

## Largest ramming for TR 565 - Bentonite makes it possible

Contractor: Paul Y Construction, Hong Kong
Length: 20 m + 105 m (66 ft + 350 ft)
Steel pipe ram: TERRA-HAMMER TR 565

Steel pipe:  $\emptyset$  1'400 mm +  $\emptyset$  1'200 mm ( $\emptyset$  55" +  $\emptyset$  47") Drilling fluid:  $\emptyset$  Bentonite lubrication outside of the steel pipe

Underground: Clay and gravel

The outside of the steel pipe was continuously lubricated with Bentonite to reduce the friction. Therefore 100-200 ltr/min (25-50 gpm) Bentonite drilling fluid were pumped into the ground.



The TERRA-HAMMER TR 565 during the ramming of the steel pipe ø 1'400 mm (55")

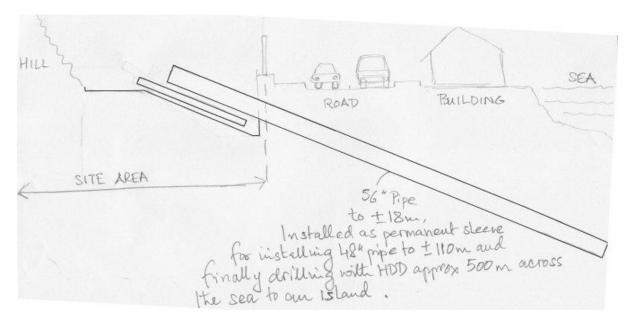


The frame of a HDD machine was used as a support for the steel pipe and the TR 565.



The steel pipe ø 1'400 mm (55")





This sketch explains the job site. The 1'400 mm (55") steel pipe should be rammed as a protection for the 1'200 mm (47") steel pipe underneath the rod. Then the 1'200 mm (47") steel pipe was rammed over the full distance of 105 m (350 ft). After the successful ramming a HDD machine drilled through the 1'200 mm (47") steel pipe, underneath the ocean, to a nearby island to lay a 800 mm (32") HDPE pipe for sever water.



The 800 mm (32") sever line was laid to this island.



The TERRA-HAMMER TR 565 during the ramming.

TERRA AG, Hauptstrasse 92, 6260 Reiden, Switzerland, phone: +41-62-749 10 10, fax: +41-62-749 10 11, e-mail: terra.ch@bluewin.ch, internet: www.terra-eu.eu