



Department of Civil and Environmental Engineering
The Hong Kong Polytechnic University

HALF-DAY SEMINAR ON HIGH PERFORMANCE STEEL MATERIALS

Organized by
The Hong Kong Institute of Steel Construction

Supported by
Joint Structural Division, Hong Kong Institution of Engineers
Department of Civil and Environmental Engineering, The Hong Kong Polytechnic University

Organizing Sponsor
Wo Lee Steel Co. Ltd.

Date:	7 November 2014 (Friday afternoon)
Venue:	Room Y409 , The Hong Kong Polytechnic University, Hunghom, Kowloon
Time:	1:45 pm (registration) for 2:00 pm to 5:30 pm

Scope and Objectives

With the advent in the research in the use of high performance steel in Mainland China, its application is not only widely adopted in buildings and bridges but also in car industry and mechanical manufacturing industry. This seminar aims to introduce the advances and trend in the use of high performance steel as well as in cold forming of such high performance steel.

High Performance Structural Steel

The main characteristics of High Performance Structural Steel include great yield strength, tensile strength, resistance to earthquakes and high welding performance. High Performance Structural Steel is subdivided into three types: High Performance Construction Steel, High Performance Bridge Steel, and High Performance Corten Steel. Over 30,000 tons of High Performance Constructional Steel has been used in huge scale construction projects, like Beijing National Stadium, China Central Television (CCTV) and Canton Tower. Secondly, with excellent weather resistance, high yield strength and increased welding performance properties, High Performance Bridge Steel has been used in the construction of the Beijing Guangzhou High Speed Rail Wuhan Changjiang Bridge, the combined highway-and-railway bridge with largest length span and capacity in the world. Last but not least, High Performance Corten Steel, mainly used in railway vehicles, is highly resistant to corrosion.

High Performance Cold-forming Steel

The advantages of Cold-forming Steel involve better resistance to earthquakes, environmental-friendly, industrialized producing and increasing the usable floor area effectively so as to achieve superior constructional performance as well as economies of scale.

Nowadays, the Cold-forming Steel has been used widely in large scale projects all over the world, such as Beijing Capital International Airport (BCIA), London Heathrow Airport, Hong Kong Convention and Exhibition Centre (HKCEC) and so on. Moreover, Cold-forming Steel has already been applied to building, automobile production, railway vehicles and construction machinery due to the excellent surface quality, even wall thickness, good cross-sectional shape and low cost. Therefore, the celebrity of High Performance Cold-forming Steel has improved greatly.

People in engineering and construction industry, technician and interested parties are welcome to join.

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1:45 pm - 2:00 pm	Registration
2:00 pm - 3:00 pm	High Performance Structural Steel (Speaker: Dr. Luo Hai He)
3:00 pm - 3:10 pm	Q & A Section
3:10 pm - 3:25 pm	Tea refreshment
3:25 pm - 4:25 pm	Steel Structure Design & Application (Speaker: Dr. Liao Wen Xuan)
4:25 pm - 4:35 pm	Q & A Section
4:35 pm - 5:05 pm	High Performance Cold-forming Steel (Speaker: Dr. Zhu Shao Wen)
5:05 pm - 5:15 pm	Q & A Section
5:15 pm - 5:30 pm	Collection of CPD certificates End of Seminar

Official Language and Registration fees

Registration fee

HK\$500

Member of HKISC or HKIE (a group of 5 participants)

HK\$400

The seminar will be conducted in Putonghua. The registration includes a copy of the lecture notes, a copy of 3-hour CPD certificate and tea refreshment.

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Biographies of Speakers

Dr. Zhu Shao Wen is the Deputy Chief Engineer at WISCOJiangbei Cold-formed Co., Ltd. He received his Ph.D. in 1987 from Wuhan University of Science and Technology on the topic of high-performance steel and application of cold forming steel production. Dr. Zhu has presided over the drafting of 11 national and industrial standards including: GB/T 6728 (Cold Formed Steel Hollow Sections for General Structure: dimensions, shape, weight and permissible tolerances) and GB/T 6723 (Cold Forming Sectional Steel - Open Sectional Steel for General Structure: dimensions, shape, weight and permissible tolerances). In addition, Dr. Zhu has hosted and participated in major talk in the developments of high performance structural steel on passenger vehicles, railways and tower cranes. To date, Dr.Zhu has received the Hubei Province Scientific and Technological award 5 times, published 28 papers and holds 15 patents.

Dr. Luo Hai He is an engineer at Research and Development Center of Wuhan Iron and Steel (Group) Corp. He received his Ph.D. in 2009 from Huazhong University of Science and Technology on the topic of development and application of highperformance structural steel. Dr. Luo has hosted and participated in major talks, including “The Development and Usage of Grade 600/650MPa Low Yield Ratio High Performance Bridge Steel”, “The Usage of High Strength Steel on Roads and Bridges”, and on “The Research of High Performance Cold Formed Steel”. To date, Dr.Luo has won 10 awards from WISCO on scientific and technological awards, published 25 papers and holds 12 patents.

Dr. Liao Wen Xuan is the Chief Engineer at WUHANSI YAYAUN REAL ESTATE CO.LTD. He received his Ph.D on structural design in 1986 from Wuhan University of Science and Technology while also working for the WISCO Design and Research Center structural design team. He has received several professional qualifications including Registered Structural Engineer (First Class), Registered Supervision Engineer and Registered Consulting Engineer.

Dr. Liao has supervised and designed over 30 major structural engineering projects including the extension of WISCO steelmaking plant and Hubei Swimming Training Center. In addition, Dr. Liao has also conducted research on steel applications and regulations, prepared technical designs for tenders and manuals, supervised engineering plans in significant projects, and delivered training seminars while receiving numerous awards for his work.

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REGISTRATION FORM

(To be replied on or before 4 November 2014)

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 **Hong Kong Institute of Steel Construction Limited** to *Mr Sam CHAN*, at:

The Hong Kong Institute of Steel Construction
c/o Room ZS972, Department of Civil and Environmental Engineering,
The Hong Kong Polytechnic University, Hunghom, Kowloon, Hong Kong.

on or before the 4 November 2014.

To: Mr Sam CHAN

Fax: 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	Total no. of registration	Sub-total
1. Regular registration (Member*price or 5+ registration)	_____ person(s)	= HK\$ _____
2. Regular registration (Non-member price)	_____ person(s)	= HK\$ _____

Postal Address
(for official receipt):

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

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). Certificate(s) not required.