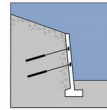




FREYSSINET



New Structures

Prestressed ground anchors

Kariba Plunge Pool Strand anchors Siavonga, ZAMBIA



General contractor

RAZEL-BEC

Customer/Owner

Zambezi River Authority

Engineer

Stucky

Freyssinet subsidiary

Freyssinet Pole Grands Projets

Works period

Start date: September 2020

End date: September 2021



PROJECT DESCRIPTION

Kariba Dam is the world's biggest dam based on water storage capacity with 420 feet (128 m) high with a crest 1899 feet (579 m) in length. In 2017 began a major project which aims to reshape the plunge pool downstream from the dam.

Indeed, the water discharge from the spillways created a 80m deep pit in the plunge pool, creating instability at the dam foot.

To perform this plunge pool reshaping, a temporary dam is built to allow future dewatering.

FREYSSINET MISSION

Freyssinet's mission is to supply 48 permanent strand anchors to anchor the temporary dam piers to the ground. Between 6 and 8 cables will be installed per pier. They are composed of 13 strands from 35 to 50 m long. Freyssinet will assist the main contractor in their implementation and will ensure their tensioning to the designed service load, following the standard sequences and tests.

They are equipped with head load cell to measure their live load during the project.

These anchors have the ability to be re-tensioned in a later stage during the plunge pool dewatering.

