CLAIMS

[Claim 1]

A method of installation of driving a screwed pile provided with a blade into the ground,

the method of installation of the screwed pile characterized by comprising

a measurement step of measuring a vertical load in ~~a~~ the screwed pile with a period ~~pf~~ of 10 seconds or less while screwing the screwed pile into the ground and

a judgment step of judging whether to unclog soil deposited inside the screwed pile based on the results of measurement of the vertical load obtained by the measurement step,

wherein when judging in the judgment step to unclog the soil, it is repeated to make the screwed pile reverse and rotate in an extraction direction until judged that the clogging is eliminated based on the results of measurement of the vertical load during rotation in the extraction direction.

[Claim 2]

The method of installation of the screwed pile according to claim 1, characterized by the measurement step including measuring at least one of a rotational torque of the screwed pile and an amount of penetration.

[Claim 3]

The method of installation of the screwed pile according to claim 1 or 2 characterized in that the judgment step includes comparing the past results of measurement at the time of screwing in screwed piles installed in the past and the results of measurement obtained by the measurement step and judging whether to unclog the soil.

[Claim 4]

The method of installation of the screwed pile according to any one of claims 1 to 3 further comprising an unclogging step of using an excavation device to remove at least part of the soil and unclog the soil when judging in the judgment step to unclog the soil.

[Claim 5]

The method of installation of the screwed pile according to claim 4 characterized by further comprising, after screwing in the screwed pile down to ~~the~~ a bearing layer, a movement step of making the soil removed using the excavation device move to the inside of the screwed pile.

[Claim 6]

The method of installation of the screwed pile according to ~~any one of claims 1 to 5~~ claim 4 or 5 characterized in that the measurement step includes measuring an amount of deposition of soil deposited inside the screwed pile.

[Claim 7]

The method of installation of the screwed pile according to claim 6 characterized by further comprising, after the unclogging step, a confirmation step of measuring the amount of deposition to confirm whether the soil has been unclogged.

[Claim 8]

A method of production of a group of piles characterized by using the method of installation of a screwed pile according to any one of claims 1 to ~~8~~ 7 to produce a group of piles including a plurality of screwed piles driven down to a bearing layer of the ground.

~~[Claim 9]~~

~~A group of pile characterized by including a plurality of screwed piles produced by the method of production of a group of piles in claim 8 and driven down to a bearing layer of the ground.~~

~~[Claim 10]~~

~~A group of piles characterized by soil clogging the inside of a screwed pile in a state with the pile driven down to a bearing layer of the ground in claim 9.~~