



Electronics & Advanced Technology

Client

Tianma Microelectronics Co., Ltd

Location

Shanghai, China

G4.5 TFT-LCD Plant Design

Key Highlights

- G4.5 thin film transistor-liquid crystal display flat panel display production plant
- Phase I design and services during construction approach
- State-of-the-art design

CH2M HILL provided design and services during construction (SDC) for a new generation 4.5 G thin film transistor-liquid crystal display (TFT-LCD) flat panel display (FPD) production plant in the Zhang Jiang High Tech Park East Manufacturing Area.

CH2M HILL's scope involved a multi-discipline effort for the design of a 200,000-square meter factory with a 43,000-square meter cleanroom for phase I.

The phase I project includes:

- A TFT/Cell/Module Fab and attached Fab Support Buildings
- Central Utility Building-Ultra Pure Water (CUB-UPW)
- Wastewater and source water treatment (WWT)
- Incoming Power Station
- Gas Yard
- Chemical Building
- Solid Waste Building
- Research & Development Office

The total project area is 300,000 square meters. The company invested nearly USD 471.5 million (RMB 3.29 billion) for the new facility, which took 13 months to build. It has a production capacity of 30,000 units of 730x920mm substrates a month, which are targeted for small/medium display applications such as those for mobile phones, car navigation devices, portable media players, portable DVD players, handheld game consoles, and automotive and industrial applications.