



How does the  
Pile Pusher Pro  
make a difference?

## NO VIBRATIONS, NO NOISE

In the historic town centre of Schagen, the foundation piles for two apartment buildings were pushed into the soil; in approximately three weeks a total of 154 prefabricated concrete piles with an average length of 22m. Given that the piles had to be installed right next to an existing building, the side piler was used. The contractor opted for this foundation installation method because of the Pile Pusher Pro's indisputable benefits: low noise level and vibration-free.

Another fine example is at Accsys Technologies in Arnhem. A number of piles were pushed into the soil by the side piler at 80cm from an adjacent building, without the nuisance from noise and vibrations. The vibration-sensitive production process next door could continue undisturbed.



## USE OF HIGH-GRADE PREFABRICATED PILES

In the past, the Hoogeveen local authority had its share of problems with piling systems that are cast in situ (vibro-piles and bored piles with grout injection). A foundation made up of prefab concrete piles (72 piles of 23m long), on the other hand, does deliver the required quality. And seeing as, on top of that, the foundation has to be built right next to a healthcare facility for the disabled, the Pile Pusher Pro is the obvious choice, because it delivers the required quality level without all the inconvenience that is caused by the other methods.

## LOAD TEST FOR EACH PILE THANKS TO EXTRA DATA

Every single Pile Pusher Pro is equipped with a data acquisition system that measures and records the pushing force, pushed depth and pushing speed in real time. The recorded data provides valuable input for calculations of pile load-bearing capacities as per the NEN 9997-1 (2016) standard. It is ultimately a practical test to check that each pile pushed is up to the task and that the design is adequate. In the city of Delft, the Sint Sebastiaan Bridge needed to be replaced. The main contractor preferred to use high-grade prefabricated concrete piles. But what do you do when you have to install the piles right in the heart of the historic town centre on the border with the old university district, and without causing any inconvenience for residents?

Our customer Drukpaal.nl had the answer. The piled embankments (420 piles of 22m long) for the bridge ramps were installed without causing any kind of nuisance. Given that each pile's load-bearing capacity is effectively tested as it is pushed into the soil, the foundation design could be assessed throughout the process, enabling the contractor to intervene whenever there were deviations.

### Side piler

So far, Drukpaal.nl has pushed over 3,600 piles into the soil. The data from past projects has been analysed and captured in a technical paper. Interested? Request a copy of the technical paper.

## Valuable fleet expansion

"I have specialised in vibration-free foundation constructions. That pounding noise of driving piles is something I don't like at all. Therefore, investing in a pile pushing machine was a logical choice for me. It is the perfect addition to my fleet of drilling machines, enabling me to execute on a wide range of different projects. Although the machine is huge, it can be transported using standard trucks and can be set up on most construction sites. Pushing piles into the soil is still a relatively unknown technique, but I expect it to take off in a big way. Clients are very enthusiastic about it and we get a lot of repeat business as clients hire us for follow-up jobs, which says a lot."

**Marco Hylkema,**  
General Director, Hylkema Funderingstechniek

## RELATIVELY LOW INVESTMENT

In a nutshell, the simplicity and robustness of the design are the basis of the Pile Pusher Pro. The machine is built in China by a company with many years' experience and a track record of 1,500 machines delivered across Asia. For the European market, we supply machines that fully comply with European legislation (CE mark) and standards (NEN ISO 16228:1). A.P. van den Berg's expertise lies in the area of technology for soil condition data collection. This expertise has been added to the Pile Pusher Pro. Simplicity, robustness, expertise, and many years' experience make the investment in a Pile Pusher Pro an exceptionally attractive proposition for foundation contractors.

## RELATIVELY LOW OPERATING COSTS

Current PFAS legislation has numerous construction companies across the supply chain looking for ways to reduce carbon emissions. The Pile Pusher Pro can contribute substantially in this area as well through the use of a Stage IV (or even Stage V) powerpack. Thanks to excellent fuel efficiency of approximately 15 litres per hour, carbon emissions are lower than those of any other foundation machine. And this is not solely down to our foundation machine, as also the supplied prefabricated concrete piles can be sourced from a carbon-neutral production facility. Our contribution to reducing carbon emissions is evident.



## LOW ENERGY CONSUMPTION AND LOW CARBON EMISSIONS

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## Fully electrically powered

The Pile Pusher Pro can also run on electric power. Connected to the main power grid, the Pile Pusher Pro is the world's only foundation machine that can install a foundation pile on electric power only. A unique sustainably powered pile pushing method. It is not without reason that the 3Ps of People, Planet & Profit are also the pillars of the 3Ps of Pile Pusher Pro.

**"It is not without reason that the 3Ps of People, Planet & Profit are also the pillars of the 3Ps of Pile Pusher Pro"**

## PILE PUSHER PRO



No vibrations



Low sound level



Low maintenance



300-500m pushed piles in 8 hours



Powered by grid supply or generator



60 to 1,200 tonnes of pushing force



Real-time registration



Detachable counterweights

## Fundamentally better...

### ► for the neighbourhood

Pushing piles into the ground using the Pile Pusher Pro is ideal for construction projects in urban areas. It makes installing foundations a silent job and there are no vibrations that can cause damage to surrounding buildings or infrastructure.

### ► for the environment

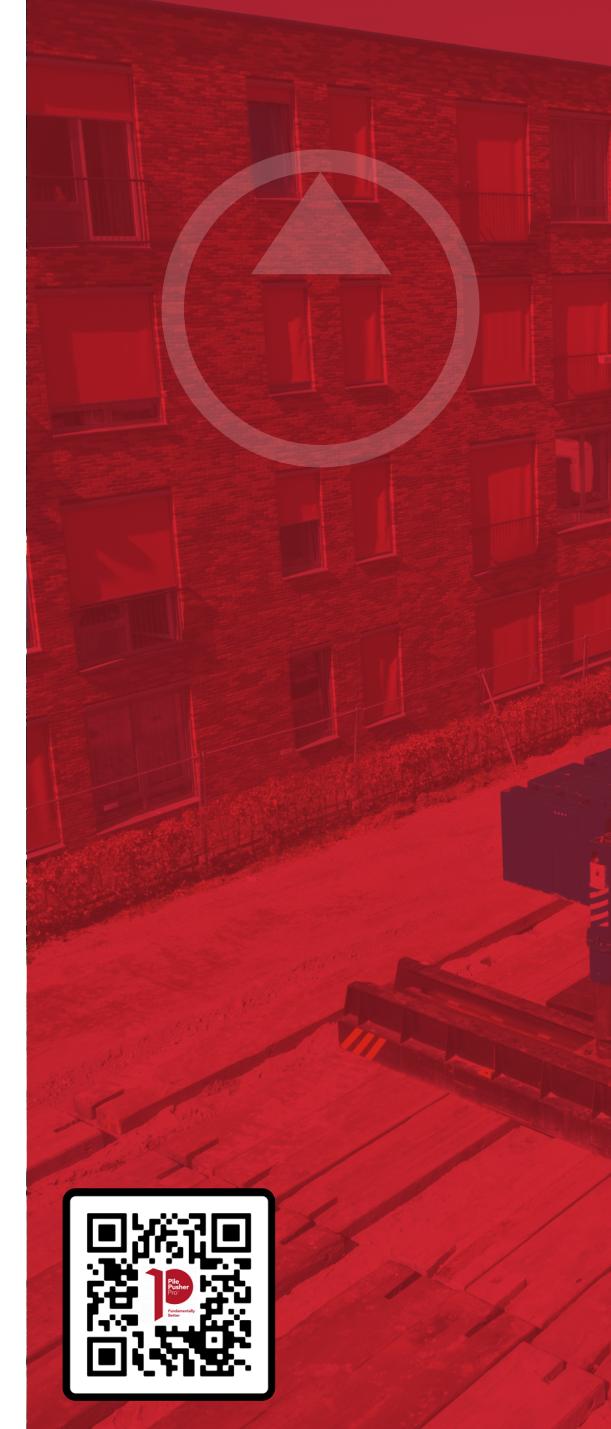
The Pile Pusher Pro contributes to sustainable construction projects that comply with strict environmental standards. The machine can even be powered entirely electrically at locations with suitable grid supply. The very silent foundation machine is also a right choice for construction projects in or near natural areas.

### ► for reliability

It is already widely known that precast concrete piles offer high quality and reliability. The Pile Pusher Pro adds a unique and extremely valuable feature to it; during the pushing process, the machine records various operational parameters that can instantly be used to verify the load-bearing capacity of the piles and, therefore, of the foundation.

### A fundamentally better choice

With playful ease, the Pile Pusher Pro pushes a precast concrete pile into the soil in only a few minutes. With this machine, pile foundations can be installed fast while quality and reliability are kept high and building costs low. A logical choice for end-clients and contractors.



**Do you have any questions or would you like to receive more information?**

**Please contact Sandro Katerberg, Sales Engineer.**

**A.P. van den Berg GeoTechnology bv**

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