

Turnkey Civils, Liphobong Tailings Dump Materials Handling System, Lesotho, 2017

The existing conveyor head/drive pulley was elevated above local ground level with a discharge chute to discharge material onto the tail end of the new DemcoTECH 320m long extendable conveyor which consists of a tail-end horizontal winch take-up unit and a drive unit as well as a brake and a VSD with resistor banks. It has a suspended belt magnet as well as a mass meter all of which is covered by side and roof sheeting fitted along the length of the conveyor. The extendable conveyor feeds onto a diagonal retractable conveyor approximately 120m long installed from an existing transfer point and which will also be able to feed onto a standby slewing conveyor or straight onto the retractable conveyor.

This layout ensures that tailings may be routed to two discharge points namely; to the shiftable conveyor depositing tailings along the wall or onto the standby slewing conveyor where a kidney-shaped stockpile is deposited to be dosed as required for the operations.

The shiftable conveyor is a 60m take up/belt storage system which feeds onto a slewable boom. The shiftable conveyor was lengthened in increments of approximately 12 meters from the initial length, to the final 455m length along the tailings dump wall. The tail belt storage system is modular and is anchored in the dump with buried anchors. A manual winch releases and retracts the belting as the head end advances. The storage area is ideal for belt splicing in parallel with the conveyor head end advancement operation.



Client	Turnkey Civils Lesotho
Commodity	Diamonds
Contract Type	EPCM
Duration	12 months, (2016 -2017)
Location	Lesotho

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