

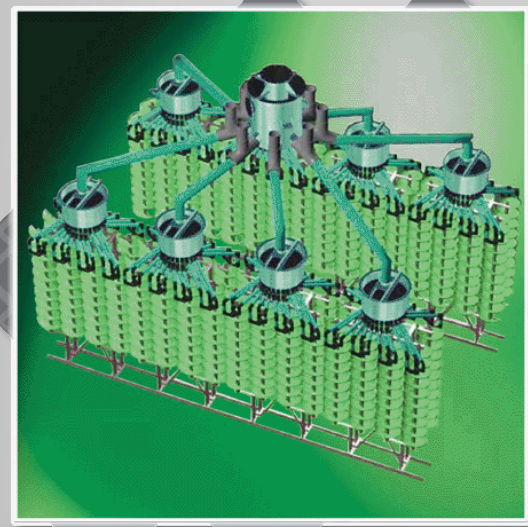


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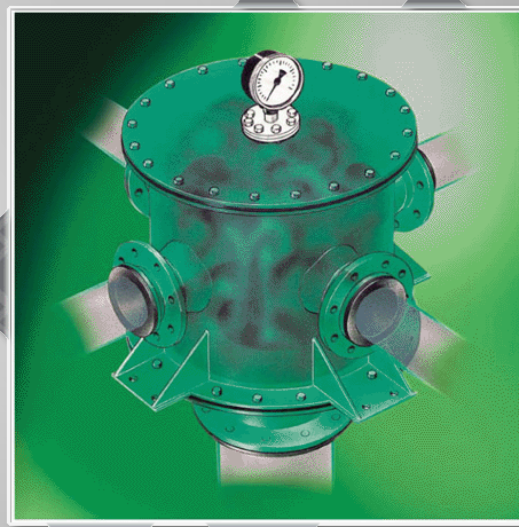


Spirals

**Gravity Fed Slurry
Distributors
Orifice and Slot Type**



Pulp Distributors



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Benefits of a Multotec Mineral Spiral



- Six different basic models and up to three different combinations to suit the A to Z of minerals making the Multotec mineral spiral range the most extensive and diverse in the world.
- Assemblies supplied in single, twin or triple starts, from 3 turns up to 8 turns
- High, medium or low grade profiles
- Compact modular design to add flexibility when building or replacing the spiral plant
- Materials of construction selected to give a long life, low cost and low maintenance high quality product



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.

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Resources Mining Technologies [RMT] Partners



Multotec -
PROCESS EQUIPMENT
[Edmonton, Canada]



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



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



Hazen Research -
**METALLURGICAL
RESEARCH**
[Golden, CO USA]



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



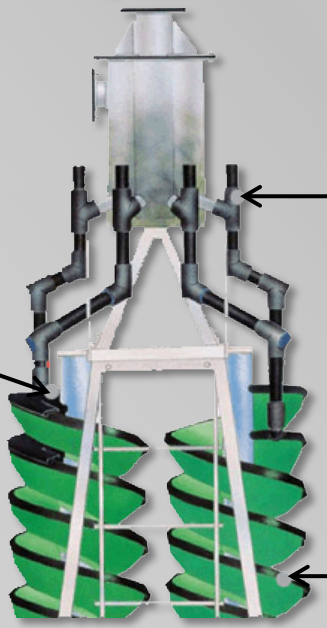


Upper Spiral Components



Feed Box

- Solid polyurethane casting
- Impact wall provides longer life
- Design ensures homogenous pulp mix
- Replaceable



Distributor and Piping

- Robust galvanized steel shell
- Cast polyurethane lining
- Replaceable parallel throat orifice
- Anti-syphoning off-takes
- Rigid H.D.P.E. piping
- Modular polyurethane elbows
- Top or bottom fed



Spiral Tough

- Accurately manufactured by reverse lamination
- Working surface is sprayed with polyurethane to a thickness of (3mm +/-0.5mm) or as requested
- Integral edge
- Improves circumferential strength
- Prevents spillage
- Integrally moulded
- Ribbed for extra strength





Lower Spiral Components



Modular Housing Frame

- Each module houses two spiral assemblies
- Upper level walkway
- Access cat ladder
- Full dismantle capability for retro-fitting
- Hot-dip galvanized to prevent corrosion

Product Box and Splitters

- Solid polyurethane casting
- Three or four individual outlets
- Box design assures no solids build-up
- Linked steel reinforced splitters
- Splitters are independent to trough surface and offer knife edge cutting of pulp stream
- Replaceable

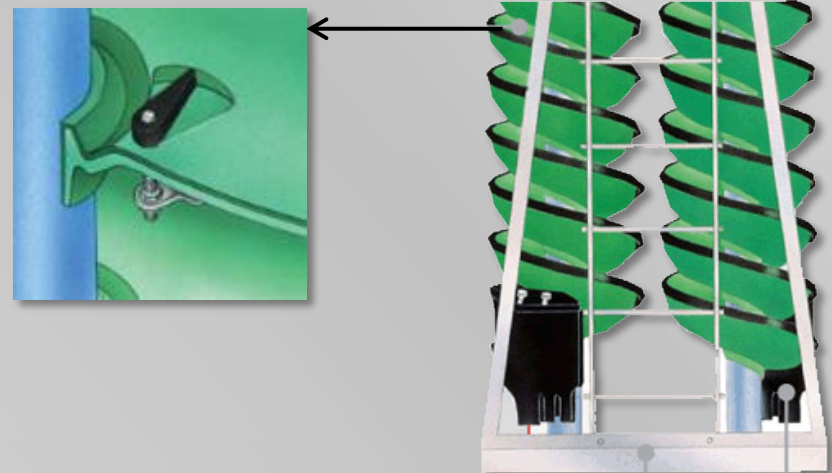


Lower Spiral Components



Auxiliary Splitters

- Solid polyurethane casting
- Collects high density material
- Collected material is channelled into a specific product box outlet
- Improves metallurgical performance





Spiral Components

Launders

- L.D.P.E. with cast polyurethane lining for long life
- Lightweight rigid construction
- Discharge flange to customer specification
- Launders can be bolted to spiral frame
- Design allows for spiral products direct discharge into launder

RMT offers its' clients

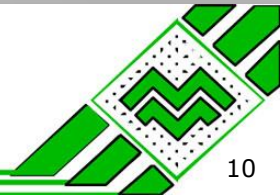
- Testwork on spiral concentrators, laboratory or pilot plant
- Consultation regarding spirals and plants
- Design assistance to clients
- Commissioning of spiral plant and equipment
- Optimization of spiral plants



Spirals



Spiral with very exotic woman (VEW) to show how HUGE this really is





RMT Inspection and Maintenance Contracts

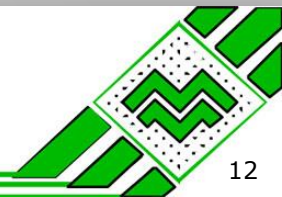
Multotec's engineers are dedicated to improving the life of wear components and reducing downtime. Multotec's USA Partner Resources Mining Technologies [RMT] will tailor inspection and maintenance contracts to suit your requirements and give regularly updated reports on plant running conditions. This 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

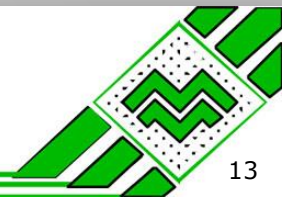


- Polyurethane Screening Systems and Accessories
- Polyurethane Spray Nozzles
- Conveyor High Impact Loading Points
- Polyurethane Flotation Cell Rotors, Stators and Accessories
- Fibreglass Floor Grating & Walkway Systems

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 (sieveband housings, screen frames, trommel screen frames)



Multotec Group Spirals Manufacturing Facility

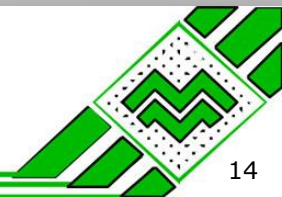


- Cyclones
- Spiral Concentrators
- Sampling Systems
- Rhodax Inter-particle Crusher
- Process Consulting

Multotec Group Cyclones Manufacturing Facility



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



Multotec Group Rubber Production Facility

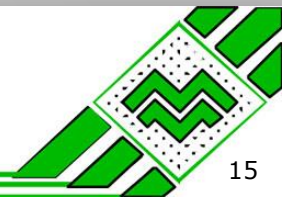


- Mill and Scrubber Rubber Liners
- Rubber Impact Wear Plates
- Rubber Screen Panels
- Conveyor Loading Points
- Composite Liners

Multotec Group Ceramic Production Facility



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

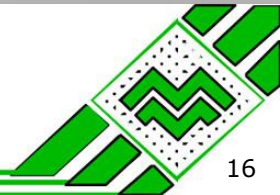


Spiral Installation Base



Richards Bay Minerals Pty Ltd	KZN	R.S.A.	Beach Sands	30	1		1 x 10 Twin
National Manganese Chrome Mine		R.S.A.	Chromite	8	1		1 x 4 Twin
Foskor (Pty) Ltd	Palaborwa	R.S.A.	Zirconium	200	1		6 x 8 Triple
Eastern Platinum Mine	Marikana	R.S.A.	Chromite UGII	120	2		4 x 8 Triple
Buffelsfontein Chrome Mine	Marikana	R.S.A.	Chromite	36	1		2 x 6 Twin
Zaaiplaas Tin		R.S.A.	Cassiterite	30	2		2 x 4 Triple (Rougher)
Alpha Mining Services	Rustenburg	R.S.A.	Chromite	20	3		1 x 8 Twin
Foskor (Pty) Ltd	Palaborwa	R.S.A.	Phosphates	-	-	SGD	Distributor
Richards Bay Minerals Pty Ltd	KZN	R.S.A.	Beach Sands	-	-	SGD	Distributor
Canadian Gold	Rustenburg	R.S.A.	Chromite	20	3		1 x 8 Twin
Eastern Platinum Mine	Marikana	R.S.A.	Chromite UGII	120	2		4 x 8 Triple
Rustenburg Platinum Mines	Northam	R.S.A.	Chromite UGII	80	3		4 x 8 Twin

*** Contact References Available Upon Request**

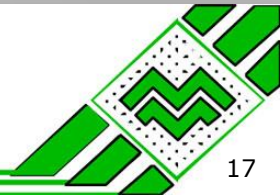


Spiral Installation Base



Foskor (Pty) Ltd	Palaborwa	R.S.A.	Baddeleyite	220	1	H.M.	6 x 8 Triple
Sepro Limited		U.K.	Galena / Barite	38	1	H.M.	5 x 2 Twin
Richards Bay Minerals Pty Ltd	KZN	R.S.A.	Beach Sands	50	1	H.M.	2 x 10 Twin
Schauenburg GmbH		Germany	Soil Washing	20	1	H.M.	1 x 10 Twin
Osna Equipment Inc.		U.S.A.	Gold	5	1	H.M.	1 x 2 Twin
Schauenburg GmbH		Germany	Feldspar / Fluorite	10	1	H.M.	1 x 4 Twin
Schauenburg GmbH		Germany	Soil Washing	20	1	H.M.	1 x 8 Twin
Union Carbide		Zimbabwe	Ferrochrome	10	2	H.M.	1 x 4 Twin
Scharp Mining		Thailand	Zinc	5	2	H.M.	1 x 1 Twin
Tiwest		Australia	Beach Sands	150	3	H.M.	3 x 10 Triple
Richards Bay Minerals Pty Ltd	KZN	R.S.A.	Beach Sands	60	2	H.M.	4 x 6 Twin
Ferro-Metals		R.S.A.	Ferrochrome	40	2	H.M.	2 x 10 Twin

*** Contact References Available Upon Request**



Spiral Installation Base



Richards Bay Minerals Pty Ltd	KZN	R.S.A.	Beach Sands	120	1	H.M.	3 x 8 Triple
Sierra Rutile Limited		Sierra Leone	Rutile	500	2	H.M.	7 x 12 Triple
Schauenburg GmbH	Berlin	Germany	Soil Washing	20	1	L.D.	1 x 4 Twin
Schauenburg GmbH	G.F.A	Germany	Sand De-Coaling	50	1	L.D.	1 x 8 Twin
Richards Bay Minerals Pty Ltd	KZN	R.S.A.	Beach Sands	20	1	H.M.	1 x 8 Twin
Waste Prod. Utilisation		R.S.A.	Gold / Carbon	40	2	L.D.	1 x 6 Twin
Schauenburg GmbH	ASRA	Germany	Raw Sewage / Sand	2	1	L.D.	1 x 1 Twin
Radon Consortium		Ukraine	Various	-	-		3 x Test Rig
Richards Bay Minerals Pty Ltd	KZN	R.S.A.	Beach Sands	500	1	H.M.	13 x 8 Triple
Western Chrome Mines		R.S.A.	Chromite	40	2	H.M.	1 x 10 Triple
Foskor (Pty) Ltd		R.S.A.	Phlogopite	6	2	L.D.	1 x 3 Single
Tema		Germany	Sand De-Coaling	18	1	L.D.	1 x 2 Triple

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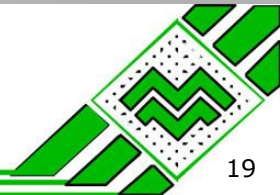


Spiral Installation Base



Crown Gold Recoveries Pty Ltd		R.S.A.	Gold	50	1	H.M.	1 x 10 Triple
Birlik Madencilik		Turkey	Chromite	8	1	L.D.	1 x 4 Twin
Ferrochrome Inc.		Phillipines	Chromite	--	--	H.M.	Test Rig
Tema		Germany	Sand De-Coaling	60	1	L.D.	1 x 4 Twin
Iran Kansar		Iran	Illmenite	10	1	H.M.	1 x 2 Twin
Kahnooj-Titanium		Iran	Illmenite	15	1	H.M.	1 x 4 Twin
Millennium Inorganic Chemicals		Brazil	Beach Sands	25	1	H.M.	3 x 4 Twin
Tiwest		Australia	Heavy Minerals	6	1	H.M.	1 x 3 Twin
Svedala		Sweden	Heavy Minerals	12	1	H.M.	1 x 2 Triple
Iscor Ltd		R.S.A.	Heavy Minerals	370	2	H.M.	6 x 12 Triple
Iscor Ltd		R.S.A.	Heavy Minerals	10	3	H.M.	1 x 5 Twin
Svedala		Malaysia	Tin	10	1	H.M.	1 x 2 Triple

*** Contact References Available Upon Request**



Spiral Installation Base



Pomza Eksport		Turkey	Gold	50	2	H.M.	1 x 10 Triple
Sub-Saharan Resources			Tantalite	40	4	H.M.	1 x 8 Twin
M.G.O. Industries		Zimbabwe	Tantalite	8	2	H.M.	2 x 2 Triple
Namakwa Sands		R.S.A.	Zircon Sand	30	1	H.M.	10 x Twin
Grinaker - LTA Process Engineering		Gambia	Zircon Sand	48	2	H.M.	1 x 8 Triple
VV Minerals		India	Heavy Minerals	60	1	H.M.	4 x Twin
VV Minerals		India	Heavy Minerals	60	1	H.M.	4 x Twin
Tantco Global		R.S.A.	Tantalite	25	4	H.M.	1 x 6 Triple
Sub-Saharan Resources		R.S.A.	Tantalite	30	1	H.M.	7 x Triple
S.D.E		Brussels	Sulphides	5	1		1 x 1 Triple
MDM – Ferroman Pty Ltd		R.S.A.	Tantalite	40	5		1 x 10 Twin
Multotec (Pty) Ltd - (Australia)		Australia	Zircon Sand	150	1		3 x 8 Triple

*** Contact References Available Upon Request**

Spiral Installation Base



Mineraçao – Vila Nova		Brazil	Graphite	50	2		1 x 4 Triple
Eriez Manufacturing Co.		India	Mineral Sands	25	2		2 x 4 Triple
Sierra Rutile Limited		Sierra Leone	Heavy Minerals	1100	5		14 x 12 Triple
DRA Mineral Project (PTY)LTD		Kazakhstan	Heavy Minerals	60	3		1 x 12 Twin
Bohle Aufbereitungstechnik GmbH		Austria	Scheelite	32	1		1 x 8 Twin
Sunshine Argentina Inc. – Sucursal Argentina - Las Pirquitas Mining Project		Argentina	Tin	86	5		2 x 8 Triple
Carnegie Minerals - (Gambia) Limited		Gambia	Illmenite	48	1	HX5	1 x 2 Triple
AMCK Mining S.PR.L. - c/o Anvil Mining Limited		DRC Congo	Copper oxide	40	3		1 x 8 Triple
Blastrite (Pty) Ltd		R.S.A.	Garnet	10	1	HX5	1 x 1 Twin
Camis Madencilik A.S.		Turkey	Mineral Sands	175		SC20	4 x 8 Triple
Sunshine Argentina Inc. – Sucursal Argentina - Las Pirquitas Mining Project		Argentina	Tin			SC18	1 x 12 Triple
Sunshine Argentina Inc. – Sucursal Argentina - Las Pirquitas Mining Project		Argentina	Tin			SC18	3 X 6 Triple

*** Contact References Available Upon Request**

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Roode Heuwel Sand Ltd		R.S.A.	Mineral Sands			HX5	1 x 1 Quad
Kaveh Glass Co. (Iran)	Iran	Iran	Mineral Sands			SC20	1 x 6 Triple
Blastrite (Pty) Ltd		R.S.A.	Mineral Sands			HX5	1 x 3 Twin
Chemaf S.P.R.L.		Congo	Heavy Minerals			SC20	1 x 1 Single MO
Metso Minerals Singapore		India	Heavy Minerals			SC20	1 x 1 Single MO
Metso Minerals Singapore		India	Heavy Minerals			SC20	1 x 1 Single MO
DRA Mineral Projects (Pty) Ltd		R.S.A.	Copper Cobalt			SC20	2 x 8 Twin

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Spiral Presentation

This Presentation can be downloaded
from the RMT Gold Technology Website

www.resourcesgoldtechnology.com/our-partners.html

