Increasing Production Capacity of large-sized TFT LCD Glass Substrates

Asahi Glass Co., Ltd.

Asahi Glass Co., Ltd. (Headquarters: Tokyo; President: Shinya Ishizu) has decided to increase its production capacity of large-sized glass for glass substrates used in TFT LCD (Thin Film Transistor Liquid Crystal Display) panels. The Company will construct an additional glass furnace and two polishing lines in Taiwan for large-sized TFT LCD glass substrates. Total investments in the project are estimated at 26 billion yen. The construction of the furnace is scheduled to commence in March 2004, with commercial production of glass slated to start in April 2005. Construction of the two polishing lines will begin in April 2004, with mass production to start sometime between February and April 2005.

The addition of a new glass furnace is a response to ongoing strong demand for the TFT LCDs used in PCs and TVs. The furnace, the second in Taiwan and sixth for the Company, will be installed next to the glass furnace currently under construction and due to open in September 2004.

After completion of the new furnace, the Company's total production capacity will be 18 million square meters of glass per annum, when all six furnaces, also including the three at the Keihin Plant, the one at the Kansai Plant and the one under construction in Taiwan, are operating at full capacity.

Demand for TFT panels is growing faster than expected and is projected to increase at a rate of about 20% per annum. In addition to demand for PC monitors, demand for TVs is expected to grow significantly. Given the shift towards larger panels for TVs, demand for glass substrates is expected to grow substantially, exceeding growth in demand for the panels themselves.

There are fears of a further strained supply-demand situation for TFT LCD glass substrates, especially larger ones, since TFT panel manufacturers have started introducing a sixth-generation size, and plan further size increases.

Unlike many competitors, Asahi Glass incorporates the float process in manufacturing TFT LCD glass substrates, suited to mass production of larger sizes. Its TFT LCD glass substrates are less prone to warpage and do not shrink much during heat treatment in the manufacturing process. With growing interest in environmental conservation, they are also highly valued by TFT LCD panel manufacturers as "environmentally-friendly glass," free of the toxic substances such as arsenic and antimony that are usually used in the manufacturing process to remove bubbles.

Capitalizing on rising demand for larger substrates, the Company decided to raise its production

capacity of glass for TFT LCD glass substrates, aiming to become the global leader in this business.

To meet the high demand, it will reinforce integrated production systems, ranging from the furnace to

the polishing line. Details of the planned capacity increase are as follows:

- New Furnace

The Company will construct another glass furnace for manufacturing glass for TFT LCD glass

substrates at Asahi Glass Fine Techno Taiwan Co., Ltd. (a wholly owned subsidiary of Asahi Glass Co.,

Ltd., located in Douliu, Taiwan). The new furnace, with an annual production capacity of four million

square meters, will be able to manufacture glass substrates with a width of about 4m, enabling efficient

production of ultra-large-sized glass substrates.

Although there is a glass furnace already under construction in Taiwan, the Company will build an

additional one there in order to meet demand from panel manufacturers, which is expected to grow

further in the future. Capital investment on the new furnace will be some 12 billion yen.

- Polishing Line

The Company will install two more glass polishing lines at Asahi Glass Fine Techno Taiwan Co., Ltd.,

mainly for large-sized glass substrates to be manufactured by the planned furnace there. Capital

investment in the polishing lines is estimated at 14 billion yen.

For further information, please contact Shinichi Kawakami, General Manager, Corporate

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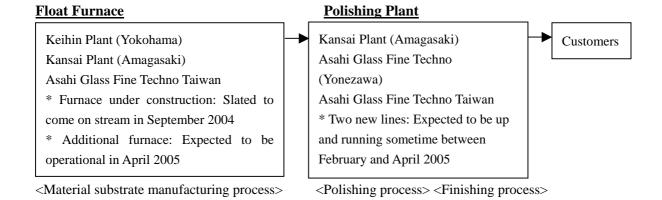
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1. Features of glass for TFT LCD Glass Substrate of Asahi Glass

The Company is the only glass manufacturer in the world to employ the **float process** in the manufacturing process of glass for TFT LCD glass substrates. "AN100" grade glass, put on the market in 1998, exhibits the following major features:

- (1) Large-sized glass for glass substrates that can be supplied stably and in volume.
- (2) "AN100" comes fully equipped with the characteristics sought after in large-sized glass substrates of fifth-generation size (or greater), which will become the mainstream in the TFT LCD industry in the near future.
 - 1) It is less prone to warpage during in-line transfer, since it is more durable than other manufacturers' glass substrates.
 - 2) Warpage and variations in substrate thickness are small, and it has excellent dimensional stability.
- (3) The "AN100" is an eco-friendly product. It is the only non-alkali TFT LCD glass substrate not to include such toxic materials as arsenic trioxide (As2O3) or antimony trioxide (Sb2O3).

2. Flowchart of the Asahi Glass' TFT LCD Glass Substrate Manufacturing Process



3. Outline of Asahi Glass Fine Techno Taiwan Co., Ltd.

(1) Corporate name Asahi Glass Fine Techno Taiwan Co., Ltd.

(2) Headquarters and factory Douliu, Taiwan

(3) President Takeyasu Murayama

(4) Capital New Taiwan \$1,520 million

(5) Shareholder Asahi Glass Co., Ltd.

(6) Product TFT LCD glass substrates

(7) Establishment July 2000

(8) Number of employees 379