



# MAXX ROUND™

## Pipe Conveyor

### Product Feature:

To ensure that there is no environmental contamination, ORIENTAL has developed MAXX ROUND, a conveyor belt, which carries material in the form of a pipe. The material is completely enclosed over the entire length of the conveyor. This belt can take steep angles at both horizontal and / or vertical curves. It offers dust and spillage free transport of material and offers phenomenal savings by way of material savings and installation costs.

### Principles of Pipe Conveying:

- In loading area the belt acts as a normal troughing conveyor. Thereafter, special idlers are used to form an enclosed chamber like pipe.
- Hexagonally arranged idler rolls keep the conveyor belt closed over the track.
- The belt opens at the conveyor head like normal belt to discharge the material.
- On its return, the conveyor belt closes again only to open up at the loading zone at the head conveyor.

### Product Application:

Cement, Chemical, Fertilizers, Power Plants and Food Industries.

### Product Characteristics:

Width	:	Refer Belt width Vs Pipe diameter table given
Ply	:	Normally 3 Plies and above
Carcass Variety Available	:	EP / NN / PP
Belt Rating	:	315/3, 400/3, 500/3, 630/3, 800/3, 630/4, 1000/4, 1250/4, 1600/5, 2000/5
Rubber Cover Grade	:	M, N, HAR, SAR other grades of Oil, Fire and Heat Resistant grades available on request (including MAXX SURYA 4 EPDM belt)
Rubber Covers Thickness	:	4 + 2 mm; 5 + 3 mm
Rubber	:	Black
Surface Finish	:	Smooth
Edge	:	Molded Edge
Splicing Method	:	Hot splicing
Packing available in	:	Cassette / Single Roll

### Benefits:

- **Retains material quality** from climatological influences.
- Completely **enclosed and dust free transport** of material.
- **Reduces transit material loss** due to spillage of material.
- **Protects environment** from chemically hazardous material.
- **Saves space** due to larger contact between material and belt allows increased angle of inclination.
- It's flexibility allows to accommodate horizontal and vertical curves **to route through difficult terrain inside and outside of the plant.**
- Narrow widths of installation and absence of hoods **reduces structural material cost substantially.**
- **No spillage** of material from return belt.



# MAX<sup>X</sup> ROUND<sup>TM</sup>

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## Typical Width Vs Pipe Diameter - Conveyor Selection guide:

<b>Belt Width, mm</b>	600	800	1000	1200	1400	1600	1800	2000	2100
<b>Pipe Diameter, mm</b>	150	200	250	300	350	400	475	525	550
<b>Belt Speed , m/s</b>	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
<b>Material density, kg/m<sup>3</sup></b>	1000	1000	1000	1000	1000	1000	1000	1000	1000
<b>Capacity (fill factor 60-70% of pipe dia.) , t/hr</b>	105	190	290	420	570	750	1060	1300	1425
<b>Max Lump size, mm</b>	30 - 50	50 - 70	70 - 90	90 - 100	100 - 120	120 - 150	120-150	120-150	120-150

## Schematic Diagram of Pipe Conveyor Arrangement:

