

**Chunghwa Picture Tube, Ltd.**  
**PDP Plant 1**  
**Taoyuan, Taiwan**

**Low-vibration retrofit**  
**MEP vibration isolation**

**Client**  
Chunghwa Picture Tube

Chunghwa Picture Tube converted an existing CRT factory for Plasma Display Panel production.

**Construction Value**  
Confidential

The third floor of the existing building was to be used as the main process floor, which would house most of the vibration sensitive tools. Due to the site limitation, six 6000KW generators were to be located on the first floor, directly under the process area. The challenge was to mitigate the vibration from the generators to the existing floor with limited floor clear height. Through our field measurement, detailed analysis and design, the existing floor girders were stiffened to comply with the vibration criteria.

**Completion**  
2002

**Work Scopes**  
Structural Vibration Retrofit  
Mechanical Vibration Design  
Vibration Testing

All major Mechanical, Electrical, Plumbing and Process systems, including ducts and piping layout, were reviewed for vibration consideration. We provided the vibration isolator schedule for all these systems and developed vibration control specifications for the procurement and installation of these isolation systems.

**Special Work Scope**  
Generator Vibration Impact

**Architect/Engineer**  
J. J. Pan Partners  
Goodtech Engineering

We also performed the in-situ and the at-rest field measurements to validate that the structure behaved according to our design and that the vibration isolators worked efficiently.

**Total Building Area**  
Confidential

**Clean Room Area**  
Confidential

**Clean Room Class**  
Class 1

