



# company profile

## OUR COMPANY

MIP PROCESS TECHNOLOGIES (Pty) Ltd is a South African Process Equipment sales and manufacturing company offering customised and innovative process solutions for the Mining, Minerals processing, Petrochemical, Waste water, Chemical, Food & Beverage and related industries.

Offices are situated in Rivonia, north of Johannesburg. Our technical staff is well equipped to provide the most extensive and latest recommendations in agitation, attritioning, clarification & thickening, mixing, sampling, pumping and flocculation processes.

MIP PROCESS TECHNOLOGIES is a 100% Black owned and black managed company and the team has over 100 years combined experience in the process industry. MIP PROCESS TECHNOLOGIES is accredited with the highest achievable BEE score, i.e. Level 1 status by BEE Rating Solutions. MIP PROCESS TECHNOLOGIES is a value adding supplier, which enables customers to claim 135% spend against their own BEE targets. MIP PROCESS TECHNOLOGIES has successfully supplied numerous thickeners, flocculant plants, attrition scrubbers, linear screens, pumps, slurry samplers and agitators. Our installation lists are testament to our success.

## MISSION AND VISION

MIP PROCESS TECHNOLOGIES' mission is to establish the company as the preferred supplier of process equipment that is underpinned by the following:

- Customer focus
- Reliability
- Innovation
- Continuous improvement

## STRATEGY

### Value Creation

through innovative, superior designs and building strong supply capabilities in minerals processing and related industries

### Value Realisation

through customized process equipment and business excellence

### Sustaining Value

by developing innovative technology and the continuous addition of new products to our range

Creating value  
through innovative  
superior designs and  
building of strong  
supply capabilities





## PRODUCTS & SERVICES

MIP PROCESS TECHNOLOGIES strives to design and manufacture process equipment that is technically advanced, reliable and more customized than any other supplier.

Our product range includes:

- Clarifiers and Thickeners
- Linear Screens
- Attrition Scrubbers
- Flocculant Plants
- Mixers & Agitators
- Slurry Samplers
- Progressive Cavity Pumps
- Lime Preparation Plants
- Reagent Make-up Plants

## CLARIFIERS AND THICKENERS

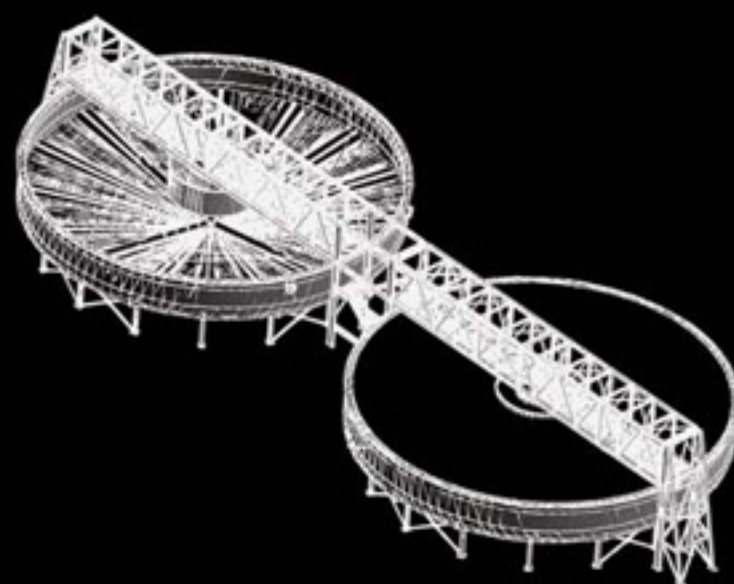
Thickeners and clarifiers operate in the minerals processing, water treatment, chemical and effluent treatment industries throughout the world. In addition to this existing technology MIP PROCESS TECHNOLOGIES brings customized and tailored-made process solutions.

Over and above your process data, our designs also consider long-term mechanical performance, optimised circuit efficiency, maximum availability and minimised operating costs.

Some of our design considerations include:

- Testwork capability
- Accurate sizing for the duty
- High torque planetary gearbox
- Torque measurement including a 'high torque' audible and visual alarm with 'over torque trip' for mechanism protection in the event of extremely high torque conditions
- Dual feed well with adjustable feed dilution system
- Ability to monitor and/or operate via SCADA
- Multiple flocculant additional points for easy optimisation
- Full/Half span walkways
- Various bridge and tank designs

Exceptional attention is given to the design of the thickener feedwell (for efficient distribution) and specially profiled rake blades, with minimal drag, for maximum transfer rate of viscous and heavy material.



26m $\phi$  Thickener in operation



21m $\phi$  Thickener from bolted design



## LINEAR SCREENS

MIP PROCESS TECHNOLOGIES' linear screens are designed to remove trash/wood chips/fibre from ore streams. It comprises a frame with screen cloth, which is supported on rollers and driven via the head pulley.

Slurry enters the screen via a feedbox onto the moving cloth. Polyurethane side curtain panels prevent spillage. The "cleaned" material is collected in the underpan and the trash/wood chips are retained on the screen, where it is discharged into a chute. Any material sticking to the cloth is removed using water nozzles mounted on a spray bar.

MIP horizontal linear screens offer the following design features:

- Pre-engineering units
- Range of screen apertures up to 2000 micron
- User friendly
- Flexible

## ATTRITION SCRUBBERS

MIP PROCESS TECHNOLOGIES Attrition Scrubber design is a culmination of more than fifteen (15) years of experience in this field.

MIP Attrition Scrubber operates on the principle of creating more attritioning zones within the unit. It is designed for optimum utilisation of space whilst ensuring that every particle passes through the multiple working zones. This offers multiple opportunities for particles to achieve more than adequate scrubbing.

Each attrition cell is fully rubber lined in accordance to the client's specifications for wear resistance. The unit is designed specifically for the required duty and ease of maintenance.

## FLOCCULANT MAKE-UP PLANTS

MIP PROCESS TECHNOLOGIES Flocculant Make-up Plants are of modular design and can also be supplied as a customised unit.

The wetted flocculant particles enter the unit through a wetting head followed by gentle mixing of the solution in the make-up tank. No pumping takes place between the make-up and holding tanks, as transfer is achieved by means of hydraulic kinetics. Plants are fully PLC controlled.



30m<sup>2</sup> Linear Screen



34m<sup>2</sup> Linear Screens



Attrition Scrubber



Skid mounted flocculant plant



## •• MIXERS AND AGITATORS

**MIP PROCESS TECHNOLOGIES** is the official licensee in Africa for Chemineer Incorporated.

Chemineer is one of the largest mixer manufacturers in the world and has been at the forefront of the mixing industry since 1952. They are well known in a variety of markets including chemical & petrochemical, mineral processing, food & beverage, pharmaceutical, water treatment, biotechnology and pulp & paper.

Chemineer's fluid mixing knowledge, supported by the best application software, proprietary mixer designs and state-of-the-art laboratory, allows it to be the preferred supplier of fluid mixing equipment.

Chemineer gearboxes are custom designed for mixer applications with a larger output shaft and bearing arrangement, compared to "general use" gearboxes. A variety of impellers ensures optimum mixing performance.

The complete range of mixers, from portable to large heavy duty units is offered.

## •• SLURRY SAMPLERS

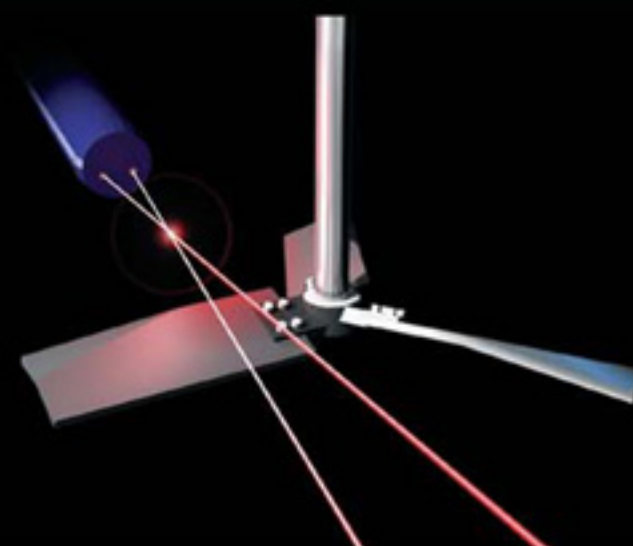
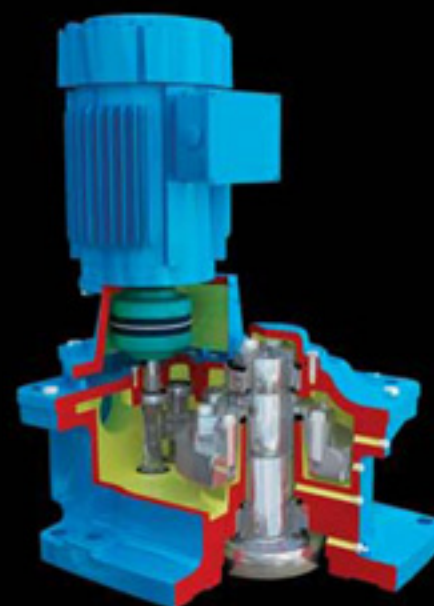
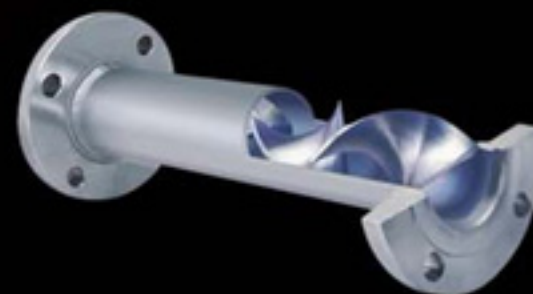
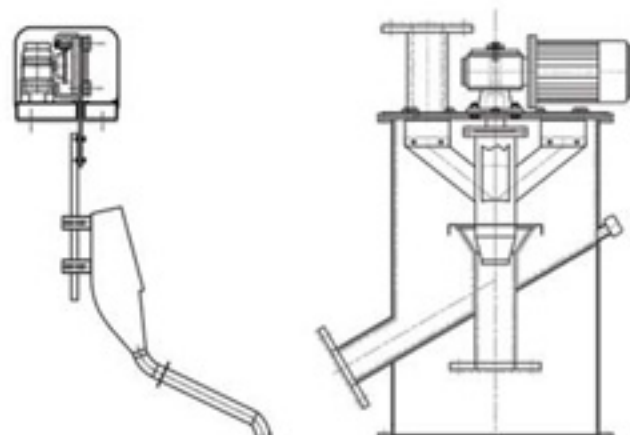
**MIP PROCESS TECHNOLOGIES** supplies the following slurry samplers:

- Cross cut / Launder Samplers
- Primary Rotary Samplers
- Secondary Rotary Sampler
- Pipe Samplers

The MIP Automatic Cross-Cut Sampler is designed to operate as a primary sampler. Based on the launder size requirement and cutter parking of 150mm on each side, various standard sizes are available to suit each application.

The Primary Rotary Sampler has been designed to require minimal maintenance and consists of a cylindrical enclosed steel housing with feed, discharge and sample ports. The housing is rubber lined for abrasion resistance, with the outer surface painted.

The MIP 450mm $\phi$  secondary vezin sampler is designed to operate as a continuous unit.





## MOYNO PROGRESSIVE CAVITY PUMPS

MIP PROCESS TECHNOLOGIES supplies Moyno® positive displacement pumps. Moyno® Incorporated is a leading manufacturer and marketer of Moyno® progressing cavity pumps, sludge pumps, metering pumps, sanitary pumps, multiphase fluids transfer systems, grinders and controls.

The progressive cavity pumps comprise a specialised, patented screw-type rotor that limits leaks and is ideal for applications with high pressures and viscosities, particularly the mining and petrochemical industries. The pumps can process mediums with viscosities up to one-million centiPoise and particles of up to 20mm in diameter.

The rotor on the Moyno® positive displacement pumps operates within a rubber enclosure in the pump, which forms cavities. The progressing cavity design forms a series of sealed cavities 180° apart, which contain the pumped medium. As the rotor turns and the cavities progress from the suction to the discharge end of the pump, the pumped fluid is carried along the cavities.

As one cavity decreases and empties of fluid, the opposite cavity increases at the same rate, filling with liquid. As such, the flow within the pump is constant and non-pulsating with low shearing action that reduces the degradation of materials.

## LIME PREPARATION PLANTS

MIP PROCESS TECHNOLOGIES' Lime Preparation Plants are designed for each application and converts hydrated lime to milk-of-lime. Units are self contained, modular and reduce the costs normally associated with mixing water and slaked lime.

The plants can cater for bulk bags or to milk-of- lime pumping.

## REAGENT MAKE-UP PLANTS

MIP PROCESS TECHNOLOGIES Reagent Make-up Plant is designed to mix a wide range of flotation chemicals, including Xanthates, Frothers and Depressants. Designs comply to Class 1 certification.

As part of our development initiatives MIP PROCESS TECHNOLOGIES is committed to ongoing testwork and research, in order to improve existing competitive technology.





## •• AFTER SALES SERVICE

All **MIP PROCESS TECHNOLOGIES'** products have been innovatively designed to ensure minimal maintenance with easily replaceable parts for minimum downtime. All our products carry an eighteen (18) month warranty compared to the industry standard of twelve (12) months. This decreases the buying risk for customers, as most products are large capital investments.

We offer excellent after sales services. Our technical and service department staff is available on a continuous seven (7) days a week basis to offer assistance.

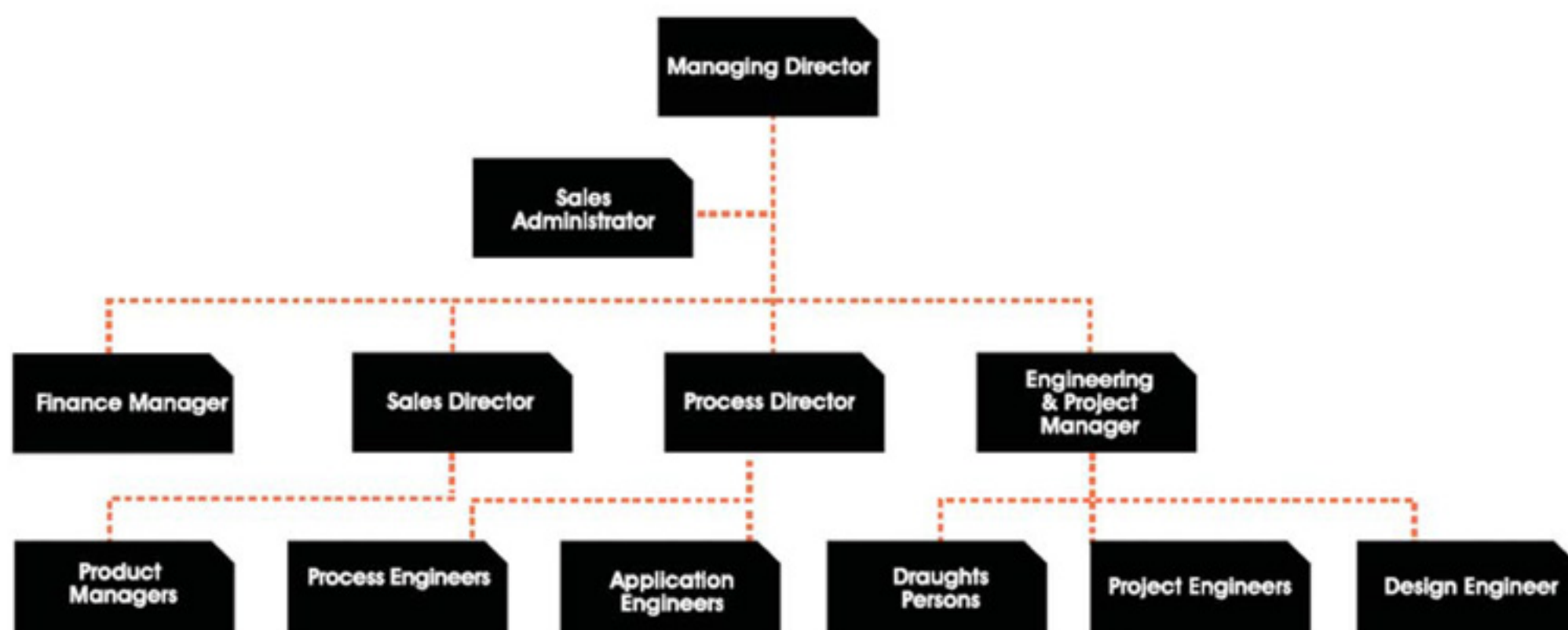
## •• PROJECT MANAGEMENT

Owing to the high importance **MIP PROCESS TECHNOLOGIES** places on delivery, we ensure that each project has a world-class project management team. This is coupled with the resources of highly experienced sub-contractors for various aspects of each project.

We boast strong support elements to ensure that the quality and successful delivery of each project is carried out thoroughly and on time. Our services include our in-house quality management and inspection that requires minimal supervision from our clients.

## •• MANAGEMENT STRUCTURE

Collectively **MIP PROCESS TECHNOLOGIES'** staff boasts over 100 years of expertise in management, metallurgical R & D, process design and development, project management, sales and marketing.



## CONTACT US

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|--------------------|---|
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## DIRECTIONS

