

Half Day Seminar: Optimize Steel Frame Design with Semi-Rigid Joints



7 June 2024 (Fri)



IEM Secretariat Office
1-04-02 E -Gate
Lebuh Tunku Kudin 2
11700 Penang



REGISTER ONLINE @
event.iempenang.org



8.30am – 12.30pm



BEM CPD Hours: 4
Ref:IEM24/PG/141/S

IEM Member : FOC
Non-IEM Member: RM60

Synopsis

Engineers typically design steel frames with simple connections due to its simplicity in design calculation and the perceived lower construction cost.

Rigid connections on the other hand are often avoided at all costs due to its complexity in design calculation and its presumed high construction cost.

Semi-rigid connections are hardly used even though engineers understand structures design with such connections will be the most cost-effective option. Engineers do not design steel framing with semi-rigid connection due to the complexity of determining the joints stiffness for global FEM analysis and the detailed design for such connections.

This seminar will overview Steel frame design with advanced numerical software. We will compare the effects of different connection types namely: Simple, Rigid and Semi-rigid. We will also discuss how engineers can validate the correctness of their assumed connection modelled based on their connection configuration. Finally, we will have a thorough overview of the process of modelling and design with Semi-rigid connections using the (2) State-of-The-Art software: IDEA StatiCa and CSI SAP2000.

Agenda

Time	Program
08.00am-08.30am	Registration
08.30am-10.30am	Sesion 1: a. Introduction - IDEA Statica & Otte/CSi b. Overview of Advanced Steel connection analysis & design
10.30am-11.00am	Tea Break
11.00am-12.45pm	Session 2: a. Overview of Steel Frame Design with FEM using Direct Analysis Method b. How to model, analyze and design Steel Frame with Semi-Rigid joints
12.45pm-1.00pm	Q&A - End-

Half Day Seminar: Optimize Steel Frame Design with Semi-Rigid Joints

About the Speakers



Er. CHOO JUNE SHYAN P.E.
MSCE, MPW, BSCE
M.ASCE (USA), M.SEI (USA), MIES, MSSSS

Er. Choo is a Singapore-Registered Professional Engineer with over 30 years of building design experience, both in Singapore and the USA. He had designed over 200 Light-gage steel frame structures scattered over USA and many RC and Steel buildings in Singapore when he was a consultant in a major consulting company.

Er. Choo has extensive experience in computer-aided analysis and design using advanced engineering software. He is well-versed in advanced numerical analysis including Nonlinear Dynamic Analysis and Performance Based Design.

He is the Technical Director of the Otte group of companies which specialized in advanced and innovative IT solutions for Building, Structural and Geotechnical Engineering professionals. He has conducted numerous training courses and seminars in Singapore, Malaysia and other countries.



Mr. Vlastimil Konecny
Product Engineer
IDEA StatiCa APAC

Vlastimil Konecny is a Senior Product Engineer at IDEA StatiCa, having worked for IDEA StatiCa headquarters in Brno, Czech Republic, Europe, before joining the IDEA StatiCa Asia and Pacific team in the Singapore office. He currently manages channel sales operations for Singapore and Malaysia.

He has over eight years of experience in designing civil engineering concrete and steel structures, participating in various projects, e.g., the renovation of the Faculty of Philosophy, Masaryk University in Brno, Faculty of Law, Masaryk University in Brno, Faculty of Law, Masaryk University in Brno, new residential area Ponava City in Brno, and more. He graduated from Brno University of Technology with a Master of Science in Civil Engineering, specializing in Structural Engineering and has been working in this field ever since.

This event is brought to you by:

