

ABSTRACT
ROTARY PENETRATION STEEL PIPE PILE AND METHOD FOR
CONSTRUCTING ROTARY PENETRATION STEEL PIPE PILE

5 Provided are a rotary penetration steel pipe pile configured to be placed
so that a pile end is arranged in an intermediate layer without reaching a
supporting layer and that can provide a sufficient bearing capacity while
reducing costs, and a method for constructing the rotary penetration steel pipe
pile. The present rotary penetration steel pipe pile (1) is configured to be
10 placed so that the pile end is arranged in the intermediate layer without
reaching the supporting layer, the rotary penetration steel pipe pile
including: a substantially spiral-shaped lowermost wing (3) that is wound in
one round and that is disposed in vicinity of the pile end; and an upper wing (5)
that is wound in one round and that is disposed above the lowermost wing (3)
15 in a plurality of tiers at regular intervals ranging from 1.25 times to 7.5
times a wing diameter, wherein an outer diameter of the lowermost wing (3)
is larger than an outer diameter of the upper wing (5) and is set to be 1.5
times to 3 times a pile diameter, and the outer diameter of the upper wing (5)
is smaller than the outer diameter of the lowermost wing (3) and is less than or
20 equal to 1.6 times the pile diameter, and a pitch of the upper wing is set to be
equal to a pitch of the lowermost wing (3).

(Fig. 1)