



**Pile Dynamics, Inc and EMP Piletec Pty Ltd**

**Present**

**Integrity assessment of Deep Foundations and  
High Strain Dynamic Foundation Testing Workshop  
August 10-11 (Thu - Fri) 2017**



**Novotel Sydney on Darling Harbour, Sydney, Australia  
100 Murray Street, Pyrmont NSW 2009**

## High Strain Dynamic Foundation Testing Workshop

**Who should attend:** Geotechnical, structural and construction engineers; owners, contractors and other professionals involved in the design, construction and specification of piled foundations.

- This seminar is suitable for those new to the field of Foundation Testing and Analysis, and includes non-destructive testing methods (integrity and load testing) and their applications.
- It is suitable also for those specifying the testing to gain basic understanding for assessing the results presented in reports.
- Users of the Pile Driving Analyzer® (PDA)/CAPWAP® software interested in sharpening their skills.
- Engineers, foundation testing professionals, students and professors already familiar with the basic concepts of deep foundation dynamic testing and analysis.
- Professionals who desire to have a basic understanding of the dynamic test results being presented.
- Those interested in taking the **Dynamic Measurement and Analysis Proficiency Test\***

**Learning objectives:** At the end of this two day workshop attendees will be able to

- Select an appropriate method of integrity assessment of deep foundations for a particular application.
- Review reports of integrity and dynamic load testing of deep foundations conducted by others.
- Operate the PDA in a manner conducive to acquiring good quality data
- Assess pile capacity, pile driving stresses, hammer performance and pile integrity by various methods
- Avoid pitfalls when analyzing PDA data with the CAPWAP software
- Interpret PDA testing and CAPWAP software results
- Describe the soil-model used in CAPWAP
- Prepare the input for CAPWAP
- Review options for CAPWAP analysis and output
- Calculate bearing capacity and its distribution for driven piles from impact records

### Program (subject to change)

Day 1 – 10 Aug 2017	Day 2 – 11 Aug 2017
8:00 Registration	8:30 Stresses, Energy and Integrity Analysis
8:30 Wave Mechanics – Applied	9:30 CAPWAP(r) software Background
10:30 Break	10:15 Break
10:45 PDA Testing - Proper Practices	10:30 iCAP(r) - Instant Signal Matching
12:30 Lunch	11:00 CAPWAP Workshop: Examples
1:30 PDA Testing - Proper Practices (cont.)	12:00 Lunch
2:00 PDM – use and application	1:00 CAPWAP Workshop: Examples (Continued)
2:45 Dynamic Testing of Drilled Shafts and Augered Cast-in-place Piles	2:00 Data Quality Examples
3:15 Break	3:15 Break
3:30 Drilled Shaft Integrity solutions (TIP/ Shape/ CSL/ TIP)	3:30 Dynamic Measurement and Analysis Proficiency Test *
5:00 Adjourn	5:00 Adjourn

\* At the end of the High Strain Dynamic Testing Workshop participants may take a multiple choice **Dynamic Measurement and Analysis Proficiency Test** which will take less than 1-½ hours to complete. The test will cover the theory of Wave Mechanics, Case Method (PDA) equations, data quality assessment, data interpretation and basic CAPWAP analysis. The test is designed for those with experience in using the Pile Driving Analyzer® system and CAPWAP to perform High Strain Dynamic Foundation Tests. The workshop will refresh the participant's theoretical background and be a reminder of some important points. Those taking the test are advised to study "Appendix A" and "Helpful Hints" of the PDA manual, review some of the EXAMPLE data provided with the PDA, and read the CAPWAP background material. These materials are supplied with PDA purchases. Those without access to the manuals and examples should please contact [softwaresales@pile.com](mailto:softwaresales@pile.com) in advance of the test date. For more information about the Proficiency Test website: [www.PDAProficiencyTest.com](http://www.PDAProficiencyTest.com).

A Certificate of Proficiency in High Strain Dynamic Pile Testing will be awarded to those who pass the test. The Level indicated on the Certificate is dependent on the score achieved on the test. Those who do not pass the test will receive full credit of test registration fee to be applied towards retaking the test at the next opportunity.

A Certificate of Participation documenting the number of hours of instruction (CPD) will be provided. Check with your engineering board of registration for their continuing education requirements.

## **Workshop and Seminar Lecturers**

**Ryan C. Allin, P.E.**, is a partner in PDI and GRL. He has a BS in Civil Engineering from Cleveland State University, has achieved Expert level on the PDCA/PDI Dynamic Measurement and Analysis Proficiency Test. After several years performing the breadth of services offered by GRL throughout the United States and in international offshore projects, Ryan is currently responsible for all GRL's educational programs for foundation testing professionals. In that capacity he has lectured on numerous seminars, webinars and workshops on foundation testing and has co-authored papers on the subject. Ryan is a member of the American Society of Civil Engineers and a registered professional engineer in the State of Ohio and various other states.

**Richard Yu MIEAust CPEng** Richard has more than 25 years of experience as a geotechnical engineer, specializing in deep foundation testing and is a registered PE in Malaysia and Australia. He has performed thousands of field tests throughout Asia Pacific for both onshore and offshore projects. Currently Richard provides technical support and training for PDA clients in the Asia-Pacific region and is ranked as "Master" in the PDCA/PDI Dynamic Measurement Proficiency Test.

**Julian Seidel, Technical Director, Foundation Specialist Group:** Julian is Technical Director and Chairman of the Foundation Specialist Group. He has 40 years of professional experience as a geotechnical engineer specializing in deep foundations, with particular expertise in pile dynamics and rock socketed piles. He has been employed as a senior engineer with general and specialist geotechnical and foundation engineering consultants, a government road authority, a specialist deep foundation contractor, and at University as senior lecturer and researcher. His broad and extensive experience makes Julian uniquely placed to advice on the planning, commissioning, design, installation and verification of structural foundations, with a focus on efficiency and constructability.

**Hotel Reservations:** Attendees are responsible for making their own hotel reservations. Novotel & Ibis Sydney Darling Harbour will give 10% discount to conference participants. Ibis Sydney Darling Harbour is a cheaper option (3.5 star) and value for money. There are all sorts of hotels/accommodation available around Sydney Darling Harbours

The hotel is In the heart of Darling Harbour, the hotels are within walking distance to many of Sydney's best attractions: International Convention Centre (ICC), Powerhouse Museum, SEA LIFE Sydney Aquarium, WILD LIFE Sydney Zoo, IMAX Theatre, the Australian National Maritime Museum and Star Casino. The rest of Sydney is easily accessible through the nearby bus, ferry and tram systems.

## **Airport Transfers**

Novotel Sydney on Darling Harbour is conveniently located in Darling Harbour and guests can easily access the hotel by car, train or light rail. The hotel is located on 100 Murray Street, Pyrmont, just behind the Darling Harbour Harbourside Shopping Centre. Please refer website <https://transportsw.info/#/> for public transport.

There is secure undercover car parking on site at a cost of \$55 per day.

## **Seminar Notes:**

- All training material will be available digitally for download prior to the event. It is suggested that attendees download this material to their laptop and bring their laptop, or print the training material and bring their own hard copy.
- Attendees are encouraged to use their own laptops

**Registration Form**

For online registration, please completed registration form by 31 July 2017 to: richard@empasia.co

**Early Bird Deadline – July 9, 2017 – REFUNDS – 50% PRIOR TO 31 July 2017 – NO REFUNDS AFTER 31 July 2017**

For more information contact Richard Yu from EMP Piletec Pty Ltd: O: +61 3 9893 4286, M +61 430 30 480  
email: richard@empasia.co

Name(s): 1)\_\_\_\_\_ 2)\_\_\_\_\_

3)\_\_\_\_\_ 4)\_\_\_\_\_

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Address: \_\_\_\_\_

City:\_\_\_\_\_ State:\_\_\_\_\_ Postal Code: \_\_\_\_\_ Country:\_\_\_\_\_

Phone: \_\_\_\_\_ Email: \_\_\_\_\_

**Registration Fees (includes, course notes, AM/PM breaks and lunch):**

- High Strain Dynamic Foundation Testing Workshop \_\_\_\_\_ **\$650.00**
- Dynamic Measurement and Analysis Proficiency Test (*No Discounts*) \_\_\_\_\_ **\$285.00**

*\*If you do not pass the test you are allowed one (1) retake of the test at no additional charge at the next course*

- \$50 discount on *each* workshop for Early Bird registration prior to **July 9, 2017**

Amount: Program total \$ \_\_\_\_\_

Discount (if applicable) subtract \$ \_\_\_\_\_

**Grand total** \$ \_\_\_\_\_

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