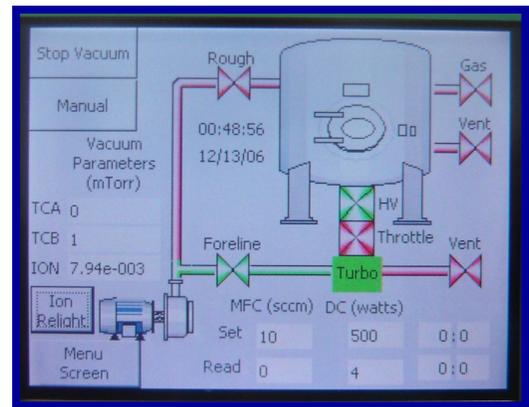


Hummer® BC-20 Series

ONE SYSTEM IN A FAMILY OF PLANAR MAGNETRON SPUTTERING SYSTEMS
THIN FILM DEPOSITION OF METALS AND INSULATORS

Sputter-Up Configuration !



**TOUCH-PANEL
 SYSTEM CONTROL**

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

**QUARTZING
 CV DOT MATRIX
 FAILURE ANALYSIS
 MATERIALS RESEARCH
 MICROELECTRONICS RE-**

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

The **HUMMER BC-20** sputter coater combines a high degree of process control and flexibility with ease of operation.

THIN FILM RESEARCH - FAILURE ANALYSIS - PILOT PRODUCTION

HUMMER[®] BC-20 Sputter-Up

PLANAR MAGNETRON SOURCE

TARGET DIAMETER -

3" Standard,
Optional - 2" & 4" diameter
sources and Multiple sources
TARGET THICKNESS - 1/16 to
1/4" standard

TARGET MATERIALS - Metals
and / or insulators

SOURCE MOUNTING - Quick
coupling to chamber, pneumatic
shutters, shields between
sources as necessary

POWER SUPPLY - 300 watts,
13.56 MHz. Standard
Optional - 600, 1000 watts RF
at 13.56 MHz.

1500 Watts Standard, Optional
- 2500 Watts DC, or various
combinations of supplies

COOLING WATER - .2 to 10
GPM required.

Optional - Recirculator

TARGET MOUNTING -

Mechanical clamp or magnetic
keeper depending upon
requirement

OVERALL SYSTEM

CHAMBER - 304 Stainless steel,
20" ID nominal, aluminum door,
4" Door view port, roughing,
High Vacuum pump and instru-
ment ports

CONTROL - Siemens S7-200
Series PLC control for each
vacuum function and sputtering
source. Fully integrated with easy
"Touch-Panel" control pad for
diagnostic and setting system pa-
rameters

DESIGN - Floor mount cabinet
on casters with leveling pads

SAFETY INTERLOCKS - Water, door
and vacuum interlocks.

ELECTRICAL REQUIREMENTS -
40-75 AMP, 208-240 Volt,
50/60 HZ

SPUTTERING - Standard top down
sputtering. Optional - Sputter-up
or horizontal sputter

AUTOMATIC SEQUENCING -
Standard

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 actu-
ated High Vacuum/Throttle 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

STAGE FIXTURE

SIZE - 2", 3", 4", 6", 8", 12" or 16"

MOTION -360° rotation standard.

Optional - Variable angle of
incidence to sputter source

COOLING - Optional

REVERSE SPUTTER/ETCH - Optional

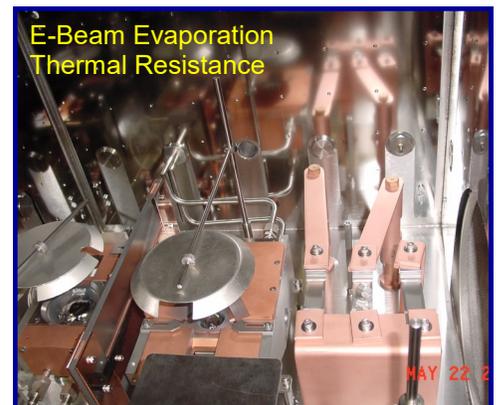
HEATED - Optional to 900° Celsius

IONIZATION SPECIES

GAS REQUIREMENTS - Argon
regulated from 5 to 20 PSI

OPERATING PRESSURE -
 2×10^{-3} to 5×10^{-2}

REACTIVE SPECIES - Optional



SOURCE OPTIONS

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

CALL ANATECH USA TODAY TO DISCUSS YOUR APPLICATION

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