



Auto-Z Pneumatic Inker

Push-button Z Height Adjustment with Programmable Return Feature

The Auto-Z pneumatic inker combines all of the advantages of the standard Xandex high speed pneumatic inking system with motorized Z height adjustment for precision, push button setup. The Auto-Z inker is also equipped with a sensor that is programmed to return the ink cartridge to the exact Z-height setting after the cartridge is changed. The Auto-Z system is suitable for off-line and cabled-in in-line applications on Electroglas and KLA/TEL probers.

Auto-Z inkers incorporate the convenience of DieMark™ cartridges with the reliability of a microprocessor controlled pneumatic dispensing system for the ultimate inking solution. Ink dots are deposited via pneumatic actuation of the inker shuttle mechanism and a simultaneous pulse of air into the cartridge reservoir. There is no filament and no direct contact with the wafer surface.

As the shuttle extends to the downward position, the air pulse to the cartridge forces ink out of the cartridge barrel and forms a drop at the end of the needle tip. When the shuttle is at its lowest position, the drop makes contact with the wafer surface and forms a dot.

The dot size is determined by cartridge air pulse duration, adjusted via the controller settings. Depending on the ink cartridge model, ink type and dot size mode selected, a 13 mil* to 53 mil* dot is possible.

The Z-UP and Z-DOWN buttons on the controller enable motorized adjustment of the inker Z height in 0.0005 inch increments each time either button is depressed. The Auto-Z return feature simplifies and shortens setup time after cartridge change and insures accurate Z-height setup time after time.

* All ink dot characterization testing performed at ambient temperature of 70° degrees F, relative humidity of 50% using polished, unetched silicon wafers (no passivation)



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Key Features & Benefits

- ▶ Automatic Z-height return function and motorized Z-height adjustment
- ▶ Variable dot size – 13 mil* to 53 mil*
- ▶ Accurate and repeatable pneumatic inking system increases reliability and reduces ink related rework
- ▶ High speed ink dot deposition – up to 10 dots per second
- ▶ Programmable dot counter



Auto-Z Pneumatic Controller

