



Chunghwa Picture Tubes

Location: Multiple, Taiwan
Completion: 2004



Summary

Chunghwa Picture Tubes Ltd. (CPT) was the first to introduce the technology for large scale TFT-LCD in mass production, which subsequently manifested the era of flattened monitors in Taiwan. In addition, CPT is the first to mass produce PDP (plasma display panel) domestically.

CH2M HILL IDC has a history of partnering with CPT, providing complete design services to this industry leader. CPT's confidence in CH2M HILL IDC design and construction management services led to breakthrough facility cost reductions through our "cost-down" approach. Designed to produce Generation 4.5 and 6 TFT/LCD panels, the Longtan facility is the largest single building in use for glass manufacturing in the flat panel industry.

Project Examples

Longtan, Taiwan G4.5-6

CH2M HILL IDC was selected to provide design services for the Longtan facility, including programming, basis of design, process critical system and cleanroom design as well as MEP detail design. CH2M HILL IDC furnished 12-15 professional design personnel to work on this project. The project included array and cell manufacturing floors as well as central utility, utility support, and office spaces. CH2M HILL IDC services included industrial engineering tool layout and utility optimization and emphasized capital and operating cost savings.

Longtan, Taiwan G5

CH2M HILL IDC provided programming and conceptual design services for a Generation 5 TFT-LCD manufacturing factory. Focus included maximizing output on an extremely tight site.

Yongmei, Taiwan

CH2M HILL IDC provided programming and conceptual design services for a Generation 4.5 Color Filter manufacturing facility. Challenges included optimizing cost savings while utilizing a steel structure remaining from a demolished cathode ray tube plant.

Services Provided

- Master Planning
- Programming
- Structural Engineering
- Mechanical Engineering
- Electrical Engineering
- Industrial Engineering
- Tool Layout
- Utility Optimization

Project Elements

- TFT/LCD
- Color Filter
- Generation 4.5 through 6
- Class 10 - 1000 Cleanroom
- Array and Cell Manufacturing
- Central Utility