



HYDROELECTRIC POWER PLANT TUNNEL, PERU

20.06

Underground & Open Pit Mining

Hydroelectric Power Plant Tunnel

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Project	Hydroelectric Power Plant Tunnel
Location	-
Country	Peru
Year of installation	2014
Customer	-

Initial situation During construction of the headrace tunnel in July 2012 for a hydro power plant some severe rockburst occurred. The high internal stress in the rock and overburden over 1000 m on top of the tunnel as well as the brittle metamorphic character with a rock mass rating RMR > 65 caused some severe problems during the project.

Description The tunnel was divided in sectors to analyse the stress level in regard to the *high stress classification* whereas it shows that some rockbursts of level 2 and 3 occurred. In the most critical zone a support system with MINAX[®] 80/4 was applied in combination with mechanized installation thanks to Geobrugg's MESH[®] handler. The installation time had been decreased between 20 to 25% and safety for workers was significantly improved.

Protected object	Other
Corrosion protection	GEOBRUGG SUPERCOATING
Stabilized area	5000 m ²
Bolt length	2 m - 4 m
Bolt pattern a	1.5 m / 1.5 m

For questions please contact our Geobrugg specialist at your side

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