Reports From IPA's Japan Regional Office

Yuta Kitano

Technical staff, ODA Promotion Section GIKEN LTD.

I have been carrying out technical support for Japanese and overseas market with Giken subsidiaries and promoting Pressin Method in the world including ODA (Official Development Assistance) projects in GIKEN Head Office (Tokyo). We have invited a lot of customers from Netherlands, China, Thailand, etc. to Japan to visit Press-in construction sites. We are certain that this activity will help to promote Press-in Technology towards the achievement of Press-in construction.

The Press-in Method was recently utilized for two ODA projects for the first time in Africa. One of them was the retaining wall works which were part of major construction works for building new hospital facilities in Cairo, Egypt (Fig. 1). Since the working space was quite limited, the Silent Piler was utilized for the installation of sheet piles for building a cofferdam in order to avoid affecting adjacent buildings.

The other project is being carried out for repairing quays using the "Gyropress Method" for an ODA project at Dakar port in Senegal (Fig. 2). The Dakar port is extremely important for West African countries which are developing rapidly and for which the deterioration of port is a serious problem. Therefore, this project is planned to rehabilitate and renovate the port to accommodate bigger ships. This is one of the projects to which the Press-in construction site tour in Japan contributed.

For more information about above-mentioned projects, please refer to the following URLs. <u>https://www.giken.com/en/release/05_aug_2019/</u> <u>https://www.giken.com/en/release/may_29_2019/</u>

IPA launched TC5 (Technical Committee) titled "Influence of operator skill and experience on field performance of Pressin Piling" this year. The Japan Regional Office is supporting the TC5 activities. For example, we conducted a research survey together which was a comparison between "performance of Press-in Machine" and "operator's experience and skill". The research survey revealed that performance of Press-in Machine is affected by operator's skill and experience (Fig. 3). We will continue focusing on this issue and conclude these data for improving Press-in technology all over the world with IPA.

I will keep supporting IPA's activities such as planning an on-site interview like I did last year, cooperating with TC5 and so on. I hope we can improve Press-in technology and contribute to the public through these activities.



Fig 1. CG of Cairo project



Fig 2. CG of Dakar project



IPA TC-5

"Technical Committee on Influence of operator skill and experience on field performance of Press-in Piling"

[Background & Purpose]

In order to correctly and efficiently install piles by the press-in piling method, in accordance with a construction plan, a press-in piling machine should normally perform and function as designed and an operator should operate the machine appropriately. However, actual piling operation is not usually conducted under ideal conditions. In such situations, some mechanical accidents (i.e. malfunction, failure) and operator experience and skill are assumed to adversely affect the field performance.

The IPA TC-5 is established to clarify the various influences of operator experience and skill on performance in the field, by focusing on an aspect of press-in piling machine and operation.

Fig 3. Extraction from the TC5 document