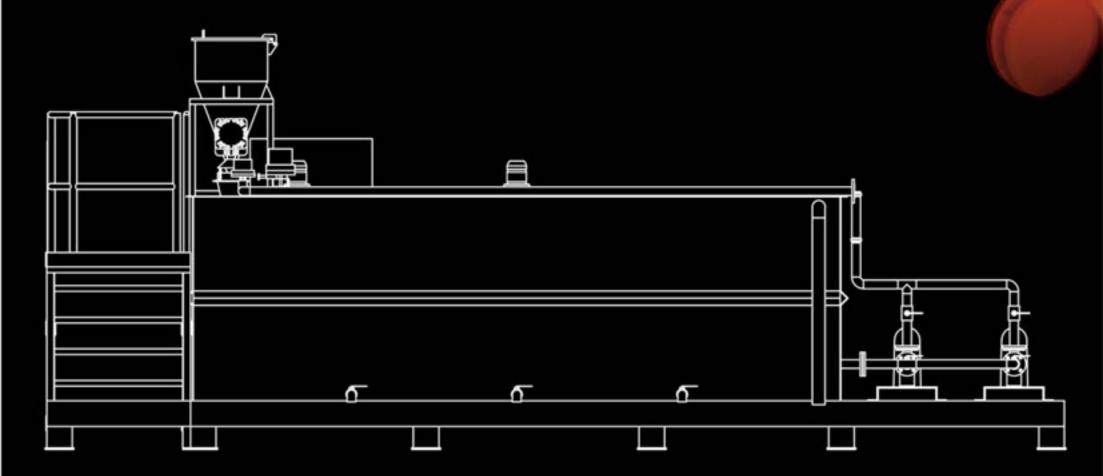


# flocculant dosing plants



#### OUR COMPANY

MIP Process Technologies (Pty) Limited is a South African Process Equipment sales and manufacturing company offering customised and innovative process solutions for the Mining, Minerals Processing and related industries. The 100% black-owned and black-managed company was established in 2007. MIP Process is accredited with Level 1 BEE Status, which is the highest that can be achieved. We pride ourselves on being truly customercentric with unsurpassed levels of customer service.

MIP Process Technologies (Pty) Limited's mission is to be the preferred supplier of process equipment with an offering that is underpinned by:

- customer focus
- reliability
- innovation
- continuous improvement

We specialise in the supply of Process Equipment, but have the capability to assist with plant design around our core technologies.

# BACKGROUND TO FLOCCULATION

Flocculants are polymers that promote flocculation by formation of bridges between themselves and thus become suspended particles to aggregate. When the suspended particles are flocculated into larger ones, they are settled in devices like thickeners and clarifiers and removed with the underflow.

The flocculants accelerate the settling process, which leads to the potential use of smaller thickeners.

Flocculants can also be used to aid filtration.

#### APPLICATIONS

Flocculation is employed for a variety of applications from mineral processing to purification of drinking water. This includes:

- Concentrate and Tailings thickeners in the mining industry
- Water treatment plants
- Filtration aid
- Sewage applications
- Treatment of industrial waste water streams
- Clarification processes

## FLOCCULANT PLANT TYPE AND SIZES

The MIP series of Flocculant Plants are supplied according to consumption rates.

| Model No | Flocculant Consumption (kg/h) |
|----------|-------------------------------|
| MIP-050  | 0 to 0.2kg/h                  |
| MIP-100  | 0.2 to 0.5kg/h                |
| MIP-200  | 0.5 to 1kg/h                  |
| MIP-300  | 1 to 2kg/h                    |
| MIP-400  | 2 to 4kg/h                    |
| MIP-500  | 4 to 8kg/h                    |
| MIP-600  | 8 to 14kg/h                   |
| MIP-700  | 14 to 30kg/h                  |
| MIP- 800 | 30 to 60kg/h                  |

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





## • ENGINEERING STANDARDS

All engineering, design and construction is based on sound internationally approved engineering principles as well as practical applications.

## AFTER-SALES SERVICE

MIP Process Technologies (Pty) Limited's products have been designed to ensure minimal maintenance with easily replaceable parts for minimum downtime.

All our products carry an eighteen (18) month warranty against the industry standard of twelve (12) months. This decreases the risk when buying MIP Process equipment. We offer an after-sales service and our Technical and Service departmental staff is available on a continuous seven (7) days a week basis to offer assistance.

A team of process and mechanical engineers, who have experience in Coal, Base Metals, Platinum and Gold markets, are available. Field service technicians provide further support.

#### • BENEFITS

A range of benefits are available to business partners when purchasing equipment from MIP Process.

| Feature                                   | Benefits                          |
|---|-----------------------------------|
| Fully automated                           | No operator intervention required |
| Skid mounted design                       | Reduced installation required     |
| Pre-Engineered units                      | Short delivery times              |
| Minimal maintenance required              | Low operating costs               |
| User friendly fault finding               | Ease of operation                 |
| Liquid and Powder polymers can be treated | Custom design                     |
| Flexible                                  | Easy to change parameters         |
| Efficient wetting of flocculant           | No discard of mixed polymers      |

Furthermore, customers are not 'locked-in' to specific polymers, they can make their own choice.

### EQUIPMENT COMPONENTS

The main components of the fully automated MIP Process Technologies flocculant plant include:

- · Multiple compartment steel tank system
- Galvanised walkway, staircase and handrails
- Make-up tank mixers and valves
- Flocculant bin with screwfeeder system
- Stainless steel flocculant wetting head arrangement
- Dosing pumps with base frame
- Control panel in IP65 protection
- Relevant automatic valves and inter connecting piping

Tanks can be supplied in a variety of materials and designs.

We employ Chemineer mixers and Moyno pumps on all our flocculant plants.



Flocculant Plant with hoist



Skid mounted Flocculant Plant



Flocculant wetting head



Chemineer HT Agitator





MIP-200 Flocculant Plant



30m2 Linear Screen

#### **Project Management**

Owing to the high level of importance that MIP Process Technologies (Pty)
Limited places on delivery, we ensure that each project has a world-class management
team. This is coupled with the resources of highly experienced subcontractors, for the
different aspects of each project.

#### Low Investment

Capital costs - Our equipment design is conservative and robust to ensure it is still in operation many years from now. We understand that process conditions can change and make allowances for this.

#### **Test Facility**

A comprehensive test facility is available to our customers. Preliminary sizing can be done using our extensive database.

#### **MIP Value Proposition**

The MIP designs consider not only the customer's process data, but also the long-term mechanical performance, maximim circuit efficiency, availability and minimised operating costs.

## PRODUCTS & SERVICES

MIP PROCESS TECHNOLOGIES strives to design and manufacture process equipment that is technically advanced, reliable and customised for each application. We believe that each ore body is different and a 'fit for all design', is not necessarily the optimum solution.

Our designs are simple yet robust and reliable. Our philosophy is to minimise the customer's total operating costs, thus minimising capital and operating expenditure. The full product range includes:

- Attrition Scrubbers
- · Clarifiers and Thickeners
- Chemineer range of Mixers and Agitators
- Flocculant and Reagent Make-up Plants
- Horizontal Linear Screens
- Moyno Progressive Cavity Pumps
- Slurry Samples

## • CONTACT DETAILS

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