

Manhattan's Business Partner Ethos Evolution

With over a 20 year track record, Manhattan's ethos has evolved its focus to being its client's preferred business partner for mining projects and minerals processing plants

The Manhattan Corporation Group offers turnkey solutions for clients intending to develop their mining projects, for expansion, upgrade or for a new project, delivering maximum throughput and yield via the delivery of a comprehensive functional and technical solution, utilising a selection of the latest and most efficient technology for such projects.

From 1992 when the group was founded, Manhattan has strived to offer an improved overall package to its clients, unique and customised to the required specification for a project. From pioneering mining and production methodology in its surface mining operations, developed from Southern to Northern Africa, such as the use of in pit mobile screening and Manhattan manufactured specialised screening plants, or within its underground gold mining operations to turnkey process plant design, construction and implementation, Manhattan's experience has allowed efficient extraction of minerals with the lowest operating cost and optimised capex investment.

Innovation in its provision of products, include bolt on applications to plants, where there exists the implementation of water extraction and treatment of waste from processing plants, which allow the optimised usage of water, reduction in power consumption, and recycling of water that can be used as potable water for surrounding communities by its mining clients or can be injected back into the system and reused in the processing application. Reduced costs through energy savings and recycling are key elements in a 21st century mining environment, where the carbon foot-print for mining companies and industrialists as well as operating costs determine efficiencies and the ability to access new projects.

Manhattan has over the past 24 months upgraded its design, engineering, manufacturing, and implementation divisions to suit the growing demand in the mining industry for turnkey



operations. It employs a full spectrum of engineers, including disciplines in chemical, metallurgical, mechanical, structural, electrical and mining, as well as other technical personnel and corporate professionals, including geology, mining, financial, legal, training and skills development, all key elements in its offering to its clients of BEST VALUE solutions.

Manhattan Corporation has representative offices on four continents: in 30 countries through Africa, Middle East, Russia, South America and Europe. It lists many of the most recognised names in the mining and resources industry among its worldwide client base including: BHP Billiton, Rio Tinto, Anglo American, Vale, Xstrata, Goldfields, De Beers and Sasol. Manhattan was nominated out of thousands of companies measuring corporate performance and exceptional contribution to the country's GDP, as one of South Africa's Top 500 Companies and Top Mining Service Companies in 2011.



The mining services division of Manhattan has continued to grow its global presence, and ensure it has diversified its exposure specifically within the African continent. It has over the past 12 months developed three South African Black Economic Empowerment joint ventures that focus on the development of emerging black companies, owned and managed by black female professionals, as well as black male professionals, engineers and operationally involved executives. Its primary group has been accredited with a Level three BBBEE score card, and its joint venture



Tel: +27 (0)11 748 8800 • Fax: +27 (0)11 748 8898 • Email: info@manhattancorp.com • Website: www.manhattancorp.com

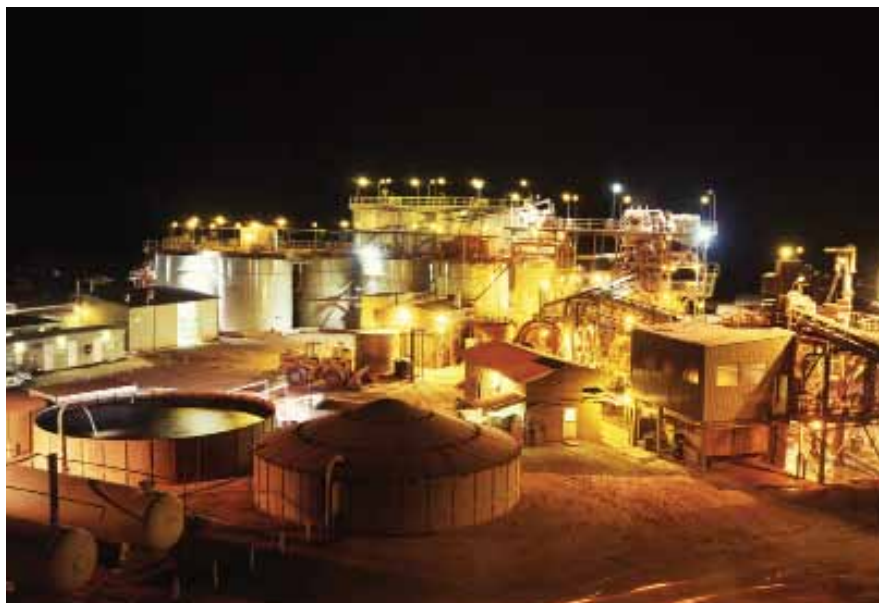
partnerships enjoy the accreditation of a Level 2 and a Level 1 BBBEE score card.

Its drive to expand its knowledge base and have a broad based representation continues to contribute to Manhattan's transformation programme, and for the upliftment and development of black engineers and professionals.

Manhattan owns and operates gold and diamond operations in South Africa. Its surface mining (alluvial) diamond mining operations, which are amongst South Africa's largest, strive to be the most efficient and successful operations in the industry. Through experience, key process and cost per tonne enhancements are offered to its turnkey solutions client base. Gravelotte Gold mine, Manhattan's underground gold operation on the East Rand of Gauteng, has a well-developed infrastructure with plans in progress to develop the capacity of the operation to a 300,000 tpa mine.

Commodity pricing has performed well and above budget, from the pricing drop of 2008/09, and while prices have recently softened in 2011/2012 due to economic uncertainty from Europe, and the USA, the mining industry is still investing in the development of medium to long term mining projects across many commodities in the sector.

Manhattan's head office is situated on the East Rand of Gauteng where the organisation develops its turnkey process plant solution, from its in-house design division, to engineering, manufacturing, construction and project site implementation teams using latest technology systems to deliver an exceptional quality, reliable and efficient technical solution.



Projects have been successfully completed through-out Africa with engineering teams travelling to remote locations to deliver, install, commission and train the new owners on operating the successfully commissioned processing plants.



In terms of its strategic alliances with OEM's, Manhattan is able to provide (within its turnkey solutions portfolio) the following process plant and equipment:-

- New minerals process plants
- New materials handling solutions
- Production equipment solutions
- New specialised mineral processing equipment - linear screens, fine screening, filtration (i.e. belt filters), material drying
- New grinding mills with ISO 9001 manufacturing quality accreditation
- New grinding media and liners with ISO 9001 accreditation
- New gearboxes, gears, couplings and fasteners with ISO 9001 accreditation
- New mobile crushing and screening plants
- New transformers with ISO 9001 accreditation
- New diesel generators / power plants with ISO 9001 accreditation

TURNKEY SOLUTIONS	NEW GOLD PROCESS PLANTS
<p>Manhattan turnkey solutions to the mining and mineral processing industries include:</p> <ul style="list-style-type: none"> • Conceptual design • Detailed engineering design • Manufacturing • Site construction and installation • Commissioning, after sales service and support • and, where required, operational management including implementing strategies for the effective marketing of the commodity. 	<p>Manhattan provides gold processing plants and turnkey solutions that include a number of key areas within a gold mining and process plant operation. Along with Manhattan's expertise, developed through 10 years of contract and owned mining, technology provided includes:</p> <ul style="list-style-type: none"> • Ore handling and storage • Crushing • Milling • Pre- Concentration • Solid-Liquid Separation • Carbon/Leaching Processes • Gold Metal Recovery • Gold Product Finishing <p>The offering focuses on the use of the Latest Technology in the market.</p>

NEW COAL PROCESSING SOLUTIONS	NEW DIAMOND PROCESS PLANTS AND DIAMOND MINING EQUIPMENT SOLUTIONS
<p>Manhattan provides turnkey coal processing solutions that include a number of key areas within a coal mining and process plant operation</p> <p>Technology provided includes:</p> <ul style="list-style-type: none"> • Coal Preparation Plants • Turnkey Supply • Process Design • Coal-beneficiation • Coal-handling systems • Coal-conveying Systems • Ash-classification systems • Emission Monitoring and control • Water treatment 	<p>Manhattan has successfully delivered diamond process plants and diamond mining equipment worth more than R1.7-billion to the mining industry.</p> <p>Along with Manhattan's expertise, developed through 10 years of contract and owned mining, technology provided includes:</p> <ul style="list-style-type: none"> • DMS plants • Rotary pan plants • Screening and de-sanding plants • Mining infrastructure development • Production machinery including yellow fleet <p>The focus of Manhattan is to be the most efficient value-adding supplier to its clients.</p>

NEW SPECIALISED MINERAL PROCESSING EQUIPMENT	MATERIALS HANDLING SOLUTIONS
<p>Manhattan has acquired technology for specialised mineral processing applications. The equipment is designed and manufactured in house in partnership with European specialists. The equipment includes linear screens for efficient trash screening, dryers utilising infrared drying under vacuum and classifiers used for trash screening and circuit classification (2mm down to 100micron). The technology is proven and well developed with the focus on optimised capital and operating expenditure.</p>	<p>Manhattan has over the passed year successfully delivered a number of materials handling solutions to the mining industry in South Africa, Ghana and Namibia. The company's + 20-year track record of successfully delivering equipment efficiently and within the budget of the client allows Manhattans' clients to achieve their own project success. For this product line, Manhattan provides design, manufacture, construction, installation, commissioning and hand-over to its clients. Delivery lead times and budget deliverables are some of the benefits of using Manhattan.</p>

CRUSHING AND SCREENING PRODUCTS	PROJECT MANAGEMENT AND IMPLEMENTATION
<p>Mobile crushing plants: Impact crushers up to 500tph and 26x44" jaw crushers: The product features a unique curtain relief system in the impact crusher range that effectively allows the crushing of marginally oversized materials that would stop other machines in its size class. It drastically reduces the typical downtime experienced by other crusher plants. In-pit screening plant: Spyder 516T: High frequency vibration means better screening efficiency. The product produces up to 600tph and is rated higher in production capacity than alternative brands. Simple operation, maintenance and control and matches perfectly with the 4043T IMPACT CRUSHER for aggregate production. New grinding mills: New, wet and dry grinding mills and milling components, as well as automatic raw material handling solutions, with products proudly bearing ISO 9001. The supply is from Europe, utilising German and Austrian design technology. Key benefits include favourable price and lead times. New transformers: New transformers offered custom designed and built to client requirements, bearing ISO 9001 manufacturing quality accreditation as well as ISO 14001, conforming to IEC standards. The production facility for transformer manufacture is rated as one of the top five facilities in the world.</p>	<p>Manhattan's engineering and project management team is qualified in process, mechanical, structural electrical and mining engineering disciplines amongst others. Team members hold extensive experience in the mining and mineral processing fields including in multiple commodities such as gold, platinum, copper, cobalt, iron ore, manganese, coal, diamonds aggregates and others. This team provides project management, design, manufacturing, installation and commissioning of plant and equipment, as well as operational support and management. The team has delivered well over 1,000 projects in the company's history. Manhattan provides extensive support and warranties on its process technology and equipment through its representative offices in over 30 different countries worldwide, of which 20 countries fall within the African continent.</p>

NEW DIESEL GENERATORS / POWER PLANTS
<p>Comprehensive range of diesel generators, manufactured to ISO 9001 standards. Brands supplied include, Mitsubishi, Cummins, Deutz, Volvo, Perkins and MTU.</p>



Mining to create jobs

Manhattan Group chairman Chris Pouroullis points the way forward to press a business-friendly environment for investment and growth.

South African mining contributes six percent to South Africa's GDP. This is an industry we know well as the Manhattan Corporation over the past 20 years has developed its business model into one that provides turnkey solutions to the mining and mineral processing industry. We have ambitions to grow our business influence throughout Africa and become a major mining services and operations company.

The world's demand for raw and beneficiated minerals is increasing and provides a guaranteed opportunity for growth in South Africa. Mineral resources are in abundance, and yet we are not a favoured investment destination for international money.

According to PwC's 2011 report *The World in 2050*, China will surpass US's GDP by 2020. China is our largest trading partner at present. Imagine the trade in 2020! China's economy is expected to grow from \$8,888 trillion to \$59,475 trillion in 2050.

South Africa, while featured in the 'top 20 economies in 2009' with a GDP of \$508 billion, is not featured in the 2050 forecast survey as a top 20 country.

Why is our growth not expected to accelerate and how can we change that?

We need to be proactive, as industry and government, to develop a partnership that focuses on long-term planning and sustainable growth for the country. South Africa's

economic growth needs to increase and we have the opportunity to not only reduce unemployment, but develop our status as the "Gateway into Africa". This status provides the future retail industries of Africa with South African-influenced products and professional services. While the government is pressured to meet social objectives, economic growth should never be compromised.

My philosophy is that you cannot build a stable business on a sandy foundation. We need economic growth to be the primary focus of government's efforts to develop South Africa into a successful democracy. Over-regulation stifles entrepreneurial activity and chases away investment. While the reflex is to increase regulations to achieve desired objectives, there is a high price to pay for over-regulation. If businesses cannot grow, the willingness to invest fades away.

But all the role players need to co-operate and move away from their historical positions to enable the proper growth environment to be achieved. Trade unions, business, government and the powerful electorate need to be educated on best practice so that a co-operative environment is created.

If the taxman can advertise on billboards and television why our taxes are important, why can't economic policy be marketed and branded? This could alleviate the pressure on government to do the right thing and not the popular thing.

My wish list for the next ten years would include a business friendly environment, forged through a cooperative relationship between organised labour, government, business and the electorate to create a successful economy, where there are jobs for all.

Unfortunately this is not possible

when the various factions have different goals. Business wants to make annual profit (highest revenue, lowest cost), Government needs to build long-term return infrastructure (high cost, no revenue in short term) while trying to maintain annual nett returns for Africa's largest company (South Africa) and organised labour wants to look after their members by increasing their salaries and benefits (higher costs).

'By far our most significant challenge is to find a way to create jobs for the 15 million youth who will be ready to work in the next few years.'

An efficient, business-friendly government which guarantees economic growth should demand the co-operation of business and organised labour. This message has to be broadcast and followed to ensure South Africa's success in the future. The demand however should be in the form of incentives and not increased regulation. Those that cooperate benefit. Those that don't, remain average.

As a business we have found our association with TOP500 the sort of alliance that expands boundaries and creates new business opportunities. We have been recognised in our sector for our performance and I wish to extend my thanks to Richard Fletcher for putting together the extensive research that contributes to this recognition. 🏆

**Chris Pouroullis
Chairman Manhattan Corporation**

Chris Pouroullis

From concept to implementation, Manhattan group chairman Chris Pouroullis shares the successes of the mining and mineral processing plant organisation



Name
Chris Pouroullis

Born
6 June 1966

Occupation and position
Engineer and Chairman

Steps to success
Integrity, vision, humanity

Business philosophy
The detail is important

Manhattan's strives to be the Business Partner of Choice in the provision and supply of turnkey solutions and minerals processing plants. Manhattan's products are packaged to enhance the efficiency of a customers' business through production efficiency improvements, cost-effective and functional technical design latest technology new capital equipment. The group was founded in 1992 and is focused on being a leading mining services provider to the mining industry. For the last ten years, the group has focussed its solutions in newly designed and manufactured process plants with a wide customer base involved in gold, manganese, iron ore, coal, platinum, diamonds, copper, cobalt, nickel and zinc. Projects have been successfully concluded in the fields of smelting, materials handling, ore processing, mining and beneficiation. Manhattan is currently represented in 20 African countries.

Manhattan provides solutions to mining companies wishing to improve their operating and capital cost per tonne, volume throughput and recovery efficiencies.

This could include the turnkey supply of a new plant, upgrading or refurbishment of existing machinery or the addition of modules that increase total plant capacities and efficiencies.

In your experience, which comes first: people or profit?

They operate symbiotically. Without people you cannot generate profit. Without profit you cannot keep people.

The global markets seemed to be stabilising. It looks as though Europe is not as stable as was thought. What impact is that having on business in South Africa?

Any global market instability is going to impact business confidence. In the mining field a low growth scenario will curtail demand for mined commodities, hence plant and production equipment supply. Fortunately, growth in the BRIC countries (Brazil, Russia, India and China) has created a healthy market for commodities. We expect the possibility that the next 12-24 months could be stagnant in terms of growth from other markets, however commodities remain a real tangible asset class for development and investment purposes.

Sustainability in business is becoming hard to ignore; how do you define it?

Sustainability for Manhattan is created through business efficiency, growth and success. Staying in tune with our client's requirements has always been a core focus for Manhattan, implying that change and adaptation are part of the modus operandi.

If you could advise government on policy, what critical suggestion would you make right now?

Communication, integrity and team work. We are all in this together. Focussing on the creation of 5 million jobs in South Africa requires a combined effort, and understanding from both sides of the spectrum, government and the private sector on what needs to be done to remain competitive, increase exports of beneficiated commodities, and ensuring an attractive and an easy to do business environment for foreign investment.

What is your company doing in terms of job creation?

Manhattan has developed over the past year a number of joint ventures, and has planned a roll out of additional business units in the future. These include mining and process plant supply joint ventures, which involves a partnership to empower black professionals and women in technical and engineering companies, as well as the development of additional mining projects in diamonds and gold mining.

Initiatives in the agricultural and small scale mining sector are also being developed for implementation, which would include the facilitation of finance, technical development, and training of small scale miners in specific sectors that the group operates in. It is a fairly unique and pioneering model that will create a segment of new entrepreneurs and new businesses. Manhattan's job target within 5 years, could potentially reach 4,000 new jobs being created, but market conditions will affect all job creation initiatives in terms of timing.

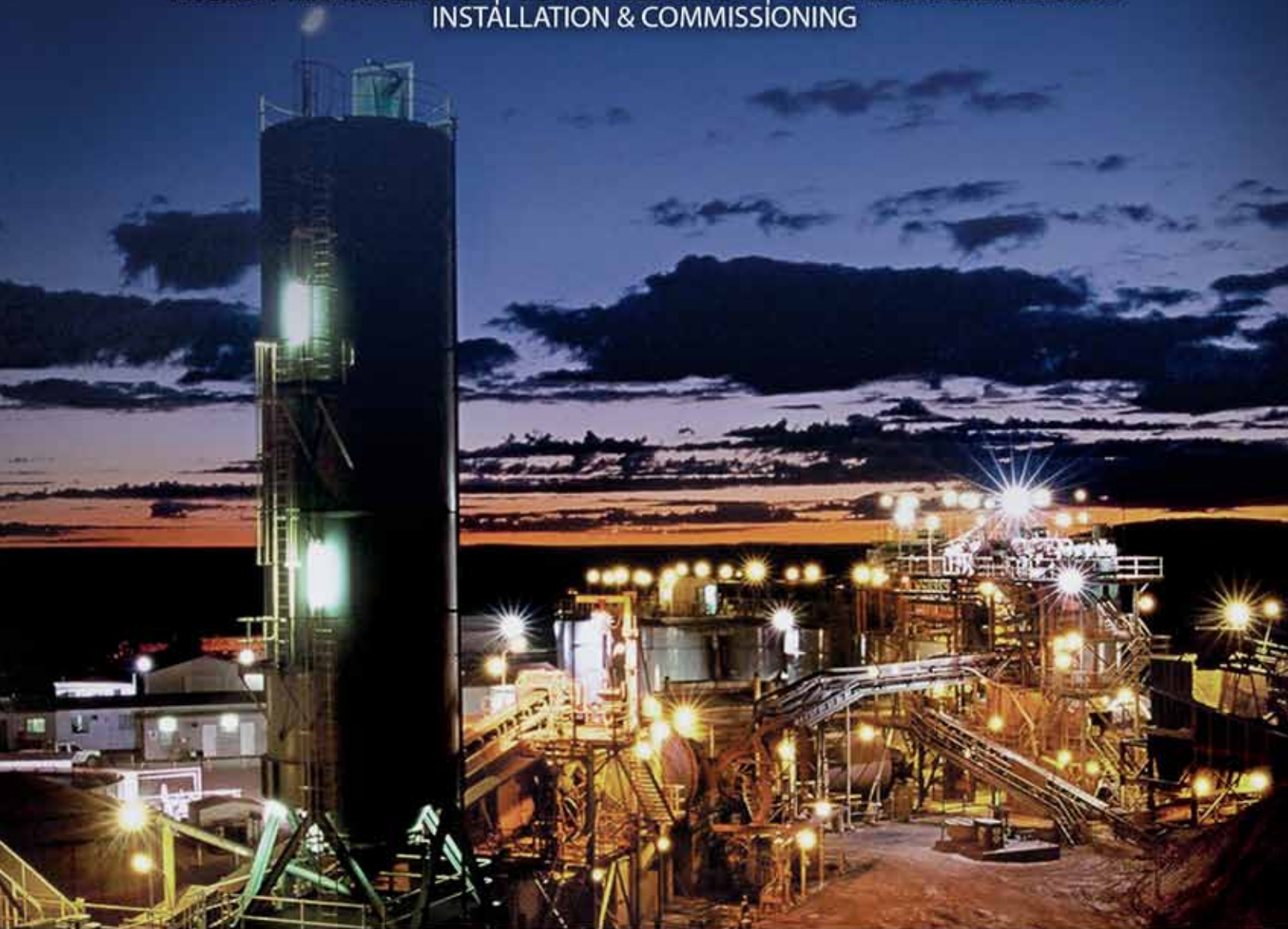
What's next for your company?


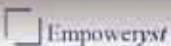
Manhattan will develop its technology and business capacity further. Africa is an enormous growth target that is in Manhattan's strategic vision.

TURNKEY PROCESS PLANTS FROM CONCEPT TO COMPLETION

IMPROVED ROI | CUTTING EDGE TECHNOLOGY | PROCESS OPTIMISATION

DESIGN | PROCESS ENGINEERING | MECHANICAL ENGINEERING
PROJECT MANAGEMENT | MANUFACTURING | ELECTRICAL ENGINEERING
INSTALLATION & COMMISSIONING



LEVEL 3 BBBEE STATUS  

YOUR BUSINESS PARTNER IN MINING AND PROCESS SOLUTIONS

www.ManhattanCorp.com

t. +27 11 748 8800

info@manhattancorp.com

