## **IPA News Letter**

## **Reports**

## Activity Report: IPA TC-5 "Technical Committee on Influence of operator skill and experience on field performance of Press-in Piling"

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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 operations are not usually conducted under ideal conditions. In reality, some mechanical accidents (i.e. malfunction, failure) and operator experience and skill are assumed to adversely affect the field performance.

The new IPA technical committee No.5 (hereinafter called IPA TC-5) is hereby 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. This committee plans to act for three years from the fiscal year 2020, and is composed of the following members: Dr. Osamu Kusakabe as chair (Executive Director, International Press-in Association), Mr. Kiyoshi Minami as co-chair (Muramoto Corporation), Mr. Masayuki Kitamura as secretary general (GIKEN SEKO CO., LTD.), seven additional members and me as deputy secretary general. Please note that we will always be looking for new members.

So far, one preparatory meeting was held in March 2020 and one technical committee meeting was held online in July 2020. Before the preparatory meeting, a questionnaire survey was conducted with some operators of the press-in piling machine. As a consequence of the discussion regarding the survey result, the members decided to conduct an additional questionnaire survey of initial settings and re-settings of press-in parameters (i.e. values of press-in force, press-in speed and so on) on rotary press-in piling operation (the Gyro-press method), following a request to analyze the quantitative data. Some useful information regarding the activity of TC-5 was acquired from these surveys.

This year, one paper will be prepared and submitted to the Second International Conference on Press-in Engineering (ICPE) 2021, which is to be held in Kochi, Japan, in June 2021, subject to confirmation. After the members of TC-5 approve the activity plan, an actual survey of the rotary press-in piling to install tubular piles and a questionnaire survey on the press-in piling to install steel sheet piles will be conducted in the fiscal year 2021. Additionally, an activity report on press-in parameters, information for automatic operation and Artificial intelligence (AI) training data will be prepared and submitted to the IPA.

I believe that our activity will be useful for the technological advancement of the press-in piling method. Should you have any questions or suggestions for us, please get in touch through the IPA Secretariat (tokyo@press-in.org).