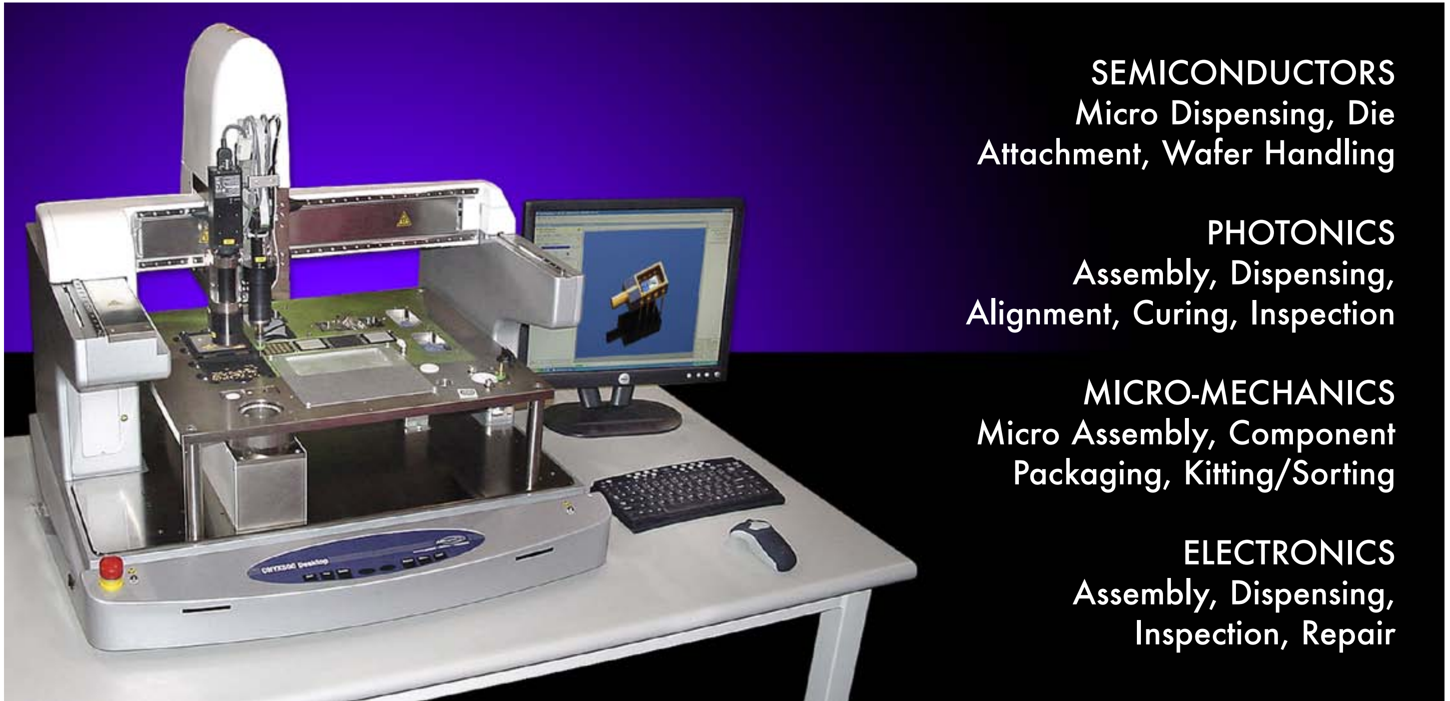
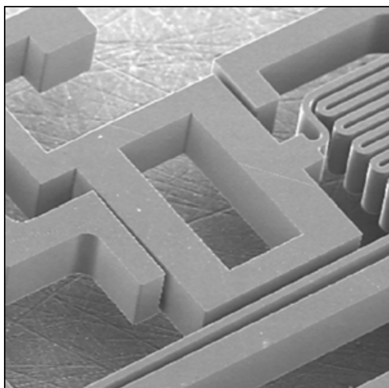
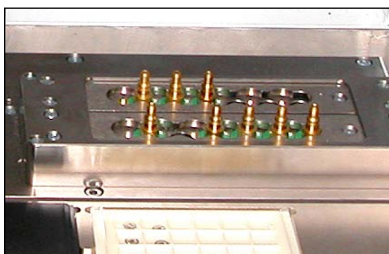
ONYX500

MICRO ASSEMBLY BENCHTOP SYSTEM

High Precision, Low Volume, Micro Assembly, Dispensing & Prototyping







SYSTEM FEATURES/BENEFITS

Cartesian Positioning with Precision Linear Motors & Encoders

Assembly Head with Theta Rotation

Dual Camera Vision System

Up looking camera compares component/die/object mounted on z-axis vacuum nozzle to a model. Down looking camera compares substrate/object on the application plate to a model.

Precision Force-Controlled Placement

The component/die/object is automatically placed after the two part vision match. Various precision force placement systems are available to provide the minimum (1 gram) or maximum (20 kilograms) force required.

High Performance Integrated Dispensing

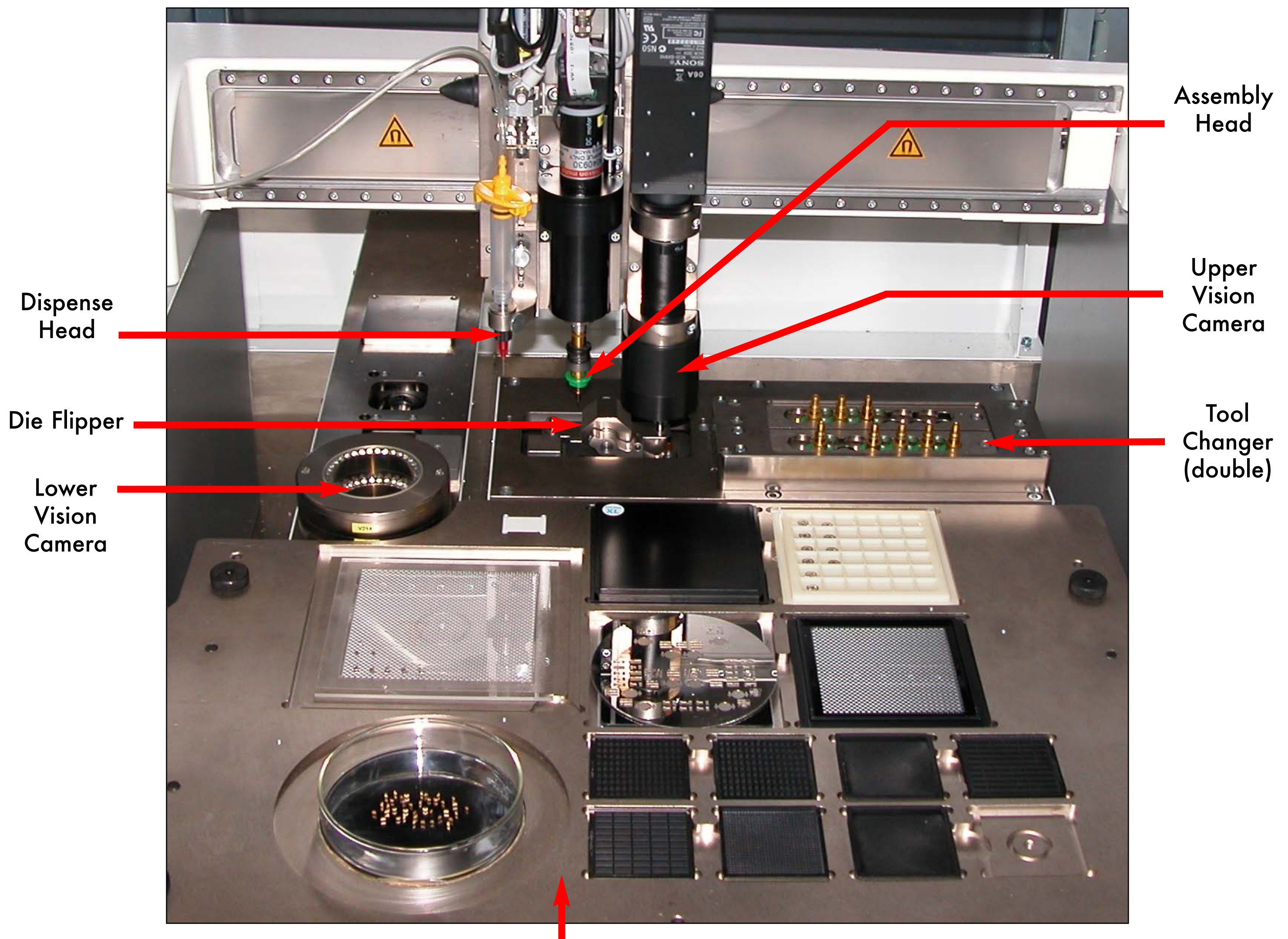
A time/pressure dispenser with automatic pressure compensation and independent z-axis can be integrated, providing the capability to dispense epoxy then pick/align/place on a single machine.

Automatic Tool Changer

Provides the capability to store and automatically change up to twelve vacuum nozzles.

Die Flipper

Flexible design allows machine to be configured based on application requirements.



Technical Data

Dimensions	Width: 823 mm (32.4″)		Depth: 821 mm (32.4″)	
	Height (avg): 702 mm (27.6″)		Weight (avg): 70kg (154 lbs.)	
Electrical Power	100-240 VAC, 10A, 50/60Hz, 1 phase			
	X	Y	Z (standard)	Theta
* **Process Accuracy**	+/- 0,009mm	+/- 0,009mm	+/- 0,020mm	+/- 0,020˚
+/- 3 Sigma	+/- 0,00035 ″	+/- 0,00035 ″	+/- 0,00078 ″	
Safety System	CE certified, UL compatible.			

Specifications are subject to change without previous notice.

* Values are based on glass flip chip placements on glass substrate. Local process accuracies of 0,005 mm can be reached depending on the application.

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