Fiber Drain Method

The Fiber Drain Method is one of vertical drain methods
using fiber drain (FD) material driven into soft cohesive soil ground.
The FD material as made of natural fiber is environmentally friendly since
it will naturally decompose in a long run and becoming part of the soil.

Features

★ The FD material has a characteristic of permeability necessary for draining, filtering to screen soil particles and has a sufficient tensile strength.

★ Uses jute and fiber of coconut shell covering as FD material
This material will decompose naturally in a long run and become part of the soil.

★ FD material can be driven by an ordinary vertical drain driving equipment.

Working Procedure

Setting of mesh basket containing drain material to mandrel

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Mounting of anchor plate

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Driving of mandrel up to a predetermined depth.

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Drawing of mandrel

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Cutting of drain material on the ground surface.

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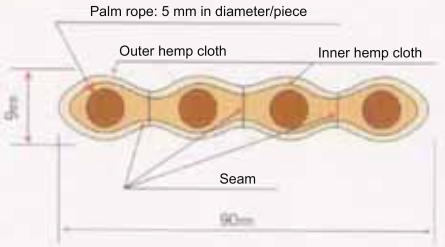
Repeat the cycle for the next location

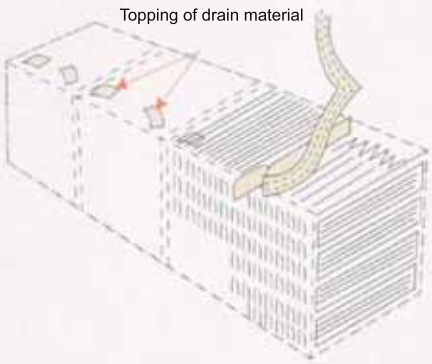
Equipment to be Used

Fiber Drain Material



Drain Material Section

Twist preventive device and back tension reel



Continuous driving using a trio-mesh-basket (1,000 m per mesh basket)

Completed Projects Record

Project Name	Duration	Project site	Client	Objective	Drain Length / Depth / Drain Pitch
Ujina Inner Port Area 21st Engineering Zone ground improvement work	94.11~95.3	Hiroshima	Hiroshima Pref.	Consolidation acceleration and increase ground strength	63,000m／28.8~30.8m／1.1m
Ujina Inner Port Area 29th Engineering Zone ground improvement work	95.3~95.12	Hiroshima	Hiroshima Pref.	Consolidation acceleration and increase ground strength	266,000m／28.5~32.5m／1.3m
Ujina Inner Port Area reclamation parapet wall work	96.6~96.9	Hiroshima	Hiroshima Pref.	Consolidation acceleration and increase ground strength	28,000m／25.0~32.0m／1.5m
Maya Wharf ground improvement work between 1st and 2nd jetties	97.9~97.11	Kobe	Kobe Port Welfare Service Association	Consolidation acceleration and increase ground strength	40,000m／ 20.0m ／0.7m