

檔 號：  
保存年限：

## 中華民國大地工程技師公會 函

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受文者：高雄市土木技師公會

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速別：普通件

密等及解密條件或保密期限：

附件：PDC示範簡介(1070393A00\_ATTCH2. pdf)

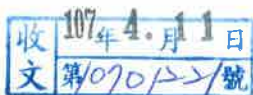
主旨：茲訂於107年4月19日下午2點至4點，假高雄市中山路與民生路交叉路口中央公園內06KH-CJN03孔位，示範「高雄市土壤液化潛勢分析第一期計畫」之PDC土壤液化檢測儀施作，請貴單位派員參與，請查照。

說明：

一、本公會與中興工程顧問股份有限公司執行PDC(Piezo Drive Cone)小型沖鑽，利用其錐頭尖端水壓感應器貫入土層，可直接快速計算土壤液化潛勢之能力，來精進高雄市中級土壤液化潛勢分析之成效，並由高雄市政府工務局進行指導。為與各單位分享旨揭PDC新型工程技術執行經驗及進行現場示範，示範工作包含簡報及施作，現地並備有日文翻譯，請貴單位派員參與。

二、本次示範採線上報名，請於4月18日前於下列網址填寫報名資料完成報名程序：<https://goo.gl/forms/ecuA2zjhjPKTVuii1>。

正本：高雄市政府工務局、高雄市土木技師公會、高雄市結構技師公會、高雄科技大學土木工程系、高雄科技大學營建工程系、高雄大學土木與環境工程學系、正修科

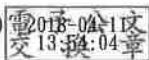


黃佳萍



技大學土木與空間資訊系

副本：中華民國大地工程技師公會(高屏辦事處)(含附件)、中興工程顧問股份有限公司  
(含附件)



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## PDC (Piezo Drive Cone)

PDC enables evaluation of soil liquefaction strength at an in-situ test, measuring pore water pressure in dynamic penetration test.

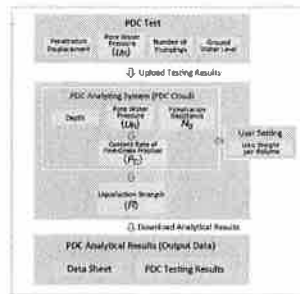
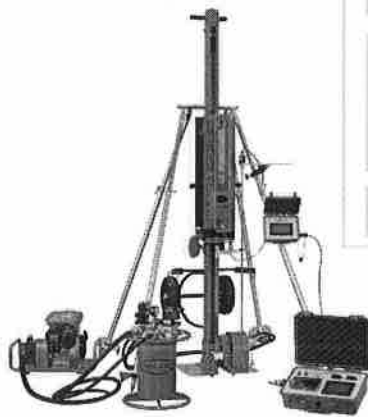
PDC comprehends consecutive heterogeneity of ground structure from automatic measurement at every plump, while standard penetration test can get only one data at every one meter.

PDC is effective especially for subsurface exploration on heterogeneous grounds like weak laminated grounds covering alluvial plains.

### Measure Soil Liquefaction Strength with PDC

PDC measures at every plump not only penetration resistance value  $N_d$  (calculated N-Value), but also pore water pressure.

You only have to upload your testing results to PDC cloud so that it would analyze the results and you will be able to download the analytical results.



### Secretariat of PDC Consortium Contact

2-61-5, Toro-cho, Kita-ku,  
Saitama-shi, Saitama 331-8688, Japan

TEL: +81-48-652-3959  
Technical Management Division,  
OYO Corporation

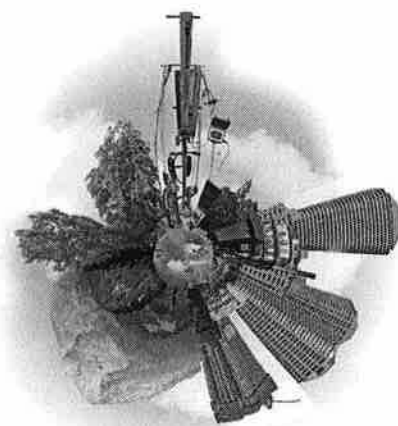
## Soil Liquefaction Potential Sounding

Product Name: Piezo Drive Cone (PDC)

Registered in New Technology Information System  
of Ministry of Land, Infrastructure and Transport.  
(NETIS Registration No. T14-160732 A)



PDC Consortium



## PDC will Make a Revolution to Soil Liquefaction Testing

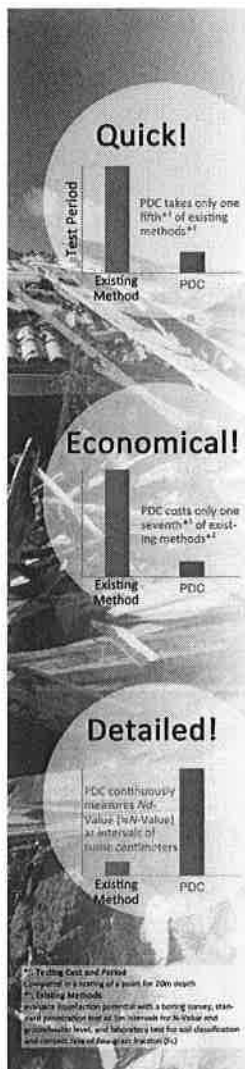
PDC: Piezo Drive Cone

### ■PDC Consortium■

PDC Consortium was organized to disseminate Piezo Drive Cone (PDC), which enables more economic and more effective soil liquefaction testing.

In Great East Japan Earthquake, soil liquefaction occurred in wide area of coastal Tokyo and the surrounding prefectures, including unequal settlement of ground, flow of banking structures in dikes and roads, flotation of manholes, and other soil liquefaction hazards. Especially in littoral reclaimed lands, tilting of houses induced by the liquefaction draw strong interest of common people as a social problem. We, PDC Consortium, aim to contribute to future reduction of soil liquefaction hazards by acquiring more massive and denser information of liquefaction strength of grounds with Piezo Drive Cone.

PDC Consortium established an academic committee in the consortium for technical examination of PDC to disseminate and upgrade soil testing method utilizing PDC as a new soil liquefaction testing method. The committee consists of university professors and researchers from institutes including Public Works Research Institute and Port and Airport Research Institute.



## How much Liquefaction Countermeasures should you take?

### ■Advantages of PDC

Existing testing methods with boring survey evaluate liquefaction potential with only a limited number of data. PDC enables more reliable (with less geology risk) evaluation based on denser data because it investigates more points with a cost of a boring survey

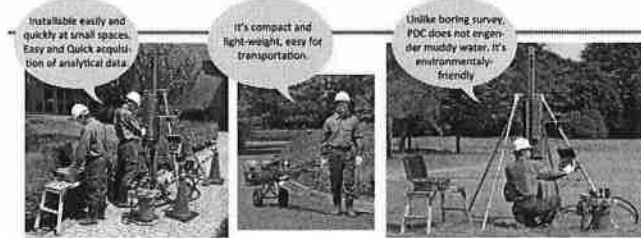
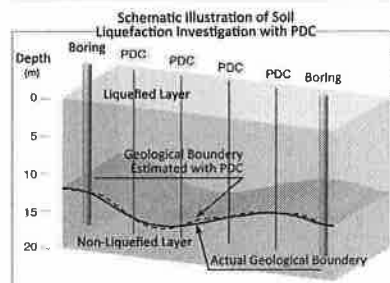
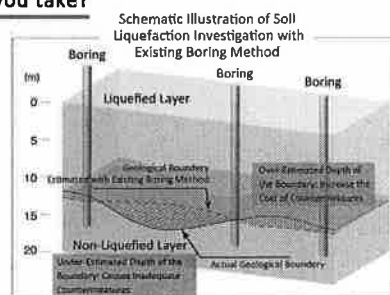
### ■Lean Cost for Countermeasures

Detailed evaluation of soil liquefaction potential of grounds defines a scope of countermeasures more leanly and enables more reasonable cost estimation.

### ■Compact Design

Dynamic penetrating device of PDC does not require any reaction force. PDC can be transported on its wheels. PDC occupies thirty percent in area of boring survey\*

\*PDC occupies only six square meters while standard boring survey occupies 20 square meters



## 報名資訊:

(一)時間：2018 年 4 月 19 日 ( 星期四 ) 下午 2 點至 4 點。

(二)地點：高雄市中山路與民生路交叉路口中央公園內。

(三)報名方式:線上報名網址: <https://goo.gl/forms/ecuA2zjhjPKTVuii1>。

(四)聯絡人:大地技師公會 高屏辦事處 林小姐 (07)5537936

(五)交通資訊: 高雄市中山路與民生路交叉路口中央公園

