



# YES-450PB 8-2P-CP High Temperature Vacuum Oven

For Curing Polyimide, BCB, Low-K Dielectrics & Copper Anneal

## Specifications

Hardware			
Clean Room Compatibility		Class 10	
Chamber Cleanliness		Class 1	
Wafer Size		Up to 200mm	
Capacity		Up to 50 8" wafers/batch (two 25 wafer cassettes)	
Operation Temperature		Ambient to 450 °C	
N <sub>2</sub> Flow Rate		1 SCFM	
Nitrogen Consumption		15-25 liters/min.	
Interior Chamber Dimensions		36.57 cm barrel (ID) x 66.55 cm (D) (14.4" x 26.2")	
Chamber Process Area		23.88 cm (W) x 45.97 cm (D) x 24.89 cm (H) (9.4" x 18.1" x 9.8")	
Overall System Dimensions		69.1 cm (W) x 139.06 cm (D) x 78.23 cm (H) (27.2" x 54.75" x 30.8")	
Control Console Dimensions		51.44 cm (W) x 96.01 cm (D) x 23.62 cm (H) (20.25" x 37.8" x 9.3")	
Chamber Material		316L stainless steel	
Process Gas Inputs		1 standard, up to 3 optional	
Mass Flow Controllers		Optional – up to 3 for gas mixing	
Laminar Flow Filter		100 micron Mott™ plate filter	
Cleanliness		Particle reduction in most applications	
Software			
Number of Recipes		8 temperature profiles	
Number of Steps for Each Recipe		16 program steps	
Range of Exposure Time		0-600 minutes	
Resolution of Timer Setting		1 minute	
Performance			
Temperature Uniformity		± 5 °C during dwell after stabilization period	
Average Heat-Up Rate (150°C - 450°C)		7.5 °C/min.	
Average Cool-Down Rate (450°C - 150°C)		4.5 °C/min.	
Oxygen Concentration		10 ppm over background	
Additional			
Power Requirements		208V, 40 amps, 50/60 Hz, 3 phase	
Shipping Weight, Crated (approx.)		328.85 kg (725 lbs)	
Crate Dimensions		147.3 cm (W) x 152.4 cm (D) x 160 cm (H) (58" x 60" x 63")	
# of cassettes that fit inside the laminar flow zone			
2 inch wafers	9 cassettes	150 mm wafers	3 cassettes
3 inch wafers	6 cassettes	200 mm wafers	2 cassettes
100 mm wafers	3 cassettes	300 mm wafers	0 cassettes
125 mm wafers	3 cassettes		

*Tool temperature performance is a combination of temperature control accuracy and temperature uniformity. Accuracy is the deviation of the average product temperature from the set point. Uniformity is the deviation between the maximum and minimum product temperatures and is not related to the set point. Accuracy is calculated as set point – average temperature. Uniformity is calculated as (max-min)/(max+min). YES-PB series tools have dwell accuracy of +/-1.5°C after stabilization. YES-450PB8-2P-CP has a uniformity of +/-3.5°C. After stabilizing at dwell, all product temperatures should be within 7°C or 10°C of each other (depending on the tool) and within 5°C or 6.5°C of set point (depending on the tool).*

## Contact Us

When you're ready to run process tests, a demonstration can be arranged using your chemicals and samples. Call +1 925-373-8353 (worldwide), 1-888-YES-3637 (US toll free), or visit us online at [www.yieldengineering.com](http://www.yieldengineering.com).

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