

Balarud Dam, Iran



PROJECT SUMMARY

Name: Balarud Dam, Iran

Year: 2015 - on going

Client: Khuzestan Water & Power Authority

Main Contractor: OMRAN MARON

Instrumentation: LARZEH SAKHT SAVALAN

Consultant: DEZAB









OVERVIEW

Balarud dam is located in Khozestan Province, 27km north of Andimeshk. It is an earthfill dam with a central clay core, 1070m in length and 77.5m high. It provides water for irrigation, potable water, industry and hydro power. It impounds a 131,000,000 m³ reservoir and its plant capacity is 4Mw.

MONITORING

Monitoring of the dam construction integrity and long-term safety is carried out by recording measurements in the following key areas:

Main dam body
Pore water pressures in the core
Effective stress in the core
Inclination in the core & shell
Settlement in the core &shell
Groundwater levels

Foundation
Pore water pressures in the rock
Groundwater levels

Dam main drain Seepage

PRODUCTS USED

VW piezometers

Measurement of pore water pressure.

VW Total Pressure Cells

For measuring total earth pressures.

Standpipe piezometers

3D Mechanical Crack Meter

Remote Smart Mux

Smart Mux Interface

Portable MEMS Inclinometer

V-notch weirs

Measurement of seepage flows.

Staff gauges

Water level in dam reservoir.

Geo-XM

Magentic system for measuring ground settlement.

VW Readout VWR01

Measures all types of vw instruments.

G8 PLUS Data Logger

Geoaxiom software

Weather Station