

## ESKOM, Majuba Power Station Coal Supply Facility Upgrade, South Africa, 2014

DemcoTECH was appointed to investigate the existing coal delivery facility at this 6 x 700MW power station with the view to upgrading the throughput and system reliability. DemcoTECH developed various conceptual designs and prepared a simulation model for the rail delivery, tippler and power station feed system in order to predict the required equipment capacity and the rail infrastructure modifications necessary to deliver 14Mtpa coal reliably by rail.

Having prepared a number of feasible options for the Client's consideration, DemcoTECH was able to recommend a specific scope for the upgrading and enhancing of the coal off-loading and delivery system. This included enhancements to the rail tandem tippler, re-design of the wagon indexer, revised conveyor layouts and a streamlining the off-loading process.

DemcoTECH's scope ranged from site investigation measurements to time-and-motion studies, system performance evaluations and equipment audits to re-engineering of the various identified components of this system. Through this process of design, optimisation and re-engineering DemcoTECH was able to offer the Client significant throughput enhancements with significant CAPEX and OPEX savings. DemcoTECH prepared a detailed implementation scope supported by designs, drawings and specifications to which the plant is presently being upgraded by EPC contractors.

DemcoTECH Engineering is a specialist bulk materials handling and niche process plant company, offering services from conceptual design through to project completion to the power generation, cement, mining, metallurgical, manufacturing and port handling industries. Services include conceptual design, feasibility studies, design, engineering, procurement, expediting, construction and commissioning. Plant supplied by DemcoTECH includes troughed conveyors, air-supported conveyors, pipe conveyors, rail-mounted slewing boom stackers, pivot boom conveyors and mobile conveyors, road load-out stations, rail tipplers.



<b>Client</b>	ESKOM
<b>Commodity</b>	Coal
<b>Contract Type</b>	Concept feasibility study
<b>Duration</b>	2013 – 2014