



MTL Triad Engineering

Mission Statement



Our mission is to consistently deliver superior quality Botswana steel fabrication and industrial services through a truly Motswana company, by Batswana employees with Motswana products for use on Botswana soil.

To place a non-negotiable first priority on safety and ensure every employee goes home to their family.

To make professionalism and integrity the cornerstone of all our relationships.

To place an undeniable emphasis on the development of our company, our people, our projects, our clients and our country.



Our Team

MTL Triad Engineering (PTY) LTD is a 100% citizen owned Botswana registered company, providing Civil and structural Refurbishment, scaffolding, Tank linings, Acid proof linings, Hold & Cold Insulation, HP & UHP cleaning, Denso applications, Fire proofing, Welding & Fabrication, fall protection and arrest systems, concrete rehabilitation, demolition works, Corrosion Protection, industrial sheeting, mechanical engineering in the mining and construction industries spectrum. The firm is led by 3 Batswana individuals being Moatlhodi Maseko, Kelebogile Rapekenene and Tumelo Garebabitse



Steel Wizard Kelebogile Rapekenene is an experienced steel smith

KELEBOGILE RAPEKENENE

experienced steel smith (Fabrication, removal and Installation) with over 14 years of experience attained in the construction and mining industries.



MOATLHODI MASEKO

SHEQ Maestro
Moatlhodi Maseko is an
experienced SHEQ Specialist
with 11 years' experience
attained in the construction
and mining industries.



TUMELO GAREBABITSE

Industrial services Genius
Tumelo Garebabitse is an
experienced scaffolding,
sheeting, corrosion protection and
Civil works specialist with over 20
years of experience attained in
the construction and mining
industries.

Born, bred, and developed on Botswana soil, MTL is a 100 % Motswana company backed by the multinational Industrial services Group – RSC. MTL works hand in hand with site engineers, architects, and designers harnessing top world-class talent to deliver practical structural steel solutions and associated industrial services, enabling MTL to offer a one-stop solution and single point of accountability for your site rehabilitation and maintenance requirements.



Facilities and Capabilities

Boasting world-class facilities in Francistown and Orapa, MTL is an authentic Botswana business. These facilities enable MTL to meet the needs of the Botswana mining and energy industries. By combining extensive site steel fabrication and steel erection experience with world-class safety and quality experience, MTL offers a practical safe and high-quality deliverable by a 100% locally owned company with exclusively local technical staff.

Projects and Experience

The MTL team possesses a long history of completed projects, shutdown, and maintenance projects that include a wide array of site services, including steel fabrication, erection, specialised coating, access solution, rubber lining, acid lining, and concrete rehabilitation. MTL proudly enjoys a brand licensing and developmental agreement with the RSC Group and thus proudly uses that brand as proof of its capabilities to finance and execute the most complex of projects. MTL's twenty years core experience in Structural, Mechanical, and Steel Platework coupled with 37 years of experience in industrial services ensures guaranteed high-quality delivery in operational environments.

"Used Under License"

Management and Expertise

The three directors and shareholders are all hands-on and have a combined fifty years of site-specific experience, ensuring direct involvement by senior management in every deliverable. ERB rated engineers, PMI certified project managers, and extensively vetted professionals are utilized on all major projects. This means your project receives oversight from the top talent in the industry, with the result that quality is achieved, costs are managed, and the project is executed on time.



Citizen Economic Empowerment

MTL has an extensive network of **Motswana suppliers**, subcontractors, and service providers from cranes to latrines, ensuring both citizen economic empowerment and support on the ground as and when needed. The excellent safety record for MTL is a source of pride and proof of the company's commitment to excellence in safety.

The MTL commitment to citizen economic empowerment (CEEP) starts with its ownership, 100% local, and carries on to its experienced staff and key personnel, 100% local, and our procurement, which is wherever possible 100% local.

We are a truly 100% proudly Motswana Company.

Certifications and Affiliations

MTL is aligned with all Botswana governing bodies and is registered with the PPADB and only utilizes ERB certified engineering management staff









www.mtltriadeng.co.bw



Extension of Life of mine- Full Turnkey Industrial service Provider

MTL Triad Engineering provides specialised site refurbishment & maintenance services that effectively extend the lifespan of structural assets even in inhospitable and challenging environments found across Africa. This focus on preventing catastrophic failure and extending life of mine has led to the development of a skilled project based organization capable of offering comprehensive site maintenance industrial services and where necessary refurbishment and structural fabrication. Clients now benefit from accessing all their required site services including steel rehabilitation where necessary from a single provider, resulting in streamlined operations, reduced risk, and lower capital costs. With its extensive expertise and diverse service portfolio, MTL confidently asserts its position as the Botswana industry leader in all the services it offers, as described below.

Steel Fabrication

MTL works hand in hand with site engineers, architects and designers harnessing top world class talent to deliver practical structural steel solutions and associated industrial services enabling MTL to offer a one stop solution and single point of accountability for your site rehabilitation and maintenance requirements.

Boasting world class fabrication facilities in Francistown and Orapa MTL is an authentic Botswana business. These facilities enable MTL to meet the needs of the Botswana mining and energy industries. By combining extensive site steel fabrication and steel erection experience with world class safety and quality experience MTL offers a practical safe and high-quality deliverable by a 100 % locally owned company with exclusively local technical staff







Surface preparation is the most important part of the Corrosion Protection process. In other words; "surface preparation" is to a coating system what a foundation is to a building.

Blasting to a SANS standard of S.a.2.5 / S.a.3, guarantees our clients quality work and ensures that any substrate is suitably prepared and is of the required cleanliness and blast profile for industrial painting. The blasting process is designed to remove any rust (oxides), scale, grease and any other impurities from the surface.

Blasting teams are trained and certified to produce the required standard. Together with supervisors and qualified QC staff, these steps are recorded for the client to review within the data packs provided. Numerous Internationally recognised testing methodologies are employed to ensure that steel is free of chlorides, sulphides and any other contaminants.

Surface Preparation

Along with abrasive grit blasting utilising slags, there are numerous surface preparation methodologies that may be deployed and various types of blasting media that may be specified depending on the substrate material, environmental conditions and coating specified. Blasting is the process of applying the selected media to a surface using compressed air to propel it.

MTL offers the additional services of Wet or Dustless blasting where dust may be a concern. Garnet and Glass beads can be utilised for stainless steel and finishing or polishing processes. For power turbines and other precision equipment Aluminium Oxide can be utilised ensuring a superior finish. Ultra high pressure water systems can also be used for surface preparation and maintaining the existing profile. MTL has the latest technology, specialised machinery and equipment to address any surface preparation requirement.

MTL will identify your specific needs whilst taking into account the environmental factors and most suitable coating methodology in order to propose a suitable and cost-effective system to achieve your required ends.



Corrosion Protection

The aim of corrosion protection is to influence the rate at which oxidation occurs, resulting in less corrosion over a longer period and extending the life of the asset and ensuring structural integrity, thereby minimizing maintenance.

By mechanically isolating the package contents from the aggressive corrosive agents, damage is prevented. This is achieved by means of protective layers or coatings. What is critical to longevity are the conditions surrounding the application of such coatings.

Surface preparation, ambient and substrate conditions, as well as method of application of the coating need to be closely monitored and controlled.

Other considerations in designing the appropriate coating system may including a fire intumescent (fire-resistant) or wear proof lining to limit potential damage to the substrate.







Industrial Painting / Tank Linings and Floor Coatings

MTL specialises in application of Industrial Paints within numerous Mining, Oil & Gas, Petrochemical, Power Generation and Industrial environments. Whether it's working-at-heights or in confined spaces, MTL has the experience to deliver quality workmanship safely in the most extreme environments.

MTL believes in partnering with key stakeholders; thus, our paint suppliers are critical and imperative to ensure we can provide the best possible service to our clients.

MTL enjoys close and mutually beneficial relationships with the industries top suppliers. Commonly used paint suppliers include Stoncor, Sigma, International, Hempel, Jotun, Cin, Sherwin Williams and Plascon.

Keeping up to date with innovative new products and the latest specifications ensures our coating specialists can offer the latest in coating technology.





Due to the demands for access, the provision of scaffold was a logical and organic service add-on. With the increase in maintenance and project work for the Petrochemical and Power Generation industries, scaffolding has become a core MTL service.

In excess of 1000 tons of access scaffolding material can be erected at any time for routine maintenance, construction and shutdowns. We carefully manage the erection, inspection, handover and dismantle thereof.

MTL scaffold and working-at-heights certified professionals offer an all-round on-site scaffolding management system. Successfully delivering to a multitude of industries providing Towers, Hanging Scaffolds and Access Platforms from the most basic applications to specialised structures. Large scale builds or load bearing scaffolds are designed and certified by PR engineers.

Concrete Rehabilitation

Corrosion protection is not only imperative to steel structures but also to concrete within the industrial environment. MTL has developed the expertise to provide rehabilitation to corroded concrete structures using rehabilitative products and where necessary executing new builds.

Spalling, cracked and deteriorated concrete caused by chlorides and oxidisation of the rebar that is not suitably and efficiently addressed, risks the integrity of the entire structure.

Concrete corrosion and deterioration can mostly be visually observed, and level of corrosion ascertained. After observation and measurements, an assessment of recommended rehabilitation techniques and products can be provided, and an optimal maintenance plan designed.

Corrosion protection includes the removal of deteriorated concrete, rehabilitation of the rebar including blasting and coating and then application of repair product or grout with corrosion inhibitors.

Concrete rehabilitation prior to the application of Epoxy floor coating systems is critical and fundamental to long term wear and coating success.

Concrete repairs can be carried out on plinths, bund walls, floors and conveyers whilst considering jointing and expansion requirements.

Secondary containment substrates are critical and require ongoing maintenance and evaluation.

MTL can provide aesthetically pleasing rehabilitation solutions using all major supplier products including the Prostruct, BASF, CIN and SIKA systems providing solutions that address the environmental challenges.





Secondary Containment & Acid Proof Linings

MTL specialises in the design, supply and application of Acid Proof Linings strictly to customer's requirements.

Typically utilised for acid tanks, CIL areas and bund containment areas, MTL can provide the most robust systems capable of withstanding the corrosive elements and thermal shock effects associated with the most aggressive acids. Our specialised team has more than 20 year's experience in the application of Acid Lining, ensuring all workmanship is completed to the required specifications. A complete service offering includes plant survey, rehabilitation of concrete and application of linings. Products include Acid Resistant Bricks, Flake Glass Linings, Vinyl Ester & Modified Epoxy, Polyester High Performance and Heavy-duty systems.





Hot, Cold & Acoustic Insulation

MTL Specialises in insulation (thermal and acoustic). Our Thermal Insulation division offers the supply and expert application of both hot & cold insulation systems. Experience includes hot and cold solutions for the Mining, Power, Petro-chemical, Paper, Sugar & Oil and Gas Industries. Cladding can be developed in aluminium, stainless and galvanized products. MTL can provide insulation solutions for any application from -200° to 1000° C. Additional services include Cold Cryogenic applications, Aerogel Insulation, Polyisocyanurate, Perlite and Cellular Glass applications for LNG plants





Widely accepted as an environmentally sound alternative to abrasive blasting. MTL has the expertise and equipment available to perform HP & UHP Water Jetting operating at pressures ranging between 68 bar and 2800 bar.

Services include:

- Removal of aged coatings
- Cleaning of concrete surfaces
- Removal of surface contaminants
- Tank cleaning & De-sludging
- Removal of marine growth fouling
- Tube Bundle clearing
- Deck and floor cleaning
- Furnace cleaning
- Boiler cleaning



MTL are specialists in the supply and installation of Sheeting to all Industries. Our Sheeting crews are specialised Sheeting Applicators and can work off Scaffolding or Rope Access. We maintain a strict safety record with a low risk factor on all our projects.







Denso Steel Protection

MTL provides a selection of the best tape anti-corrosion protection systems to steelwork and plant depending on site and corrosive factors.

Services include:

- Above ground tape wrapping
- Buried piping tape wrapping
- Waterproofing
- Tank base protection
- Doping & Wrapping





Fire Protection



MTL is approved and trained in the application of fireproofing materials.

Fireproofing can be done either by applying an Intumescent coating on steel to give various fire ratings or by Cementitious applications for various fire ratings.

We offer extensive Fire Protection Systems and product line solutions to every fire protection design requirement including Commercial, Medium, and High-Density Spray-Applied Fire Resistive Materials, Intumescent Coatings, and Rigid Boards.

MTL Fire Protection teams are highly experienced teams of Technical & Field professionals and we have the full technical support of our global network of approved professional suppliers.



Rubber Lining

MTL supplies Wear & Corrosion protection on chutes, piping and tanks using high wear resistant natural rubber. This can be applied on site or at our workshop.



Rope Access

MTL provides Rope Access for areas that cannot be reached by Scaffolding or any other forms of access.

MTL's primary concern is our workers "SAFETY" and we ensure that all the necessary training is undertaken. We take no chances with the testing and inspection of all our gear.

The biggest benefit of using Rope Access is speed and less interference on site with day-to-day operations, making it more efficient than any other Access Forms.

All our Rope Access Technicians are certified, competent and qualified to provide a safe and efficient service to all the difficult to reach areas.







<u>Asbestos Removal –</u> Department of Labour Accredited Partner

MTL is able to leverage its RSC brand agreement and thus can provide a registered asbestos contractor. We offer legally compliant and safe asbestos removal by experienced staff.

The prolific use of asbestos in the past and its recognition as a serious health hazard has necessitated a structured safe procedure to remove an isolate the hazardous material.

MTL can safely remove and dispose of roof sheeting, gutters, cladding, lagging, pipes and storage tanks.



Pigging

MTL provides pipe pigging services for inspection, desludging and maintenance purposes. Pigging reduces the environmental impact of cleaning operations whilst reducing the loss of product and it avoids the need for line flushing.

Pigs allow for separation of products in pipeline, internal cleaning of the line, Inline inspection of internal walls and capturing of geometric information relating to pipes.







On Site Full Turnkey - Plant Maintenance

MTL is able to offer a single point of accountability and a single P & G for numerous industrial services from a single service provider thus passing on considerable savings to asset owners across the continent.

By combining corrosion protection, scaffolding, concrete rehabilitation, sheeting, acid lining, insulation, cladding and fire proofing amongst many other industrial services, our clients can benefit from a single point of contact, world class quality and safety offerings, highly specialised and certified services from a local Botswana contractor.









Debswana -0rapa, Letlhakane & Daamtsha mines

MTL Triad team has been involved with refurbishment projects on Debswana Orapa plants Since 2011.

Successfully Completed projects include:

Steel works encompassing fabrication and installation of categories 4 and 5 site wide structural steel integrity priorities. Civils have also been carried out successfully on numerous site wide projects.

The rehabilitation of Plant 1, Plant 2, DMS, Crushing, MTP, Crusher bins, 600 T Bunkers, Carp building, Silos, Flocculant plant, Degrit, Drill chip sampling plant, OM2, ultraceps, thickener refurbishment and rebuilds and the full conveyer rehabilitation & refurb including structural steel and concrete replacement.

Damtshaa Thickeners refurbishment.

Letlhakane Modular tailing plant corrosion protection.

The supply and erection of site wide scaffolding and access solutions for both maintenance and projects for all 3 mines.

Completed maintenance solutions Include:

Structural Steel Fabrication, propping, replacing and installation. Steel plate fabrication and replacement

Q decking remove and replace. Corrosion protection on structural steel, platework, thickeners, tanks and other vessels. Crushers replace and refurbish including replacement of VRN 500 liners.

Site wide sheeting, insulation & Cladding. Conveyer Plinths excavate and rehabilitate including bracing and propping of conveyers allowing for transfer loads. Concrete repair and rehabilitation including replacement of conveyers and plant floors. Rubber lining, denso application and column base protection as required.

HP & UHP cleaning including cleaning of ore buildup in crusher, splitter bins and silos.

Site wide maintenance and project access solutions including Scaffolding, rope access and suspended scaffold/platform solutions.

Project teams have ranged from 8 to 140 people and durations from 3 days to 1 year. MTL has proven the ability to handle massive plant wide maintenance and short intense shutdown interventions.

If you are serious about structural integrity, your life of mine and avoiding catastrophic failure then MTL is your once stop solution for a full plant maintenance and refurbishment offering.





Projects

Botswana ash - Sua Pan

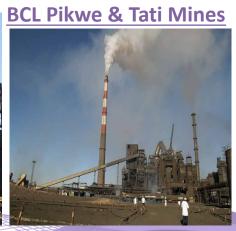




Debswana - Jwaneng







Projects

Engen & Astron Francistown - Tank Linings





Khoemacau - Formerly Discovery







Projects



Contact Us









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