



RM PROCESS (PTY) LTD



EXPERTS IN METAL EXTRACTION AND MINERAL BENEFICIATION

ABOUT US

At RM Process (Pty) Ltd, our diverse team of experts is dedicated to providing comprehensive engineering solutions tailored to meet your specific project needs. With a blend of specialised skills and extensive experience, we offer a range of services designed to optimise performance and drive success.

Whether you're embarking on a new project or seeking to enhance an existing system, RM Process (Pty) Ltd is here to deliver innovative and effective engineering solutions. Explore how our expertise can drive your success by reaching out to us today.

OUR SERVICES

- 01 **PROCESS FLOWSHEET DEVELOPMENT**
- 02 **PROCESS OPTIMISATION**
- 03 **CHEMICAL ENGINEERING SERVICES**
- 04 **STRUCTURAL ENGINEERING EXPERTISE**
- 05 **MECHANICAL ENGINEERING SOLUTIONS**
- 06 **DRAUGHTING AND DESIGN SERVICES**
- 07 **ESTIMATION AND COST ANALYSIS**
- 08 **PROJECT MANAGEMENT AND CONSULTING**

Contact us:

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<https://rmprocess.co.za/>



Tailored Strategies and Expert Solutions for Your Unique Engineering Needs

WHY CHOOSE US?

At RM Process (Pty) Ltd, we understand that selecting the right engineering consulting partner is crucial for the success of your projects.

Here's why we stand out as your ideal choice:

01 Expertise Across Disciplines

Our team comprises highly skilled professionals with deep expertise in process flowsheet development, process optimisation, chemical, mechanical, and structural engineering, as well as drafting, estimation, and project management.

02 Tailored Solutions

We believe in providing solutions that are as unique as your needs. By understanding your specific requirements and objectives, we deliver customised strategies that drive efficiency, innovation, and success.

03 Commitment to Quality

Quality is at the heart of everything we do. From detailed analysis and precise engineering to thorough quality control and adherence to industry standards, we ensure that our work meets the highest benchmarks of excellence.

04 Client-Centric Approach

Your satisfaction is our priority. We foster strong, collaborative relationships with our clients, providing clear communication, reliable support, and a proactive approach to problem-solving. We are dedicated to understanding and addressing your needs throughout the project lifecycle.



ABOUT US

Welcome to RM Process (Pty) Ltd, where engineering meets ingenuity! We're not just another consulting firm; we're your partners in transforming visions into tangible results. Our mission is simple: to deliver tailor-made engineering solutions that are as unique as your projects.

At RM Process (Pty) Ltd, we pride ourselves on our ability to tackle challenges head-on with a blend of experience, innovation, and a dash of creativity. Our team of seasoned engineers and industry experts thrives on finding smart, sustainable, and cost-effective solutions that span from initial concept development to full project execution.

RM Process (Pty) Ltd business strategy is to utilise specialised engineering skills across all relevant disciplines who work collaboratively on a project. This approach minimises large overhead costs normally incurred in a large design engineering company; this cost saving is reflected in our rates.

Each member brings a specialised skill set and a wealth of knowledge to the table, ensuring that every project benefits from a focused and dedicated approach. Leading this dynamic team is our director, Rogan Roulstone, whose vision and leadership guide us in delivering excellence.

Whether you're looking to optimise processes, boost efficiency, or navigate complex technical challenges, RM Process (Pty) Ltd is here to assist with innovative technical solutions, align with industry technology development underpinned by a comprehensive metallurgical test work program. Let's collaborate to achieve greatness together. Contact us today and let's get started on your next big project!

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More Information:

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OUR KEY EXPERTISE

Metallurgical Experience Summary

01 Chrome and PGM's

- Detail process design and flowsheet development
- Test campaign management to establish a flowsheet
- Reagent optimisation and development
- Plant commissioning
- Plant operational readiness programs
- SOP and COP development based off test work results
- Plant de-bottling and optimisation

02 Gold

- Detail process design from crushing, milling, CIL, Pump Cell or CIP elution detox and tails treatment
- Detail design and construction of oxide, double and so called triple refractory ore bodies
- Bacterial leach testwork, piloting and detail engineering
- Test campaign management and full process plant design,
- Reagent recovery and optimization – novel technology and new technology
- Plant commissioning
- Plant operational readiness programs
- Standard operating procedures
- Plant de-bottling and optimization
- Double and triple 'Refractory' ore design plants
- Process plant operational audits
- Process plant risk management campaigns

03 Cobalt

- Detail process design from crushing; milling; leach and or flotation product recovery either as a salt or metal; tails treatment
- Test campaign management
- Battery grade flowsheet development
- Plant commissioning and SOP and COP development
- Plant operational readiness programs and maintenance system integration,
- Standard operating procedures
- Plant de-bottling and optimisation

OUR KEY EXPERTISE



Metallurgical experience summary - Continued

04 Uranium

- Detail process design from crushing; milling; leach and or flotation product recovery either as a salt or metal; tails treatment
- Test campaign management and flowsheet develop
- Material of construction testing and redesign
- Reagent recovery and optimization – novel technology and new technology
- Plant commissioning
- Plant operational readiness programs
- Standard operating procedures
- Plant de-bottling and optimisation

05 Copper / base metals

- Dense media pre-concentration, design
- Detail process design from crushing; milling; leach and or flotation product recovery either as a salt or metal
- Tails treatment and retreatment
- Test campaign management
- Plant commissioning
- Plant operational readiness programs
- Standard operating procedures
- Plant de-bottling and optimisation

06 High Purity Battery grade metals

- Detail process design and flowsheet development
- Unique flowsheet development
- Test campaign management to establish a flowsheet

07 Blackmass

- Flowsheet development



Our global footprint includes Countries in which we have either built or designed process plants:

South Africa

Mozambique

Namibia

Zambia

Zimbabwe

Democratic Republic of Congo

Ghana

Australia

Botswana

Iran

Venezuela

Saudi Arabia



MEET THE TEAM - ROGAN ROULSTONE

Director & Lead Process Engineer

Rogan is an energetic and highly passionate Process Engineer and Project Management Professional with extensive experience in the Mining and Resource Industry. His strong technical background, combined with a wealth of sales and marketing experience, has enabled him to grow new and developing businesses into medium-sized companies.

He possesses strong team leadership, effective communication skills, motivational, and training skills, with the ability to work both independently and as part of a team. Rogan is technically astute, with broad experience in Engineering, Metallurgical, Mining, Petrochemical, and Health and Safety standards and systems.

Rogan has proven leadership skills and experience in managing, developing, and motivating teams to achieve their objectives. He establishes clear team performance targets and mentors team members to foster their professional and personal growth in line with company values and objectives.

He has a deep understanding of the importance of strong communication with key stakeholders and demonstrates expertise in aligning himself with the company vision and values, management systems, and compliance with all necessary statutory, legal, quality, and engineering standards and requirements.



Professional Experience

- **RM Process:** Lead Process Engineer
- **Fraser Alexander:** Metallurgical Solutions Specialist
- **KCi Group:** Operational Director
- **Met63 (Pty) Ltd:** Business Development Manager, Process Manager
- **Mets Projects:** Lead Process Consultant
- **Solo Resources (Pty) Ltd:** Market Development
- **MIP Process Technologies (Pty) Ltd:** General Manager
- **MMG Limited:** Senior Project Manager
- **MDM Engineering:** Lead Process Engineer
- **TWP Projects:** Senior Process Engineer
- **MC Process:** Managing director

Areas of Expertise

- Well-rounded background in project management;
- Strong process engineering background in;
 - Process engineering,
 - Mineral processing,
 - Study management;
 - Health and safety;
- Long history of working on projects in the Democratic Republic of Congo and Southern Africa;
- Good understanding of project methodology and structure;
- Diverse experience in designing, trouble shooting and applying best practice to debottleneck mining, mineral processing circuits;
- Very strong process and hydrometallurgical background;



MEET THE TEAM - ALLEN PHILLIPS

Principle Member / Process Consultant

Born on April 14, 1952, in South Africa, Allen Phillips has built an extensive career in metallurgy and mining over the past decades. After matriculating from Capricorn High School in 1969, he pursued higher education in extractive metallurgy at Witwatersrand Technikon (now University of Johannesburg), followed by leadership and mine management programs at Cape Town University Business School and Witwatersrand University Business School.

Head of metallurgy for two major mining companies in the mid 1980's. Allen began his career as a Learner Official at ERPM in 1970, then progressed through roles at De Beers Industrial Diamond Research Laboratory, Randfontein Estates Gold Mine, JCI Corporate where he held the position of Chief Consulting Metallurgist for the group. He was then appointed as Senior Consulting Metallurgist for Gold Fields Ltd responsible for all their operations locally and internationally.

Since 2005, Allen has been an independent Consulting Metallurgist and established Allen Phillips Consulting (Pty) Ltd. His consultancy focuses on feasibility studies, plant audits, process reviews, and project evaluation. His Consulting work has included process optimisation, process audits, project design and exploration.

His contributions to the field are highlighted by his publications and leadership roles, including serving as Vice President of the Mine Metallurgical Managers Association and Chairman of the Chamber of Mines Consulting Metallurgists Committee in 2000. He has also held various directorships and executive roles in companies like Prestea Gold Mine, Barnex Exploration, Rand Refineries and Central Rand Gold.

Areas of Expertise

- **Metallurgical Operations Management:** he has extensive experience managing complex metallurgical operations, overseeing gold and uranium extraction processes across multiple plants in South Africa, Ghana, Australia, Saudi Arabia and Venezuela.
- **Feasibility Studies and Project Evaluation:** He specialises in conducting feasibility studies and evaluating projects for various mining operations, providing critical insights for plant expansions and new installations.
- **Process Optimisation and Audits:** He excels in process optimisation, conducting thorough audits of mining operations to enhance efficiency, safety, and performance. His work includes refining gold recovery circuits and upgrading plant processes.
- **Technical Consulting:** As an independent consultant, he offers unbiased technical advice on plant design, process improvements, and capital estimation, ensuring that projects meet industry standards and operational goals.
- **Advanced Technology Implementation:** He has overseen the installation of advanced processing technologies, such as automated elution circuits and SAG mills, contributing to significant improvements in mining efficiency and gold recovery.





MEET THE TEAM - GAVIN SCALLAN

Principle Member / Senior Mechanical Engineer

With over three decades of experience in mechanical engineering and project management, Gavin is a seasoned consulting engineer specializing in fabrication and project management. He holds a B.Sc.Eng in Mechanical Engineering from the University of the Witwatersrand and an Advanced Diploma in Business Project Management from the University of Cape Town.

Currently serving as a Consulting Engineer at RM Process (Pty) Ltd, Gavin excels in project planning, risk management, and stakeholder communication.

His previous roles include being a Consulting Engineer at Betterect as well as being a Engineering Manager at MIP Process (Pty) Ltd, where he led engineering activities and managed project cost control, and Construction Project Manager/Senior Mechanical Engineer at McConnell Dowell in Dubai/Saudi Arabia, where he directed major projects like the Ma'aden Aluminium Smelter.

His career highlights also include leading mechanical engineering design projects at Aqua Engineering and technical management roles at Betterect and Andritz/Delkor.

Gavin's achievements include winning the South African Institute of Steel Construction's Best Export Project Award in 2022 and the Sastech/Sasol Quality Excellence Award.

Professional Experience

Gavin Scallan is a Senior Mechanical Engineer at RM Process, with a diverse background in engineering and project management. His experience includes:

- Leading project planning and cost control at Betterect.
- Managing engineering and procurement at MIP Process (Pty) Ltd.
- Directing major construction projects at McConnell Dowell.
- Designing equipment for the Eskom Medupi Power Station at Aqua Engineering.
- Overseeing production and technical support at Betterect.
- Designing mining equipment and managing risk at Andritz / Delkor.
- Engineering water treatment plants at Degremont Aquazur.
- Working on water systems and plant operations at Rand Water.

Areas of Expertise

- **Project Management:** Planning, execution, cost control, and risk management.
- **Contract Management:** Negotiations, procurement, and subcontractor oversight.
- **Engineering Management:** Design, project planning, procurement, and stakeholder coordination.
- **Mechanical Engineering Design:** Equipment specification, plant design, and system optimisation.
- **Construction Management:** Construction planning, quality control, and resource management.
- **Consulting Engineering:** Fabrication and project management across various sectors.
- **Value Engineering:** Cost-effective solutions and process improvements.
- **Standards & Regulatory Compliance:** Adherence to safety, health, environmental, and quality standards.
- **Risk Management:** Identifying, assessing, and mitigating project risks.

