

## **Screen Releases a High-End Optical Pattern Inspector for Printed Circuit Boards World's Highest Class of Inspection Precision and Speed Combined in an Inspector Suitable for both R&D and Mass Production**

January 24, 2006: The Precision Equipment Company (President: Kyohei Fujisawa) of Dainippon Screen Mfg. Co., Ltd. (Headquarters: Kyoto, Japan) will commence sales of the PI-8700 optical pattern inspector for printed circuit boards (PCBs) in February 2006. This inspector is suitable for high-speed inspection of everything from extremely high-precision patterns used in leading-edge R&D to high-density patterns used in mass production.

In recent years, increases in the functionality and speed of CPUs in PCs, graphics control devices, and memory modules, as well as increased miniaturization and sophistication of consumer electronics such as cellular phones and digital cameras, have contributed to increased PCB pattern density and complexity, and accelerated the demand for high-end circuit inspection equipment. What's more, countries in Asia that handle mass-produced circuit patterns, such as China, have begun to examine the possibility of mass production of high-precision PCBs. The demand in these countries for inspection systems that can be used for high-productivity inspection of patterns with a wide range of line widths is therefore also increasing.

The PI-8700, which is scheduled for release in February, was designed to account for recent worldwide trends in the printed circuit board industry. It features five different inspection modes that ensure it can meet any user's needs. In addition to offering the fastest pattern inspection in the industry for 12.5 micron line-width patterns, it also boasts a 60%\* higher inspection speed for 50 micron line width patterns — for which demand continues to increase — and provides dramatic increases in inspection speed for everything from extremely high-precision patterns to mass-produced patterns with line widths in the dozens of microns. What's more, the PI-8700 features a variety of new features, including a newly developed image processing engine that helps minimize false alarms (over-detection of defects) in intricate, high-density patterns. The PI-8700 does more than just offer faster inspection; it provides extremely high inspection accuracy and productivity, contributing to improved total throughput.

The release of the high-end PI-8700 optical pattern inspector ensures that Dainippon Screen will continue to meet the varied needs of the industry, and is expected to increase the company's presence in the market as a whole, as well as its market share both in Japan and overseas.

\* Compared to previous Dainippon Screen models, when inspecting a printed circuit board 510 mm x 406 mm in size.

**Date sales are expected to commence**

February 1, 2006

**Suggested retail price in Japan  
(before tax)**

68 million yen

**Expected annual sales (worldwide)**

30 units



**PI-8700 Optical Pattern Inspector**

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