

The MicroWash Model 973 is the Ideal Solution for Submicron Cleaning of Wafers, Substrates, and Other Diced



MODEL 973 WASH STATION



One of the most important and most frequently repeated tasks in semiconductor manufacturing is the cleaning of the wafer surface in preparation for further processing. Of the hundreds of different steps in the manufacturing process, approximately 20% involve cleaning. During dicing operations, cooling water mixes with material removed from the kerf and forms a fine slurry that must be carefully and completely eliminated prior to die inspection and removal. In addition to IC wafers, nearly all precision dicing operations, including package singulation and hard and brittle materials applications, require sub-micron cleaning before any additional processing. With an abundance of standard features and performance enhancing options, the MicroWash Model 973 Wash Station is an extremely efficient, reliable and cost-effective solution for your post-dicing cleaning needs.

High-Pressure, Sub-Micron Cleaning

The MicroWash Model 973 Wash Station utilizes an oscillating, high-pressure, de-ionized water jet spray of up to 2000 psi, with 0.2 μm filtration for removal of sub-micron particles. Spray arm speed is fully adjustable and a variable arm travel range allows the Model 973 to handle wafers up to 8" or substrates up to 10" in diagonal. The system also includes a D.I. water line purge to prevent bacterial build-up and a CO₂ re-ionizer for elimination of static charges that may accumulate during dicing or cleaning. The efficient radial chamber combines drain and exhaust, and variable spin speeds promote rapid drying. Push-button open/closure of the wash chamber and built-in safety interlocks make the system safe and easy to use and operate. The Model 973 also features an intuitive, microprocessor-controlled, touch-screen user interface for adjustment of process parameters and program storage.

Customized to Suit Your Cleaning Needs

A variety of standard and custom vacuum chuck options allow the Model 973 to handle a full range of wafers and substrates. Optional dispense canisters supply surfactant through fixed or oscillating, low-pressure dispensers that incorporate a self-cleaning mechanism and 0.2 μm filtration. Drying can be accelerated with an infrared heat lamp and nitrogen assist with 0.2 μm filtration and N₂ ionizer.

- Handles Wafers Up to 8"
- Touch-screen Operation and Program Storage
- Oscillating, High-Pressure, D.I. Spray Arm
- 0.2 μm Filtration
- Combined Chamber Exhaust and Drain
- Built-in Safety Interlocks
- CO₂ Re-ionizer
- Compatible with Most Water Soluble, Photoresist Strippers



MODEL 973 WASH STATION

MicroWash Model 973 Standard Features

- Compatible with substrates up to 10" in diagonal
- Programmable, microprocessor-controlled operation
- Oscillating, high-pressure, D.I. water jet with up to 2000 psi and 0.2 μ m filtration
- Efficient radial chamber combined exhaust/drain
- Built-in exhaust blower for consistent results
- D.I water line purge for prevention of bacteria accumulation
- Built-in safety interlocks
- Compatible with most water soluble, photoresist strippers
- CO₂ re-ionizer for elimination of static charge
- Infrared heat lamp for complete drying

MicroWash Model 973 Options

- Various sizes of vacuum chucks for wafers
- N₂ drying assist with 0.2 μ m filtration
- Fixed or oscillating, low pressure dispensers
- Surfactant dispense canisters
- 0.2 μ m filtration for low pressure, surfactant dispensers
- Nitrogen ionizers

Facility Requirements

Power:	115 VAC, 5 A, 60 Hz
D.I.Water:	30 - 70 PSI Minimum, 0.5 to 1.5 GPM (intermittent)
Nitrogen:	70 PSI and 1.0 CFM Minimum
Air:	Clean and Dry, 80 to 125 PSI (Min/Max) and 7.0 CFM (High Pressure Pump)
Exhaust:	Three (3) inch Port
Drain:	0.5 to 1.5 GPM (intermittent)
CO₂:	40 PSI and 0.025 CFM (Grade 4)
Dimensions:	29.5" W x 28" D x 47.5" H
Weight:	Approximately 200 lbs.

Product/Process Technical Support

As part of our line of wafer prep equipment and accessories, the MicroWash Model 973 Wash Station is just another example of our commitment to providing the most complete and comprehensive dicing solutions in the industry. Together with our world-renowned expertise in dicing saws, blades, wheels and accessories, ADT Dicing Systems can quickly and efficiently analyze your latest, most challenging applications and provide all the tools, equipment and technology you need for the best possible solutions.

CORPORATE HEADQUARTERS

2101 Blair Mill Road
Willow Grove, PA 19090, USA
(215) 784-6000 phone
(215) 659-7588 fax

USA/AMERICAS/EUROPE

Eastern USA

2101 Blair Mill Road
Willow Grove, PA 19090, USA
(215) 784-6788 phone
(215) 784-6181 fax

Western USA

2210 Martin Avenue
Santa Clara, CA 95050, USA
(408) 727-5040 phone
(408) 727-4929 fax

Semitec

3025 Stender Way
Santa Clara, CA 95054-3216
(408) 496-1092 phone
(408) 496-1091 fax

Scandinavia, Finland and Baltic

BITAELEKTRONIK SVENSKA AB
POB 3434
SE-10368 STOCKHOLM
Ph. +46 (8) 319000
Fx. +46 (8) 326064
www.bitase.se, e-mail: info@bita.se

ASIA

Hong Kong

21/F Yen Sheng Centre
64 Hoi Yuen Road
Kwun Tong, Kowloon, Hong Kong
(852) 2955 3668 phone
(852) 2955 3666 fax

Korea

Sunil Building 3/F
#125-7 Yangjae-dong, Seocho-ku
Seoul, Korea 137-130
(82) 2-3461-2107 phone
(82) 2-3461-2109 fax

Philippines

Block 3, Lot 11
Laguna International Industrial Park
Mamplasan, Binan Laguna, Philippines
(63) 2-549-5000 phone
(82) 2-549-5004 fax

Singapore

No. 6, Serangoon North Avenue 5
#03-16
Singapore 554910
(65) 880-9600 phone
(65) 880-9488 fax

Taiwan

5/F-2, No. 167
Sszu Wei 4th Road
Ling-Ya District
Kaohsiung, Taiwan ROC
(886) 7-331-1041/2 phone
(886) 7-332-7120 fax

Thailand

Kulicke & Soffa (Thailand) Ltd.
8th Floor, Na-Nakom Building
99/349 Chaengwattana Road
Laksi, Bangkok, Thailand 10120
(662) 5761559-60 phone
(662) 5761561 fax

Japan

No. 5 Koike Building 3/F
1-3-12 Kita-Shinagawa
Shinagawa-ku, Tokyo Japan 140-0001
Sales Office
(81) 3-5461-1520 phone
(81) 3-5461-1597 fax
Technology Center
(81) 3-5461-1520 phone
(81) 3-5461-1597 fax

<http://www.adt-co.com>