Pre-Mixing (PREM) Method

The Pre-Mixing Method aims to prepare a stable ground in a pre-sequence by adding cement and anti-separation agent to sand and mixed while processing them as a treated soil and directly conveyed to reclamation area as fill materials. Treated soil from this method is effective on reclaimed ground as protection from liquefaction and scouring as well as reduce earth pressure.

- **Minimize water turbidity since the treated soil is containing anti-separation agent and maintains water quality in friendly environment.**
- **Employs belt conveyor mixing system for reclamation work in an extensive area**
- **Decreases the effect of earth pressure allowing to reduce the size and weight of quaywall structures, etc.**

### Working Procedure

1. Transporting of sand
2. Cement mixing with the sand
3. Spraying Anti-Separation Agent onto Soil Mixed with Cement
4. Transporting of Treated Soil (Mixed Simultaneously)
5. Reclamation / Preparation

### Equipment to be Used

- Work in progress
  (Stabilizer Plant and Conveyance System)

- Process System
  (Belt Conveyor Mixing System)

### Completed Projects Record

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Duration</th>
<th>Project Site</th>
<th>Client</th>
<th>Objective</th>
<th>Volume of Improved Soil</th>
<th>Strength after Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tokyo Bay Crosscut, Kisarazu Artificial Island Improvement Fill Work</td>
<td>92.6~93.3</td>
<td>Tokyo Bay</td>
<td>Tokyo-Wan Odendoro K.K.</td>
<td>Fill material for artificial island</td>
<td>425,000m³</td>
<td>qu=400kN/m²</td>
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<tr>
<td>RI Quaywall Remedial Work</td>
<td>95.9~96.10</td>
<td>Kobe</td>
<td>Transport Ministry</td>
<td>To reduce earth pressure on quaywall</td>
<td>10,700m³</td>
<td>qu=170kN/m²</td>
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</tbody>
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