

Title (en)

METHOD FOR FORMING A SHEET PILE STRUCTURE, SHEET PILE ELEMENT, SHEET PILE STRUCTURE AND USE OF A SHEET PILE STRUCTURE FOR DAMPING VIBRATION

Title (de)

VERFAHREN ZUR HERSTELLUNG EINER SPUNDWANDSTRUKTUR, SPUNDWANDELEMENT, SPUNDWANDSTRUKTUR UND VERWENDUNG EINER SPUNDWANDSTRUKTUR ZUR VIBRATIONS DÄMPFUNG

Title (fr)

PROCÉDÉ DE FORMATION D'UNE STRUCTURE DE PALPLANCHE, ÉLÉMENT DE PALPLANCHE, STRUCTURE DE PALPLANCHE ET UTILISATION D'UNE STRUCTURE DE PALPLANCHE POUR AMORTIR LES VIBRATIONS

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Application

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Abstract (en)

[origin: WO2007138150A1] The invention relates to a method for forming a sheet pile structure, in which method a broaching tool (14) is fastened in connection with the lower edge (5) of a sheet pile element (1, 1a, 1b, 1c, 1d), and a grout hose (17, 18) is detachably fastened in connection with the sheet pile element with the aid of a hose fastening means (19, 20). The sheet pile element is arranged in the soil the lower edge and broaching tool first, whereby the broaching tool forms a cavity in the soil. Concrete grout (21) is fed in the cavity at the same time as the sheet pile element is arranged in the soil so that said cavity is at least partly filled with concrete grout. The hose fastening means is released and the grout hose is disconnected from being in connection with the sheet pile element after the sheet pile element is arranged at a desired depth inside the soil. In the method the width of the broaching tool and the width of the cavity formed by means of said tool is at least 30 % of the width the sheet pile element, whereby the concrete grout fed into the cavity covers at least 30 % of the surface of the sheet pile element. The invention also relates to a sheet pile element in connection with which element a broaching tool is arranged for forming a cavity into the soil, as well as a hose fastening means for the grout hose. The broaching tool is detachably fastened to lower edge of the sheet pile element. The invention also relates to a sheet pile structure, which is formed according to the method disclosed in the application. The invention also relates to the use of a sheet pile structure for dampening vibration in the soil.

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