

Project datasheet

Runway infrastructure: pavement and drainage design

Project name: Porto Alegre Airport (POA) Expansion Works

Location: Porto Alegre, Brazil

Client: Fraport

Description: The concessionary of the Porto Alegre Airport decided to increase runway length by 150 m for the operation of larger aircraft. As soil conditions are 8 m deep very soft clays, this required ground improvement through deep mixing, additional drainage works and a new safe strip pavement design.



Terratek's services:

- Trial embankment design and analysis;
- Settlement and porepressure monitoring;
- Pavement design for the safe strip using Neoloy geocells
- RESA (Runway End Safety Area) pavement analysis and design;
- Drainage design.



Project datasheet

Ground improvement by stone columns

Project name: Tarmac, taxi and parking area, GRU airport

Location: São Paulo, Brazil

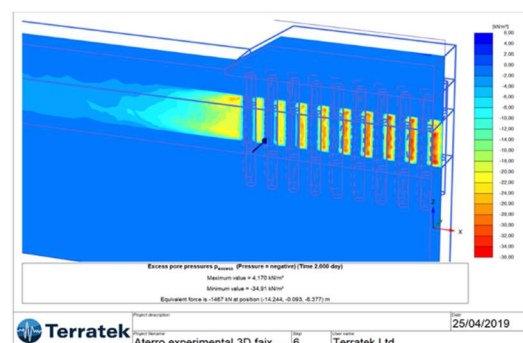
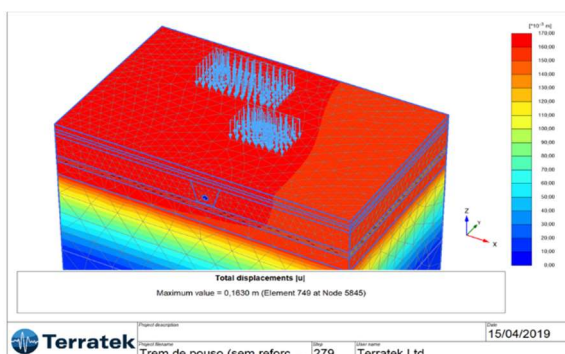
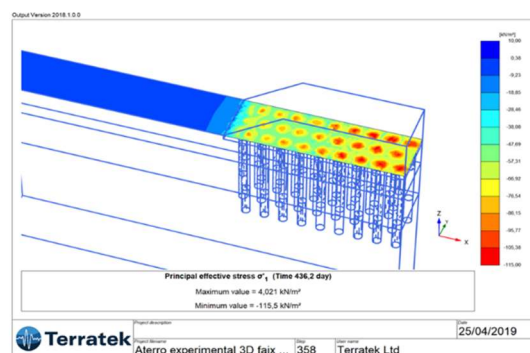
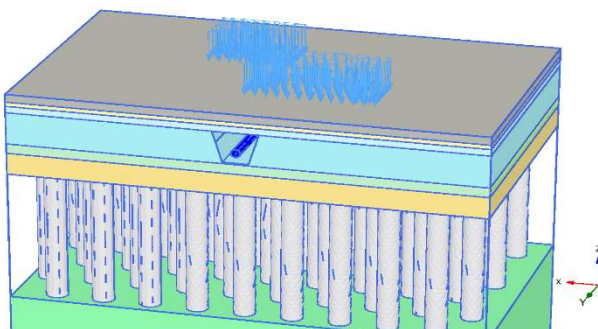
Client: GRU Airport

Description: GRU Airport expansion project in 2018-2019 included an extension of the tarmac and taxi area, where a new tarmac area was built on 4 to 7 m deep soft lacustrine clay. The design adopted 900 mm diameter 1.8 m spaced stone columns and installed with an electric vibrator. A trial embankment was built to check design assumptions and to validate a Plaxis 3D model which was, then used to analyse the effect of aircraft loading.



Services provided by Terratek

- Geotechnical consultancy and design review;
- Plaxis 3D modelling;



Project datasheet

Project name: Project Management of Galeão Airport expansion design

Location: Rio de Janeiro, Brazil

Client: Infraero Brazilian Airport Authority

Services provided

Project management of airport expansion design leading a group of specialists in several disciplines, such as:

- Airport planning
- Architecture
- Runway and tarmac design
- Paving and road infrastructure
- Mechanical systems, electricity, electronics, air conditioning and communication
- Mechanical and airport systems equipment.
- Structural design
- Geotechnics
- Drainage

Galeão International Airport, Rio de Janeiro



Project datasheet

Project name: Project Management of Curitiba Airport expansion works design

Location: Curitiba, Brazil

Client: Infraero Brazilian Airport Authority

Services provided

Project management of airport expansion design leading a group of specialists in several disciplines, such as:

- Airport planning
- Architecture
- Runway and tarmac design
- Paving and road infrastructure
- Mechanical systems, electricity, electronics, air conditioning and communication
- Mechanical and airport systems equipment.
- Structural design
- Geotechnics
- Drainage

Curitiba Airport



Project datasheet

Project name: Project Management of Guarulhos Airport expansion works design

Location: São Paulo, Brazil

Client: Infraero Brazilian Airport Authority

Services provided

Project management of airport expansion design leading a group of specialists in several disciplines, such as:

- New Passenger Terminal - Terminal III
- General coordination of project
- Architecture
- Paving and road infrastructure
- Mechanical systems, electricity, electronics, air conditioning and communication
- Mechanical and airport systems equipment.
- Runway Tarmac pavement design
- Structural design
- Geotechnics
- Drainage

Guarulhos Airport, São Paulo

