

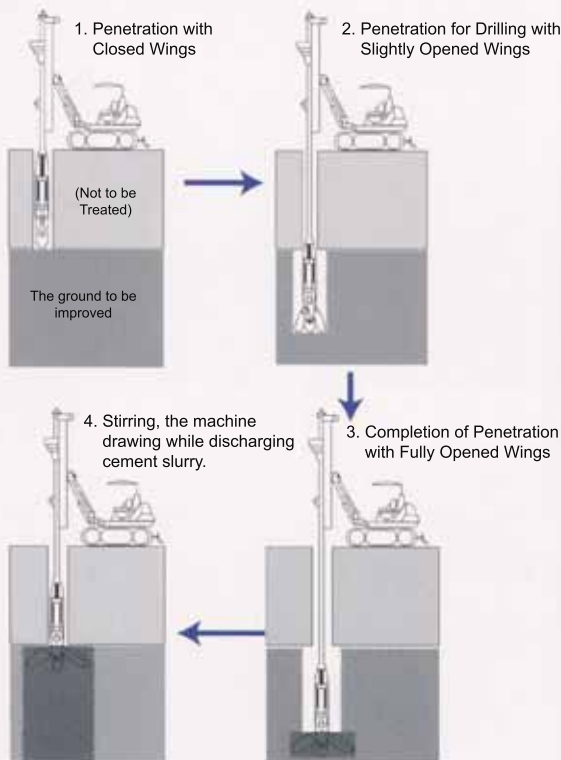
Wing-System Solidification Method

The Wing-System Solidification Method aims to improve the ground of existing structures such as roads, retaining walls and abutments while limiting its effect to a minimum level. A small hole, just enough to insert a rod serving as solidifier feeder, is drilled and enlarged diametrically on the ground to be improved. Then, cement slurry is mixed into soft soil and stirred so that the strength of soil can be increased in its natural position.

Features

- ★ A pilot drilled hole of a small diameter (=200 mm) yields substantial improvement in a large-diameter (=1,200 mm)
- ★ Minimized ground displacement in adjacent area since the pilot hole drilling machine has slight wing opening
- ★ An improvement coverage can be controlled by changing the opening width of the wings
- ★ High mobility of the machine allows to drill a hole diagonally.

Working Procedure



Equipment to be Used



Machine used for Treatment



Machine with Opening Wings



Improvement in Progress

Completed Projects Record

Project Name	Duration	Project Site	Objective	Quantity of Blended Solidifier	Site Strength
Independent Test Work	99.3	Tochigi	Confirmation of Effect of Improvement	50kg/m ³ 100kg/m ³ 180kg/m ³	qu= 700KN/m ² qu= 1280KN/m ² qu= 1820KN/m ²
Independent Test Work	99.3	Chiba	Confirmation of Effect of Improvement	30~ 150kg/m ³	—