

One year has passed since Haneda D-runway construction work started in March 2007.

## Past movement

March 29, 2005.

A construction contract was concluded.

- Negotiations on fishery compensation finished.
- Use of Environmental Impact Assessment finished.
- Reclamation of public waters was approved.

March 30, 2007.

Construction work started.

- Seabed soil improvement of reclamation area completed in March 2008.
- Prefabrication of steel jacket and installation it. (Steel-jacket-platforms and Connection bridges sections.)

March 29, 2008.

1 year has passed since construction work started.

## Photos



## A summary of seabed soil improvement

### • Sand Compaction Pile (SCP) method [April,2007 - Decemder,2007]

SCP method is a method of improving soft soil by building dense sand piles into the ground.

Improvement specification : 3.0m x 3.5m , Diameter : 2.0m,  
Improved length of a sand piles : about 25m, Constructed amount : 71,747 piles,  
The total length of sand piles : about 1,200km

### • Cement Deep Mixing (CDM) method [November,2007 - February,2008]

CDM method improves soft sea bed marine clay as a rigid foundation by mixing soils with cement directly.

Improved width : Foundation of caisson-type-seawalls : CN  
width 55m x length 125m x depth 28.5m, improved : 28.5m  
Foundation of caisson-type-seawalls : CW  
width 60m x length 245m x depth 28.5m, improved : 28.5m  
Improved length 28.5m

Constructed amount : 4,525 cement deep mixing piles.

### • Sand Drain (SD) method [July,2007 - March,2008]

SD method develop vertical drainage system in the foundation ground.

Improvement specification : 1.6m x 2.5m, Diameter : 0.4m,  
Improved length of a sand piles : about 20m,  
Constructed amount : 183,846 piles,  
The total length sand piles : about 3,900km

Amount of sand used for seabed soil improvement : Approximately 1,100,000m<sup>3</sup>

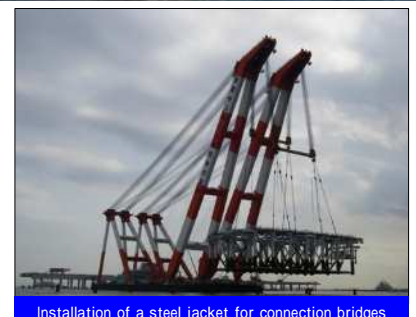
## Prefabrication and installation of steel jacket



Prefabrication of a steel jacket



Installation of a steel jacket for steel plat forms



Installation of a steel jacket for connection bridges