

Building 'dynamic' fertilizer plant in Vietnam

The Ninh Binh Nitrogenous Fertilizer Plant is currently under construction in the Ninh Phuc Industrial Zone, Ninh Binh province, Vietnam. The Vietnam National Chemical Group is investing US\$ 667 million in the project. Once completed, the plant will produce 560,000 t of urea per year, primarily to meet the demand generated by farming in the Red River Delta and Northern Vietnam provinces. These regions currently import the product, a practice Vietnam is hoping to cease once production starts. The domestic production is expected to stabilise the price of urea and decrease the dependency of Vietnam's fertiliser supply on foreign countries.

The plant superstructure is supported by 3600 cast-in-place bored piles. ADCOM Consultant and Technology Development JSC developed an extensive programme of foundation testing and inspection for the project.

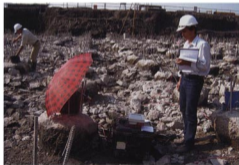
Cross Hole Sonic Logging, a process that verifies the integrity of the foundation by lowering a transmitter and a receiver into tubes pre-installed in the pile and analysing the resulting signals with an instrument called CHAMP, was conducted in 900 of the shafts. Pulse Echo Testing, a faster integrity test performed with a Pile Integrity Tester and for which access tubes are not required, was performed in 1,800 piles – 50 percent of the total.

A smaller percentage of the piles – 50 of them – were dynamically tested with a Pile Driving Analyzer model PAX. The dynamic test assessed the bearing capacity of the piles by a process much faster and cheaper than a static load test would. The instruments used in

the QA/QC programme were manufactured by Pile Dynamics. The testing methods selected for this inspection programme are fast and efficient, and in spite of the scale of the testing programme, the equipment performed without a glitch, causing no delays for the Chinese Hoanqiu Corporation, the contractor for the project.

The plant is scheduled for completion in October 2011. ■

Enquiry: sales@pile.com



Pile Dynamics is helping to make work at the Ninh Binh Nitrogenous Fertilizer Plant fast and efficient.