



BUSINESS OVERVIEW

A leading supplier of Blasting
and Metallurgical Solutions

Delivering Sustainable Future Fit Solutions

- Established in 1984, BME is a leading global manufacturer and supplier of explosives, related accessories and blasting services to the mining, quarrying and construction industries.
- Added to this is our mining chemicals and metallurgy solutions, client tailored to extract maximum value from ore while reducing costs and environmental impacts.

"BME aims to be a globally trusted mining solutions provider by prioritising safety, sustainability, and continuous technological innovation. Through strong governance, community engagement, and a commitment to a carbon-free future by 2050, we are building a winning culture that not only empowers our clients, but our employees."

BME is a division of the Omnia Group

PURSuing GROWTH FROM THE CORE AMMONIA AND NITROGEN VALUE CHAIN



AGRICULTURE



MINING



CHEMICALS



Mining segment overview

Delivering blasting technology and metallurgical solutions in Africa and beyond



Africa

South Africa, Lesotho, ESwatini, Botswana, Zimbabwe, Namibia, Zambia, Mozambique, Tanzania, DRC, Sierra Leone, Guinea, Senegal, Mauritania and Mali

International

Indonesia, Australia, USA and Canada

1 720
employees

Across
18 countries

284
explosives customers

70
chemicals customers

A global and diverse leadership team

Extensive sector & technical knowledge



Ralf Hennecke

Managing Director
Mining Engineer, MBA



Deon Swart

Chief Operating Officer
CA (SA)



Dirk Voogt

General Manager:
Production & Logistics
B.Engineering, Chemical



Nishen Hariparsad

General Manager:
Technology & Marketing
Chemical Engineer, MBA



Nic Dreyer

General Manager:
Southern Africa Operations
Honours: Business Management



Lucy Dirole

Financial Director
CA (SA)



Agusman

General Manager:
Indonesia
Civil engineer, Masters in Finance



Michael Wiseman

General Manager:
Australia/Asia
B. Engineering, Mining



Ramesh Dhoorgapersadh

General Manager:
Global Operational Excellence
Industrial Chemist, MBA



Kasturi Adari

General Manager:
Human Resources
Post Grad: Labour Law



Nelisile Thanjekwayo

Head of Legal
LLM, Commercial and business law



Lefa Masiuana

General Manager:
Mining Chemicals
Chemical Engineer



Neil Alberts

General Manager:
Americas
MPhil: International Business, MBA

We are a purpose-led business

Innovating to enhance life, together creating a greener future

Food security

Critical mineral extraction

Economic growth

Our business impact on the world

Increased food production capacities ensuring stable, productive food supply and combating global hunger

Fostering innovation and sustainability in essential global industries

Enhanced economic stability and growth in regions of operation, improving living standards and fostering long-term development





bme
BLASTING SOLUTIONS



WHAT WE DELIVER

Mining Explosives & Electronic Initiation Systems

Consolidated product and service offering: Blasting Solutions

SERVICES



Products

- Axxis Detonators
- Axxis Wire
- Bulk Raw Material
- INNOVEX (Surface and Underground)
- INNOPAK
- INNOFEX
- Viperdet
- Boosters
- Traded packaged explosives
- Traded 3rd party Non-electric and Electric I.S. and Accessories



Infrastructure and equipment

Surface

- MMU truck – Emulsion
- MMU truck – HA
- Stemming Truck
- LDV – Bulk
- Apex Plant
- Acid plant
- AXXIS blasting boxes and various other components

Underground

- Megacharger
- CCU
- ECU's
- Chargers
- Transfer cassette
- Filling Station – Rapid Emulsion Delivery System
- Vertical pipeline
- Closed Emulsion System
- CBS

Production infrastructure

- Mobile plants
- Water tanks
- Silos

Support structures

- Offices
- Fences



People

Operations personnel

- Blaster
- Blaster Assistant
- Truck Operator
- Truck Assistant
- Site Manager
- Operations Foreman
- Priming Operator
- Administration person
- Blasting licence holders
- Magazine master

Technical personnel

- Blasting Technician
- Blasting Engineer
- Blast Optimisation head
- Blasting Technology Director



Advanced technical services

Level 1

- Drill & Blast Audit
- Drill and Blast Investigation
- VOD Monitoring
- Vibration and Airblast Monitoring
- Fragmentation Analysis
- Blast Video Analysis
- 2D Laser Profiling
- **Blast Investigation**
- Borehole calipering
- Boretrak
- Reactive ground testing
- 3G Face Profiling
- UAV
- High Speed Video Analysis
- **Rock Response Testing (Tmin)**
- Regression analysis
- Blast design and predictions
- Survey Services

Level 2

- Green Field Design Projects (Consulting based)
- Blasting Impact Assessments
- Blast design and predictions (Project Based)
- Signature Hole Analysis
- Blastmap software training
- Blast Modelling
- **Burden Response Mine to Mill Projects**
- Blast performance optimisation (ore dilution, wall control, fragmentation opt, etc.)



Software

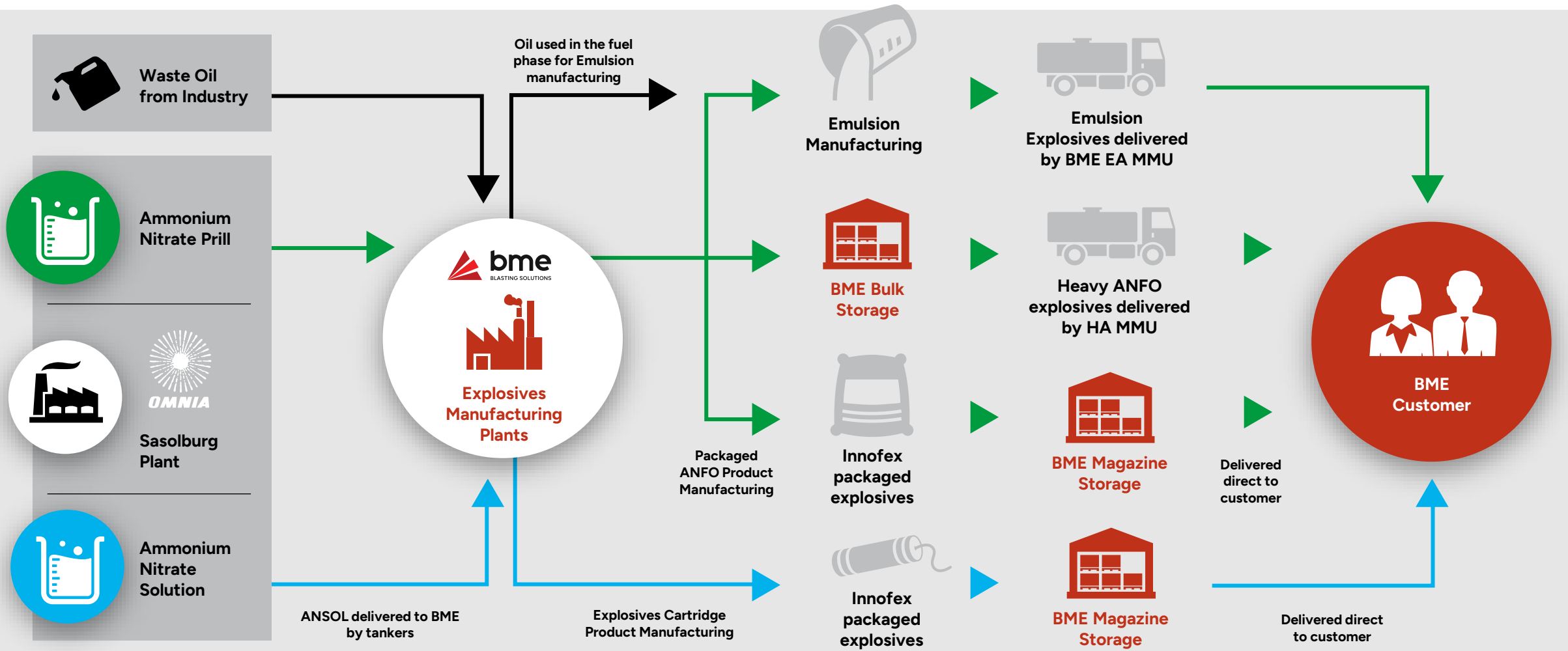
- BLASTMAP
- BLASTMAP Underground
- XPLOLOG
- XPLOCHARGE
- Smart MMU
- BME Blasting Guide
- API development

Unlocking value across the entire mining value chain: **mine-to-mill process**

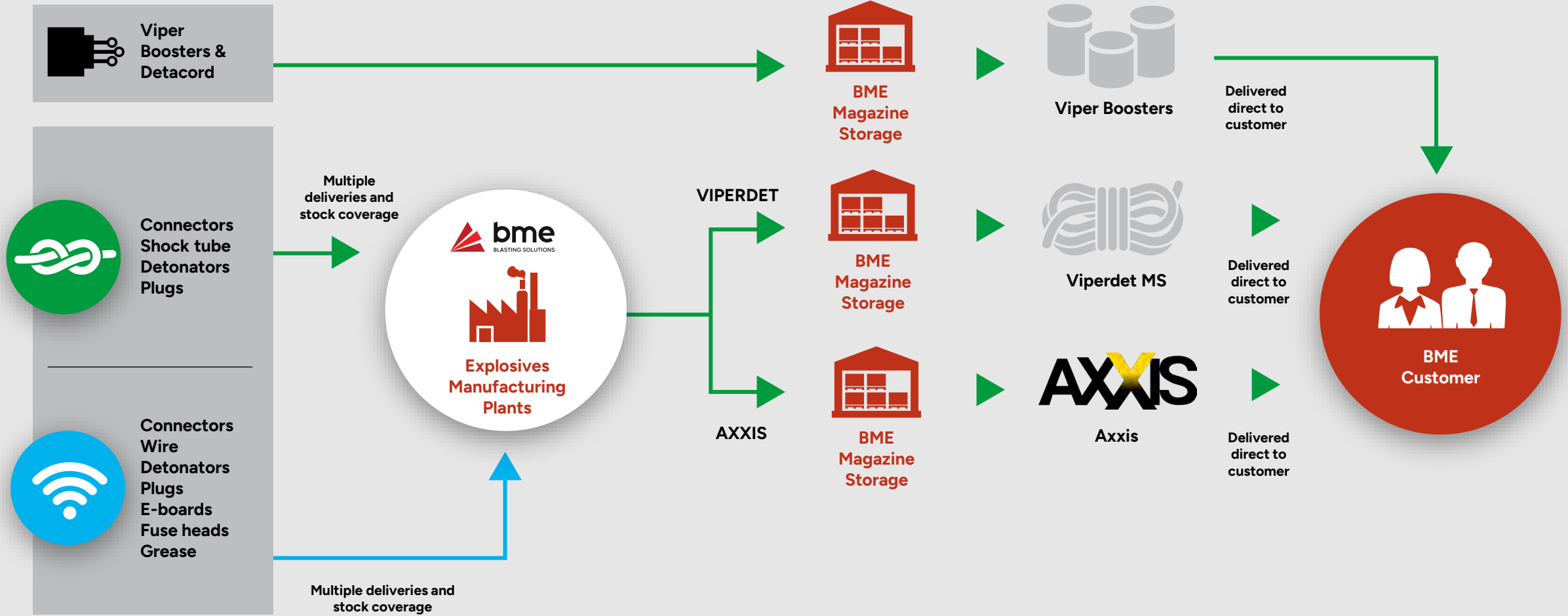


- **BME is investing in the next generation of digital technologies and solutions** as customers seek operational efficiencies across the mining value chain
- **Innovative solutions to** enhance mine yields & cost saving from blasting to mineral processing
- **Opencast market leader** – bulk emulsion & blended bulk explosives
- Proprietary **precision software & electronic detonators** – strong mining relationships & global presence
- **Dual salt emulsion** using less AN, requiring less electricity to produce and more stable
- Award-winning **used oil technology**
- Exemplary **safety record**

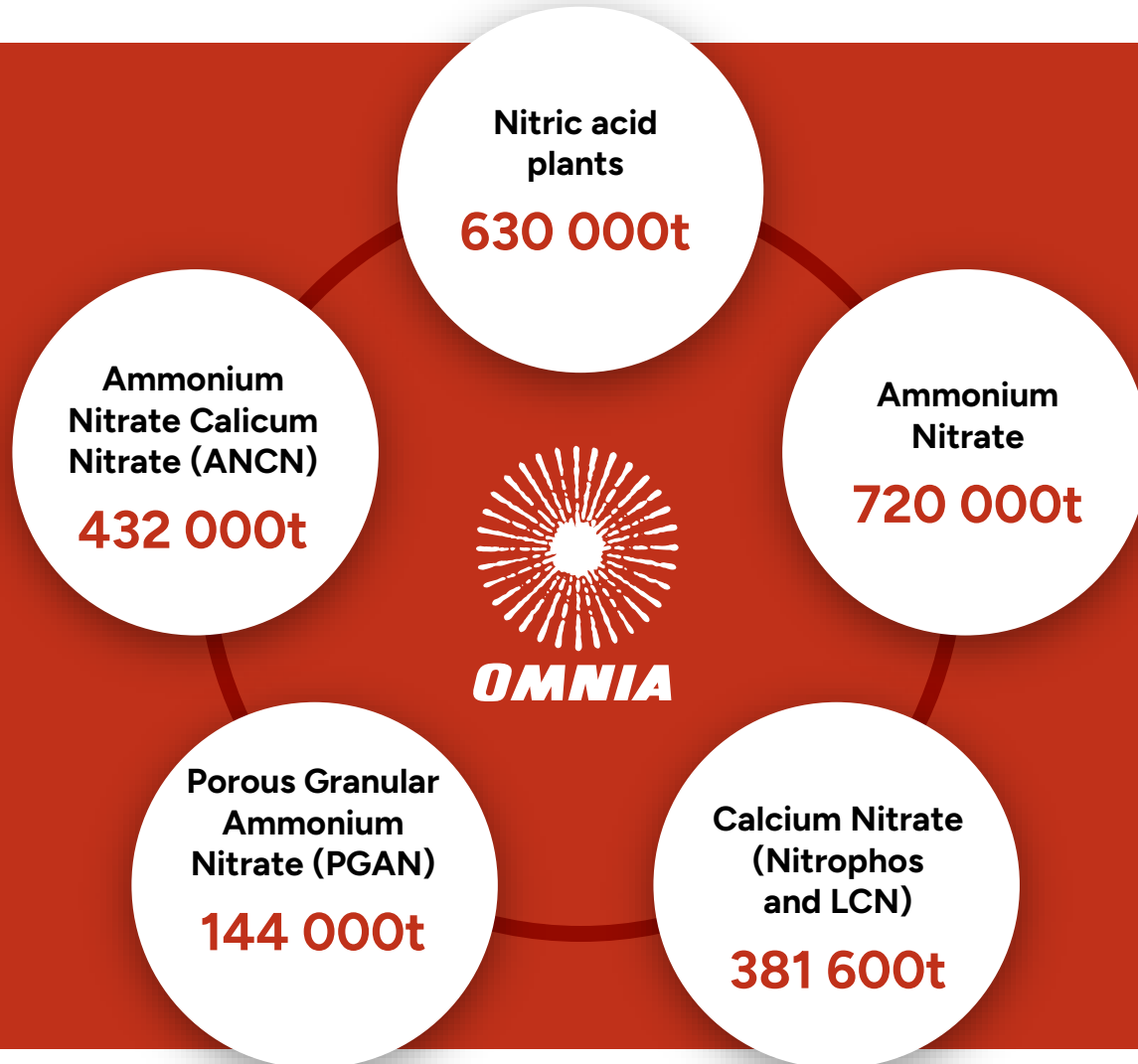
Our value chain: **BME explosives manufacturing**



Our value chain: **BME accessories manufacturing**



Plant capacities: Omnia & BME (annual)



Production	Annual Installed Capacity	
Bulk Emulsion	Losberg	300 000 t
	Dryden	300 000 t
		600 000 t
Blasting Accessories	Losberg	3 000 000 units
	Rustenburg	1 300 000 units
		4 300 000 units
Cartridge	Losberg	960 000 cases
Emulsifier	Losberg	12 000 t
Storage		
Emulsion	Combined	9 200 t
Blasting Accessories	Combined	56 120 cases
Emulsifier	Combined	900t

Consolidated value proposition

Leveraging key technologies to deliver growth and value delivery

Emulsion

System of technologies



INNOVEX

Bulk emulsion systems

Chemistry

Differentiated chemicals



Emulsification

Unique analytical chemistry solutions

Initiation System

Innovative benefits

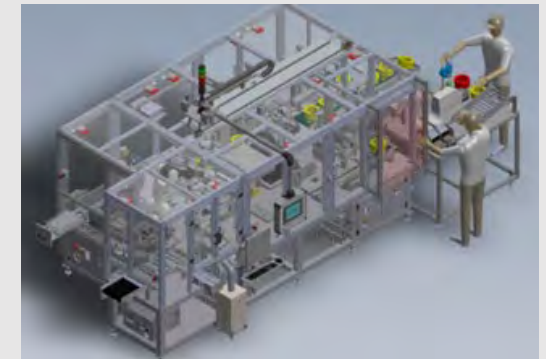


AXXIS

Enhanced precision and accuracy

Manufacturing

Modular and Automated

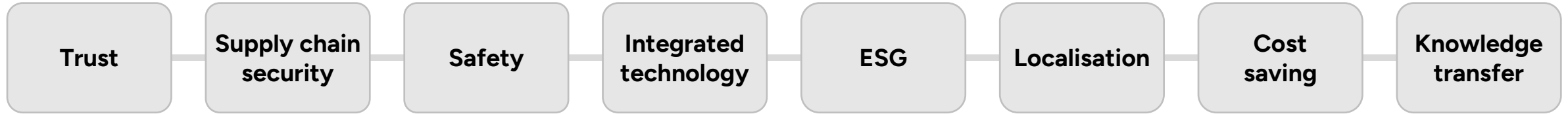


Manufacturing

Enabled assembly and quality systems

Meeting customer needs throughout the mining value chain

Evolution of technologies continue to unlock new opportunities and drive value creation

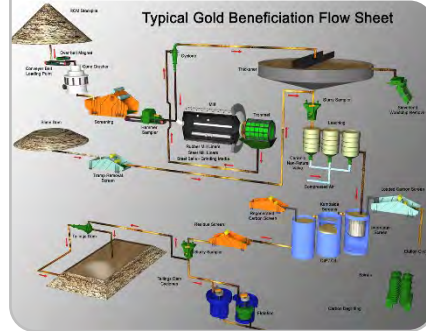


Beyond Mining Excellence

Innovative blasting solutions



Optimised extraction and yield



End to end product solutions



Transforming mining



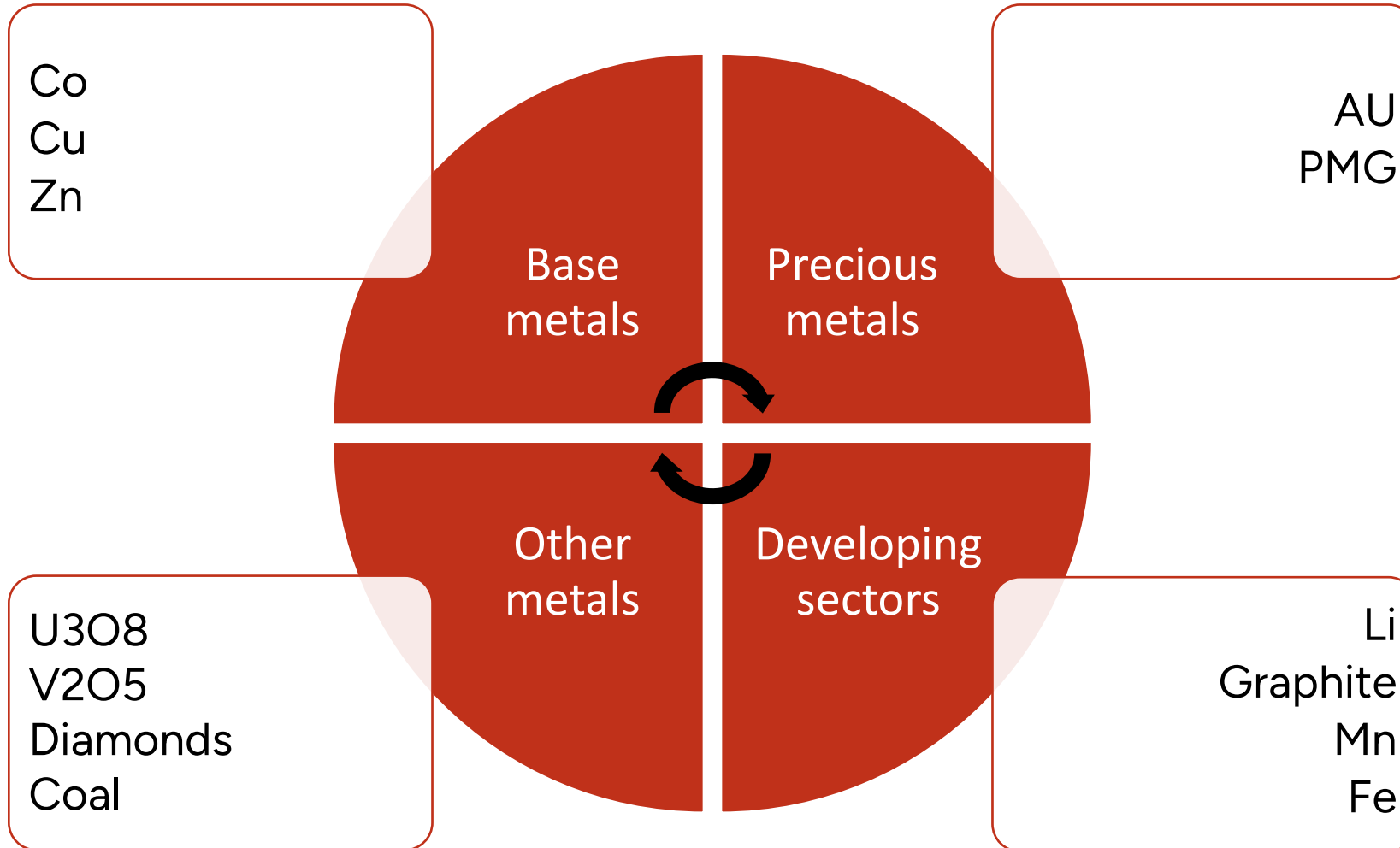


WHAT WE DELIVER

Mining Chemicals & Metallurgy Solutions

Mining Solutions - Mineral Sectors

We partner with global industry leaders in delivering innovative cost saving mineral recovery solutions



Areas of support

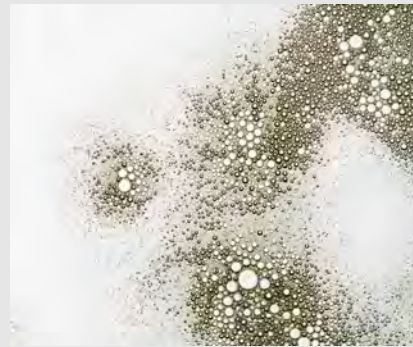
Primary areas where we support clients in driving success, address challenges, and deliver value.

Comminution



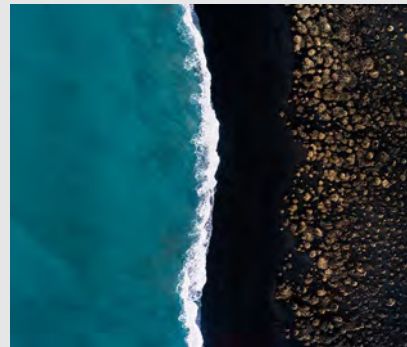
- Grinding media
- Lime

Flotation



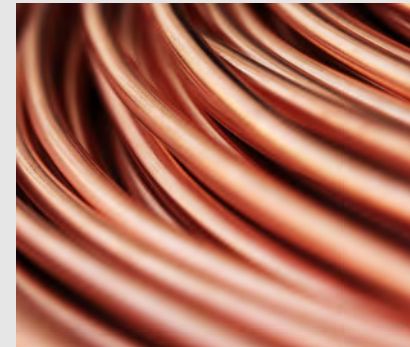
- Frothers
- Depressants
- Dispersants
- Collectors
- Activators
- Promoters
- Sulphidizers

Solid-liquid separation



- Flocculants
- Coagulants
- Filter aids

SX/EW



- Diluent
- Colloidal Silica Coagulant
- Smoothing agents
- Acid demister

Precipitation



- MgO
- Lime
- Soda ash
- Caustic

Areas of support

Primary areas where we support clients in driving success, address challenges, and deliver value.

Adsorption



- Carbon blanking agents
- Activated Carbon

Water Treatment



- Coagulants
- Biocides
- Corrosion inhibitors

Leaching



- Acids
- Bases
- Hydrogen Peroxide
- Ammonia

Support services



- Risk Mitigating Services
- Training
- Metallurgical support

Analysis



- Lab analysis
- Flux formulations



bme

HOW WE DELIVER VALUE

SUSTAINABILITY

SECURITY OF SUPPLY

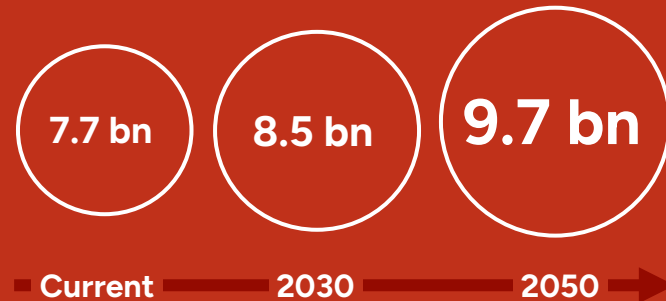
FIT-FOR-PURPOSE
SOLUTIONS

OIL
OFF-LOADING

Sustainability: BME's solutions are positively aligned to global mega trends

Factors driving demand for minerals

Population growth



2050 urban occupancy projected at 68%, increasing the need for natural resources, infrastructure and industrialisation

Decarbonisation

Global action towards



carbon emissions by 2050

Mining companies are looking to reduce Scope 1, 2 and 3 GHG emissions – BME's green tech solutions reduce emissions across the supply chain (Scope 3)

Climate change and critical minerals



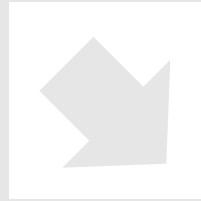
Markets for critical minerals used in green energy technologies are expected to expand sevenfold in the next decade

Sustainability: ESG¹ goals to 2030²

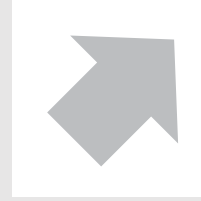
Defined objectives with solid performance against targets³ up to 31 Jan 2023



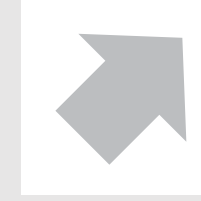
Energy



20%
Absolute energy use
Achieved: 24%



15%
Renewable energy consumption
Achieved: 9%

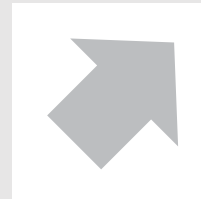


25%
Energy efficiency
Achieved: 21%

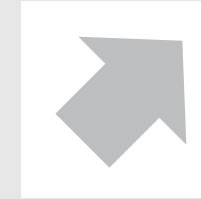
Water



25%
Absolute water use
Achieved: 23%



20%
Water recycling
Achieved: 6%



15%
Water efficiency
Achieved: 21%

Climate Change



25%
GHG⁴ emission
Achieved: 77%

Safety, health and wellbeing of staff and communities



50%
RCR⁵
Achieved: 67%

Sustainability: Strengthening our ESG commitment

Omnia's strategic intent is to move towards facing green & sustainable products and solutions



Agriculture

- Nutriology® - **Nutrient and water use efficiency**
- **Ammonium Nitrate fertilizer** < carbon footprint than Urea
- **AgriBio** product range
- **Precision farming** technology



Mining

- Dual salt technology
- **Used oil** as a fuel agent for emulsions
- **Precision blasting** technology solutions
- R&D of innovative **environmentally friendlier emulsion technology**
- Innovated processes for the **efficient extraction of minerals**



Indonesian Government
Good Mining Practices



Production & supply chain

- Reverse osmosis water treatment plant - **eases reliance on municipal water** consumption, and decreases effluent discharge
- World class EnviNox™ emission abatement technology - **reduces carbon footprint**
- **Solar installation** supplementing 25% – 35% of Sasolburg's electricity demand; investment to double capacity currently underway



Chemicals

- HydroEnergy® – carbon reducing hydrogen fuel supply
- Sourcing of **green chemicals** and advisory on application



CAIA Responsible Care®



CFI Best Sustainable Diversified
Chemicals group in Africa



Sustainability: Green economy solutions



ESG goal contributor

Used Oil & Recycling of Waste streams

- Conserves resources, eg diesel and water, used as alternative to diluents in fuel blend
- Mitigates environmental impacts of waste streams
- Improves safety, and reduction of costs



Reduction in non-renewables

Dual Salt optionality

- Reduces environmental impact, producing less toxic fumes
- Reduction in nitrates in mine fills and
- Lower ammonia leaching charac...
- Lower manufacturing temperature reduces reliance on energy sources



Decarbonisation imperative

Circular Economy contribution

- Reduction of waste into landfills;
- Prevention of soil contamination;
- Conserves resources, supplements
- Diesel reserves;
- Prevention of water contamination
- +/-20% contribution to the mineral economy of RSA;
- Boosts economy providing jobs from collection & transportation



Future-fit product solutions

Nitrate Free, Eco Bulk Emulsion

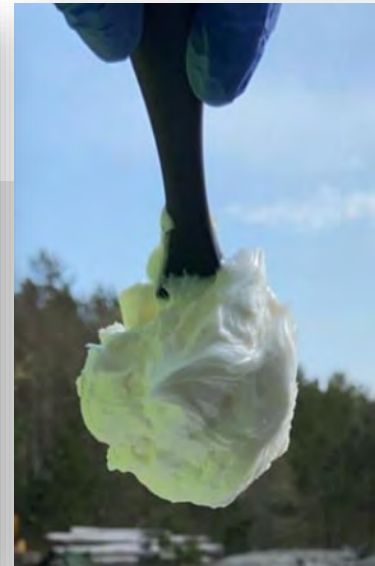
- Eco Bulk solution – Nitrate free emulsion solution
- Alternative fuel > Carbon neutral fuel
- Elimination of ammonia and Nox fumes;
- Reduction of CO₂ gasses;
- Minimise dependency on ammonia and nitrate streams

Decarbonisation: **green emulsion technology**

Customer Value Proposition

No nitrogen	GHG
NOx fumes	90% now
No nitrate/ ammonia waste	100% possible
Decreases reentry time	

- HP emulsions have **no nitrate or ammonia byproducts**
- **Used Oil Inclusion** – contributes to circular economy and reduction of non renewables
- **Sustainable manufacturing** processes
- **Renewable energy** inclusion
- Reduces **environmental** impact
- Improves **Safety**



Sustainability: SHERQ commitment to our stakeholders



Security of supply: Supply chain capability

Omnia and BME have made significant investments into its manufacturing base



Two Nitric Acid Plants

Newest in Africa



Nitrophos Plant

CN



Ammonium Nitrate Facility

ANS + ANCN Solution



Two Central Emulsion Plants



Two Automated AXXIS Electronic Detonator Plants



Cartridge Explosives Facility



Non-Electrics Assembly Plant



MMU Manufacturing and Assembly



Remote Emulsion Plants

Security of supply: Manufacturing competency

Unique design efficiencies and low environmental impact, is a **strong competitive advantage**

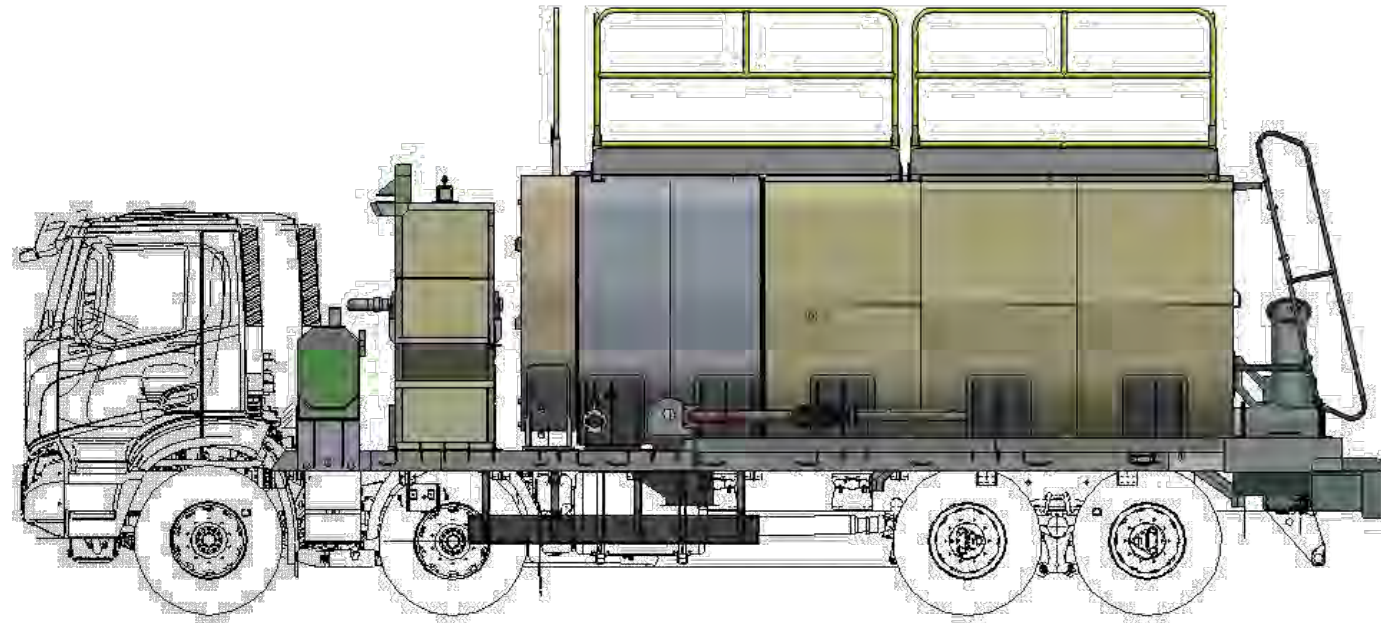
- Most modern Nitric Acid and AN product manufacturing plants in SADC1
- Leveraging granulation and Nitro phosphate technology
- EnviNox™ reduces emissions by > 90% generating carbon credits
- Solar installations ongoing
- Electricity co-generation can provide approximately 50% of the Sasolburg complex
- Sasolburg Manufacturing has a dual ammonia supply
 - Sasol pipeline supply
 - Imported ammonia supply (own rail tankers)
- Increase in downstream storage of nitrogen
 - Expanding additional Ammonium Nitrate Solution storage tanks
 - Nitrogen is stored in raw materials, Nitrophos powder, final products and at the Liquids facilities





Differentiated mobile equipment strategy:

- BME has limited **variation in process design**:
 - Allows easier management of assets,
 - Control maintenance spend,
 - **Optimised control systems** for efficient management of control systems and easier adoption of BME's technology roadmap.
- BME's **standardisation of chassis** aid in maintenance and spares management of single OEM parts list.
- BME's MMU's are easier to redeploy to other customers provided **product solution and capacity requirements** are met. (not limited to regional technologies as others are.)
- BME has employed a consistent mixing technology (bar the homogeniser system) on the majority of its fleet allowing for BME to **affirm product quality as consistent across all customers** (respective of product type E vs HA).



Security of supply: **agility, supplier diversification and product mix**



Offsets the risk in current and future volatile commodity markets

- Robust supply chain to navigate supply and demand of key raw materials through:
 - Sector based seasonal analysis
 - Logistics management
 - Technology
 - Supplier diversification
 - Long term agreements
- Sophisticated supply chain management, own infrastructure
- Security of supply to customers maintained though leveraging alternative suppliers for key inputs
- Supply chain finance program

Value add: In-house dedicated development & manufacturing



In-house hardware and software Development Team

- Global partners with dedicated blast technology experience
- In-house and dedicated software and hardware development
- 6x dedicated developers
- 8x electronic and electrical engineers
- Dedicated network support engineers
- Dedicated quality and certification management

Fit-for-purpose solutions: **Variable cost improvements**



INNOVEX™

INNOVEX differentiator

- Dual salt technology lowering impact of AN fluctuations
- Used oil inclusion lowering cost of fuel diluents
- In house emulsification technology providing lower cost of product



AXXIS™

AXXIS Precision & Accuracy

- Larger blasts (200,000 holes) = more benefits, relieves pressure points within mining value chain
- Predictable outcomes, fragmentation allows for more material through crusher = improves production
- Predictable muck piles reduces dependency of energy and drives efficiency and cost improvements



BME Manufacturing

Automated Manufacturing

- Improved first pass efficiency improves cost to manufacture
- Automated systems improves quality and lowers burden rates
- Reduced reliance on people resources,
- Efficient manufacturing processes



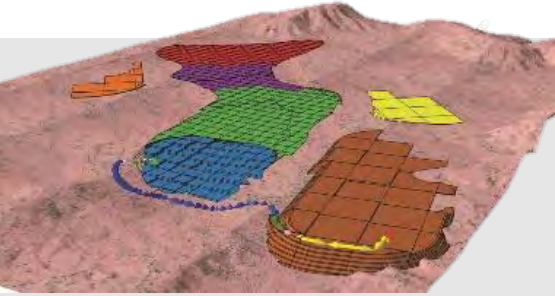
XPLOLOG, XPLOCHARGE, BLASTMAP

Ecosystem of Technologies

- Informed decision making through an integrated product offer
- Productivity and utilization of systems;
- Increase data points for statistical process control
- Increased blast accuracy and safety while reducing errors and wastage of critical products.



Fit-for-purpose solutions: 'Glocal' Technical Services Delivery



Global Technical services allocation of resources

- Regional TS managers in place
- Dedicated TS Engineers per site
- 4x Senior Technical Specialists in RSA
- 11x Technical Specialists
- Fragmentation and Blast Analyst in place
- Dedicated Reactive Ground Support (Field + lab)

Regional Product support managers dedicated per region/Customer

- Dedicated team of field support and Field technicians per region allocated
- Equipment and product support
- Maintenance servicing and repair model developed
- Global allocation of resources across various business units

Blasting Science

- Global Manager Blasting Science - >40years experience
- >10 papers and case studies published at ISEE and SME
- Dedicated PhD chemists with extensive experience in emulsion technologies
- Extensive Blasting and Mining Engineers with significant field experience

Level 1

- Drill & Blast Audit
- Drill and Blast Investigation
- VOD Monitoring
- Vibration and Airblast Monitoring
- Fragmentation Analysis
- Blast Video Analysis
- 2D Laser Profiling
- **Blast Investigation**
- Borehole calipering
- Boretrak
- Reactive ground testing
- 3G Face Profiling
- UAV
- High Speed Video Analysis
- **Rock Response Testing (Tmin)**
- Regression analysis
- Blast design and predictions
- Survey Services

Level 2

- Green Field Design Projects (Consulting based)
- Blasting Impact Assessments
- Blast design and predictions (Project Based)
- Signature Hole Analysis
- Blastmap software training
- Blast Modelling
- **Burden Response**
- **Mine to Mill Projects**
- Blast performance optimisation (ore dilution, wall control, fragmentation opt, etc.)

Collaborating for positive change

Building resilient communities by addressing social challenges together

Food projects



Partnering with Reel Life Food Garden Project

- Promoting food security
- Innovative garden in a box
- Feeds a family of four for a year
- ~10 000 households supported

Zamdela Community Food Project

- Developing agriculture entrepreneurs
- Supported 10 co-operatives, predominantly women



Investing in education



Partnering with Primestars and Youth Start Foundation

Educate

- Improving maths and science for Grade 12 learners
- Leveraging cinema and WhatsApp based learning
- Delivered 26 928 learner engagements



Omnia Future Fund

- Education fund, for children of Omnia staff
- R4 million paid for school fees

Education for Women in STEM

- R5 million (FY24) committed supporting bursaries, internships and mentorship opportunities

Our commitment to inclusive social and economic development

Procurement programmes

Core

- Staff transportation
- Motor vehicle maintenance and repairs workshop
- Used oil bulking
- Motor vehicle wash bay



Non-Core

- Office Consumables
- Building Maintenance
- PPE
- Laundry services

Social programmes

Education

- Grade 12 Maths and Science Revision
- Grade 8 to 11 Green Youth Entrepreneurship
- Bursaries for women in STEM ¹

Food Security

- Household Food Gardens ¹





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