

Construction of Hume Dam, 1919-1936

Part 7 – Tools of Trade

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At a time when horse power often referred to the four-legged variety, some remarkable machines using steam, helped build Hume Dam.

The Bucyrus steam shovel could shift 3 cubic metre loads and ran on caterpillar tracks. A variety of cranes, diggers, scoops and navies, mostly wood fired, were deployed. Both quarries made considerable use of rail on which to run their cranes, loaders etc. Steam locos were used extensively.



The Bucyrus steam shovel at work in the quarry.

Steam crushers processed thousands of tons of stone to make concrete. Both states used steam to generate electricity. Victoria produced 100kW at 415/240 volt AC for mixers, workshops and housing and ran 24/7. The NSW demand was far greater. They had two 330kW, 480V DC generators plus a smaller one which provided 415/240V for light and power around the village, workshops and sheds. The plant shut down at 11pm. The stone quarry also had a power house. The cement mixers, flying fox, conveyer belts, pumps and compressors were all electrically driven.

The 10 ton Lidgerwood flying fox or cable way spanned the river with a large high tensile steel cable, 393m point to point (Albury Post Office to the Cinema Centre is a guide).

On the Victorian bank, the cable was attached to a static 20m oregon pylon and securely anchored. On the NSW side, it was attached to a 20m mobile pylon located well back from

the river from which it was operated. Mounted on four parallel rails along the arc of a circle, it could travel 115m, allowing coverage of most of the spillway worksite. By anchoring the cable down to the chassis and loading that with 300 tons of concrete blocks, the centre of gravity was reduced dramatically. Ten ton loads on the cable trolley could then be placed with impunity.



The mobile pylon or home tower of the Flying Fox and Cable Trolley.

The operator sat near the apex, giving him a birds-eye view.

The structure on the left is the cooling tower for the steam engines.

The coal burning power house with smoke stack is adjacent.

Communication between the operator and the work site men was done by telephone. External links were via a telephone line from the Albury telephone exchange to an exchange at the NSW Public Works Office at the dam. From there, various parts of the works, including Victoria, could be connected.

Brought to Hume from Burrinjuck, the flying fox was virtually the first piece of equipment installed and the last to be removed before it saw service at Yarrawonga Weir from 1937.