

## Kinyerezi II Power Plant Station

Dar es Salaam, Tanzania

Kinyerezi II Thermal Power Station is a 240 MW (320,000 hp), natural gas powered, electricity generating power station in Tanzania.



### The project

The Kinyerezi II power plant project in Ilala district in Dar es Salaam, Tanzania will be supplied with natural gas from the Mnazi Bay and add 240 MW to the national grid when completed. We were contracted to provide the design and construction of the foundation piles for the plant.

## The challenge

The main challenge was installation of pile to the design depth to resist lateral and tension loads in increasingly competent soils and platform level changes introduced by the client.

The delayed start of the project was another challenge, which required our utmost professionalism to complete the works 4 weeks ahead of schedule and with the quality fully accepted by the client.

## The solution

Installation of 520mm Franki enlarged-base piles to a depth of 9.0m in medium dense soil conditions to resist design loads of 1200kN compression, 600kN tension and 80kN lateral load. A total number of 935 Franki piles were installed.

Optimization of pile design was achieved through back-analysis of pile load test data and working closely with the project engineers.

## Project facts

### Owner(s)

Toshiba

### Solutions

Heavy foundations

### Keller business unit(s)

Keller East Africa

### Markets

Power

### Main contractor(s)

Caspian Construction Ltd.

### Techniques

Franki (DCIS) piles

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