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73 Proprietor : **HOLLANDSCHE BETON GROEP**
N.V.
489, Generaal Spoorlaan
NL-2285 TA Rijswijk (NL)

72 Inventor : **Bus, Leonardus Theodorus Jacobus**
Echtpaar Curiedreef 3
NL-3146 BC Maassluis (NL)
Inventor : **Van Den Berg, Arie Willem**
Van der Palm 68
NL-2802 VH Gouda (NL)

74 Representative : **de Bruijn, Leendert C. et al**
Nederlandsch Octrooibureau
Scheveningseweg 82 P.O. Box 29720
NL-2502 LS Den Haag (NL)

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Description

The invention relates to a system comprising a U-shaped anchor for a sheeting panel and a steel insertion member for said anchor.

Such a system is known from EP-A-0074686.

For the isolation of polluted ground and ground water and in the case of well drainage it is known to make use of vertical screens formed in the ground, made of a bentonite-containing mixture in which a liquid-tight panel wall of thick HDPE sheeting is provided in order to increase the water impermeability. The flexible panels of these walls are, for example, 2 to 3 metres wide and are interconnected by means of locking sections. The insertion of the panels by means of the steel insertion sheet takes place in such a way that the locks are placed under little or no load. At the bottom side the bentonite sheeting screen must be connected to a watertight layer, for example a natural clay or an injected synthetic layer. In order to anchor a panel after it has been pushed into the ground trench, it is disclosed in said EP-A-0074686 that an anchor is fixed to the bottom edge of a panel. The fixing of the anchor to a sheeting panel is time consuming.

The object of the invention is to produce a connection between anchor and sheeting panel considerably more quickly without there being any risk of wedging occurring between insertion member and anchor as a result of which a sheeting panel would be pulled up with the insertion member during the raising of said member after the insertion of said sheeting panel and the locks between the panels could consequently spring apart.

According to the invention the system is to this end characterized in that the top piece of one of the legs of the U-shaped anchor is bent in the direction of the other leg to form an accommodation chamber for a thickened part at the bottom edge of the sheeting panel, that a space exists between the free edge of the inward bent leg part and the other leg allowing the bottom edge of the steel insertion member to move through this space, and that a number of substantially vertical recesses are provided in the anchor section said recesses extending from the free edge of said other leg.

The virtually vertical-running recesses in the vertical leg of the U of the anchor section, which can lie against the insertion member during the insertion of the sheeting panel, reduce the local rigidity of the anchor section. The correct wedging between anchor section and insertion member can be achieved by providing the correct number of such recesses over the length of the anchor section and/or adapting the length and/or the breadth of said recesses, depending on the shape of the anchor section and/or bottom part of the insertion member, as a result of which the insertion member can be removed from the anchor

without too much force after the sheeting panel has been pressed into the lowest position and, in addition, the sheeting panel with its locks is not placed under unnecessary stress.

In order to be able to reduce the rigidity of the anchor even more in its lengthwise direction the recesses can continue into a part of the bottom of the U.

The breadth of the recesses preferably lies between 0.5 and 300 mm.

In order to centre a sheeting panel when it is being pressed into the ground and thereby take the load off the locking connections between panels, projecting centring wings can be fixed on the anchor in both sides.

The invention will now be explained in greater detail with reference to the figures.

Figure 1 shows a cross-section through the bottom part of an anchor according to the invention with insertion sheet and sheeting panel.

Figure 2 shows a perspective view of the anchor.

The steel anchor 1 shown in the figures is in the shape of a U of which one of the flanges is bent inwards at its top part for the purpose of forming a channel into which the thickened bottom edge 2 of a sheeting panel 3 is pushed. This sheeting panel is made of plastic, for example HDPE, and is connected in a manner which is known per se by edge locking sections to a sheeting panel already placed in the trenches.

A steel insertion sheet for pressing the sheeting panel with anchor into a ground trench 4 filled with bentonite mixture is indicated by 5 and projects with its bottom edge into the anchor.

In order to centre the sheeting panel when it is being pressed into the ground trench, centring wings 6 are fixed to the anchor 1, projecting on either side. These wings end in an upward-sloping part, so that during the downward movement of the anchor they cannot become jammed in the trench wall when they come into contact with said wall.

The wings are welded to the bottom of the anchor section, but they can also be connected to the anchor section at other places.

The wings 6 at both sides of the anchor section can also be fixed as a continuous unit to the bottom side of the anchor section.

Vertical-running recesses 7 are provided in order to be able to adjust the local wedging between anchor section 1 and the insertion sheet 5. These recesses are preferably of a minimum breadth of 0.5 mm and a maximum breadth of 300 mm. They can continue into the bottom of the U.

Claims

1. System comprising a U-shaped anchor (1) for a sheeting panel (3) and a steel insertion member

(5) for said anchor, characterized in that the top piece of one of the legs of the U-shaped anchor is bent in the direction of the other leg to form an accommodation chamber for a thickened part (2) at the bottom edge of the sheeting panel, that a space exists between the free edge of the inward bent leg part and the other leg allowing the bottom edge of the steel insertion member (5) to move through this space, and that a number of substantially vertical recesses (7) are provided in the anchor section said recesses extending from the free edge of said other leg.

2. System according to claim 1, characterized in that said recesses continue into a part of the bottom of the U-shaped anchor.
3. System according to claim 1 or 2, characterized in that the breadth of the recesses measures between 0.5 and 300 mm.
4. System according to any of the preceding claims, characterized in that centring wings (6) are fixed to the anchor (1), projecting on either side.

Patentansprüche

1. System, das einen U-förmig ausgebildeten Anker (1) für eine Abdeckplatte (3) und ein Einschubstahlelement (5) für den genannten Anker umfaßt, dadurch gekennzeichnet, daß das obere Stück von einem der Füße des U-förmig ausgebildeten Ankers zum anderen Fuß hin gebogen ausgeführt ist, um so eine Unterbringungskammer für ein verdicktes Teil (2) an der unteren Kante der Abdeckplatte zu bilden, daß ein Raum zwischen der freien Kante des nach innen gebogenen Fußteiles und dem anderen Fuß vorhanden ist, so daß sich die untere Kante des Einschubstahlelementes (5) durch diesen Raum bewegen kann, und daß eine Anzahl von im wesentlichen vertikalen Rücksprüngen (7) im Ankerabschnitt vorgesehen sind, wobei die genannten Rücksprünge von der freien Kante des genannten anderen Fußes aus verlaufen.
2. System nach Anspruch 1, dadurch gekennzeichnet, daß die genannten Rücksprünge in einen Teil des Bodens des U-förmig ausgebildeten Ankers hinein verlaufen.
3. System nach Anspruch 1 oder 2, dadurch gekennzeichnet, daß die Breite der Rücksprünge zwischen 0,5 und 300 mm beträgt.
4. System nach einem der vorstehenden Ansprüche, dadurch gekennzeichnet, daß auf beiden

Seiten hervorstehende Zentrierflügel (6) am Anker (1) befestigt sind.

5 Revendications

1. Système comportant une ancre en forme de U (1) pour une feuille de blindage (3) et un membre d'insertion en acier (5) pour ladite ancre, caractérisé en ce que la portion supérieure de l'un des bras de l'ancre en forme de U est recourbée en direction de l'autre bras de façon à former un logement pour une partie épaissie (2) au bord inférieur de la feuille de blindage, en ce qu'il existe un espace entre le bord libre de la partie du bras recourbé vers l'intérieur et l'autre bras, permettant au bord inférieur du membre d'insertion en acier (5) de passer à travers cet espace, et en ce qu'un certain nombre d'évidements essentiellement verticaux (7) sont prévus dans la section de l'ancre, lesdits évidements s'étendant depuis le bord libre dudit autre bras.
2. Système selon la revendication 1, caractérisé en ce que lesdits évidements se poursuivent jusque dans une partie du fond de l'ancre en forme de U.
3. Système selon la revendication 1 ou 2, caractérisé en ce que les évidements ont une largeur de 0,5 à 300 mm.
4. Système selon l'une quelconque des revendications précédentes, caractérisé en ce que des ailes de centrage (6) sont fixées à l'ancre (1), faisant saillie de chaque côté.

fig - 1

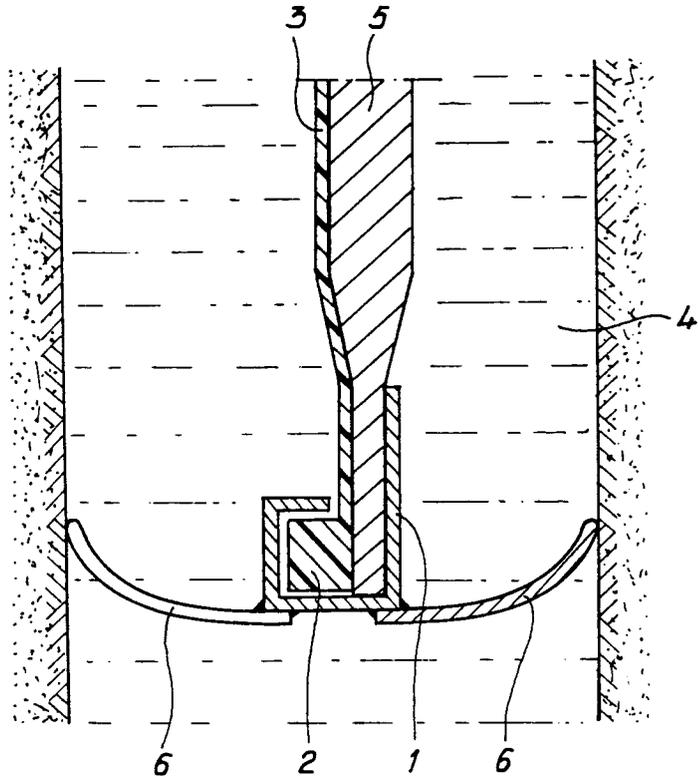


fig - 2

