

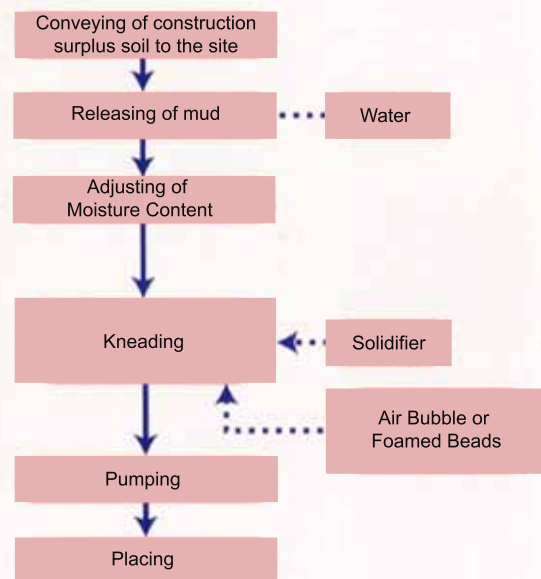
# Lightweight Mixed Treatment Soil Method

The Lightweight Mixed Treatment Soil Method uses surplus soil from the construction site and mixed with water, solidifier and air bubbles or foamed beads to produce lightweight and stable material for reclamation or backfill of a structure. Such materials as SGM lightweight soil, high-grade soil and FCB are available for selection according to uses.

## Features

- ★ Density can be adjusted ranging from about 0.5 to 1.3 g/cm<sup>3</sup> by controlling the quantity of air bubble or foamed beads to be mixed.
- ★ The strength can be controlled as required when the amount of solidifier to be added is changed. It is recommendable to set the unconfined compressive strength at  $q_u=100\sim500$  kN/m<sup>2</sup>, to a range allowing the material to be handled as soil.
- ★ A suitable fluidity can be obtained by adjusting the moisture content. Conveying by pumping is possible and the material can be placed in any form in air and under water. Compaction is not necessary.

## Working Procedure



## Equipment to be Used



Whole View of Plant



Material Being Placed

## Completed Projects Record

Project Name	Duration	Project Site	Client	Objective	Treated Soil Volume	Type of Treatment
Kannon 2nd Tidal Embankment Work	90.2	Hiroshima	Construction Ministry	To prevent settlement of fill area	880m <sup>3</sup>	Foamed beads mixed treatment soil
Shimotsuruta Bridge Replacement Work	92.2	Miyagi	Miyagi Prefecture	Reduction of earth pressure/settlement on the back of abutment	1,630m <sup>3</sup>	Foamed beads mixed treatment soil
Tokyo Airport Surrounding Road Work	96.5~96.6	Tokyo	Transport Ministry	To reduce earth pressure on the back of revetment	1,940m <sup>3</sup>	Air bubble mixed treated soil Foamed beads mixed treatment soil
Tokyo Airport Runway Ground Improvement Work	98.1~98.12	Tokyo	Transport Ministry	To reduce load on the top of tunnel	32,100m <sup>3</sup>	Air bubble mixed treated soil
Oi Wharf New 4 Berth Access Revetment Reinforcement Work	00.12~01.2	Tokyo	Tokyo Port Wharf Corporation	To reduce earth pressure on the back of quaywall	9,240m <sup>3</sup>	Air bubble mixed treated soil