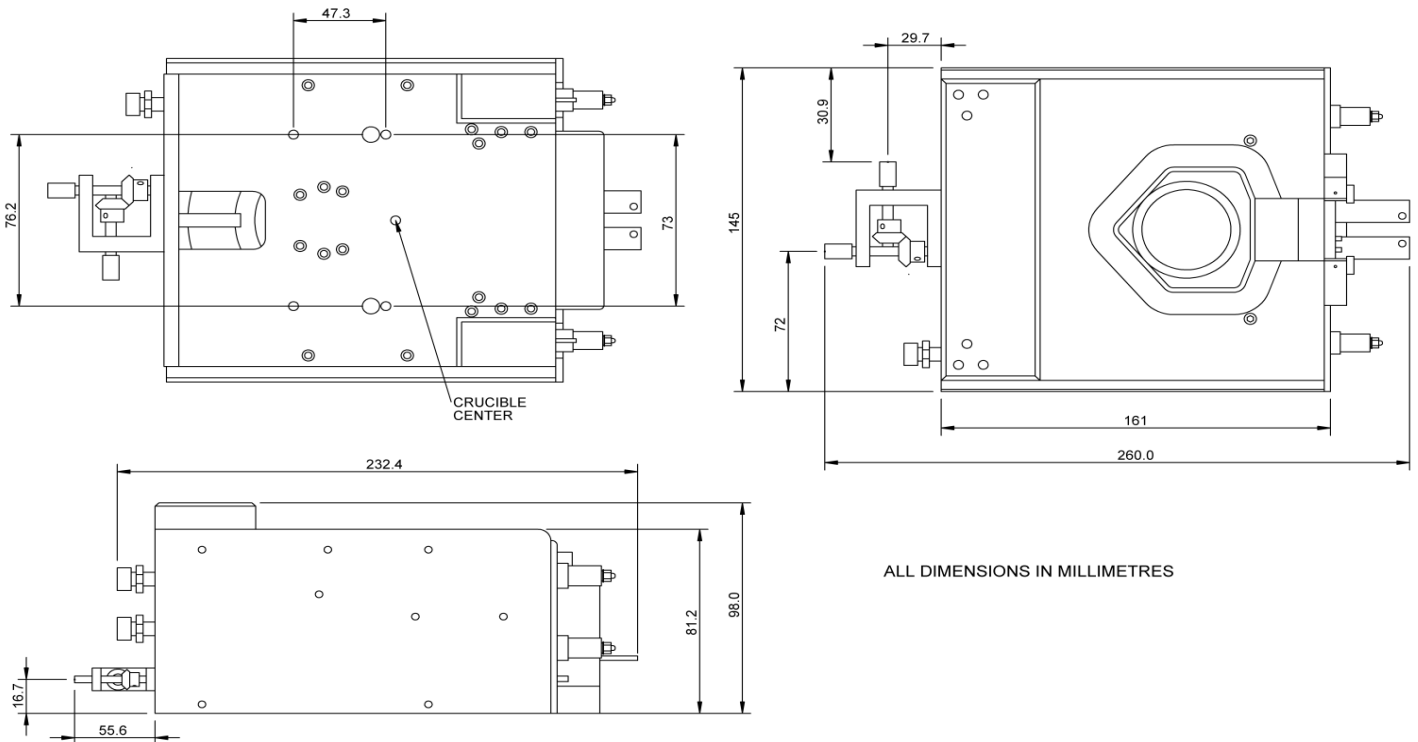
- Permanent magnets AlNiCo
- No pole pieces
- Uniform magnetic field lines
- Reliable beam shape in any location
- Beam remains vertical to melt....no beam curl

### **Crucible assembly**

- Direct cooled pockets to help maintain stable evaporation rates
- Higher power ratings over indirect cooled sources
- Different configurations available (see options)

## Specifications

Frame size	Medium
Source type	HV Rotary Pocket
Max power	10kW
Accelerating voltage	6kV to 10kV
Filament	12VAC
XY sweep	200Hz
Beam spot size	8-10mm
Materials	HV Compatible
Vacuum rating	2x10E-8 Torr
Water flow	2-3gpm
Dimensions	L-260mm x W-145mm x H-98mm
Weight	12.2kg



## Standard Configurations

4x4cc, 4x7cc, 4x15cc, 4x25cc, 4x30cc, 6x12cc, 1x150cc (Carousel)