PKPPBSH PROJECT – PARKING & TAXIWAYS EXTENSION SOEKARNO HATTA INTERNATIONAL AIRPORT – INDONESIA CONTROLLED MODULUS COLUMNS (CMC)

Category:	**Airport, aprons taxiways, logistics**
Developer:	**PT Angkasa Pura II**
Contractor:	**PT. Hutama Karya (Persero)**
Area / Quantity:	**200000 m²**
Year:	**2014 - 2016**

PROJECT DESCRIPTION

Project Situation:

Construction of additional taxiway and parking area (12 spots) to increase the airplane capacity of Jakarta International Airport. Menard will be in charge of CMC realization (ground improvement method) by pouring columns and inject mortar.

Scope of works:

- Organize Soil Investigations and design the ground improvement for the main contractor
- Perform CMC ® on 12 spots inside a live airport
- Provide to the Main Contractor PLT (Plate Load Test) – testing method for CMC

SOIL CONDITION / GEOTECHNICAL PROBLEM

Ground conditions were not uniform from one area to another. Overall, ground was composed of soft clays with a hard layer located between 10 and 20 m.

MENARD SOLUTION

Objectives:

- Perform CMC inside a live airport with 25m high equipment
- Organize a working sequence for critical (6h/nigh) and non-critical areas (24 h /day).
- Create a special traffic management system to improve our equipment monitoring inside a crowded airport environment.

Keys figures:

- Surface treated: 200 000 m2
- 39 000 CMC (equal to 250 000 linear meters poured)
- Spot quantity: 11 areas
- Mortar quantity : 30 000 – 35 000 m3
- Depth of CMC: between 10 and 20 m depth (depending on the hard layer)