



Safe and Efficient Blasting (SEB) Course For Underground Tunnelling & Applications

Venue: HDB Centre of Building Research, 10 Woodlands Avenue 8

Thursday & Friday, 7 to 8 March 2013

8.00 am to 5.00 pm

COURSE OBJECTIVES

The SEB course is designed to further enhance the skills and knowledge of those people either directly involved with blasting activities such as engineers, shoffirers and drill and blast crew members or those indirectly involved with blasting, such as project management personnel or government and regulatory officials.

The objective of the course is to provide participants with a greater understanding of the requirements of drilling and blasting in an underground environment, so that they are able to carry out their job responsibilities more;

SAFELY - without risk of causing injury or damage, **and**,
EFFICIENTLY - maximise blasting performance whilst optimizing overall costs.

Typically, the 2 day SEB course is attended by mine and construction personnel that may have had little exposure to drill and blast practices in the past though have the need to have a basic operational blasting knowledge.

SPEAKERS

Ajay Chaplot
Dave Kay
Martin Adam
Nathaniel Labuson
Willie San Pedro

Course Outcomes

Completion of the course will train participants to:

- Compare various explosive products and systems and decide on the safest and most efficient combination, including the formulation of blast designs and determination of explosives quantities,
- Correctly prime and charge blast holes to ensure optimum blasting performance,
- Select a suitable initiation system, including delay intervals and tie-up methods,
- Modify blast patterns in difficult or unusual areas to maintain good blast results,
- Have an understanding of ground vibration and overpressure (airblast), their causes and how to control them,
- Evaluate the risks associated with blasting,
- Identify potential safety hazards relating to explosives (especially misfires) and understand how to avoid them,
- Understand how latest explosives product innovations, measurement and software technology can be used to optimize project costs and timelines while meeting environmental restrictions.

REGISTRATION FEE

SRMEG members:
\$375.00

Non-members:
\$450.00

(Registration fee covers workshop handouts, tea breaks, and lunches)

PDU: 13
STU: 3

Please send Registration Form and Payment to:

SRMEG Secretariat

1 Liang Seah Street, #02-11 Liang Seah Place, Singapore 189022

Phone: +65 6336 2328 Fax: +65 6336 2583

Email: srmeg@cma.sg Website: www.srmeg.org.sg



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COURSE AGENDA

The course has been developed to include an introduction of explosive products and applications on Day 1, and on Day 2 provide an update on the latest blasting technology applications with practical case studies, and a view of the future in Drilling & Blasting technology related to Underground Civil applications.

DAY 1: 07 March 2013 (Thursday)		
Time	Topic	Speaker
8:00 AM	Registration	
8:15 AM	Introduction and Terminology	Martin Adam
8:35 AM	Explosives Properties	Martin Adam
9:35 AM	Explosives/Rock Effects	Dave Kay
10:15 AM	Tea Break	
10:30 AM	Explosives Ranges / Selections	Nathaniel Labuson
11:30 AM	Initiation System	Nathaniel Labuson
12:30 PM	Lunch	
1:30 PM	Basic of Tunnelling Blast design	Dave Kay
2:10 PM	Shotplus-T Demo (Tunnelling software)	Dave Kay
2:30 PM	Principles of Priming	Ajay Chaplot
2:50 PM	Electronic Blasting System	Ajay Chaplot
3:30 PM	Tea Break	
3:45 PM	Vibration	Martin Adam
4:25 PM	Open Cut / Quarry Blasting Overview	Martin Adam
4:55 PM	Questions and Answers	
5:15 PM	End of day 1 Session	

DAY 2: 08 March 2013 (Friday)		
Time	Topic	Speaker
8:30 AM	Start	
8:30 AM	Asia Tunnelling Case Study	Willie San Pedro
9:10 AM	Hypercharge Drive Case Study	Ajay Chaplot
9:50 AM	Tea Break	
10:10 AM	Pentex D Booster & Electronic Blasting System	Nathaniel Labuson
11:10 AM	Recent Advancaeas in Tunnelling Blasting in North Asia & Adam 3D	Ajay Chaplot
12:10 PM	Lunch	
1:10 PM	Construction Blasting Case Studies in Australia	Martin Adam
2:10 PM	Tea Break	
2:30 PM	Opportunities to Optimize Project Economic Through Use of Digital Technologies with NCVib Demo	Dave Kay
3:50 PM	Questions and Answers	
4:00 PM	End of Session	



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REGISTRATION FORM

Title: *Prof / Dr / Mr / Mrs / Mdm / Ms

Full name: (underline Surname / Family name)

SRMEG Membership No:

Organisation:

Mailing Address:

Telephone:

Mobile:

Fax:

Email:

SRMEG members: \$375.00 per person **Non-members:** \$450.00 per person

Registration on a first-come-first serve basis. All registration must be accompanied with cheque payment before the course commence. No cancellation or refund upon registration, only a replacement of name is allowed.

Method of Payment

By Bank Draft / Cheque in Singapore dollars drawn on a bank in Singapore and made payable to:
"Society for Rock Mechanics and Engineering Geology"

Please select one (1) option only, if required:

Invoice Receipt

Issuing Bank : _____ Bank Draft / Cheque Number : _____

By Credit Card. Please deduct the above amount from my:
 Visa Master Amex

Name on Credit Card : _____

Card number : _____

Expiry Date (MM/YY) : _____

Signature

Date

Please send Registration Form and Payment to:

SRMEG Secretariat

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