



SRI U3 PROJECT – HEAVY INDUSTRY EXTENSION MICHELIN SYNTHETIC RUBBER COMPLEX – INDONESIA CMC & STONE COLUMNS (SC)

Category:	Oil & Gas, Logistics (Tanks & heavy industry)
Developer:	Michelin
Contractor:	PT. IKPT
Area /	12105 m ²
Quantity:	
Year:	2016



PROJECT DESCRIPTION

Project Situation:

Extension of Chemical Plant to produce polypropylene included in the tire composition. Menard will be in charge of CMC & Stone Column realization (ground improvement method) by pouring columns, inject mortar, pre drilling and compacting stone

Scope of works:

- Organize Soil Investigations and design the ground improvement for the main contractor
- Perform CMC[®] & Stone Column on 8 spots
- Provide to the Main Contractor PLT (Plate Load Test) – testing method for CMC & SC
- Level finalization with sand layer for LTP (Load Transfer Platform)

SOIL CONDITION / GEOTECHNICAL PROBLEM

Ground conditions were totally different from a spot to another. We have treated 8 majors spots subdivided in zones to get an accurate design. There were compacted sands with a hard layer around 2,5 m depth until 7 m . Then some area were composed of soft clays (brown and green) and compacted sandy clays with a hard layer from 6 m up to 8 m.

MENARD SOLUTION

Objectives:

- Perform CMC & SC within Chemical plant with high safety and security standard
- Organize a working sequence 24 h /day - 6 days/ week.
- Create a special traffic management system to improve our equipment monitoring inside a crowded airport environment.

Keys figures:

- Surface treated: 12105 m²
- 6062 SC & 6530 CMC
- 8 Areas treated whose 5 areas treated with both method (CMC + SC)
- Mortar quantity : 3200 m³ Stone quantity : 10000 m³
- Depth of CMC & SC : 2 – 7,5 m
- Lm CMC: 25900; Lm SC 20000
- Starting Production date: February 02nd 2016 – Completion date: April 21st 2016