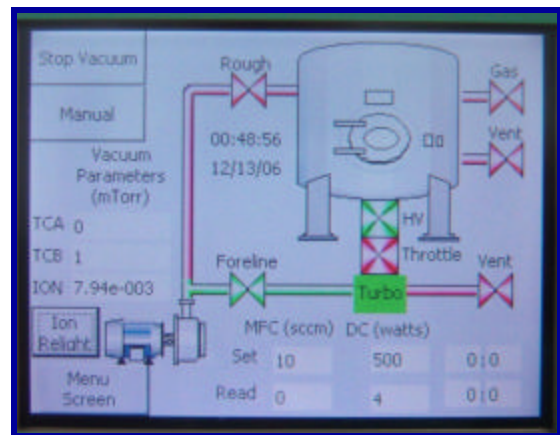


Hummer® Box Coater Series

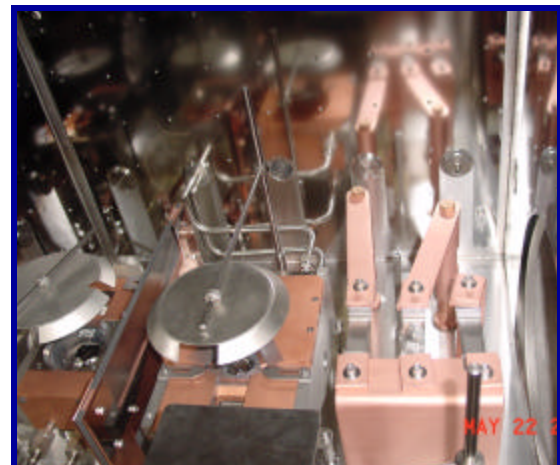
ONE SYSTEM IN A FAMILY OF THIN FILM DEPOSITION SYSTEMS

E-BEAM and THERMAL EVAPORATION DEPOSITION

**TOUCH-PANEL
SYSTEM CONTROL**



Vacuum and Process Control all in one.
Functions are clearly displayed



E-Beam Evaporation / Thermal Resistance

**BC Systems are available in sizes;
16", 20", 24" and 30" D-style chambers**

The **HUMMER BOX COATERS** combine a high degree of process control and flexibility with ease of operation.

HUMMER[®] Box Coater

E-BEAM or THERMAL EVAPORATION

E-BEAM-

Single or Multiple Pocket sources.

Index rotation control for Crucibles—continuous or Retrograde

XY Beam Sweep

“Off-Axis” maximizes uniformity

Pneumatically operated source shutters

THERMAL EVAPORATION—

Adjustable Z-Bars and Boat Clamps

Z-bar and clamps accept Boats, Crucibles and Filaments

Parallel or Series connections

Pneumatically operated source shutters

POWER SUPPLY -

E-Beam—6Kv to 10Kv. Other powers available

Thermal Evap - 3000 watts

COOLING - .

Chiller Recirculator Optional

OVERALL SYSTEM

CHAMBER - 304 Stainless steel, aluminum door, 4” Door view port, roughing, High Vacuum pump and instrument ports

CONTROL - Siemens S7-200 Series PLC control for each vacuum function. Fully integrated with easy “Touch-Panel” control pad for diagnostic and setting system parameters

DESIGN - Floor mount cabinet on casters with leveling pads

SAFETY INTERLOCKS - Cooling, door and vacuum interlocks.

ELECTRICAL REQUIREMENTS 200 — 400 Volt, 50/60 HZ

System specific

DEPOSITION -

Standard Evaporate-Up

IONIZATION SPECIES

GAS REQUIREMENTS - Argon regulated from 5 to 20 PSI

OPERATING PRESSURE -

2×10^{-3} to 5×10^{-2}

REACTIVE SPECIES -

Optional

VACUUM SYSTEM

PUMPING - Roughing pump and Turbomolecular pump - Standard
Optional - Cryo pump or Larger pumps

VACUUM GAUGING - Convectron gauges (2), Ion gauge (1).

Atmosphere to 1×10^{-8} TORR

VALVING - Electro-Pneumatic actuated High Vacuum valve between pump and chamber. Fore-line and chamber roughing isolation valves. Pneumatic air or nitrogen (clean, dry) operating at 60-PSI.

GAS CONTROL - Mass Flow Controller (1) 100sccm. Optional - Gases (3) maximum, for mixing and reactive gas sputtering

PLANETARY FIXTURE

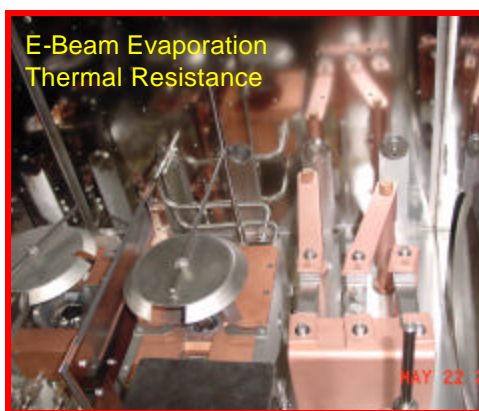
SIZE- Designed to maximize substrate size and quantity

MOTION -360° rotation standard.

CONFIGURATION - Domed

Optional:

Designs to specification



SOURCE OPTIONS

Anatech USA offers alternatives for source configuration. Contact our sales staff.

CALL ANATECH USA TODAY TO DISCUSS YOUR APPLICATION

1-800-390-4449

2947 WHIPPLE ROAD
UNION CITY, CA 94587

TEL: 510-401-5990 FAX: 510-401-5994

Anatech USA Web Site: www.anatechusa.com

E-Mail: info@anatechusa.com

HUMMER[®] BOX COATER

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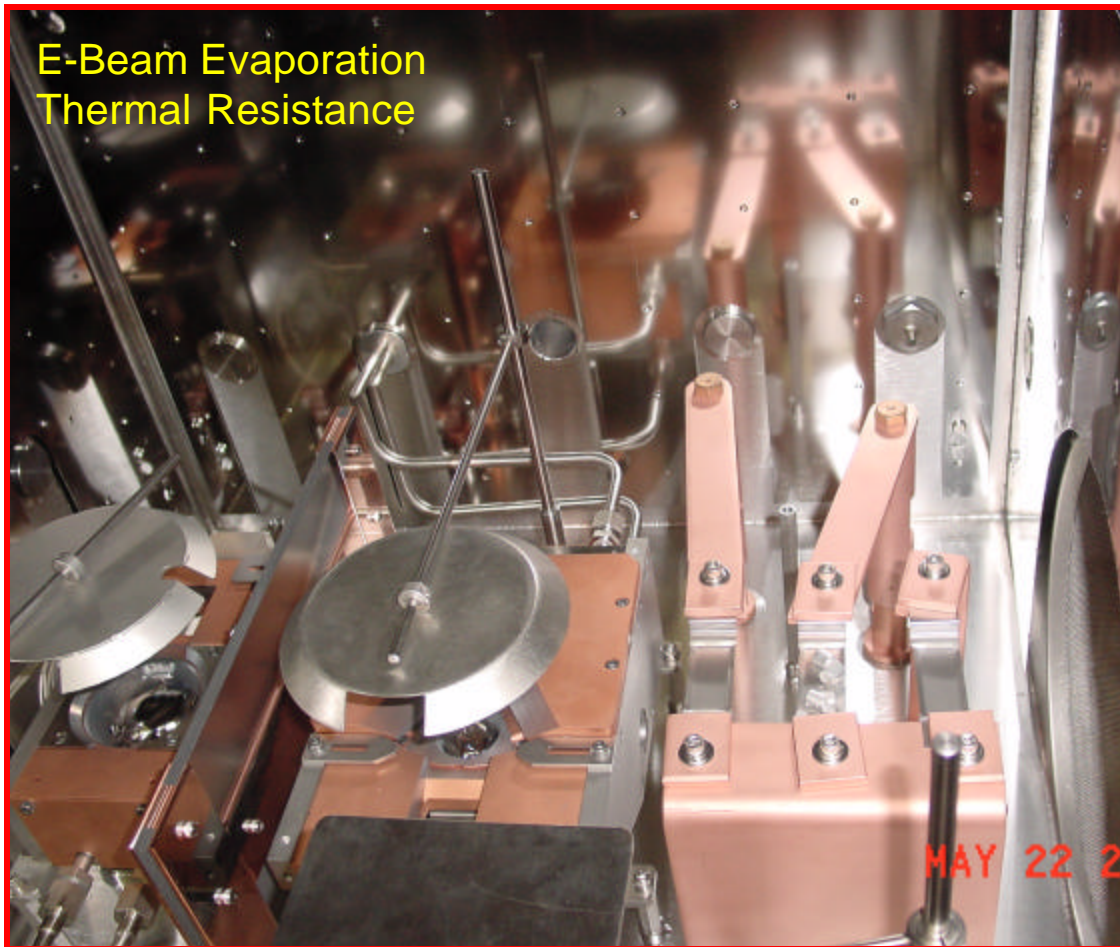
SOURCE OPTIONS

Anatech USA offers alternatives for source configuration. Electron Beam Evaporation and Thermal Resistance sources can be substituted for planar magnetron deposition sources

Contact our sales staff.

Photo:

Single pocket E-Beam source and Thermal Resistance



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