



## DecoTEC Cuts Through Dam to Increase Water Storage

### ABRASION SYSTEMS

REF No. D/A-5

**Client:** SEQ Water  
**Location:** Hinze Dam, Queensland  
**Project:** Hinze Dam Stage 3

The Hinze Dam Stage 3 project has been identified as a priority to increase the dam's water storage capacity and to reduce downstream flood levels and the number of properties vulnerable to flooding.

The Stage 3 project will raise the Hinze Dam embankment wall from 93.5m to 108.5m, providing a total storage capacity of 309,700m litres, almost double what it is currently.

DecoTEC was requested to demolish a 4.6m wide slot through the dam's ogee crest, for two reasons:

- 1) for access to the stilling basin during construction of the spillway and
- 2) for a channel for the fish to exit the stilling basin to adhere to current ecological standards.

With the spillway wall being raised, the base must be enlarged to ensure the wall is structurally sound, so the existing right hand Guide Vane will be shortened

**“We are very happy with the project outcome and DecoTEC’s commitment to quality, safety and environmental management.”**

**Matthew Tutton, Project Engineer, Hinze Dam Stage 3**

on the upstream side by 15m to ensure there is enough room for the stage 3 spillway toe. To achieve this, DecoTEC will drill a 50mm diameter wire hole through the 6m of concrete through the Guide Vane.

As the Stage 3 dam will be constructed over the existing one, the most efficient way to provide a good mechanical bond between old and new concrete is to expose the surface aggregate through hydro-demolition: high pressure water blasting (20,000psi @ 50L/min).

The raising of the dam will also increase the dam's hydrostatic pressures. To relieve this pressure, DecoTEC will drill 26 core holes 25m deep, to ensure that any water pressures can be released into the

spillway gallery and then drained out to the stilling basin.

Our slurry control systems within the gallery are so efficient that HDA have now adopted our techniques.

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

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ISO 9001:2000  
ISO 14001:2004