UV-OZONE SURFACE TREATMENT SYSTEM

Low cost UV-Ozone for ultimate cleaning of substrates

OVERVIEW

It is often critically important to clean the substrates to a molecular level before device fabrication. Conventional cleaning techniques often leave a monolayer of organics on the surface, which is detrimental to device performance.

The ultraviolet (UV)/ ozone cleaning is a simple-to-use, inexpensive, fast and dry method that rapidly removes organic contaminants including oils and greases, fluxes, skin oils, and contamination adsorbed during prolonged exposure to air.

Contact angle measurements and wettability tests confirm the performance of this method. In this method samples are exposed to a certain dose of simultaneous UV/ozone, at optimum and controlled conditions. The exposure time is set by a timer and oxygen can be injected for improved performance.

FEATURES

- Substrate cleaning prior to thin film deposition on many surfaces
- Cleaning of silicon, GaAs and InP wafers, optical lens, mirrors, solar panels, steel sheets
- Hybrid substrates prior to wire bonding – removal of condensed epoxy volatiles
- Improved adhesion to plastic surfaces
- Creating thin oxide on silicon or other materials

SPECIFICATIONS

UZ Technical Specifications	
Model	UZ-1928
UV lamp type	Low pressure mercury quartz UV lamp
UV lamp dominant wavelengths	185 nm, 254 nm
UV lamp dimensions	10 cm × 19 cm
Ozone generating lamp	220 V , 9 * 6 W Hg lamp
Power supply	220 V , 50-60 Hz
Max run time	99 hours
Safety features	Exhaust fan, electrical fuse
Max. recommended substrate size	18 cm × 24 cm × 1 cm
Dimensions (WxHxD)	35 cm × 35 cm × 33 cm
Weight	17 Kg