

Tsankov Kamak HPP, Bulgaria



◆ Downstream view of left bank with weather station



◆ Direct & inverter telependulum stations



◆ Instrumentation cluster in dam body



The Tsankov Kamak Dam, Devin, Bulgaria

GKM Consultants was awarded a major contract to provide the instrumentation system for the Tsankov Kamak Dam in Bulgaria. GKM Consultants served as a sub-contractor to Alpine Bau GmbH, the primary civil contractor.

Tsankov Kamak Dam is located near the town of Devin. It's designed to be a concrete arch dam, with double curvature and a height of 130.5 m. Its length at crest is 468 m, volume content is 465,000 m³ and reservoir cross capacity is 110,900,000 m³.

GKM Consultants, in conjunction with local sub-subcontracting firms, has provided up to 200 instruments to measure seepage, stress, inclination, displacement, temperature, foundation pressure, seismic acceleration, weather parameters and more. In addition, a complete automatic monitoring system was deployed inside the dam through a fiber optic communications network.

To facilitate management of the data generated by the system, GKM Consultants has provided the sophisticated Vista Data Vision (VDV) data visualization software package. Relevant data and information can be viewed as graphs and tables through a special mimic board, which provides Virtual Digital Displays. This approach has made it much easier for site Engineers and Operators to monitor the dam's behavior. The same information was also accessible via the Internet using the VDV web browser module.