

TELEMARK

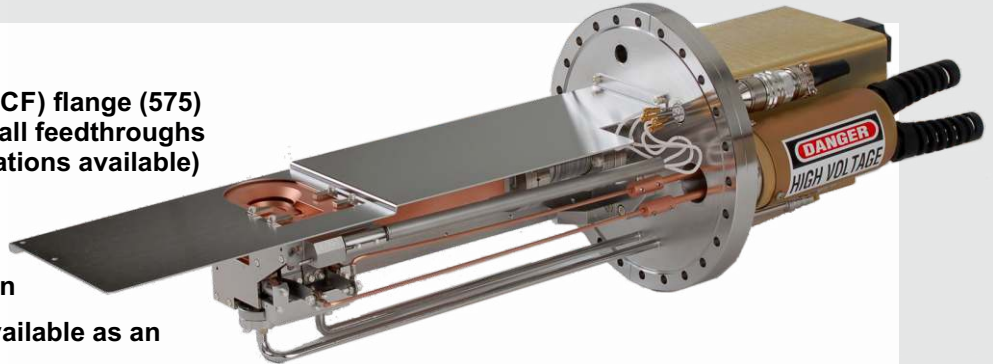
Model 575/578 UHV Linear Multi-pocket Electron Beam Sources

FEATURES

- Mounted on 10" CFF (DN200CF) flange (575) or 12" CFF flange (578) with all feedthroughs (optional CF flange configurations available)
- Pumps down to 10^{-11} torr
- Automatic motorized indexer available as an option
- Electro-pneumatic shutter available as an option
- Water-cooled cryo-shield available as an option
- Integral sealed XY Sweep coils
- Designed for ease of use and maintainability
- Long filament life with 270° beam deflection
- Emitter assembly secured by single screw for easy filament replacement

APPLICATION

The 575/578 are precise, efficient UHV multi-pocket electron beam sources, ideal for research and development, as well as for small production applications. The models 575/578 are unique for their compact size and the capability to take up to six 15cc or four 40cc crucibles. This, combined with a 8/10kW power rating, makes the 575 and 578 the most versatile multi-pocket UHV electron beam sources available in the market place. These models also incorporate all the unique design features that have made the Telemark electron beam sources the most widely used E-beam evaporation sources in the world.



SPECIFICATIONS

Electron Beam 270° hidden filament
Power Rating 8kW (575), 10kW (578)
Max High Voltage -10kV
Cooling Water 1.5 gpm (6l/min)
Bake Out Temperature 220°C
Distance from flange to center of the pocket
575-01 to 575-03 11"(280mm)
575-04 to 575-09 14.5"(356mm)
575-10 to 575-12 16.2"(411mm)
(custom lengths available as an option)

MODELS

575-01	5 pocket 4cc
575-02	4 pocket 7cc
575-03	3 pocket 15cc
575-04	7 pocket 4cc
575-05	6 pocket 7cc
575-06	4 pocket 15cc
575-07	9 pocket 4cc
575-08	7 pocket 7cc
575-09	5 pocket 15cc
575-10	10 pocket 4cc
575-11	8 pocket 7cc
575-12	6 pocket 15cc
578-01	2 pocket 40cc
578-02	2 pocket 25cc
578-03	4 pocket 40cc
578-04	4 pocket 25cc

The 6kW model 568 source is available for applications where a 8" CF flange mounted source is required.



Optional Source Rail Guide Assembly

Model 528 UHV Compact 3kW Linear Multi-pocket Electron Beam Source

The model 528 is mounted on a 2.75 inch CF flange with 1.5cc pockets, no sweep coils, available in 3, 4, 5, and 6 pocket configurations.

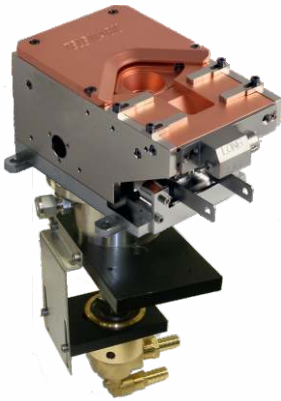


Near UHV Multi-Pocket and UHV Single Pocket Electron Beam Sources

6kW

Model 249

Near UHV Multi-pocket
Capacity up to 6x 7cc
Magnetic Fluid Rotary Feedthru
to pump into -10 torr Range



Model 218

UHV Single pocket



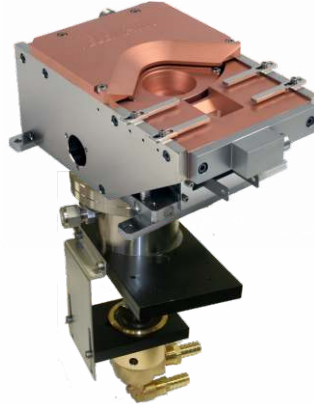
High Performance in a Small Package with Crucible Volumes up to 15cc.

- Rated at 6kW of power when operated at voltages from -6 to -10kV.
- Compact design for use in small research and development systems or wherever space is an important consideration.
- Sweep coils sealed in stainless steel cans are standard.

10kW

Model 269/279/299

Near UHV Multi-pocket
up to 6x 15cc pocket (269)
up to 6x 25cc (279)
up to 6x 40cc (299)
Magnetic Fluid Rotary Feedthru
to pump into -10 torr Range



- **ROTATABLE HEARTH IS REMOVABLE FOR EASY CLEANING OR CHANGING OF CRUCIBLES**
- 270° beam deflection (Hidden Filament)
- Proprietary water cooling design means longer crucible life and more consistent evaporation of material

3kW

Model 508

Ultra compact UHV
Single pocket source

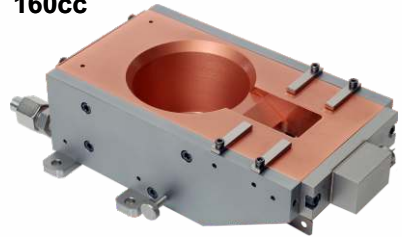
- Unmounted, horizontal mount on 2.75" CF flange with water lines, or vertical mounted on 4.5 CFF
- No beam sweep
- 1.8cc pocket
- 5kV max.



15kW

Model 259

UHV Single pocket up to
160cc



**Large Capacity Source
Performance Proven in
High-Power Production and
MBE Applications**

- Available in crucible volumes up to 160cc for long, uninterrupted evaporation, for long intervals between breaking vacuum, or processes requiring large area source

4kW

Model 509

Ultra compact UHV
Single pocket
source

- Mounted on 6" CFF for direct replacement of K-cells
- No beam sweep
- 4cc pocket
- 5kV max.
- Integrated Dual HV feedthrough option

