



April 12, 2010

IPS Alpha Technology Himeji, Ltd.

Responding to growing and diversifying global demand for flat panel television sets

Mass Production Operation of IPS Liquid Crystal Panel at Himeji Factory Starts

3-month acceleration of mass production schedule realized and started today

IPS Alpha Technology Himeji, Ltd. (President and Representative Director, Fumiaki Yonai) began mass production operation of its advanced IPS liquid crystal panel^{(*)1} mass production base "IPS Alpha Technology Himeji, Ltd. (hereinafter referred to as "IPS α Himeji") on April 12, 2010. Built in Himeji city, Hyogo Prefecture, the factory is fully supported by investment from Panasonic Corporation.

The construction of IPS α Himeji began in July 2008, with the start of operations originally scheduled for January 2010, but due to the global economic environment at the time, the plan had been modified and delayed until July 2010. However, in order to respond to sudden swift recovery and expansion of the global demand for flat panel television sets, equipment was introduced at the end of last year, and preparations were once again put in place to realize an earlier start.

As result, after going through a test/trial period, mass production operation has officially started today on April 12th. The factory will begin shipping out goods primarily for Panasonic flat panel television factories all over the world in May.

The new factory will start the first period with an equipment capacity to produce 405,000 units (equivalent of 32-inch) per month, and the company plans to increase output to 810,000 units (equivalent of 32-inch) per month during fiscal 2010. Mainly 32-inch and 42-inch IPS liquid crystal panels will be mass produced. Along with state-of-the-art production facilities that realize 18 chamfers for the 32-inch, and 8 chamfers for the 42-inch, a "high efficiency line" is realized by introducing IPS α type process technology in order to produce high efficiency, high quality panels. In concrete terms, lead time is reduced and investment productivity is dramatically increased by reducing the number of times processing must be carried out for exposure, an important process of liquid crystal panel production, in order to realize a speedy, timely liquid crystal panel supply system. This technology realizes approximately 1.6 times^{(*)2} better investment productivity than the existing IPS α Mobara factory (6th generation)^{(*)3}.

Also, in addition to reducing the amount of water used (35%) and the amount of CO₂ emitted (23%), the energy cost per 32-inch panel^{(*)4} has been cut by approximately 20% (in comparison with Mobara factory) to realize a state-of-the-art circulative, environmentally-friendly plant.

The global flat panel television market is expected to exceed 200 million units in 2011, but due to the growth in

demand for a second or third television set in the advanced markets of Japan, the US and Europe, as well as the sharp expansion of emerging markets such as BRICs, there is especially marked growth in the larger 32-inch and 42-inch TVs, exemplifying the diversifying needs of consumers. Of the expected 200 million units, the 32-inch TVs are expected to account for more than 35% and the 40 to 42-inch TVs for more than 20% (according to a study conducted by private survey company).

The 32-inch and 42-inch flat panels that IPS α Himeji focuses on can be called the "two big volume zones" of the flat panel television set market. IPS α panels, which offer some of the best motion picture resolution and viewing angle characteristics among all liquid crystal panels available on the global market, as well as high transmittance ratio, energy saving performance and cost competition, have been well received in both domestic and overseas markets, and is expected to further increase in demand.

In combination with the existing Mobara factory, increased production capacity for the 32-inch panels and the starting production of the 42-inch panels, IPS α Himeji will enhance its global competitiveness through an ideal total operation factory management system with Panasonic's liquid crystal television assembly bases throughout the world. Doing so, IPS α Himeji will realize a timely supply system that can function in agreement with the growing global flat panel television market, and enable the company to respond flexibly and swiftly to the diversified needs of different regions and customers.

Terminology explanation

- *1: IPS liquid crystal is an abbreviated expression for In-Plane-Switching type TFT crystal, and is a high quality crystal mode that "is beautiful even when viewed at an angle." With IPS, the liquid crystal molecules rotate on a plane parallel to the TFT board by a horizontal electrical field, and therefore in principle, it offers superior viewing angle, color reproduction, and halftone response speed, has little variation in color tone according to the viewing direction and is capable of displaying a natural image.
- *2: Comparison of equipment investment per 32-inch panel
- *3: IPS α Mobara factory (Chiba Prefecture, Mobara City) [Production start: May 11, 2006, Production capacity: 7.2M units/year (equivalent of 32-inch)]
- *4: Total cost of energy (water, electricity, gas) used to produce one 32-inch panel

IPS α Himeji Overview

Name	IPS Alpha Technology Himeji, Ltd.
Address	Mega Hida-cho, Shikama-ku, Himeji-shi, Hyogo-ken (old site of Idemitsu Kosan Co., Ltd. Hyogo oil refinery)
Investment	¥235B (including building, utilities, equipment expense) Investment reduction to ¥65B from ¥300B when factory construction was initially announced
In charge	President and Representative Director, Fumiaki Yonai (Also serves as CEO of IPS Alpha Technology, Ltd.)
Products	IPS type liquid crystal panels

Production capacity	Board size: 8th generation 1st period: 405,000 units/month (equivalent of 32-inch)
Construction start	July 2008
Mass production start	April 12, 2010
Area of property	Approx. 361,000 m ²
Construction scale	4 story building, steel construction