

The Hong Kong Institution of Engineers

Joint Structural Division





Fourth announcement

The Hong Kong Polytechnic University <u>Dept, Of Civil And Structural Engineering</u> 香港理工大學 土木及結構工程系

<mark>ONE-DAY SEMINAR</mark>

USE OF STEEL HOLLOWS IN DESIGN AND CONSTRUCTION OF BUILDINGS

Organized by

Hong Kong Institute of Steel Construction Department of Civil and Structural Engineering, The Hong Kong Polytechnic University

Supported by

Joint Structural Division, The Hong Kong Institution of Engineers Department of Civil Engineering, The University of Hong Kong

Organizing Sponsors

Vallourec & Mannesmann Tubes Wo Lee Steel Co., Ltd.

| Date: | 16 December 2011 (Friday) |
|--------|--|
| Time: | 8:30 a.m. (registration) for 9:00 a.m. to 6:00 p.m. |
| Venue: | ST111, The Hong Kong Polytechnic University, Hunghom, Kowloon. |

Scope and Objectives

Steel hollow sections, circular, square, rectangular and even oval, are some of the most efficient structural sections under compression loading. The use of steel hollows in building construction has become more popular owing to the architecturally aesthetic appearance and the structural efficiency. Further, these steel hollows are in-filled with concrete to increase the structural capacity. It is this great enhancement in structural capacity of concrete in-filled hollows that the member sizes can significantly be reduced, rendering attractive visual and spacious impact on the building layout.

The one-day seminar will be scheduled on 16 December 2011. It will focus on the design and construction of steel hollows, and in particular, the composite concrete-infilled steel hollow column construction. The seminar materials will be based on Hong Kong Code of Practice for Structural Use of Steel 2011. Speakers will comprise local and overseas experts in the field. Engineers and designers in private sector and government who are working in building and construction industry are most suitable to attend the seminar as the steel hollow construction would lead to economical and efficient design solutions. Lecture notes will be provided.

Official Language

English will be the official language.

CPD certificate will be given to each participant. The registration fees of the seminar are given as follows: -

| Programme | HKISC, HKIE members and government officers | Others | |
|---------------|--|---------|--|
| 1-day Seminar | \$ 800 | \$ 1000 | |

Should you have further query, please do not hesitate to contact Mr. Sam CHAN at samchan@hkisc.org



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THE HONG KONG POLYTECHNIC UNIVERSITY DEPT. OF CIVIL AND STRUCTURAL ENGINEERING 香港理工大學 土木及結構工程系

ONE-DAY SEMINAR USE OF STEEL HOLLOWS IN DESIGN AND CONSTRUCTION OF BUILDINGS

REGISTRATION FORM (To be replied on or before 12 December 2011)

Please follow the 2-step registration procedure:

- 1. Fax the completed registration form to Mr Sam CHAN (Fax: 852-2334 6389) for preliminary registration.
- 2. Post the completed registration form within 7 days together with a crossed cheque payable to <u>Hong Kong Institute</u> <u>of Steel Construction Limited</u> to *Mr Sam CHAN*, at:

Room TU743, Department of Civil and Structural Engineering, The Hong Kong Polytechnic University, Hunghom, Kowloon, Hong Kong, China.

on or before the deadline.

To: Mr Sam CHAN

Fax: 852-2334 6389

Personal Details:

| Title | Name in full (Block Letter) | Name of Company | Tel. | Fax | E-mail address | Institution/ Membership No. |
|-------|--------------------------------|--------------------|------|-----|----------------|-----------------------------------|
| 1. | | | | | | |
| 2. | | | | | | |
| 3. | | | | | | |
| 4. | | | | | | |
| 5. | | | | | | |

| Item | Registration Fee (please insert the number of attendants for attendance) | Total no. of registration | Sub-total |
|---|--|---------------------------|-----------|
| Regular registration (Members and government officers' price) | | person(s) | = HK\$ |
| 2. Regular registration (Non-members' price) | | person(s) | = HK\$ |
| | | Total amount: | HK\$ |

Postal Address

(for official receipt):

I enclose a crossed cheque (no._____) with a sum of HK\$ ______for the registration fee of the captioned Technical Visit.

 Signature:
 Date:

 CPD Certificate of Attendance
 Please tick the appropriate box to indicate your choice:

 Yes, I/ we would like to have CPD certificate(s).
 Not request for certificate(s).

ONE-DAY SEMINAR USE OF STEEL HOLLOWS IN DESIGN AND CONSTRUCTION OF BUILDINGS

| Seminar programme on 16.12.2011 | | |
|---------------------------------|--|--|
| Time | Programme | |
| 8:30-9:00am | Registration | |
| 9:00-9:15am | Welcome Speech Ir Prof. Paul Pang – Honorary Fellow of HKISC | |
| 9:15-9:45am | Introduction and New Features of HK Steel Code 2011 Ir Dr W T Chan | |
| 9:45-10:15am | Introduction and Basics of Eurocode 3 (EN 1993) – new developments Dr S Herion | |
| 10:15-10:30am | Tea break | |
| 10:45-11:15am | Production of hot-rolled seamless hollow sections including new sections with small corner radii Dr Marcel Schneidert | |
| 11:15-11:45am | Production and quality assurance of cold-formed hollow sections Ir Dr W T Chan | |
| 11:45am-12:30pm | Design of concrete-infilled hollow sections as columns and design of steel hollows as beams <i>Ir Prof S L Chan</i> | |
| 12:30-2:00pm | Lunch Break | |
| 2:00-2:30pm | Application of concrete-infilled hollow sections and steel hollows in Hong Kong Ir Prof S L Chan | |
| 2:30-3:00pm | Design of welds for joints made of CHS and RHS according Eurocode 3 (EN 1993-1-8) and other codes Dr S Herion | |
| 3:00-3:30pm | Presentation of the new V&M Design Tools including design tables and design software Dr M. Schneider and Dr S. Herion | |
| 3:30-3:45pm | Tea break and Collection of CPD certificates | |
| 3:45-4:30pm | Steps of optimization of a uniplanar girder made of RHS Dr S. Herion | |
| 4:30-5:15pm | New applications of CHS in long span structures Dr S. Herion | |
| 5:15-5:45pm | Q&A forum | |
| 5:45-6:00pm | Concluding remarks | |