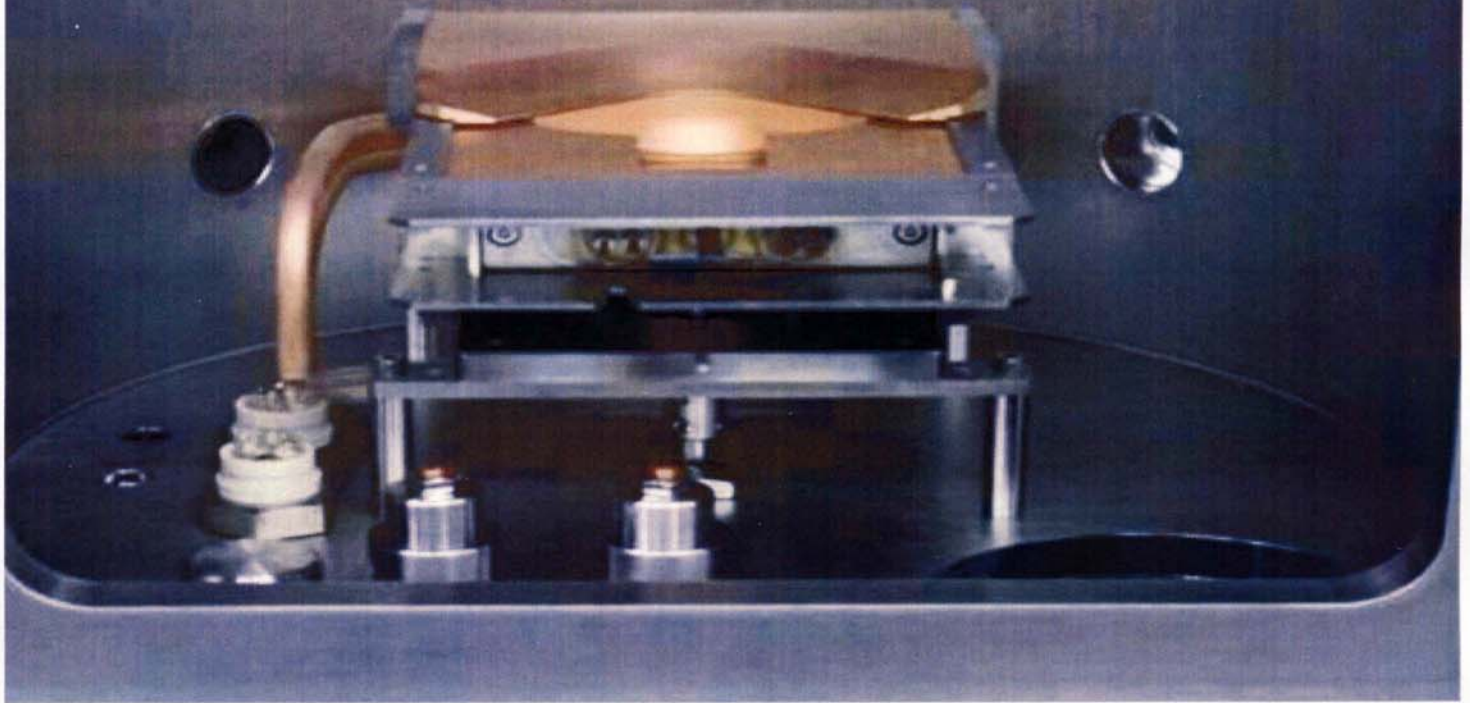


Think inside the box.



Although from the exterior most small-scale PVD systems appear the same, it's what goes on inside the process chamber that can have the most impact on your application. Too often, low-cost systems come with marginal features and few capabilities. Until now.

Introducing *Solution*, the newest process development system from CHA.

Engineered to handle a wide range of deposition needs, the *Solution* incorporates many of the features that make our Mark 40 and Mark 50 industry standards. Like a fully water-cooled stainless steel chamber that allows users greater flexibility to optimize process start temperatures. Or space enough for even our largest volume electron-beam gun or resistance sources. There is even a choice in pumping packages including diffusion, cryo or turbo molecular pumps. All for a base price of under \$48K.

Of course, a PVD system is only as good as its tooling. Which is precisely why *Solution* offers the widest range of available tooling in the industry. Lift-off, Planetary, Variable angle and much more. Choose from a variety of sources including Swing, Resistance and our full line of SmartSource® electron beam guns.

Best of all, the *Solution* is from CHA, the company that's been leading the way in PVD for over 50 years. To find out more, give us a call or visit us at Semicon West 2002, booth #1109.

Larger system features and a wide range of options make Solution ideal for small lot processing.



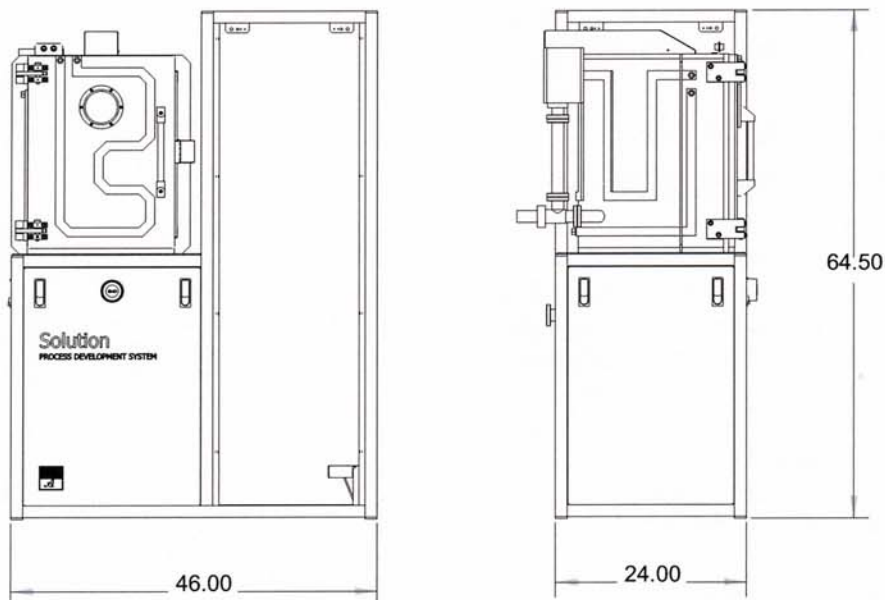
CHA Industries

4201 Business Center Drive Fremont, CA 94538
Voice (510) 683-8554 Fax (510) 683-3848

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Specifications

Vacuum Chamber	
Type	Water Cooled Stainless Steel
Size	18W x 18D x 24H (457 x 457 x 610mm) Additional size available.
Volume	4.5 ft3 (.127 m3)
Inlet Flange	NW 50
Source Distance (Ebeam, liftoff dome)	15 in (381 mm)
Tooling	
	Option
Lift-Off Dome	3 x 150mm / 5 x 125mm / 7 x 100mm / 10 x 75mm
Planetary Dome	9 x 100mm / 12 x 75mm
Variable Angle	3 x 150mm / 5 x 125mm / 7 x 100mm / 9 x 75mm
Pumping	
	Option
Diffusion Pump	1200 liters/sec
Turbomolecular Pump	320-600 liters/sec
Cryo Pump	1100 liters/sec
Systems Control	
	Option
Manual	Autotech Sequencer
PLC	Siemens Touch Screen
Vapor Source	
	Option
Electron Beam Gun	4 x 25cc / 4 x 40cc / 6 x 15cc / 6 x 25cc
Resistance Source	
Swing Source	
Power Requirements	
	Option
Domestic	120VAC/60Hz, 208VAC/60Hz
International	220VAC/50Hz



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