The core to Materials Handling and Logistics is to ensure efficiency and effectiveness as it represents 20% of the mine’s operating costs! From the point of extraction through to the mill is a continuous process that needs to work in alignment.

Gain Valuable Insight Into:
- The latest technologies to be used in Materials Handling for Surface and Underground mines
- Complying with safety requirements and the necessary criteria for a successful site inspection
- Various methods for optimum conveying
- The importance of chute design in Materials Handling
- A strategic Materials Handling process in action in a Surface mine
- Underground controlling of the logistics system
- Effective use of horizontal transportation

Corporate Silver Sponsors:
- Goodyear
- Unitrans Freight
- Manitou

Corporate Business Branding Sponsor:
- Marcus Evans

HALF-DAY WORKSHOP
Designing and Implementing the Most Cost-Effective Logistics and Materials Handling System

Your Expert International Presenter:
Prof.Dr.ir. Gabriel Lodewijks
President
CONVEX, THE NETHERLANDS

International Presentation By:
Prof. Dr. ir. Gabriel Lodewijks
President
CONVEX, THE NETHERLANDS

Expert Presentations By:
Steven Rupprecht
Senior Consultant - Mining Engineering
RSG GLOBAL

Prof. Roger Thompson
Department of Mining Engineering
UNIVERSITY OF PRETORIA

Paul Nash
Safety Manager - Operations
ANGLO PLATINUM

Werner Baller
Managing Director
WEBA CHUTE SYSTEMS

Eugene Strydom
Senior Mechanical Engineer
HATCH

Warren Beech
Attorney
LEPPAN BEECH INCORPORATED

Wilton Monnery
Technical Manager - Conveyor
GOODYEAR ENGINEERED PRODUCTS DIVISION - SOUTH AFRICA

Dr Xiaowei Pan
Project Manager - Technology
GROUP TECHNICAL SERVICES DE BEERS SA

Simon Curry
Engineering Manager
ETS

Gert Brits
General Manager
UNITRANS FREIGHT - MINING SERVICE

Frank Rosslee
Mining Engineer
XSTRATA - THORNCLIFFE CHROME MINING OPERATION

Phillip Tshiloane
Production Manager
ASSMANG - BLACK ROCK

Leonard Rweyemamu
Mining Engineer
PLACER DOME TANZANIA - NORTH MARA GOLD MINES

Johann Wannenburg
Manager - Specialised Engineering
ANGLO TECHNICAL DIVISION

Willie Vermaak
Industrial Engineer - Specialised Engineering
ANGLO TECHNICAL DIVISION

Anthony Coutinho
Principal Inspector of Mines
DME (DEPARTMENT OF MINERALS AND ENERGY)

Bennie Strydom
International Sales Manager
TRU-TRAC ROLLERS (PTY) LTD

Sarel Blaauw
Managing Director
TACMIN (PTY) LTD

Richard Galloway
Director
ORE MECHANIZATION

Don Bowes
Sales Manager
MANITOU

Choose from two optional streams for Day Two
STREAM 1: Surface Mining
STREAM 2: Underground Mining
08:00 Registration and Morning Coffee
08:30 Opening Remarks from the Chair

08:45 Linking Mine Planning and Simulation Software for Optimal Material Handling System Design
- Examining the latest simulation software used in Materials Handling
- Identifying constraints that prevent profit maximisation
- Using a case study to compare the traditional approach vs the simulation approach
Willie Vermaak
Industrial Engineer - Specialised Engineering
Anglo Technical Division

09:30 Complying with Safety Requirements and Reviewing the Criteria for Positive Site Inspection Ratings
- Examining the checklist, check bound and legislative issues
- Obtaining clarification with regards to the grey areas
- Highlighting what to expect from site inspections
Anthony Coutinho
Principal Inspector of Mines
DME

10:30 Regulatory Updates - Safety Requirements and Policies, Environmental Issues and Compliance
- The new Mine Health and Safety Act (MHSA) regulations and the impact that they have - a practical perspective
- Materials Handling and machinery related accidents - some practical lessons
- Road transportation and potential liability
- Responsibilities placed on the employer and other appointed persons
Warren Beech
Attorney
Leppan Beech Incorporated

11:15 CASE STUDY: Safety in Materials Handling and Logistics
- Creating a culture of safety
- Examining the factors that ensure safe operations in the handling of materials on-site
- Safety as a core principal - ensuring a fatality free environment
Paul Nash
Safety Manager - Operations
Anglo Platinum

12:00 Soft Sensors for Weightometers
- Understanding the need to use soft sensors for weightometers
- Reviewing the development of weightometer soft sensors

12:30 Luncheon

13:30 The Challenges and Advances in Belt Feeder Design
- Design considerations
  - design criteria
  - material testing
  - hopper geometry
- Design methods - calculating feeder loads
  - theoretical
  - empirical methods
  - reisner method
  - bruff method
  - Jenike and Johansen method
  - experimental model
  - model design
  - transverse plate positioning
  - arch tension
  - calculations
  - results
  - commissioned belt feeders
- Comparison of results
Eugene Strydom
Senior Mechanical Engineer
Hatch

14:15 The Importance of the Transfer Point in the Bulk Material Handling Process
- Exploring latest technology
- Identifying general problems
- Providing solutions
- Case studies revealing results achieved in various applications
Werner Baller
Managing Director
Weba Chute Systems

15:00 Afternoon Refreshments

15:15 Lowest Cost Per Ton Conveyed
- Belt selection using eight design criteria
  - rubber compounds
  - elongation
  - load support
  - troughability
  - flexlife
  - impact
  - tension
  - splice
- Utilising Minuteman 2000 to enable belt calculation
- Evaluating Low Rolling Resistance compound
- Illustrating the Individual Tensioning Unit
Wilton Monnery
Technical Manager - Conveyors
Goodyear Engineered Products Division - South Africa

Day 1
Monday
25th July 2005
16:00 Investigating Transfer Chute Designs and the Use of Discrete Element Modelling
- Examining the impact wear on belting
- Observing the abrasion wear on belting
- Visualising materials flow through the chute
- Cutting edge technology in the design of chutes

Simon Curry
Engineering Manager
ETS

16:45 Closing Remarks from the Chair and End of Day One

Day 2

26th July 2005

STREAM ONE - SURFACE MINING

08:00 Registration and Morning Coffee
08:30 Opening Remarks from the Chair

08:45 Identifying New Machinery and Tools that can be Used to Enhance Surface Mining Materials Handling
- Examining the design and management of the mine haul road for transportation using ultra-heavy haul trucks
- What are the major cost-factors in ultra-heavy truck-based haulage and how can they be controlled?
- Mine road maintenance - approaches and solutions
- Condition triggered mine road maintenance - integrating mine-wide asset location and management utilities as a road management tool

Prof. Roger Thompson
Department of Mining Engineering
University of Pretoria

09:30 Productivity Improvements and Cost Savings in the Transport and Logistics Sector
- Discussing lessons learned over many years of experience
- Referring to various case studies
- Acknowledging what the customer can do to help the service provider in the generation of productivity improvements

Gert Brits
General Manager
Unitrans Freight - Mining Services

10:15 Morning Refreshments

10:45 TANZANIAN CASE STUDY
Strategic Materials Handling with Respect to Gokona Gold Development Project - Overview of the Project
- Fleet upgrade
- Recent owner mining

11:30 Tracking and Aligning of Conveyer Belts and Controlling Spillage at Loading Points
- Examining the tracking and alignment of conveyers
- Highlighting different types of trackers
- Comparing between continuous skirting and block skirting
- Evaluating impact idlers vs impact beds
- Illustrating the advantages and successes

Bennie Strydom
International Sales Manager
Tru-Trac Rollers (Pty) Ltd

12:15 Luncheon

13:15 Insight Into the Machinery and Vehicles Used to Maximise Efficiency
- Tyre handling machines
- Surface multipurpose utility vehicles

Don Bowes
Sales Manager
Manitou

14:00 Identifying New Technologies to Optimise the Surface Materials Handling Process
- Optimised surface materials handling fleet
- Optimised surface materials handling cost
- Budget and cost control software for materials handling

Sarel Blaauw
Managing Director
Tacmin (Pty) Ltd

14:45 Afternoon Refreshments

15:00 INTERNATIONAL PRESENTATION
Optimization of Mine Development Timing and Conveyor Route Design
- Development of mines based on a production schedule
- Selection of the best mine to develop at a certain point in time
- Determination of possible routes for overland conveyors
- Selecting a route using a multi criteria analysis
- The impact of the geometrical design of the conveyor and the belt dynamics on possible routes

Prof. Dr. Ir. Gabriel Lodewijks
President
ConvEx, The Netherlands

15:45 Closing Remarks from the Chair and End of Conference
08:00 Registration and Morning Coffee

08:30 Opening Remarks from the Chair

08:45 Achieving Fit-for-Purpose Load Hauler Designs - Recognising New Machinery and Tools Used to Enhance Underground Mining Materials Handling
- Highlighting technologies that have improved the system
- Illustrating the load-hauler designs most suitable for effectiveness
  Johann Wannenburg
  Manager - Specialised Engineering
  Anglo Technical Division

09:30 EXTENDED SESSION
Exploring Effective Horizontal Transportation - Underground Rail Haulages
- Track construction and maintenance
- Equipment selection - locomotives and hopper selection
- Layout considerations for rail haulages
- Transportation considerations for personnel, material and rock
- Guidelines for rail haulages
  Steven Rupprecht
  Senior Consultant - Mining Engineering
  RSG Global

10:45 Examining In-stope Material Handling
Steven Rupprecht
Senior Consultant - Mining Engineering
RSG Global

11:30 CASE STUDY: Success Factors in Trackless Mining - Thorncliffe Chrome Mining Operation
- Identifying the advantages of trackless mining
- Illustrating how going trackless has helped us to succeed
- Highlighting the areas of improvement as a result of trackless mining
  Frank Rosslee
  Mining Engineer
  Xstrata - Thorncliffe Chrome Mining Operation

12:15 Luncheon

13:15 CASE STUDY: Underground Controlling and Tracking of the Logistics and Materials Handling System
- Using technology to maximise efficiency
- Looking into the viability of controlling technology - what are the major drivers of change?

14:00 Tracking and Aligning of Conveyer Belts and Controlling Spillage at Loading Points
- Examining the tracking and alignment of conveyers
- Highlighting different types of trackers
- Comparing between continuous skirting and block skirting
- Evaluating impact idlers vs impact beds
- Illustrating the advantages and successes
  Bennie Strydom
  International Sales Manager
  Tru-Trac Rollers (Pty) Ltd

15:00 Insight Into the Machinery and Vehicles used to Maximise Efficiency
- Roof bolting rigs
- Face drilling rigs
- Underground multipurpose utility vehicles
Joint Presentation:
  Richard Galloway
  Director
  Ore Mechanization, and
  Don Bowes
  Sales Manager
  Manitou

14:45 Afternoon Refreshments
15:45 Closing Remarks from the Chair and End of Conference

Half-Day Workshop

Wednesday
27th July 2005