



Grouting Work In Hydro Electric Project

Region	Uttarakhand (India)
Type	Chemical grouting
Client	NTPC
Main Contractor	Hindustan Construction Company (HCC)
Execution of the work	Renesco India Private Limited
Construction Period	2017 – 2018

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.

Construction of the hydroelectric power project began in November 2006. Power production from the plant was expected to begin in 2012, but sluggish tunnel excavation works and flash floods in June 2013 delayed its inauguration

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.

The Contract for again resuming the tunnel with TBM is awarded to M/S HCC Construction in 2016 with the available resources and deployment of new technologies if any to complete the project, HCC has done there efforts to advance the TBM section of HRT but due to squeezing of Rock, Overburden, Gushing of water and Class VI rocks (Augen Gneiss) with shear seams and clay band at unpredictable distance with highly weathered condition the advancement has become challenge.

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 : 100,000 kg

