

# Flotation Wear Components





### **MULTOTEC**

PROCESS EQUIPMENT



### Multotec Pty Ltd





- The Multotec Group, established more than thirty years ago, is a Johannesburg South African organization with German shareholding. Its core business is the supply of products and services to the mining, mineral beneficiation and power generation industries.
- The group comprises four main operating entities, each with its own product range and associated services, namely Multotec Manufacturing, Multotec Process Equipment, Multotec Wear Linings, and Multotec Rubber.



### Resources Mining Technologies [RMT]





- Florida based Resources Mining Technologies [RMT] is the key Multotec Product Distributor and Servicing Agent for the United States.
- In addition to RMT's extensive Multotec and RMT proprietary product offerings, the RMT organization has an established reputation for providing optimum mineral processing technical solutions and the highest levels of personal support. RMT provides direct assistance of appropriate equipment selection through to delivery accuracy, both hot and cold commissioning. RMT offers the very best industry equipment guarantee and even includes vital routine on-site equipment inspections and reporting to help eliminate unexpected costly down time.





### Resources Mining Technologies [RMT] Partners





Multotec - **PROCESS EQUIPMENT** [Edmonton, Canada]



Manhattan - **BALL MILLS** [New York, USA RSA,]



Tema Systems Inc. -VIBRATORY SCREEN PANELS [Cincinatti, OH USA]



Hazen Research - METALLURGICAL RESEARCH [Golden, CO USA



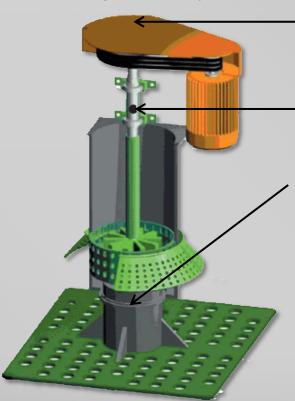
McClelland Laboratories, Inc. - **METALLURGICAL TESTING** [Sparks, NV USA]



## Flotation Dry Wear Components

Multotec's high quality, hardwearing flotation components are available for all types and sizes of flotation cells. They are replaceable components and can be redesigned to optimize performance and life. Full range of dry ends are available. Manufactured to the highest quality standards.





**Guards** 

Bearing complete assemblies, base plates and bearing stands

#### **Draft Tubes**

- Split into three sections: bottom, top hat and adapter
- High-wear area top section is effective to replace and discard
- Plastic pinning is used for ease of installation and extraction, which results in less corrosion and downtime
- Limited steel is used in the top section, thereby allowing greater wear life





## Flotation Wear Analysis

### **Wear Analysis:**

- ✓ A process of observing wear patterns and wear rate in critical areas
- ✓ Provides more polyurethane in the places where it is needed most
- ✓ Gives maximum possible wear life
- ✓ Correct amount of polyurethane in relation to the application results in a cost effective product

#### Steel laser cut reinforcing:

- 3CR12 stainless steel bosses
- Easy top-side assembly only
- No rust and bolt locking
- Grooved-in, balanced and accurate
- Welding to ISO standards
- Designed to enhance performance





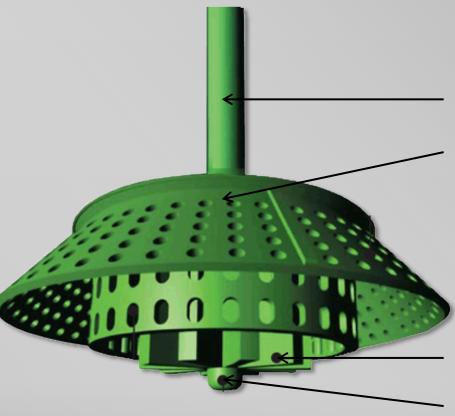
Multotec rotors/ impellers and diffusers





## Flotation Wet Components





#### **Shaft Protection**

#### **Hoods**

Hood segments are now manufactured with radial vains
The benefits are:

- swirling and wave action is inhibited
- smooth controlled radial flow is encouraged
- loss of recovery is minimized

#### **Rotors**

Mounting nut and protector caps



## Flotation Wet Components



#### **Dispersers**

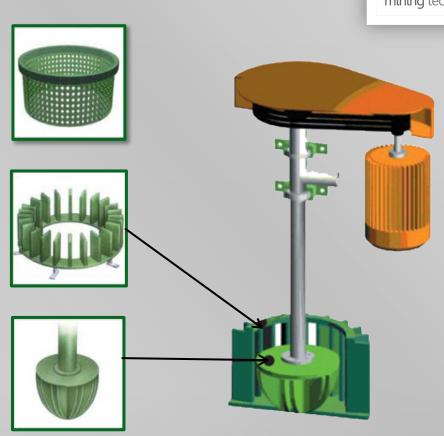
- No steel in work area
- Semi-rigid PU is used with hard-wearing anti-abrasion properties for longer life

#### **Stators**

- Optimal wear resistance
- Optimal impact resistance
- Modular stators available

#### **Rotors**

- High abrasion resistance
- Steel is omitted in specific areas to enhance polyurethane shock absorption which limits vibration fatique



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## Various Flotation Wear Components



**Rotors, Dispersers, Hoods and Standpipes** 

## Flotation Re-conditioning

- Individual cyclone spigots discharge into a common underflow launder
- Large diameter outlet pipe and correct angle of tank base ensure that the dense spigo can discharge under gravity
- Launder is rubber lined or ceramic tiled
- Removable splash covers minimize splashing spray whilst allowing quick access to spigots











## RMT Inspection and Maintenance Contracts

Multotec's engineers are dedicated to improving the life of wear components and reducing downtime. Multotec's USA Partner Resources Mining Technologies [RMT] will tailor inspection and maintenance contracts to suit your requirements and give regularly updated reports on plant running conditions. This will improve your plant availability by reducing unforeseen downtime. RMT provides that extra capacity and service in your times of need.



## Multotec Manufacturing Facilities





### **Quality and Excellence**

Based in Johannesburg, with branches nationwide as well as further afield in Africa, Australia and South America, the Multotec Group has several comprehensively equipped manufacturing facilities which produce specific product lines. Quality remains an integral part of the group's ongoing strategy and the entire organization is ISO 9001:2008 certified.

# Multotec Group Polyurethane Screen Panels Facility



- Polyurethane Screening Systems and Accessories
- Polyurethane Spray Nozzles
- Conveyor High Impact Loading Points
- Polyurethane Flotation Cell Rotors,
   Stators and Accessories
- Fibreglass Floor Grating & Walkway
   Systems

# Multotec Group Wedgewire Screen & Basket Facility



- Wedgewire Screening Systems (centrifuge baskets, sievebands, cylinders and flat panels)
- Trommel Screens (self-driven, mill and scrubber discharge)
- Steel Fabrication (sievebend housings, screen frames, trommel screen frames)

# Multotec Group Spirals Manufacturing Facility



- Cyclones
- Spiral Concentrators
- Sampling Systems
- Rhodax Inter-particle Crusher
- Process Consulting

# Multotec Group Cyclones Manufacturing Facility



- Flotation Cell Rotors
- Flotation Cell Stators
- Flotation Cell Hoods
- Flotation Cell Accessories





## Multotec Group Rubber Production Facility



- Mill and Scrubber Rubber Liners
- Rubber Impact Wear Plates
- Rubber Screen Panels
- Conveyor Loading Points
- Composite Liners

# Multotec Group Ceramic Production Facility



- High Density Alumina Ceramics
- Cast Basalt Linings
- Epoxy Linings and Adhesives
- Multoslip Low Friction Linings





### Flotation Installation Base



### Selected Installations as follows;

Metso Minerals	Multiple	RCS Range	RSA / Sweden	Wet Components
Metso Minerals	Multiple	Denver Range	RSA / Sweden	Wet Components
Bateman Tenova	Multiple	BQR Range	Worldwide	Complete
Wemco	Multiple		Worldwide	Complete / Custom
Outotec	Multiple		Worldwide	Complete / Custom
Wemco	Multiple		Worldwide	Flotation Drives
FLSmidth	Multiple		Worldwide	Complete
Multotec	Multiple	Custom Designed	Worldwide	Complete

\* Contact References Available Upon Request



## Flotation Presentation

This Presentation can be downloaded from the RMT Gold Technology Website

www.resourcesgoldtechnology.com/our-partners.html

