

Title (en)
Pile connecting structure

Title (de)
Verbindungsschuh für Pfähle

Title (fr)
Connecteur aux pieux

Publication
EP 1403436 A2 20040331 (EN)

Application
EP 03250907 A 20030214

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Abstract (en)

The present invention, the objective of which is to provide a pile connecting structure of high workability capable of connecting upper pile 1 and lower pile 3 to each other simply and accurately, and preventing the pile diameter from becoming a large diameter even at this connecting portion, concerns a pile connecting structure for connecting upper pile 1 and lower pile 3 to each other, by interposing a connecting plate 5 of about the same diameter as the piles, at the connecting portion between the upper pile 1 and the lower pile 3, wherein the end plate 4 of either one 3 of the upper pile 1 or lower pile 3 and the connecting plate 5 are fixed by screwing bolts 6 inserted in circular-shaped bolt inserting holes 51 formed in the connecting plate 5 to the bolt hole 41 in the end plate 4 of the pile 3 on one side, and the end plate 2 of the other pile 1 and the connecting plate 5 are fixed, in the state where the head 71 of the bolts 7 screwed to the end plate 2 of the pile 1 on the other side is inserted in the large diameter portion 52d of heteromorphic bolt insertion holes 52 communicating between a large diameter portion 52d which the head 71 of the bolts 7 formed on the connecting plate can pass through and a small diameter portion 52c which the head 71 of the bolts 7 cannot pass through, by making the other pile 1 and the connecting plate 5 move relatively so that the bolts 7 may shift from the large diameter portion 52d of the heteromorphic bolt insertion holes 52 to the small diameter portion 52c. <IMAGE> <IMAGE>

A connecting plate (5), arranged at the juncture of upper and lower piles (1,3), has a diameter identical to that of both piles. Bolts (6) are entered into circular bolt insertion holes on the connecting plate and the bolt insertion holes (41) on the end plate (2) of the lower pile. The bolts (7), protruded downward from the end plate (2) of the upper pile, have bolt heads inserted into the large diameter parts of the heteromorphic bolt insertion holes on the end plate (4). The bolts (7) are allowed to shift between the large and small diameter parts of these heteromorphic bolt insertion holes. Each small diameter part is sized to discourage insertion of the bolt head.

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