



Adit IV Tapovan site

Grouting Work In Hydro Electric Project

Region	Uttarakhand (India)
Type	Chemical grouting
Client	NTPC
Main Contractor	Rithwik Projects Private Limited
Execution of the work	Renesco India Private Limited
Construction Period	2018 – 2020

Project Description

The Tapovan Vishnugad power plant is a 520MW run-of-river project being constructed on Dhauliganga River in Chamoli District of Uttarakhand, India.

Major works at the Tapovan Vishnugad power project include the construction of the barrage, head race and tail race tunnels, power house, and switchyard.

The construction work was severely affected by the flash floods in June 2013. The diversion tunnel was completely washed away along with the under-construction cofferdam. Approach road to the silt flushing tunnel was also damaged.

Since after Flash flood in 2013 the Construction work was badly affected and the HRT with TBM (Tunnel Boring Machine) got stuck at 6 km from the portal.

Challenges to resume the work was to stop the running water with slush and to hold the squeezing of highly weathered rock mass by Consolidation/ Stabilisation.

The solution for the challenges was to use Highly customised Resins/ Ureasilicates/ Polyurethanes etc with deployment of New Technologies and modern Grouting equipment, which has created a success story by advancing TBM by 52 Meter and Crossed almost 75% of the Marked shear Zone in the alignment.

Scope of Service

- Providing and Injecting/applying PU Grout
- Chemical grouting with two component Polyurethane (PU) and Urea Silicate

Quantity:

Pressure Grouting of 2 component PU : 5000 kg

