

DNS Confirms Matching ASML TWINSCAN's Productivity to Achieve In-line Litho-Cell Throughput World Record

Kyoto, Japan. June 7 - Dainippon Screen (DNS) Manufacturing Company Ltd., today announced the first confirmed 150 WPH throughput performance from its DNS RF³ track when linked in-line with an ASML TWINSCAN™ Step and Scan system. It is the industry's first Litho-Cell showing the capability to run actual and diverse production flows at such speed, raising the bar for new productivity standards.

As part of a collaborative agreement signed in November 2003, Dainippon Screen installed its 300mm RF³ coat/develop track system in the ASML Development Laboratory in Veldhoven, the Netherlands. The purpose of the agreement is to establish proof of concept as well as explore performance capabilities and process enhancements for a 'litho-cluster,' or the linking of track and lithography systems for semiconductor manufacturing. Demonstrating 150 WPH throughput between the systems is an important milestone, further expanding productivity leadership and manufacturing worthiness of the combined Litho-Cell for both ASML and DNS. This is the highest Litho-Cell productivity ever achieved.

Traditional binary communications between the track and scanner are very basic. Any scanner-track "wafer ready" timing mismatches (in transfer communications) would delay wafer transfer and reduce the total litho-cluster throughput. ASML and DNS collaborated to incorporate advanced notice of wafer ready signals to anticipate wafer transfer timing and optimize Litho-Cell throughput. This is the first result of the collaboration between ASML and DNS. The two companies have various joint development projects for further productivity improvements.

Dainippon Screen previously announced plans to further increase the throughput of its track system to 180WPH by 2006. "We have an obligation as a track equipment supplier to establish throughput capability to meet and exceed the best scanners in production," said George Petricich, VP of Product Marketing, DNS Electronics LLC, "ASML is a leader in lithography productivity and an excellent partner for DNS in demonstrating 150 WPH in-line throughput. Our ongoing collaborative effort will be a major factor in our development of the ultimate 180 WPH track system."

■ About Dainippon Screen

Dainippon Screen Mfg. Co., Ltd was established in 1943 and is a top 10 supplier of semiconductor fabrication equipment. The company specializes in track equipment, wafer cleaning systems, and next generation flash anneal tools. DNS Electronics LLC is a wholly-owned U.S. subsidiary of Dainippon Screen, a public company quoted on the Tokyo stock exchange. Homepage at <http://www.screen.co.jp/>