

Report **From IPA America Regional Office**

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Introduction

IPA America Regional Office resides at Giken America Corporation (GAC) which is a Florida-based corporation established in 1999. As of February 2023, GAC has two offices in the United States; one in Orlando, Florida and the other in Manhattan, New York. The author is acting as a liaison between IPA and GAC while IPA-specific activities in this region have been still limited except the 2nd IPA International Workshop and General Assembly held back in 2008 in New Orleans, Louisiana. This article will briefly describe GAC's history, current business activities and future prospects, which may interest IPA members and also possibly assist IPA's standing in other regions of the world.

Brief History

Since its incorporation in 1999 as a wholly-owned subsidiary of Giken Limited, GAC had been promoting the press-in piling method by directly undertaking press-in piling work; i.e., being a piling subcontractor using Giken press-in piling machines. However, from 2009 to 2010, the corporate policy changed not to be directly involved in construction and rather to focus on promulgation of the press-in piling method with increased sales and rentals of press-in piling machines. In the process of this transition, GAC transferred its construction crew and open subcontracts to one of the current press-in piling machine user companies. Since then, GAC's business focus remains the same to date. Its New York office was opened in 2018. Figure 1 shows the office building where the current Orlando office is situated.



Fig. 1 GAC's Orlando Main Office on 5th Floor

Geographical Areas to Cover (Territory)

GAC is to cover North, South, and Central Americas. However, the United States of America has been thus far the largest press-in piling market among these regions. California, Florida, Louisiana, and New York are the states where the highest number of press-in piling projects have been built (See Fig. 2). Outside the U.S., GAC has been involved in projects in Canada, Mexico, and recently in Brazil, which appears to be a promising market.

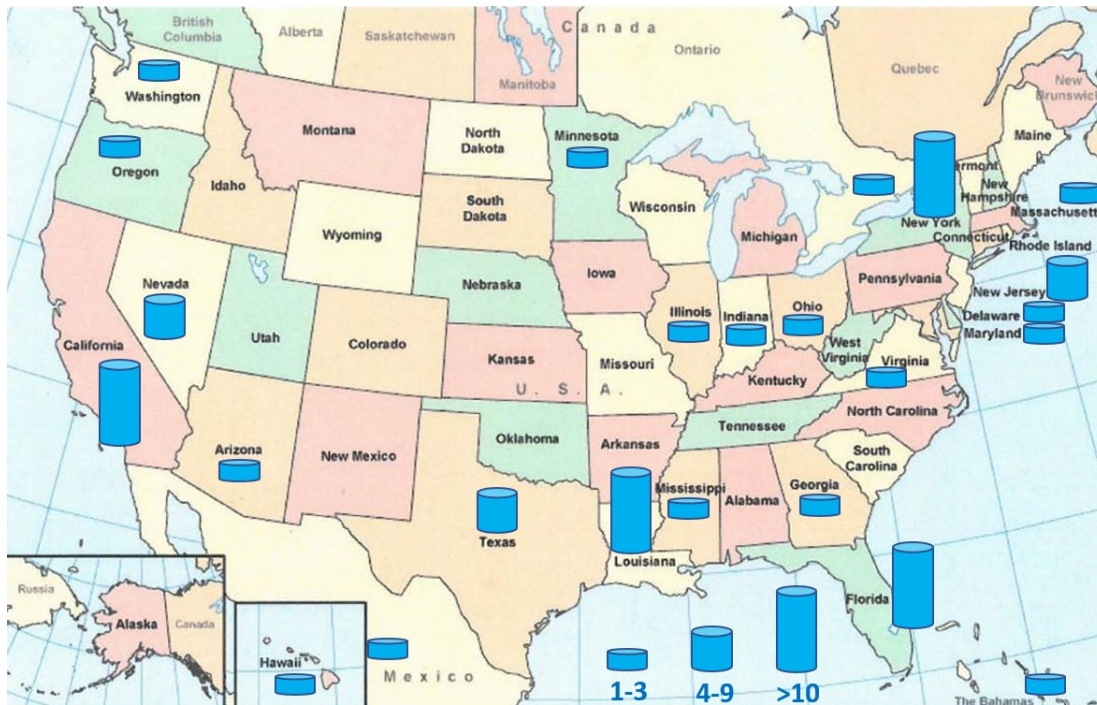


Fig. 2. Approximate Past Press-in Piling Project Counts per State of U.S.A. (up to the end of 2022)

Types of Structures Press-in Piling Adopted for

The dominant sheet piles used in the U.S. are Z-shaped, while U-shaped sheets are rarely used. And, typical installation requires coupled Z-shaped sheets for easier and faster installation, requiring significantly larger press-in piling machines, such as F401-Z1400, than those used with U-shaped sheets, such as F111. Although Z-shaped sheet piles could be reused multiple times, the author's understanding is that they are not as durable as U-shaped sheets for repeated installations and extractions. In the U.S., Z-shaped steel sheet piles have been utilized both for permanent and temporary structures but not as often as in Japan's temporary use where temporary and repeated use of the same sheet piles is very common probably for the above reason.

The following are the structure types in which press-in piling has been utilized in the U.S. on many occasions.

- Excavation Support (temporary and permanent use)
- Upgrade of Existing Bulkhead (permanent use)
- Earthen Levee Upgrade (permanent use)
- Shore Protection (permanent use)
- Basement Walls (permanent use)

Press-in Piling for Americas Future

The U.S. is the most populous country in Americas and its population base is still growing. Further urbanization and redevelopment of downtown cores are taking place at major metropolitan areas like New York, Los Angeles, Chicago, Boston, Houston, and San Francisco. The need for countermeasures against flooding and obsolete infrastructures is imminent for many cities and towns in the country. Besides that, other developed and developing countries in this region, such as Canada, Mexico, Brazil, and Chile have similar challenges and appear to have the will and means to solve them. GAC sees increasing opportunities and will keep providing solutions in collaboration with IPA for some of these challenges that people in Americas face.

Acknowledgment

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