ORIENTAL

CONVEY | ALL | THE | WAY

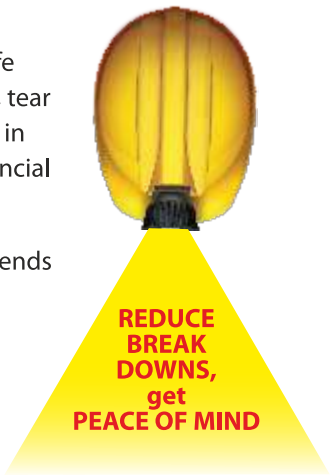
FROM **HEAVY METAL** TO HARD ROCK

MAXX ROCK®

High Impact & High Tear Resistant Belts

Product Feature:

In every conveyor installation there are certain applications where the normal expected belt life significantly deteriorates due to continuous abuse resulting in premature failure caused by rip, tear and carcass fracture. These belts normally convey large sized lumps and are considered critical in most cases. In heavy duty mining applications, failures are catastrophic and impose heavy financial losses due to stoppage of production and downtime.



For such applications demanding the highest impact, rip and tear resistance, Oriental recommends the **MAXX ROCK®** belts to convey **HEAVY METAL TO HARD ROCK**

MAXX ROCK® belts are manufactured using a specially designed fabric having high tenacity, straight warp threads and dense weft yarn construction. These belts are offered in single or two ply constructions and in strength rating from 180 to 1800 PIW i.e. 315 to 3150 kN/m.

The unique construction of the belt and the special cushion and cover rubber ensure superior impact resistance, higher longitudinal flexibility of the belt, yet guaranteeing a very low elongation at working load compared to conventional EP/NN fabric belts.

In several applications, **MAXX ROCK®** belts are a preferred alternative to steel cord belts as they provide an inherent protection against rip and tear and at the same time offer excellent impact resistance and low elongation in service.

Benefits of MAXX ROCK®:

- Endures most rigorous applications with extreme impact resistance
- Low elongation at working load results in trouble free operation
- Highest Tear resistance-upto 5 times greater than conventional multi-ply belts
- Light weight compared to ST belts, thereby reducing installation and operating costs
- Excellent Load support and troughability
- Very good longitudinal flexibility - works on smaller pulleys
- Excellent suitability to mechanical splicing
- Energy saving due to lower weight

Product Characteristics:

Common Widths	:	500 mm to 2100 mm (20" to 84")
Carcass Variety Available	:	**MAXX ROCK®**, Polyester Nylon
Common Belt Rating	:	**In 1 Ply Construction:** MR315/1, 400/1, 500/1, 630/1, 800/1, 1000/1, 1250/1, 1400/1, 1600/1 kN/m 180, 220, 285, 360, 450, 570, 700, 800, 900 PIW **In 2 Ply Construction:** MR630/2, 800/2, 1000/2, 1250/2, 1600/2, 1800/2, 2000/2, 2500/2, 3150/2 kN/m 360, 450, 570, 700, 900, 1000, 1100, 1450, 1800 PIW
No. of Plies	:	1 or 2 Ply
Rubber Cover Compounds	:	Oriental recommends HAR or SAR. Other grades are also available on request
Rubber Cover Thickness	:	For 1 Ply Belt 2:1 Cover Ratio (Min 3 mm bottom cover) For 2 Ply Belt 3:1 Cover Ratio (Min 3 mm bottom cover)
Edge	:	Cut/Moulded Edge
Splicing Method	:	Hot (O-Splice) / Mechanical
Packing Available in	:	Single Roll
Belt Identification	:	Unique Product Identification Number (PIN) at every 10 Mtr (33')

Product Application:

The **MAXX ROCK®** Belt is ideally suited for the following applications:

- Heavy impact applications e.g. primary crushers
- Material fall height exceeding 2 m (6.5')
- Lump size more than 250 mm
- Long haul applications
- Conveyors susceptible to presence of tramp material
- Scrap recycling plants, log decks.

Impact Tester

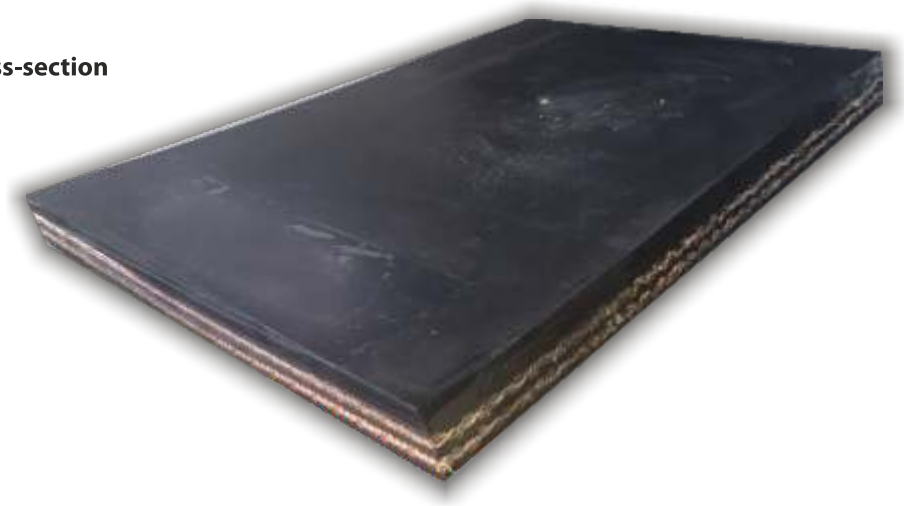
Impact Energy 50% rated belt strength in joule

EP Belt

MAXX ROCK®

Comparative Tear Strength		
Belt Type	**Belt Rating kN/m**	**Tear Strength N**
MAXX TUFF™	EP 1000/4	2000
MAXX ROCK®	MR 1000/2	4000

Belt Cross-section



MAXX ROCK® Belt Selection Chart (Metric System) Mono Ply

Belt Rating	*RMBT, N/mm	Nominal Carcass Thickness (mm)	Nominal Carcass Weight (kg/m²)	Minimum Pulley Diameter (mm) (60 to 100% belt rated tension)			Minimum Belt Width (mm) For Troughing			Load Support-Maximum Belt Width (mm)			
										35° idlers			
				Drive	Snub	Bend	20° idlers	35° idlers	45° idlers	0-0.64 t/m³	0.65-1.28 t/m³	1.29-1.92 t/m³	>1.92 t/m³
MR 400/1	40	2.50	2.0	315	250	200	450	600	750	1800	1500	1400	1250
MR 500/1	50	2.85	2.40	315	250	200	450	600	750	1800	1500	1400	1250
MR 630/1	63	3.15	2.60	400	315	250	450	600	750	1800	1700	1500	1400
MR 800/1	80	3.85	3.30	500	400	315	600	750	900	2000	1800	1700	1500
MR 1000/1	100	4.20	3.70	500	400	315	600	750	900	2000	1800	1700	1500
MR 1200/1	120	4.50	4.00	500	400	315	600	750	900	2000	1800	1700	1500
MR 1400/1	140	5.00	4.50	630	500	400	600	750	900	2000	1800	1700	1500
MR 1600/1	160	5.50	4.90	630	500	400	600	750	900	2000	1800	1700	1500

MAXX ROCK® Belt Selection Chart (Metric System) Dual Ply

Belt Rating	*RMBT, N/mm	Nominal Carcass Thickness (mm)	Nominal Carcass Weight (kg/m²)	Minimum Pulley Diameter (mm) (60 to 100% belt rated tension)			Minimum Belt Width (mm) For Troughing			Load Support-Maximum Belt Width (mm)			
										35° idlers			
				Drive	Snub	Bend	20° idlers	35° idlers	45° idlers	0-0.64 t/m³	0.65-1.28 t/m³	1.29-1.92 t/m³	>1.92 t/m³
MR 630/2	63	6.00	5.40	800	630	500	600	750	900	2150	2000	1800	1700
MR 800/2	80	6.20	5.80	800	630	500	750	900	1050	2300	2150	2150	1900
MR 1000/2	100	5.90	5.70	800	630	500	750	900	1050	2300	2150	2150	2000
MR 1250/2	125	6.20	6.10	800	630	500	900	1050	1200	2450	2300	2300	2000
MR 1400/2	140	6.60	6.30	800	630	500	900	1050	1200	2450	2300	2300	2150
MR 1600/2	160	7.00	7.10	800	630	500	900	1050	1200	2450	2300	2300	2150
MR 1800/2	180	7.80	7.60	1000	800	630	1050	1200	1450	2550	2550	2450	2300
MR 2000/2	200	8.30	8.00	1000	800	630	1050	1200	1450	2550	2550	2450	2300
MR 2500/2	250	9.40	9.20	1250	1000	800	1050	1200	1450	2550	2550	2450	2300
MR 3150/2	315	12.20	11.10	1400	1250	1000	1050	1200	1450	2550	2550	2450	2300

*RMBT: Recommended Maximum Belt Tension

1. Troughability and Load Support values can be influenced by certain cover gauge and compound combinations used.
2. When in doubt, please contact your ORIENTAL representative for selection guidance.
3. RMBT reflects a minimum 10:1 safety factor. With the appropriate fastener selection and installation, joint strength will be 4 times the belt tension.
4. Add the cover gauge to carcass gauge to obtain the nominal belt thickness.
5. For Calculation of Belt weight, consider weight of 1.0 mm thick rubber =1.10 kg/m² for M grade and for FR grade 1.26 kg/m² .
6. Oriental reserves the right to change these values without notice, in tune with technical development .


Wear Resistant


Heat Resistant


Fire Resistant


Oil Resistant


Energy Saving

MAXX ROCK®
High Impact & High Tear Resistant Belts