

# Water Diversion Tunnel CHAMSHIR Project

Kohgiluyeh-boyerahmad, IRAN

## Project aim

Providing water for irrigation of about 110 thousand hectares of lands, flow control and regulation of yearly 1.8 billion cubic meters, as well as generation of 482 gw/hr hydro energy

## Construction Costs

Construction Headrace TU: approx. USD 300 million

## Project Schedule

Design: 2013  
Construction: will be started in 2013

## Project Description, Construction Headrace

Water transfer from a regulating dam to powerhouse, circular profile

Length: 7465 m  
Curve radius: Straight  
Gradient: 0.065 %

## Method of Excavation

Single Shield TBM  $\varnothing$  5.30 m

## Geology

Carbonate sandstone, silty marl, claystone, siltstone, conglomerate  
Max. overburden: 180 m

## Our Services

Detail design of new segmental lining for refurbished Herrenknecht TBM; including:

- Segmental type selection (Rhomboidal – 6+0)
- Preparation of detailed geometrical design drawings
- Finalization of geometry with mould supplier
- Tunnel stability analysis and calculation of loads and load combination
- Structural design and analysis and preparation of rebar drawings
- Design of segmental lining based on steel fiber solution

## Client and Contact Person

Sabir Co. (General Contractor for Infrastructure Projects)

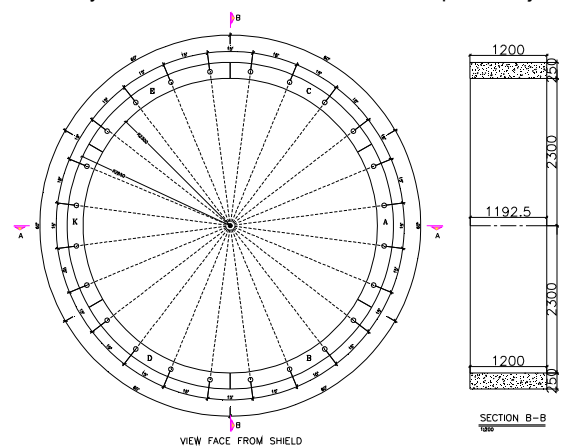
Mr. M. Khosrotash (Project Manager)



Chamshir dam location



Assembly of Herrenknecht Model S-124 in its previous job



Cross-section of 6+0 Rhomboidal segmental lining