

## Fundex, specialist in the field of (deep)foundations



### Fundex® pile with grout injection

**Vibration-free, (ground-formed), soil-displacing concrete screw pile, installed to depth using a steel temporary tube and with the addition of grout injection.**

#### Method:

- A steel (auxiliary) tube, equipped with a loose drill tip, is placed at ground level;
- The pipe is screwed to depth by applying axial pressure and torque and adding grout injection;
- When the desired pile tip level is reached, the reinforcement is suspended in the tube;
- The tube is filled with concrete;
- The tube is pulled in an oscillating manner, leaving the drill tip behind;
- The pile has now been constructed;
- The rig can be moved to the next post location.



*Utrecht High five*

#### 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 large load capacity is permitted;
- Extremely suitable as a compression and tension pile;
- Can be installed in (very) heavy soil layers;
- 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.



#### 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

### Fundex® pile with grout injection

#### Pile dimensions

Standard dimensions are:

Shaft diameter [mm]:	Corresponding drill point [mm]:
Ø 380	Ø 450
Ø 460	Ø 560
Ø 540	Ø 660
Ø 660	Ø 840

A shaft will be created in the sand layers with the same diameter as the drill tip diameter.

#### Pile Length:

Up to approximately 35 to 40 meters. The pile is always poured down to ground level. This determines the pile length from pile tip level to ground level.

#### Reinforcement:

The piles are fitted with prefabricated reinforcement cages. For quality reasons, the posts are reinforced over the entire length.

#### Concrete:

The piles are poured into the work site using concrete directly from the concrete plant. All strength classes can be used for this.

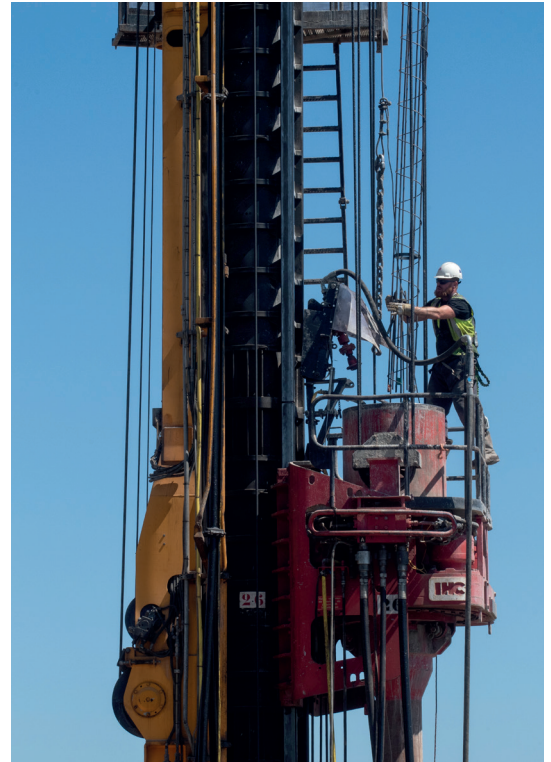
#### Soil mechanical bearing capacity:

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

The following factors can be applied:

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

*For questions regarding bearing capacity, please contact our office.*



#### Applicable basis:

Fundex piles with grout injection can be used in heavy soil layers. If you have any doubts regarding feasibility, you can always contact us.

#### Inclined positions:

Up to 4:1 forward and 2:1 backward.

#### Workspace:

To install the Fundex pile, there must be free height and sufficient space.

#### Adjacents:

The posts can be installed at a distance of approximately 0.9 m perpendicular to the adjacent. This is of course more for internal corners.

#### Piling rigs :

Fundex F12SE, F15, F16, F3500 en F4800.

#### Rigs dimensions:

Depending on the type of rig. Most common; installation location approximately 7 x 12 m. Height of rack approximately 40 m. Built-up weight variable from approximately 63 to 210 tons.

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