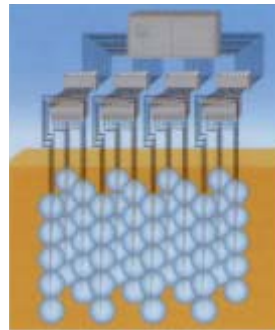


Steel Sheet Structure Cellular (Embedded) Method

New Offshore Waste Disposal Site

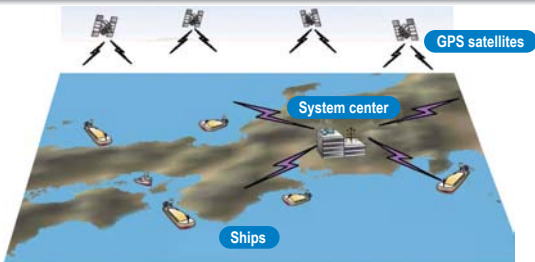
This method developed by TOA is used for many projects. A water-stop wall made of steel sheets, which will be placed in the brine surrounding the waste, will be built around the outer perimeter of the construction site. It is absolutely critical that the water-stop wall is sealed tightly so that the seawater does not overflow and allow the polluted water to leak out. This is where our technology and know-how has been put to work.



Ultra Multi-Permeation Grout Method

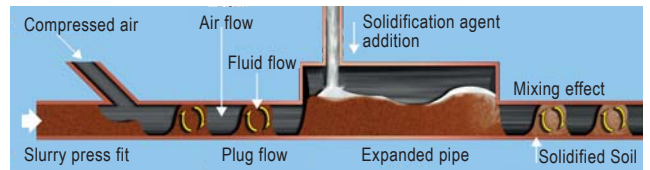
This is a new, but noteworthy technology to prevent soil from liquefaction. In this method, dozens to hundreds of nozzles are set three-dimensionally in the ground, and grout is automatically poured under the most suitable pressure and current volume based on pre-measured data.

COS-NET (Construction On the Sea Network)



COS=NET (Construction On the Sea Network) is a system for monitoring and controlling work-vessels by the combination of GPS and IT technology. By the application of this system, the operation data including accurate positions are available.

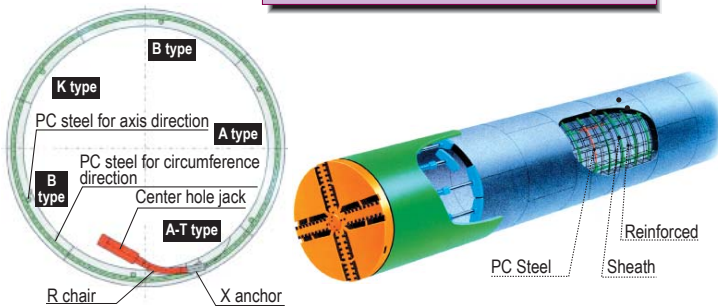
Plug Magic Method



TOA has established an engineering technique named Plug Magic Method that enables soft dredged soil to be solidified efficiently for reuse as a filling material. This method requires no mixer, and the operating cost can be reduced by 10-15%. It is also an eco-friendly method enabling a through in-pipe transportation of soft mud from dredging site to reclamation site. Plug flow occurs when compressed air gets mixed into soft mud in pneumatic pipeline. This method kneads soft mud and solidification material in the pneumatic pipeline, utilizing the characteristic of plug flow. It has maximum solidification capacity of 1,000m³/h.

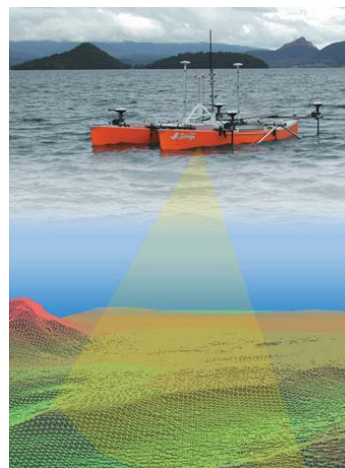
Cross Section

Pre-stressed & Pre-cast Concrete Segment Method



This is the method to form the segment ring of pre-cast concrete structure that is expected to contribute to the shield tunnel technology. The technology has great potentiality because of its vast application to the shield works such as construction of roads, subways and sewage system.

Beluga System



This is our originally developed system for accurate and speedy measurement of the depth of ground level in water by effectively combining the latest measurement devices, including the narrow multi-beam depth measuring sonar, in order to acquire data in wide regions and the GPS.