



The Institution of Engineers, Malaysia

Talk on "Building a Floodgate."

(Organised by Mechanical Engineering Technical Division IEM)

Date : 23 March 2010 (Tuesday)
Time : 5.30 pm to 7.30 pm (Refreshment will be served at 5.00 pm)
Venue : Tan Sri Prof. Chin Fung Kee Auditorium, Wisma IEM (3rd Floor)
Speaker : Ir. Hsiung Teck Pin

BEM Approved
CPD/PDP HOURS: 2
Ref No: IEM10/HQ/053/T

Synopsis

What is a Floodgate? The meaning is wide but specifically it is a piece of equipment which prevents water from passing through a gate-way. The term seems to be suitable for the piece of equipment which prevents flood water from the bad weather, passing through the door-way of the basement car parks of high rise buildings. This piece of equipment will prevent the basement car parks from being flooded and saving millions of dollars, worth of damages to vehicles, and to the affected buildings and their ancillary machinery, including injuries to visitors and even loss of life. One such equipment was designed and built by a local Engineer in 1984 for a high rise building in Jalan Raja Laut, Kuala Lumpur. It was built and installed at less than half the cost of the imported model. Jalan Raja Laut is a critical flood-prone area, and the equipment is definitely much desired. The locally-built floodgate is still in use today.

The floodgate comprises the massive steel door which moves to cover the 7'6" x 20'0" basement car park entrance, and the heavy steel door-way frame which is firmly embedded in the reinforced concrete wall.

The massive steel door is mounted on two cast steel wheels. The steel door has very strong devices built all round its edges. They automatically lock and seal when the steel door is moved into the close position. Toggles are incorporated in the lock and seal devices so that the steel door will remain locked and sealed for long periods, even when the power is switched off.

The floodgate is a typical example of a specialised mechanical engineering work. Engineers who attend the course will share the experience of the Engineer who built it, and they will be better prepared in case they are called forth to build floodgate for a high rise building, or another machine with similar complexities.

Biodata of Speaker

Ir. Hsiung Teck Pin is a humble engineer despite his achievement over the years in designing unique engineering applications, and has always referred to himself as "an ordinary engineer". He studied privately and passed both the Part I & Part II of the Institution of Mechanical Engineers, UK examinations in 1969. He is a former student of the Victoria Institution, KL and the Federation Military College (FMC), Port Dickson. During his army career, he had the rare opportunity of being selected to train at The Royal Military Academy Sandhurst, a centuries old British Institution, rich in history and traditions, where the best officers were continuously and successfully produced for the British Army and the armies of the world. He left the army in 1970 after 10 years of service to join the private sector, and to start his own business in machine design and construction. He retired in 2000. The clients whom he had provided professional services, were Lindeteves Jacoberg (M) Sdn.Bhd., Scott & English Sdn.Bhd., Texas Instruments, Chung Khiaw Bank, Malayan Cables Bhd., ALCOM, Sunway Lagoon, Star Cruise, and many others. His keen interest in designing and building machines, motivate him to share his experience with fellow engineers, and hope more engineers in the near future, would be attracted to take up the challenge in this specialized field.

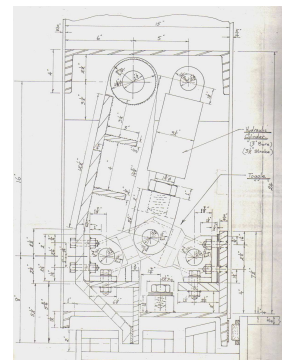
Ir. Dr. Cheong Thiam Fook
Chairman
Mechanical Engineering Technical Division, IEM



Floodgate Fully Open: (7'6" x 20'0")



Floodgate Internals



Bottom Locking Device

Announcement to note:

1. Talk is **STRICTLY** for IEM members only (walk in)
2. Limited seats available on a "first come first served" basis. (maximum 110 participants)
3. No telephone and/or fax reservation will be entertained.
4. Latecomers will not be allowed entrance, if the lecture hall is full.
5. Please bring along this flyer and membership card for confirmation of attendance (CPD purpose).

For IEM members, membership cards MUST be presented for identification purpose. Members who fail to show their membership card will be charged a fee of RM20.00.

FUNDS FOR IEM NEW BUILDING

Members are required to contribute RM10.00 per entry per talk as of 1st August 2007. This contribution will be towards the Institution's Building Fund. All contributions will be deeply appreciated by IEM.

Only Student members are exempted.

CPD HOURS CONFIRMATION

Name of Member:

M'ship No:

Signature:

Date :