

Dam Works, S1, S2, Vrachasi Hydraulic Tunnels

Aposelemi Water Dam

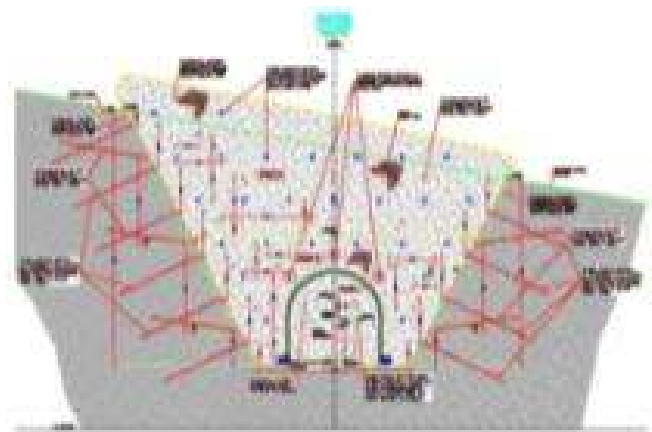
Crete, Southern Greece



Tunnel S1



Tunnel S2 Entrance



Tunnel S2 Exit

Project

Hydraulic tunnels for water transfer

Construction Cost

Total Cost: approx. € 15 m.

Project Schedule

Design: 2007 - 2011
Construction: 2008 - 2012

Project Description

Hydraulic tunnels for the transfer of water (S1 & S2 tunnels) from Aposelemi dam at the refineries and from there at Saint Nikolaos (Vrachasi tunnel)

S1 hydraulic tunnel length: 1,590m

S2 hydraulic tunnel length: 2,050m

Vrachasi hydraulic tunnel length: 680m

Tunnels effective cross section: 8.50m²

Excavation Method

NATM – Drilling and blasting – mechanical means

Geology

Phyllites, schists, limestones

Our Services

- Geological – geotechnical evaluation
- Detailed geotechnical and structural design

Construction details

- Use of piles
- Final lining from shotcrete at tunnel's top heading and reinforced concrete at tunnels sidewalls

Client

AKTOR S.A.

Dam, Hydraulic Project

Aposelemi Water Dam – Water intake structure

Crete, Southern Greece

Project

Water intake structure final design

Construction Cost

Total construction cost: approx. € 2 m.

Project Schedule

Design: 2007 - 2011

Construction: 2008 - 2012

Project Description

Water intake structure of horse-shoe shape cross section and connection with the swerve culvert

Cross section: 4.50m

Max. height: 4.00m

Length: 150m

Geology

Weathered phyllites, phyllites

Our Services

- Design and dimensioning of water intake structure
- Design and dimensioning of the connection between water intake structure and diversion culvert
- Design and dimensioning of water intake chamber
- Detailed geotechnical and structural design

Client

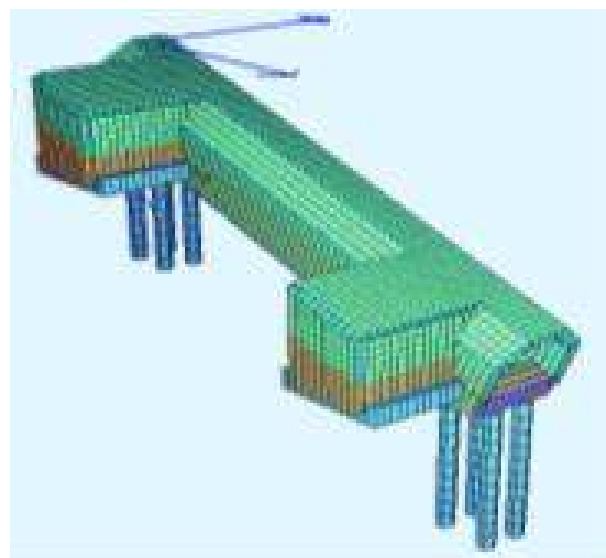
J/V TOMI S.A. – AKTOR S.A.



Water intake structure view



Structure's typical cross section



Structural analysis model