

December 6, 2000

## **Dainippon Screen and Ashland Specialty Chemical Forge Strategic Alliance Targeting Polymer Removal**

Dainippon Screen Manufacturing Company Limited, known as DNS in the semiconductor industry, announced that it will work with Ashland Specialty Chemical Company Division of Ashland Inc. Electronic Chemical Division, to promote chemistries for polymer cleaning on single-wafer processing tools. The strategic alliance will be in effect for a minimum of one year and will address the clear trend in polymer removal processes toward single wafer cleaning.

"We judge that the trend of the polymer removal process is clearly indicating a move to the single-wafer spin process due to finer design rules, contamination problems, clean room space considerations, and 300mm wafer processes," explained Nobutoshi Ogami, Corporate Executive Officer and President of the Semiconductor Equipment Division of Dainippon Screen. "We are happy to have this partnership with Ashland-ACT, which is showing strong leadership with post etch polymer removal process optimization for single-wafer spin processes. With 20 years of expertise, we are the world's top supplier of single wafer cleaners. The synergy of both companies will certainly bring matured process solutions to our mutual customers."

By combining the expertise of both companies, DNS and Ashland expect to promote chemistries that will greatly reduce process times for polymer removal while reducing consumables. This translates into higher throughput and lower cost of ownership for the customer.

"Our position in the Japanese market, and all of Asia, has grown dramatically in the past few years as a result of our alliances with Nippon Zeon and Nagase" said Bob Rohlfing, business director of Ashland-ACT, a unit of Ashland Specialty Chemical Company's Electronic Chemicals Division. "It is important for us to work together with leading equipment manufacturers like Dainippon Screen to ensure that the best possible cleaning package is provided to our customers in this growing region."

Ashland-ACT has developed products such as the ACT(r) NE Series of polymer removers that are designed to perform at a very short process time (<1 min.), are buffered to ensure process stability, and are compatible with aluminum, copper and many low-k films.

## About Dainippon Screen

The Semiconductor Equipment Division of Dainippon Screen develops, manufactures and markets semiconductor-manufacturing equipment used in wafer processing worldwide. The lineup of products includes coater/developers, wet-stations, single wafer cleaning systems and lamp anneals.

Dainippon Screen Manufacturing Company Limited is a world leading company producing LCD manufacturing equipment, PCB manufacturing equipment, prepress/printing equipment and shadow masks for CPT/CRT monitors. Dainippon Screen's Internet address is <http://www.screen.co.jp/index.html>.

## About Ashland

Ashland-ACT is a business unit of Ashland Specialty Chemical Company's Electronic Chemicals Division, a leading supplier of ultrapure chemicals, photoresist strippers and on-site services in chemical management to the global microelectronics industry. Through its recent acquisition of MicroClean, Inc., the division provides full-service equipment parts cleaning, refurbishment and management services. The division has ISO 9002-certified production facilities in Pueblo, Colo.; Dallas, Tx; Easton, Pa.; Pyongtaek, Korea and Milan, Italy; and also has a 50-percent interest in Ashland Union Electronic Chemical Company (AUECC), which recently began operating a wet process chemicals facility in Kaohsiung, Taiwan.

Ashland Specialty Chemical Company, a division of Ashland Inc., is a leading, worldwide supplier of specialty chemicals serving industries including adhesives, automotive, composites, foundry, merchant marine, paint, paper, plastics, and semiconductor. Visit the Internet web site at <http://www.ashspec.com> to learn more about these operations.

Ashland Inc. (NYSE:ASH) is a Fortune 250 company providing products, services, and customer solutions throughout the world. Our businesses include road construction, specialty chemicals, lubricants, car-care products, chemical and plastics distribution and transportation fuels. Through the dedication of our employees, we are "The Who In How Things Work(tm)." Find us at <http://www.ashland.com>.

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