



**MERCC**



**COMPANY PROFILE**



# INDEX

Company Overview

Services Offered

Projects/Clients

Company Details

BEE rating – Empowerlogic - Level 4 Contributor Certificate

3

4 - 7

8 - 9

9

10



# COMPANY OVERVIEW

**MERCC** ([www.mercc.co](http://www.mercc.co)) is a world class contract mining company and has associations with Resourceco Group ([www.resourcecogroup.com](http://www.resourcecogroup.com)), KWJ Consulting ([www.kwjconsulting.co.za](http://www.kwjconsulting.co.za)) and BrightSky Group ([www.brightsky.co.za](http://www.brightsky.co.za)).

At **MERCC** we understand the enormous amount of working logistics that go into operating a mine. We provide professional and prompt mining contracting services. We have the expertise and resources to undertake surface and hard rock mining.

Every service provided at **MERCC** has been tried and tested. Our skills-base and on-site experience guarantee a project that will run at a profit and exploit the best possible advantage of every shaft and excavation.

In addition, we do not consider any job as "small" and take as much pride in sweeping and vamping as we do with vital excavations and development.

Our work ethic combined with years of hard earned experience is applied with precision on every project that we embark on.

Our mission is to at all times mine with Safety and Innovation.

The **MERCC** name is used by a group of companies. The companies are all mining companies.

Each company has one mining project allocated to it.

# SERVICES OFFERED

The **MERCC** service offering comprise project management, mine design, planning and engineering and operating of mining activities of any shape or form.

## 1. PROJECT MANAGEMENT

**MERCC** specialises in green field implementation projects and has the flexibility to integrate with the client team during project implementation, as well as to conduct site-based management. Contracts may be carried out as turnkey or as Construction Management projects.

**MERCC** project management capability extends to the following services:

- Scope planning, definition and control
- Schedule development
- Resource planning, cost estimating / budgeting
- Procurement planning, execution and control
- Cost control and analysis
- Risk management planning and control
- Safety management planning and control
- Quality planning and control
- Communications planning and execution (performance reporting)
- Human resources planning and control
- Project integration management

**MERCC** provides project control services able to deliver projects on track, on time and in budget. We integrate planning, scheduling, cost control and status reporting functions to simplify project management and administration.

## 2. MINE DESIGN, PLANNING AND ENGINEERING, AND OPERATING

### APPROACH TO OPEN PIT MINING AND SURFACE MINING ASPECTS

**MERCC** personnel have strong operational and technical background and have gained substantial experience in mines employing a multitude of mining methods, exploiting all commodities on more than one continent. As a result, **MERCC's** solutions and advice are not only practical and workable, but take account of appropriate geotechnical, hydrogeological, economic and environmental considerations.

Our services cover scoping, pre-feasibility and feasibility studies as well as economic evaluations, detailed mine design and layouts, production scheduling and equipment selection, operating cost estimates and capital expenditure estimates.

**MERCC** employs an innovative and rigorous mine planning methodology that results in a comprehensive technical report inclusive of the life-of-mine plan and techno-economic model for any given mineral resource. The methodology focuses on pit optimisation to determine the cut-off strategy, economic mining depth, size and scale of operation. We are dedicated to identify the best option for project development and produce client-focused solutions to technical challenges.

With the growing need to bring projects into production more quickly and on budget, we can accelerate the process for mining companies by supplying quality consultants associated with **MERCC** to supplement the client's own technical resources to achieve the desired outcomes within the project timeframe. Our personnel will ensure appropriate decisions to guide project development and are committed to reviewing aspects of project advancement which can be done in parallel to minimise the risk of any rework.

# SERVICES OFFERED

Specific Services offered in respect of open pit mining and surface mining aspects/operations:

- The full range of studies from scoping to detailed feasibility
- Mine planning reviews and technical audits
- Development and implementation of optimal mining strategies
- Operational assistance, reviews and improvements
- Financial evaluations
- Risk analyses
- Project reviews
- Due Diligence Investigations
- Reclamation of surface sand, slime and rock dumps.
- Demolition and rehabilitation of processing plants.
- Opencast operations – drilling, blasting, loading and hauling.
- Rehabilitation of slime and sand dumps
- Loading and transport
- All labour hire for above as required by mine
- Actual physical mining
- Carrying out all of the above as mine contractors to deliver the desired product on time and at the agreed price

## Approach To Underground Mining

The **MERCC** methodology focuses on understanding the complete mining context or characteristics of the deposit. This understanding is fundamental to select the appropriate mining method and establish a robust mine plan. The design of stoping blocks using the appropriate cut-off grades and minimum mining widths is followed by optimised production and development scheduling. All mine design and schedule opportunities are left open until an optimised plan is defined.

We recognise the constant need to match changing commodity prices and capital costs with appropriate responses from mining operations: reduction in operating and/or capital costs when prices fall, and increasing capacity when prices rise. We also understand the socio-economic implications of mining operations and address these in our strategic planning.

We are focused on producing mine designs and schedules that make the most effective use of mine capital, in both short and longer term time frames. We can assist companies to optimise the transition from open pit to underground mining by offering a thorough analysis of the appropriate cross-over depth as well as presenting highly mechanised and often automated solutions.

Whether optimising an existing operation or deciding how to extract a new deposit, **MERCC** can help to ensure that appropriate solutions are understood and implemented.





# SERVICES OFFERED

## Specific Services offered in respect of Underground Mining:

- Mining methods selection
- Complete mine design
- Development and production scheduling including sequence optimisation
- Geotechnical characterisation
- Ground support system design
- Equipment selection
- Engineering studies (from scoping to feasibility)
- Drill and blast design
- Strategic planning: cut-off grade and production rate analysis
- Fragmentation analysis and draw control for caving operations
- Backfill system design
- Risk analysis and management
- Due Diligence Investigations
- Ventilation system design
- Operational review and assistance
- Incline shafts and incline service way
- Incline shaft sinking and equipping.
- Rehabilitation of service inclines and equipping of inclines.
- Vertical shaft support and equipping.
- Shaft restoration and equipping.
- All labour hire for above as required by mine.
- Stopping operations
  - Ledging operations
  - All stopping operations
  - Stope cleaning conventional and water jetting
  - Longhole stopping
- All labour hire for above as required by mine
- Actual physical mining
- Carrying out all of the above as mine contractors to deliver the desired product on time and at the agreed price
- Dropraising (upsidedown boxholing)

## General Mining Aspects

- **Development Operations**
  - All development operations
  - All development cleaning operations
  - All development support and cleaning operations include flat and incline development
  - Labor hire for mining and mining engineering.
- **Rehabilitation**
  - Opening-up and rehabilitation of all areas.
  - Ore pass rehabilitation.
  - Sweepings and vamping
  - Stope face sweepings.
  - Stope vamping of gullies and ore passes.
  - Vamping of incline and flat ends.
  - Vacuum cleaning / vamping.
  - Labour hire for all sweepings and vamping operations.
- **Support**
  - Meshing and lacing.
  - Shotcreting /Guniting.
  - Installation of long anchors - grouted and pre-stressed.
  - Installation of timber and steel support in all areas.
  - Installation of grouted support in stope panels.
- **Reclamation**
  - Reclamation of all equipment and stores from all areas
  - Labor hire for all reclamation operations.

# SERVICES OFFERED

- **Equipping**

- All stope and stope panel equipping
- All development equipping.
- All service ways equipping.
- Installation and re-grading of tracks and drains.
- Installation of A to C class rails and drains.
- Installation and removal of all types of box fronts.
- Installation of winches.
- Installation and reclamation of ventilation fans and pipes.
- Installation and rehabilitation of switches.
- Installation and reclamation of all electrical cables.
- Installation of tips and grizzlies.
- Establishment and construction of battery bays and installation of equipment.
- Equipping of refuge bays.

- Equipping of station areas and safety devices.
- Haulage maintenance and rehabilitation.
- Labour hire for all equipping operations.

- **Labour Hire**

- Labour hire for all mining and engineering operations.

- **Engineering**

- All mining engineering and services and installations.
- Construction of chrome plants.
- Construction of crushing and screening plants.
- Full turn key construction capability

- All labour hire for above as required by mine
- Actual physical mining
- Carrying out all of the above as mine contractors to deliver the desired product on time and at the agreed price



# PROJECTS/CLIENTS

The following table represents a snapshot of work done at various clients by **MERCC** and/or directors and shareholders of **MERCC**:

<b>Glencore/Xstrata Alloys – Helena Mine (Chrome)</b>	Mine Development (Aug 2012 to present day, ongoing)
<b>CMC - West Wits Gold Mine</b>	Totally in charge of reclamation of massive surface sand and slime ore reserves
<b>Rand Gold : West Wits Gold Mine</b>	Totally in charge of reclamation of major sand dump reclamation operations producing 100 000 to 120 000 tons per month
<b>Durban Deep Gold Mine</b>	Opening-up and rehabilitation of old areas, major capital development, long hole drilling and stoping, equipping, reclamation, sweepings and vamping, secondary on and off-reef development, rehabilitation of slime dams, meshing and lacing, shaft sinking, equipping and rehabilitation. Opencast mining Main reef , South Reefs, and Venterdorp contact reef
<b>Western Platinum Mines - Karee Mine</b>	Labour hire and diamond drilling.
<b>Nicor (Pty) Ltd - Chrome Eden</b>	Totally in charge of opencast mining, loading and hauling operation. Sinking and equipping new incline shaft including the installation of headgear and surface infrastructure. Surface exploration, drilling and management of crushing and milling plant.
<b>Mozambique NIASA Titanium Project</b>	Open pit with crushing and screening and Jigging plant.
<b>KAO Diamond Mine, Lesotho</b>	Feasibility study and mining plan. Mine was sold to international investors.
<b>DRD North West Operations, Goudkoppies Opencast - completed.</b>	Complete open cast operation with crushing plant 100 000 tons of gold bearing reef delivered to the Plant monthly. Rehabilitation of a million tons of waste rock and overburden monthly.
<b>Anglo American Platinum - Modikwa Platinum Mine</b>	Surface and underground construction. Secondary support in incline shafts Development: declines
<b>Spitskop Colliery</b>	Complete open-cast operation with wash plant 60 000 metric tons of coal mined monthly
<b>Renco Diamond mine</b>	Alluvial mining with four diamond pans and flow sorts
<b>East plats</b>	Underground construction development and stoping
<b>International Ferro Metals</b>	Surface and underground construction. Removing of beneficiation plants, overland conveyer belts, crushing and screening plants. Building of workshops. Complete construction of ore Extraction tunnel and conveyer belting
<b>Nimcor Chrome</b>	Surface construction. Renovation of mine houses.



# PROJECTS/CLIENTS

## Mooinooi Beneficiation Plant

Running and converting of wash plant and crushing and screening

### Feasibility studies completed for:

**Amplats** - Assisting the mine to restructure, align workforce and to increase production to meet requirements of plant.

**Democratic Republic of Congo** - Kolwesi and Mtwaba areas – to restart all mining operations stopped by former Government.

**Hex River Chrome** - Mining of underground by accessing ore reserves from old opencast high wall face.

**Two shafts at Doornfontein** - info gathering and due diligence review for international investors.

**Gold dump screening (East Rand)** - crushing and screening operations

**Barplats (Platinum Brits area)** - info gathering and due diligence review for international investors.

**Segi Ltd (South Korea)** - Development Company Sales of commodities to the far east

## COMPANY DETAILS

### "MERCC"

Telephone Number: +27 (011) 781 4896/8 (head office)

Fax Number: +27 (086) 633 0926

Email: [keb@mercc.co](mailto:keb@mercc.co) / [riaan@mercc.co](mailto:riaan@mercc.co) / [info@mercc.co](mailto:info@mercc.co) / [admin@mercc.co](mailto:admin@mercc.co)

Physical Address: 3rd Floor Roan House, 263 Kent Avenue, Randburg 2194 (head office)

Postal Address: PO Box 17, Pinegowrie, 2123