

## COTC produce TFT-LCD with SIMATIC PCS 7



## Customer Info

**Customer**  
COTC

**Business Group**  
COTC

**Country**  
Taiwan

**Location**

**Industrial Sector**  
LCD-TFT

## Project:

TR4 float glass line



Cell phones, computer monitors, .eld devices or handheld organizers – Liquid Crystal Displays (LCD) can be found almost everywhere. The possibilities of this technology have by no means been exhausted as the rapid progress of the TFT-LCD proves. The microscopically small structures of the displays are manufactured in al process that is similar to semiconductor production – except that the carrier is not silicon but a very thin, .at panes of glass.

This motherglass is produced by COTC in Taiwan using the Simatic PCS 7 process control system. An ever-increasing number of devices are now equipped with an LCD– and the end to the boom is not in sight. The basis of LCD production is the so-called motherglass that must meet exact quality speci.cations.

The new production line of the COTC China Optoelectronics Technology Corporation produces motherglass for Super Twisted Nematic LCDs (STN-LCD) and Thin Film Transistor LCDs (TFT-LCD) in two melting furnaces.



The motherglass is between 0.3 and 1.1 millimeters thick; the size of the finished glass panes for the displays is 355 x 406 millimeters for the STN-LCDs and 680 x 880 millimeters for the TFT-LCDs.

The entire plant, from the mixing section right through to packing of the finished products, has been automated with Totally Integrated Automation (TIA) components.

A total of 20 Simatic controllers control the processes and the 12 Operator Stations of the Simatic PCS 7 process control system ensure that the personnel always has an eye on all the important information. AEG SVS supplied the systems for the furnace heating which are also integrated into the TIA concept.

Siemens Limited Taiwan was responsible for implementing the entire network technology for COTC and integrated the production utilities into the PCS 7 system.

**Siemens solution:**

SIMATIC PCS7 process control system,  
Project planning, installation, commissioning

**Factors for choosing Siemens**

- Totally Integrated Automation
- Turnkey solution



More information: [www.siemens.com/glass-industry](http://www.siemens.com/glass-industry)