



Trusted Since 1938!

When it has to last!



Consumables and Electrodes

Call Rankin® first for high performance wear solutions. Rankin® products economically extend the life of components subjected to metal-to-metal and metal-to-earth wear, impact and abrasion.



Automated Welding Systems

For significant cost per part savings and consistent, repeatable results, Rankin® Automation manufactures multi-function systems for welding and hardfacing applications, including integrated tungsten carbide feeder systems. The Rankin® Automation equipment line ranges from small to large-scale factory systems and semi-automated to fully robotic control systems.



Rankin Industries, Inc., 8745 Production Avenue, San Diego, Ca, USA 92121
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INDUSTRY APPLICATIONS AND RECOMMENDATIONS GUIDE

Rankin® Industries serves customers in wide-ranging industries around the globe. Review our Industry Applications and Recommendations Guide and check our industry experts recommendations for the Rankin products you need to get the job done.

Applications:

Identify Your Industry

Construction
Cement, Brick, Clay
Agriculture
Palm Oil

Earth Moving
Dredging
Oil Drilling Service

Rock Quarry/Mining
Power Generation / Utilities
Sugar Mill

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INDUSTRY		ELECTRODE	WIRE		
CONSTRUCTION INDUSTRY					
Tractor Parts	Rails	Buildup	Ranite™ BU	Ranomatic™	BUG
		Hardfacing		Ranomatic™	AAG
Undercarriage Roller		Buildup	Ranite™ BU	Ranomatic™	BUG
		Hardfacing	Ranite™ A	Ranomatic™	BBG
Drive Sprocket		Buildup	Ranite™ BU	Ranomatic™	BUG
		Hardfacing	Ranite™ A	Ranomatic™	BBG
Idler		Buildup	Ranite™ BU	Ranomatic™	BUG
		Hardfacing	Ranite™ A	Ranomatic™	BBG
Shovel - Crane Parts	Shovel Idler and Roller	Buildup	Ranite™ BU	Ranomatic™	BUG
		Hardfacing	Ranite™ A	Ranomatic™	BBG
Track or Shovel Pads		Buildup C Steel*	Ranite™ BU	Ranomatic™	BUG
		Hardfacing C Steel	Ranite™ A	Ranomatic™	AAG
		Buildup Mn Steel*	Ranmang™ 1	Ranomang™	1 or 3
		Hardfacing Mn Steel	Ranmang™ 1	Ranomang™	1 or 3
Drive Tumbler		Buildup C Steel	Ranite™ BU	Ranomatic™	BUG
		Hardfacing C Steel	Ranite™ A	Ranomatic™	AAG
		Buildup Mn Steel	Ranmang™ 1	Ranomang™	1 or 3
		Hardfacing Mn Steel	Ranmang™1	Ranomang™	1 or 3
Sprocket		Buildup	Ranite™ BU	Ranomatic™	BUG
		Hardfacing	Ranite™ A	Ranomatic™	AAG
Shovel House Rolls		Buildup	Ranite™ BU	Ranomatic™	BUG
		Hardfacing	Ranite™ A	Ranomatic™	BBG

* C Steel = Carbon Steel Mn Steel = Manganese Steel

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INDUSTRY		ELECTRODE	WIRE
Shovel Swing Gear	Buildup	Ranite™ BU	Ranomatic™ BUG
Herringbone Power Gear	Buildup	Ranite™ BU	Ranomatic™ BUG
Boom Heels	Buildup C Steel Hardfacing C Steel Buildup Mn Steel Hardfacing Mn Steel	Ranite™ BU Ranite™ A Ranmang™ 1 Ranmang™ 1	Ranomatic™ BUG Ranomatic™ BBG Ranomang™ 1 or 3 Ranomang™ 1 or 3
Tooth Adapters	Buildup C Steel Hardfacing C Steel Build up Mn Steel Hardfacing Mn Steel	Ranite™ BU Ranite™ 35 Ranomang™ 1 Ranite™ 35	Ranomatic™ BUG Ranomatic™ 101 or 100 Ranomang™ 1 Ranomatic™ 101 or 100
Shovel Pins	Buildup Hardfacing	Ranite™ BU Ranite™ A	Ranomatic™ BUG Ranomatic™ BBG
Earth Moving Equipment			
Paver Rollers	Buildup Hardfacing	Ranite™ BU Ranite™ A	Ranomatic™ BUG Ranomatic™ BBG
Paver Drive Sprockets	Buildup Hardfacing	Ranite™ BU Ranite™ A	Ranomatic™ BUG Ranomatic™ BBG, AAG
Paver Screw Augers	Hardfacing	Ranite™ 35, D	Ranomatic™ 101, 100, D
Dozer Blades	Hardfacing	Ranite™ M, 35, D	Ranomatic™ 101, 100, D
Grader Blades	Hardfacing	Ranite™ M, 35	Ranomatic™ 101, 100
Tamper and Compactors	Hardfacing	Ranite™ M, 35	Ranomatic™ 101, 100
ROCK QUARRY - MINING INDUSTRIES			
Crushing Components:			
Crusher Roll	Buildup Hardfacing	Ranomang™ 3 Ranite™ BX	Ranomang™ 3 Ranomatic™ BX2
Gyratory Crushers	Buildup Hardfacing	Ranite™ BX Ranite™ 35	Ranomatic™ BX2 Ranomatic™ 101
Cone Crusher Nuts	Buildup	Ranomang™ 3	Ranomang™ 3
Gyratory Mantles	BU/Hardfacing	Ranite™ 35	Ranomatic™ 101/100
Crusher Hammer Manganese Steel	Buildup Hardfacing	Ranomang™ 3 Ranite™ 35	Ranomang™ 3 Ranomatic™ 100

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INDUSTRY		ELECTRODE	WIRE
Crusher Hammer Carbon Steel	Buildup Hardfacing	Ranite™ BU Ranite™ M	Ranomatic™ BUG Ranomatic™ 101
Grinding Components:			
Grinding Rings	BU/Hardfacing	Ranite™ 35	Ranomatic™ 100
Grinding Rolls	BU/Hardfacing	Ranite™ 35	Ranomatic™ 100
Screening Components:			
Vertical Screen Deflector Grates	Buildup Hardfacing	Ranmang™ 3 Ranite™ 35	Ranomang™ 3 Ranomatic™ 101, 100
Grizzly Bars	Buildup Hardfacing	Ranmang™ 3 Ranite™ 35	Ranomang™ 3 Ranomang™ 101, 100
Sizing and scalping Vibratory Screens Rotary Screens	Buildup Hardfacing Buildup	Ranmang™ 3 Ranite™ 35 Ranmang™ 3	Ranomang™ 3 Ranomatic™ 100 Ranomatic™ 3
Other Crushing, Grinding and Screening Application:			
Elevator Bucket Lips	Buildup	Ranite™ 35	Ranomatic™ 100
Drill Auger	Hardfacing	Ranite™ 35	Ranomatic™ 100
Screw Flights	Hardfacing	Ranite™ 35	Ranomatic™ 100
Drill Bits	Hardfacing	Rantung™ 38	
CEMENT, BRICK AND CLAY INDUSTRIES			
Cement Mill Components			
High Pressure Roller	Buildup Buffer Layer Hardfacing		Ranomatic™ BU Ranomatic™ BBG Ranomatic™ 100 Ranomatic™ Nb Mod Ranomatic™ DDG
High Pressure Roller Side	Hardfacing		
Bag Packer Screws	Hardfacing	Ranite™ 35	Ranomatic™ 100
Kiln Feed Screw Bearing	Hardfacing	Ranite™ 35	Ranomatic™ 100

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INDUSTRY		ELECTRODE	WIRE
Fan Blades	Hardfacing	Ranite™ 35	Ranomatic™ 100
Induced Draft Fans	Hardfacing	Ranite™ 35	Ranomatic™ 100
Pulverizer Mill Components			
Muller Tires	Hardfacing	Ranite™ 35	Ranomatic™ 100
Die Rings	Hardfacing	Ranite™ 35	Ranomatic™ 100
Plows	Hardfacing	Ranite™ 35	Ranomatic™ 100
Slurry Tank Agitator Bearing and Shaft	Hardfacing	Ranite™ 35	Ranomatic™ 100
Fan Blades	Hardfacing	Ranite™ 35	Ranomatic™ 100
Brick and Clay Components			
Pug Mill Knives	Hardfacing	Ranite™ 35	Ranomatic™ 100
Shredder Knives	Hardfacing	Ranite™ 35	Ranomatic™ 100
DREDGING			
Dredging Pump Components			
Pump Shell	Hardfacing	Ranite™ BX/M	Ranomatic™ BX/100
Pump Impellers	Hardfacing	Ranite™ M	Ranomatic™ 100
Side Plates	Buildup Hardfacing	Ranite™ BU Ranite™ M	Ranomatic™ BUG Ranomatic™ 100
Manganese base metal For the above parts	Buildup Hardfacing	Ranmang™ 3 Ranite™ M	Ranomang™ 3 Ranomatic™ 100
Dredge Cutters, Teeth	Buildup	Ranite™ BU	Ranomatic™ BUG
Dredge Bucket C Steel	Buildup Hardfacing	Ranite™ BU Ranite™ 35	Ranomatic™ BUG Ranomatic™ 100
Dredge Bucket Mn Steel	Buildup Hardfacing	Ranmang™ 1 Ranite™ 35	Ranomang™ 1 Ranomatic™ 100
Ladder Rolls	Buildup Hardfacing	Ranite™ BU Ranite™ BU	Ranomatic™ BUG Ranomatic™ AAG
Bucket Pins	Hardfacing	Ranite™ A	Ranomatic™ DDG

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INDUSTRY		ELECTRODE	WIRE	
RAILROAD TRACK AND COMPONENTS INDUSTRY				
Frog - Manganese Steel	Buildup Hardfacing	Butter Layer Frogrod	Ranmang™ Frogwire	1
Frog - Carbon Steel	Buildup	Railrod	Ranomatic™	AAG
Crossing Mn Steel	Buildup	Frogrod	Frogwire	
POWER GENERATION INDUSTRY				
Coal Pulverizer Roll	Hardfacing	Ranite™ 35	Ranomatic™	100/100HD
Fan Blade	Hardfacing	Ranite™ 35	Ranomatic™	100
Valve	Hardfacing	Ranco™ 6/1	RanCoMatic™	6G/1G
Boiler Tube Water Wall	Hardfacing		Ranomatic™	AM
Chute	Hardfacing	Ranite™ 35	Ranomatic™	100
OIL DRILLING SERVICE INDUSTRY				
Tool Joint Hard Banding	Hardfacing		Ranomatic™ Ranomatic™	133 3000
Stabilizer		DC 40 -100	RanCoMatic™ RanCoMatic™	1G 12G
Drill Bits		DC 40F, Rantung™ 60		
AGRICULTURAL INDUSTRY				
		<u>Rod/Electrode</u>	<u>Wire</u>	<u>Spray Powder</u>
SWEEPS				
Cultivator Sweep	Hardfacing	Ranite™ DG, D	Ranomatic™ Ag 1	SP - 60
Lister Share	Hardfacing	Ranite™ DG, D	Ranomatic™ Ag 1	SP - 78

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INDUSTRY		ELECTRODE	WIRE
Deep Furrow Drill Shoe	Hardfacing	Ranite™ DG, D	Ranomatic™ Ag 1
Subsoiler Shovel	Hardfacing	Ranite™ DG, D	Ranomatic™ Ag 1
Noble - Type Sweep	Hardfacing	Ranite™ DG, D	Ranomatic™ Ag 1
Field Cultivator Sweep	Hardfacing	Ranite™ DG, D	Ranomatic™ Ag 1
BLADES			
Bean Knife	Hardfacing	Ranite™ DG, D Rantung™ 60 10x20, 20x30	
Cultivator Knife	Hardfacing	Ranite™ DG, D	
Ensilage Knife	Hardfacing	Ranite™ DG, D Rantung™ 60	Ranotung™ wc
Root Cutter	Hardfacing	Ranite™ DG, D	Ranomatic™ Ag 1
SHANK			
Ripper	Hardfacing	Ranite™ DG, D	Ranotung™ wc
Twisted Chisel Plow	Hardfacing	Ranite™ DG, D	
Soil Saver	Hardfacing	Ranite™ DG, D	
Vegetable Crescent Hoe	Hardfacing	Ranite™ DG, D	
SUGAR MILL INDUSTRY			
Sugar Mill Rolls	Hardfacing	Ranite™ BX Rantung™ 60 Sugar 80	Ranomatic™ BX2
PALM OIL INDUSTRY			
Decanter Screw	Hardfacing	DC 60 DC Co50	
Extractor	Buildup Hardfacing	Ranite™ 308 Ranite™ SiC	Ranomatic™ 308 Ranomatic™ 101