

PRODUCT INFORMATION

MDC AUTOLOADING HOT CHUCK SYSTEM



The Model 986 AUTOLOADING DC HOT CHUCK SYSTEM is a complete tabletop Hot Chuck System with automatic wafer handling. The 986 can simplify routine, operator intensive testing like furnace qualification. Interfaced to a CSM/Win SEMICONDUCTOR MEASUREMENT SYSTEM, the Model 986 AUTOLOADING DC HOT CHUCK SYSTEM is the answer to intelligent wafer testing.

Under Windows software control, the Model 986 can remove a selected wafer from a cassette, center the wafer, locate the flat or notch, and place the wafer on the hot chuck. The probe is then brought into contact with the wafer. After measurements, the wafer is returned to the

cassette. Software in the CSM/Win System sequences measurements on multiple wafers. If the test site is large enough and wafer test pattern alignment is repeatable from wafer to wafer, no operator intervention is required. Fine probe placement by an operator may be required if test site size is too small or test pattern is not repeatable from wafer to wafer. Systems are available for all wafer sizes.

MDC is a pioneer in innovative instruments for the semiconductor industry. We can help you with more precise measurements and faster throughput than ever before. MDC is your best source for truly advanced C-V plotting systems.



Materials Development Corporation

21541 Nordhoff Street, #B, Chatsworth, CA 91311 - (818) 700-8290 - FAX (818) 700-8304

MDC AUTOLOADING HOT CHUCK SYSTEM

SPECIFICATIONS

Facility Requirements

Power:	110 to 120 VAC at 20 Amps, 50 to 60 Hz or 208 to 240 VAC at 10 Amps, 50 Hz
Coolant:	Tap water at 1 to 2 gallons/minute (4 to 8 liters/minute) at 15 PSI (1.1 Kg/cm ²). Maximum Pressure of 20 PSI (1.4 Kg/cm ²). No deionized water.
Vacuum:	20" to 25" (500 to 600mm) Hg.
Exhaust Port:	4" (10 cm), 35 to 70 CFM
Filter:	HEPA type 99.97% efficiency for 0.3 micron particles
Dimensions:	Width 36" (91 cm); Depth 30" (76 cm); Height 38" (97 cm)

Communications

Protocol	RS-232C
Baud Rate	9600
Format:	Asynchronous, 8 character bits, one stop bit, no parity

DC Heater Supply

Range:	0 to 100 Volts
AC Ripple:	less than 100 mV at temperature

Components:

- Single cassette wafer loading robot
- Standard cassette holder
- Wafer centering system
- Flat finder system
- 200 mm (8") nickel plated chuck
- Light tight enclosure with HEPA filtration
- Software controlled light
- Movable microscope mount (does not include microscope)
- Motion controller with RS-232 interface
- Single Model 725V-18 Probe Assembly
- Model 490 QuietCHUCK DC Hot Chuck Controller

Instrumentation:

CSM/Win Systems from MDC are the ideal instruments to use with your Autoloading Hot Chuck System. CSM/Win Systems mate the most advanced C-V and I-V hardware with powerful Windows software to perform a wide variety of tests on semiconductors and MOS devices.

Options:

- Video Microscope System
- Stainless Steel Clean Room System Table
- CSM/Win System
- Probe Multiplexers
- SMIF Indexer