

BLYVOORUITZICHT GOLD MINE

STOCKPILE FEED SYSTEM

SCOPE OF WORK

MAED as project managers completed a materials handling project at the Number 5 shaft of the Blyvooruitzicht Gold Mine situated at Carltonville, Gauteng Province, South Africa.

A 1050 wide x 240 metre long belt conveyor, troughed at 45° and inclined at 5° from the horizontal was installed, from the existing shaft-head steelwork and feed bin (the bin was modified during the course of the project), to the designated stockpile and tunnel area. The belt conveyor complete with vertical gravity take-up and drive was inclined as indicated to provide a working height of 32 metres at the head.

Two vibrating feeders were installed inside the stockpile tunnel. These are fed from the live stockpile via rod gates and chutework, that pull ore from the live stockpile and feeds by way of chutes, a 900 wide troughed off-loading conveyor x 70m long. This conveyor outside the tunnel is inclined to a head height of 8 metres, allowing a full chuted discharge into various road transport vehicles. The MAED project management team's responsibility included the following disciplines:

- Design
- Draughting
- Purchasing
- Construction and project engineering

SYSTEM DESIGN CRITERIA STATISTICS

Capacity:	100 000 tonnes per month
Working hours:	30 days per month x 10 hours per day
Design Capacity:	400 tonnes per hour
Material:	run of mine
Size:	-300
Live Stockpile:	5000 tonnes

The project was undertaken in a fully functioning mining environment. This required the project to co-exist with ongoing production requirements in a nondisruptive fashion.

Correct planning and implementation enabled the project and subsequent tie-ins, to the mine's mainstream material flow areas to be affected with minimal disruption.

- Civils
- Mechanicals
 - Electrical











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