

Check survey in the Rohtang Pass Highway Tunnel project





Client:

Strabag India Pvt. Ltd.

Execution period:

2015 - 2017

Place:

Indien, Himachal Pradesh, Manali

Project description:

The Rohtang Tunnel (Atal Tunnel) is a road tunnel in the northern Indian state of Himachal Pradesh and at a length of 9.02 km, it is the longest tunnel above 10,000 feet (3,048 m) in the world. The Rohtang Tunnel route makes it possible to keep the road to the valley open all year and reduces the travel time by about 4 hours.

Project costs: 250 Mio. EUR

Period: May 2002 until Oct 2020

Service description:

The highly accurate basic network was created on site by the client and measured by means of various measurement methods at enormous expense:

- GNSS baseline observations
- terrestrial total station observations
- leveled height differences

For several epochs, these data were evaluated in combined network adjustments by DMT.

In addition, control surveys were carried out in the relatively isolated region under demanding working conditions in two measurement campaigns during the tunnelling work. Network measurements were carried out in the reverse tunnels and supported by gyro measurements.

An evaluation of the gyro-based net measurements by means of geodetic adjustment software finally enabled a high accuracy of breakthrough in the ranges of the Himalaya!



