



ENGINEERS
AUSTRALIA
Hong Kong Chapter

Technical Seminar

Dynamic Analysis of Machine Foundation: when a static approach cannot give the full picture

Date, Time & Venue

20 September 2017 (Wednesday): 6:30pm (Networking), 7:00pm (Start of Seminar)

Room FJ302, Hong Kong Polytechnic University, 11 Yuk Cho Road, Hung Hom, Kowloon

Seminar Highlights

Machine foundations provide a robust platform for machinery to operate in a smooth manner with minimal maintenance requirements. An unexpected vibration can be detrimental to the machine components, ground settlement, structural integrity of foundation, and other machines or working personnel adjacent to it. If vibrations become excessive and uncontrollable, a machine can be forced to shut down or a catastrophic failure can result from fatigue failures of machine components. To avoid this, machine vendors usually specify different levels of foundation performance and vibration limits depending on the machine types for engineers to design the machine foundation.

In design office, dynamic design is often considered as a secondary check or sometime even omitted due to the lack of time and budget allocated to the project. This seminar will present various design approaches from a rule of thumb static design to a comprehensive dynamic analysis and discuss their limitations. Case studies of large machine foundations with stringent vibration limits will be presented to demonstrate when the static approach cannot give the full picture and a comprehensive dynamic analysis is necessary.

Speaker: Gary Yung

Gary Yung is currently working in AECOM and serving IEAust HK Chapter as a co-opt committee. He has over ten year design experience in a range of international projects from hydrocarbon, material handling, and underground mining structures to urban infrastructure projects. Before relocating to Hong Kong, Gary was working in one of the largest hydrocarbon and mining consultants in Australia and developed engineering solutions to minimise the risk of unfavorable vibration for machineries, such as high speed compressors, crush stations, vibrating screens/ feeders, and ball mill.

Continuing Professional Development (CPD)

Attending Engineers Australia members will be issued with a certificate acknowledging 1.5 hours of CPD.

A cost of HK\$50 will be required for attendees requiring a CPD Certificate who are neither members of Engineers Australia nor members of organisations affiliated with SAG.

Remarks, Registration & Enquiries

If typhoon signal no. 3 (or above) or the rainstorm warning (red or black) is hoisted or announced to be hoisted in effect within two hours prior to the start of the talk, the talk will be cancelled without further notice.

The seminar is free of charge and all participants must be responsible for their own safety and belongings. Please complete and return this form to Simon FAN by email: info@ieausthk.org or FAX: **2430 9080** before 15 September 2017. For enquiry, please contact Simon FAN on 2430 9030.

**Engineers Australia Hong Kong Chapter: Technical Talk
Registration Form – (20 September 2017: 6:30pm to 8:30pm)
Registration Form**

To: Simon FAN

From:

Name in full: _____ IEAust no. _____

Mobile : _____ Email: _____