

Fundex, specialist in the field of (deep)foundations

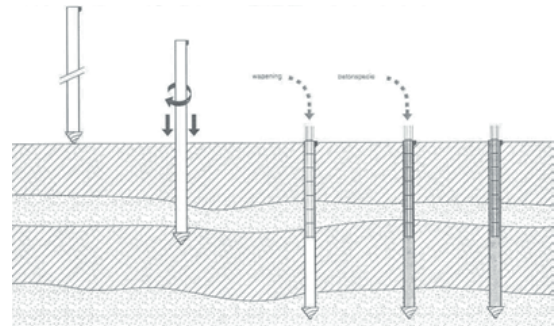


Tubex® pile with grout injection

Vibration-free, soil-displacing concrete pile with permanent steel tube, screwed to depth with the addition of grout injection.

Method:

- A steel pipe, equipped with a welded steel drill tip, is placed on ground level;
- The pile is screwed to depth, with the addition of a grout mixture, by applying an axial pressure and a torque;
- When the desired pile tip level is reached, the pile is installed;
- The rig can be moved to the next post location;
- In a later phase, the steel tube is burned off at the exact height;
- The reinforcement is placed in the tube;
- The tube is filled with concrete;
- The pile is now constructed.



Tubex® pile with grout injection

Advantages:

- Vibration-free and 100% ground-displacing (no relaxation of the ground or reduction in cone resistance)
- No risk of damage to adjacent plots during the manufacture of the pile;
- A very large load capacity is permitted;
- Extremely suitable for absorbing large compressive and tensile forces, moments and limiting deformations;
- No noise pollution, such as pile driving or vibration. The only noise is the motor of the drill;
- No soil drainage. Soil is pushed away sideways;
- Applicable in almost all soil types.
- Applicable in areas with limited height or space.
- Possibility to drill through masonry, unreinforced concrete and existing wooden piles.



Interested?

On our website you will find an overview of the expertise that Fundex has built up over the past 70 years.

WWW.FUNDEX.NL

INFO@FUNDEX.NL

Technical specifications

Tubex® pile with grout injection

Dimensions piles

Standard dimensions are: (other tube dimensions possible)

Shaft diameter [mm]:	Corresponding drill point[mm]:
Ø 168 of 219	Ø 310
Ø 324 of 355	Ø 450
Ø 355 of 406	Ø 560
Ø 457 of 508	Ø 670
Ø 609	Ø 850
Ø 762	Ø 950
Ø 762/812	Ø 1050

A grout casing will be created in the sand layers with the same diameter as the drill tip diameter

Pile length:

Basically unlimited. The pile head can be installed at ground level or at a depth.

Reinforcement:

The piles are (optionally) provided with prefabricated reinforcement cages. Depending on the requirements, they are reinforced with head reinforcement or over the entire length.

Concrete:

The piles are provided with concrete directly from the concrete plant. All strength classes can be used for this.

Soil mechanical bearing capacity:

NL: The load capacity is calculated in accordance with the current NEN and CUR standards.

The following factors can be applied:

$\alpha_p = 0.63$	$\alpha_s = 0.009$
$\beta = 1.0$	$\alpha_t = 0.009$
$s = 1.0$	

If you have any questions regarding bearing capacity, you can always contact us contact our office.



ASML

Applicable basis:

Tubex piles with grout injection can be used in very heavy layers with cone values up to approximately 80 Mpa. (In places where there are very heavy layers.) It is possible to opt for this system as the pile point level can be guaranteed. If you have any doubts regarding feasibility, you can always contact our office.

Inclined positions:

Up to 4:1 forward and 1:1 backward. It is also possible to drill up to 3:1 "from the side".

Workspace:

The Tubex pile with grout injection can be used in both free and limited height or space.

Adjacents:

Depending on the rigs, the posts can be installed at a distance of approximately 0.5 to 0.9 m perpendicular to the adjacent. This is of course more for internal corners.

Piling rigs:

Fundex HDM12, CD20E, F12SE, F15, F16, F3500, F4800. All Tubex rigs to Ø 324 and Ø 457.

Rigs dimensions:

Depending on the type of rig.
Installation location variable from approximately 2x3 to 9x14m.
Height from approximately 2.5 to 48 m.
Built-up weight variable from approximately 13 to 210 tons.

WWW.FUNDEX.NL

INFO@FUNDEX.NL