

**New Entry into the Flat Panel Display Inspection Equipment Industry
– Entry into a New Market: Using Film Thickness Measurement Technologies for
Semiconductor Manufacturing Processes and PWB Inspection Technologies –**

The Precision Equipment Company (President: Kyohei Fujisawa) of Dainippon Screen Mfg. Co., Ltd. (Headquarters: Kyoto, Japan) has developed an automatic inspection system intended for Flat Panel Display (FPD) manufacturing, including Liquid Crystal Displays (LCDs). The inspection system, will be a new product entry into the inspection equipment industry for FPD manufacturing.

In the FPD industry, demand for displays in flat panel TVs, PCs, mobile phones and car navigation systems is increasing. To meet the demand, manufacturers are planning increases in panel production and equipment investment for larger-size displays. At the same time, they are taking steps to reduce production costs. FPD inspection systems are recognized in the industry as a means to reduce manufacturing costs.

Given these industry trends, SCREEN has taken the initiative to develop its own FPD automatic inspection systems. These new systems are based on the company's existing expertise and technology in optical systems and digital inspection systems. SCREEN's long experience in film thickness measurement systems for the semiconductor manufacturing processes and PWB (Printed Wiring Board) inspection systems is the source of the advances in the FPD automatic inspection systems. In cooperation with FPD Equipment Company (President: Yoshinari Yaoi) of SCREEN, Precision Equipment Company has decided to launch its own "Automatic Mura Inspection System" for incorporation into FPD manufacturing lines.

This system enables automatic detection of various kinds of unevenness (Mura) that occur in various FPD manufacturing processes, with the same sensitivity level as that of visual inspection. This system enables high-speed inspections of large-size panels of up to the 10th generation. If incorporated in the SCREEN FPD manufacturing system, they can work as a seamless production line enabling 100% automatic inspection of panels. This system reduces the number of visual inspection steps, and contributes to production cost reductions and yield improvements by providing step by step inspection feedback.

SCREEN is pleased to develop comprehensive consulting and installation proposals for the "BEALL-EYES Concept," the automatic inspection system integrated into the FPD manufacturing process. SCREEN also plans to launch the "Automatic Pattern Inspection System" that will find pattern defects on panel substrates in coordination with the Automatic Mura Inspection system. Total integration of these inspection systems in FPD manufacturing systems will allow us to contribute to FPD quality improvement and production cost reduction throughout the industry. SCREEN seeks to set a global standard in the FPD inspection equipment market through systemization of inspection steps for panels as their definition and size increase.