

Client: Afritin Mining
Services: Mining infrastructure design, Structural Design, Preliminary Economic Assessment
Appointed Date: 2018

Afritin Namibia Mine, Namibia

Mine Upgrade / Expansion: Detail Design and PEA

The Task

Afritin Mining appointed Nurizon to undertake the detail engineering design in terms of their UIS phase 1 project.

Phase 1 of the project comprised of the design of a 80 tonnes/hour processing plant (pilot plant), including associated services, infrastructure and structures

Following the completion of Phase 1, we were also required to complete their PEA (Preliminary Economic Assessment) for the Phase 2 expansion.

Phase 2 of the project comprised of conventional opencast mining methods (10m high mining benches), with mining material being liberated using drilling and blasting. The beneficiation process comprises of Dense Medium Separation (DMS) modules, combined with a fine gravity concentration circuit. Wet High Intensity Magnetic Separation (WHIMS) is used to split the final concentrate into saleable tin and tantalum concentrate.

Also included in Phase 2 part of the project was the feasibility of a bulk pipeline and pump system, to pump treated seawater from the Erongo Desalination Plant (near Swakopmund, Namibia) to the UIS Phase 2 Project, at UIS, Namibia.

The total length of the pipeline is approximately 123km, including 5 pump stations, with a static head of more than 425m.



Design Services

- Mining Infrastructure Design
- Structural Design
- Detail Design
- Preliminary Economic Assessment

