

DECOTEC

STRUCTURAL MODIFICATION



A Cut Above the Rest...

ABRASION SYSTEMS

REF No. D/A11

Client: EMPRESA URRA S.A. E.S.P
Location: Urra Dam, Colombia, South America
Project: Urra Dam Structural Remodification

DecoTEC has overcome a range of logistical and engineering challenges to successfully complete the structural modification of a remote hydro-electric dam in Colombia, South America.

The project – to raise the Full Supply level of Urra Dam in the state of Cordoba – required the removal of a 5.2m high section of the existing spillway and structural modifications to the remaining crest to accommodate new fusegates.

DecoTEC's contract was the first work of its kind by an Australian company in South America and worth an estimated 5% of Australia's annual export trade with Colombia.

The design engineers were concerned that conventional demolition would cause micro-cracking to the structure and damage sensitive monitoring equipment; accordingly DecoTEC recommended the use of concrete bursters and wire-saws to complete unusually deep and accurate cuts.

Access to the work area was difficult and working platforms had to be designed and constructed on both the upstream and downstream faces of the dam.

To maintain vehicle access to the bridge spanning the dam spillway, a 120 tonne crane was erected on the abutments. Numerous comprehensive studies were undertaken regarding the complex rigging required for removing concrete blocks from under the deck.

Despite encountering significantly more steel reinforcement than shown on the as built drawings, the work was successfully completed with the client expressing surprise and satisfaction at the accuracy of finished surfaces. "We had allowed for make good to give us the necessary accuracy but

DecoTEC's cut surfaces are so precise we probably won't need this", said the dam's on site engineer. With the completion of Urra Dam and similar projects, DecoTEC has established itself

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as a world in large scale structural modifications.

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

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ISO 14001:2004

UNRESTRICTED DEMOLITION

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