



## Roadsaw innovation completes 22kms in record time

### ABRASION SYSTEMS

REF No. D/A-8

**Client:** Snowy Hydro  
**Location:** The Snowy Mountains, NSW  
**Project:** Fibre optic cable installation

Twenty two kilometres of fibre optic communications cable was required to be laid in to two of the Snowy Hydro tunnels during a planned twelve day maintenance shutdown.

It was planned that the tunnel would be dry but in fact up to 300mm of water was flowing during the project. The cutting had to be done in tunnels that inclined upwards and there were variances between the types of aggregate used in the tunnel walls.

The work had to be done around a large scale rockbolting and mucking-out program with heavy machinery passing by, which made for challenging working conditions.

DecoTEC suggested a dovetailed cutting shape that would lock the cable in place in the event of grout adhesion failure - water flows of six metres per second could have dislodged the cable with catastrophic effect on the 960MW Murray 1 Power Station.

Over 4 tonnes of equipment was mobilised to site from all over the world in two weeks, and the client flew to New Zealand to view a cutting test of the proposed methodology.

Due to the unforeseen water and difficult conditions in the tunnel, DecoTEC therefore deployed two x twelve hour shifts and finished the job well before deadline. The client was so impressed

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Because the cutting heads were hydraulically driven, it was possible to rotate the blade in a range of between 400 rpm and 3000rpm and still deliver 40 to 50kw of power to the blade head. Due to the radical change in aggregate halfway through the tunnel, this was a crucial advantage.

Initial speeds of concrete cutting dropped by over 70% over the space of ten kilometres, but DecoTEC was able to adjust the cutting speed and return to required speed within an hour. The project was time-critical as Snowy Hydro had to recommence power generation as quickly as possible.

with the project outcome that DecoTEC was invited to do further works on the project.

Please contact our Sydney head office to meet with a DecoTEC representative in your state to discuss your project:

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