

Kuala Lumpar International Airport

Malaysia

Market Sector

INFRASTRUCTURE



Application

THICK LAYER FILL COMPACTION



Site Conditions

HIGHLY COMPRESSIBLE CLAYS



LAND PAC INTELLIGENT GROUND ENGINEERING SOLUTIONS

Project

Malaysia's new LCCT (Low Cost Carrier Terminal) facility at KLIA (Kuala Lumpur International Airport) was developed to facilitate the growing demand for Air Asia's fleet of commercial aircrafts. The project included the placement of 12 million m³ of fill over an area of approximately 250Ha with the use of Impact Compaction.

Geotechnical Solution

To enable the placement of 12 million m³ of fill in the required period a Deep Lift fill methodology was used with Impact Compaction. To optimise the number of passes applied the fill was placed in 1.2m layers. Landpac 3-sided Impact Compactors with a kinetic energy rating of 135kJ were used.

Client: Malaysian Airports Holdings Bhd

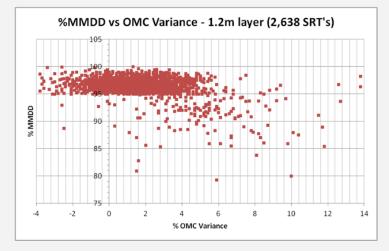
Principal Civil Contractor: WCT

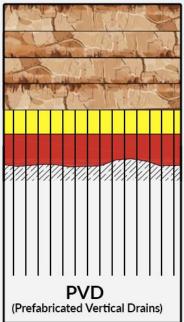
Construction Bhd

Compaction Contractor: Landpac

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Impact Compaction 1.2m Layers

Sand Drainage Layer
Correction Profile
Soft Highly Compressible
Clay

Monitoring & Verification / QA

The fill compaction was monitored with Landpac's continuous soil response system. The compaction levels were verified with sand replacement density testing. The soil response and density test results have shown that the required compaction levels were achieved consistently with a pass rate in excess of 95%.



Summary

- ✓ Placement of 12 million m³ of fill
- ✓ 250Ha with the use of Impact Compaction
- ✓ Wick drains installed at 1.1m square grid
- ✓ Density of 95% Modified MDD

Get in touch

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