



# The Institution of Engineers, Malaysia

Bangunan Ingenieur, Lots 60/62, Jalan 52/4, Peti Surat 223 (Jalan Sultan), 46720 Petaling Jaya, Selangor Darul Ehsan  
Tel : 03-79684001/2 Fax : 03-79577678 E-mail : [sec@iem.org.my](mailto:sec@iem.org.my) IEM Homepage: <http://www.iem.org.my>

## AUDIT OF FM&NFPA FIRE PUMP PERFORMANCE AND SYSTEM FUNCTIONALITY

(Organised By Building Services Technical Division, IEM)

Date : 17<sup>th</sup> January 2013 (Thursday)  
Time : 5.30pm to 7.00pm (Refreshment will be served at 5.00pm)  
Venue : C&S Lecture Room, 2<sup>nd</sup> Floor, Wisma IEM, Petaling Jaya, Selangor  
Speaker : Ir. Cha Hoong Kum

BEM Approved  
CPD Hours : 2  
Ref No: IEM12/HQ/335/T

### Synopsis:

Fire pumps installed in fire protection systems can be broadly grouped into Bomba approved and UL/FM/NFPA approved. A pump flow test should be carried out on site to confirm the performance of the pump in compliance with its specification equivalent to a "birth certificate" of the pump.

The major stakeholder of a property is the insurer who is required to pay for any fire damages. In this respect, often the insurer would insist that yearly pump flow test be conducted to re-confirm the performance of the installed fire pumps.

There are various methods to conduct the test and the selection is dependent on the facilities, size of the installation and the design code (NFPA or MS1910). With moderate installation, insurer would use Pitot tube to record the velocity pressure then compute the flow rate.

During the testing of the fire pumps, the system performance should be verified with discharge of water for example remote hydrant points, deluge system and sprinkler discharge point. The power driver (electrical and diesel engine) performance would be verified at the same time.

The talk will focus on FM and NFPA approved fire pumps and the audit would confirm the performance of these pumps and the driver as a unit with recommendations to the owner to rectify any shortcomings.

### Presenter:

Ir. Cha Hoong Kum graduated from the University of Westminster of UK with a Bachelor of Engineering (Mechanical) Second Class Honours (1<sup>st</sup> Division) in 1991. Ir. Cha then obtained his Master of Business Administration from Leicester University, UK in 1992. Upon his return he joined Fitters Engineering Services Sdn Bhd and worked his way to be the General Manager. He left and joined Mac-Tech Engineering Sdn Bhd as the General Manager. During this period he was involved in the design, tender and project management in Fire Engineering projects and is now well verse with the various NFPA and MS standards on fire. The fire pumps selection, testing and commissioning was his main focus to ensure the fire protection systems performance and functionality. Ir. Cha started his own company Versus Solutions Sdn Bhd in year 2011 and offers various specialist services, like the testing and commissioning of Fire pumps, the design of fire protection systems and supply of various fire fighting equipment.

Ir. Lim Chean Fung  
Chairman, Building Services Technical Division, IEM

### 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. IEM members are required to produce your **membership cards** 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

Kindly be informed that IEM will be charging participants RM10.00 administrative fee for evening talks organised by IEM. The fee would be used for overhead costs, building maintenance expenses as well as to support the purchase of the new building. Students are however exempted. Your understanding is greatly appreciated.

### CPD HOURS CONFIRMATION

Name of Member :----- M' ship No.:-----  
Signature :----- Date :-----