*Report*

# From Europe Regional Office (Netherlands)

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**Introduction**

The Europe IPA regional office is Giken Europe B.V. which is a subsidiary of GIKEN LTD. The office was moved from the UK to the Netherlands in 2020. It mainly oversees the European market. Giken Europe is providing services consisting of construction method proposal, rental/sales services of our machines, technical instruction for a piling operator and team, construction planning and design support, and machine maintenance.

**The Press-in Method in Europe**

We have received a lot of inquiries about our method or machines from a lot of countries. If I say something about the Netherlands where I am living, they are attempting to renovate the huge number of aging quay walls, including those in urban areas such as the city of Amsterdam, Den Haag, and the others located in very narrow spaces that are adjacent to a road, train rail, water traffic and so on. The quay wall itself is also a historical structure. Therefore, caring out renovation within a compact space and minimum nuisance is required. Therefore, we can see the Press-in Method a lot in the urban area. I feel that the Press-in Method with a sheet pile is getting normal here, while it is also getting to be interested in Gyropress Method™, which is a method to install a steel tubular pile with rotation by utilizing the press-in principle. It is a more efficient way to the renovation of a quay wall because it does not require any temporary works, such as temporary sheet pile, to remove existing quay wall. (More details are available on the website: https://www.giken.com/en/wp-content/uploads/press-in_gyropress.pdf).

The first project using Gyropress Method was completed this summer with very good feedback from people involved in this work. So, I believe that Gyropress Method is suitable for the Dutch and European markets. And next project using Gyropress Method started this November. We are planning to show this incredible solution to the European market through this project.

**Recent Case Study in Den Haag, the Netherlands**

You can see a video here https://www.youtube.com/watch?v=ZnVy9whGUGg

If you used a traditional way in is project, it would be necessary to install sheet piles in front of an existing quay wall as a cut-off wall, pump-up water inside the wall, remove the existing quay wall then make a new concrete wall there. It needs space for the works and needs to remove trees in the area, and stop all the traffic. While Gyropress Method can install a tubular pile into an existing quay wall by using cutting teeth attached to a pile toe and rotation torque, which means it does not need to secure a space, remove trees, and stop traffic. Also, less work is demanded, so it leads to a shorter period of construction.

The project information is as below.

**Background**

The city of Den Haag has jurisdiction over approx. 62 km of quay walls in total. Of these, approx. 23 km of wooden foundations need to renovate for the following reasons.

- Most of the quay walls are 100 years old construction.
- Many of the wooden foundations have suffered from bacterial damage.
- Increased loads on the quay walls due to increased traffic such as cars and trams.
- Project Owner: Municipality of Den Haag
- Main contractor: collaboration (combination) of Van Gelder and Gebr. De Koning

**Piling Information**

- Construction length: approx. 44.0 m
- Pile: steel pipe pile ϕ609.6
- Pile length L=9.5 m


Fig.1 Under construction & Cross section

**Recent Case Study in Berlin, Germany**

Giken Europe has completed works using the Implant™ Method and GRB™ System with the Press-In Piling technology reinforcing a railway embankment in Berlin, the capital of Germany. The project site was located in a confined space adjacent to a residential district and live railway which was an excellent opportunity to demonstrate the benefits of GRB System. GRB System contains SILENT PILER™ F401-1400 (double-U), POWER UNIT on UNIT RUNNER™ UR3, CLAMP CRANE™ CB3-6 and PILE RUNNER™ TB18. All piling works were completed on top of the installed piles and eliminated the need for temporary platforms and workspaces for cranes, materials and other construction equipment. Construction works were completed without affecting residents, existing infrastructure or train operations. Giken Europe B.V. provided technical consulting and installation work. The installation work utilizing GRB System attracted the attention of many construction parties who visited the site. Project owners, consultants and contractors are seeking to adopt

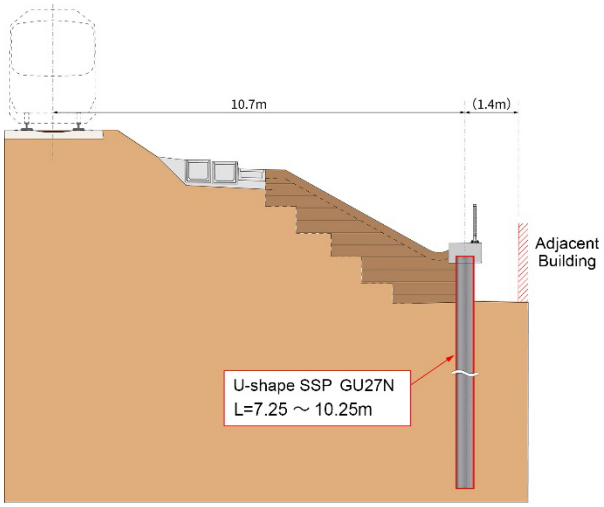


Fig.2 Cross section

GRB System in other projects. They have begun considering other railway embankment reinforcement projects. The GIKEN Group expects to expand the adoption of the Implant Method and GRB System across the German market.

Fig.3 Under construction

**Information**

- Project Owner: Deutsche Bahn (DB) AG Netz
- Main contractor: Company Echterhoff Bau GmbH, Berlin
- Number of piles: 187 pairs (374 sheets)
- Pile: U type sheet pile (GU27N)
- Pile length L=7.25 to 10.25 m

**Future Prospects for the Press-in Method in Europe**

As mentioned above, some projects using the Press-in Method, Gyropress Method and GRB System were implemented or will start. In the meantime, we are feeling that these methods are suitable for the European market. We are definitely certain that our methods will be able to make their life and construction better.

Moreover, a structure built by piles is very efficient for future renovation because only removing piles and re-install new piles are required.

Thus, we would like to show more and more advantages of our methods to the markets through the coming projects. If you are interested in our activities and solutions, please contact me!