

# PRIME CONVEYORS<sup>®</sup>



[www.primeconveyors.com](http://www.primeconveyors.com)

*We Transfer*  
**any** Materials  
*Where*

## ABOUT US

PRIME CONVEYORS specialise in the complete design, manufacture, installation and commissioning of Mobile bulk material handling systems. We have a proven record in a range of applications including quarry and mining industries, ports & inland terminals, stockyard management, power stations, rail yards, steel mills, cement kilns and many other bulk material handling industries. Our mobile solutions offer significant operating cost savings compared to traditional methods of material handling (wheel loaders, haul trucks, static conveyors), as well as providing Environmental, Health and Safety and other benefits. Other significant benefits include reduced planning requirements due to product mobility and the flexibility to move Prime Conveyors mobile equipment around the site or from site to site.

## INFRASTRUCTURE

Built in an area of 20,000 sq.ft, Prime Conveyors is well equipped with sophisticated and modern machinery that helps in manufacturing customer friendly equipments. Our Engg team strives hard to produce parts that keep in pace with the modern techniques. We ensure the quality of the products with a stringent quality assurance team and thus, we have never failed to meet the expectations of the customers. With the team of professionals in Design softwares **Solid works & Autocad** We are an integrated solutions provider to the global mining, bulk material handling and minerals industries, offering innovative solutions & Technologies as well as process and commodity knowledge along the industry value chains.



CNC MILLING & TURNING

CNC GAS CUTTING

CNC BENDING & WELDING

## SERVICES & COMPONENTS

- PROJECT DEVELOPMENT SERVICES
- FABRICATION AND COMPONENTS
- ERECTION AND COMMISSIONING
- TECHNICAL SERVICE AND SPARE PARTS

## PORTABLE MATERIAL HANDLING SOLUTIONS

- SHIP / BARGE LOADERS
- PORTABLE TELESCOPIC RADIAL STACKER CONVEYOR
- BULK RECEIVING HOPPER FEEDER CONVEYOR
- PORTABLE RADIAL STOCKPILE CONVEYOR
- TRACK MOUNTED HOPPER FEEDER CONVEYOR
- STACKABLE / PORTABLE JUMP CONVEYOR

## CHAIN CONVEYORS

- DRAG CHAIN CONVEYOR
- SCRAPER CHAIN CONVEYOR
- SUBMERGED ASH CONVEYOR
- APRON FEEDER
- BUCKET ELEVATORS

## WE SERVE FOLLOWING INDUSTRIES



SHIP/BARGE LOADER



RAIL WAGON LOADER



STOCK PILING



MINING LOADING



CEMENT PLANT



AGGREGATES





## TELESCOPIC RADIAL STACKER

Prime ship loaders ensure beyond to compare able to change when loading and unloading a vessel. Directly unload trucks in the port/terminal to vessels and barges and eliminate the double handling of materials. Prime ship loading equipment allows you to maximise production rates and minimize labour on site.

The Mobile Telescopic Radial ship loaders ensure beyond to compare able to change when loading a vessel. The radial and telescopic features allow the operator to easily locate multiple hatches from one feeding position reducing hatch change times and production downtime.



### FEATURES & BENEFITS

- Telescopic and Radial movement features offer beyond to compare capacity to handle most sized vessels.
- By using Driven wheels under carriage Tracks Rails to suit as per requirements in jetty/quay design
- Fully sealed feed-in / transfer and discharge points to eliminate spillage on site.
- Loading rates up to 2,000TPH.
- Full Extension up to 51 metres (170ft) Delivery Height 20mtrs (66Ft)
- Reduced civil requirements on site.
- Land / Sea Based Systems are available.
- Eliminate double handling of material in Port /Inland Terminal
- Complete Dust Extraction / Suppression options for handling complete of materials,

### SPECIFICATIONS

OPERATING DIMENSIONS	130'	150'	170'	190'
(G)Travel length –kingpin to Rear(m)	169'-9"(2.0)	80'-0"(24.3)	100'-0"(30.5)	100'-1"(30.5)
(H)Travel height (m)	12'-7"(3.8)	13'-9"(4.2)	13'-9"(4.2)	14'-0"(4.2)
Travel width(m)	11'-11"(3.6)	11'-11"(3.6)	11'-11"(3.6)	11'-11"(3.6)
(I)Kingpin to end of Tow eye (m)	5'-10"(1.7)	5'-11"(1.8)	5'-11"(1.8)	5'-11"(1.8)
(J)Kingpin to Axle (m)	52'-3"(15.9)	59'-3"(18.2)	77'-3"(23.5)	77'-3"(23.5)
(K) Axle Head to pulley(m)	17'-5"(5.3)	20'-4"(6.1)	22'-10"(6.9)	22'-10"(6.9)
Weight at Axle - 36"belt width (kg)	37,500(17,000)	38,000(17,2351)	46,000(20,865)	47,000(21,318)
Weight at Kingpin – 36"belt width (kg)	13,600(6,6168)	8,550(8,414)	20,865(9,464)	22,500(10,205)



## MOBILE TYPE BULK RECEPTION RADIAL TRUCK UNLOADER

The Tracked Radial Bulk Reception Radial Truck unloader offers mobility and flexibility for a complete range of industries and applications, including mobile truck unloading, reclaiming, rail wagon loading / unloading, barge loading / unloading, truck loading, with the ability to handle complete range of materials such as coal, grains, fertilisers, ore's (iron, copper, gold, bauxite), aggregates, woodchips, wood pellets, sulphur, cement clinker etc.

### FEATURES & BENEFITS

- Power source options: Diesel / hydraulic, Dual PowerFull 140 radial discharge conveyor with choice of conveyor lengths
- Belt weight scales
- Hydraulic extended hopper wings
- Option of steel or rubber tracks
- Wrap-around pull cord
- Vibrating motor for sticky material
- Belt options: Chevron, Heavy Duty
- Various feed boot liners; hardox, various rubber plys
- Full, 1/2 and quarter length rubber conveyor skirting available

### APPLICATION

- Loading a barge with grain direct from a road truck
- Loading a barge direct from a road truck
- Loading a barge direct from a wheel loader
- Feeding a Radial Telescopic shiploader loading a Handymax vessel
- Feeding a Radial Telescopic shiploading from road trucks
- Fed from grab crane in barge-unloading application
- Feeding Radial Telescopic, stockpiling in warehouse from trucks (Ship unloading)
- Stockpiling material from pay-loaders in a stockyard
- Stockpiling coal from wheel loader in a stockyard (Dust Covers)
- Reclaiming coal in a Power station
- Reclaiming iron ore in a steel mill with CAT 988 Wheel loader
- Rail Car/ Wagon loading directly from trucks 13 Unloading from Rail Car/Wagon

The PRIME CONVEYORS bring a new concept to the bulk materials handling sector. Unlike conventional truck unloaders, the Prime Bulk Reception Radial Truck Unloader is able to be set up in minutes and eliminates the need to double handle material. Designed to allow operators to load directly from tipping trucks, dumpers and wheel loaders; the 16m (52') long discharge conveyor enables material to be loaded into train wagons, barges, ships and hoppers. Unloading times as little as 60 seconds per truck and a massive 23m<sup>3</sup> (30yd<sup>3</sup>) hopper capacity enables the Prime portable truck unloader to significantly improve cycle times and on-site production. With the capability to convey up to 1000TPH with a maximum feed size of 23" and boasting a 140 radial conveyor is as comfortable on the port as it is in the harsh environment of the quarry.





## PORTABLE RADIAL STACKER CONVEYOR

Portable Radial Stacking Conveyors with more sizes and options available. Our Portable Radial Stacking Conveyors are Designed to be the quickest from road transportation to field operation. They are equipped with a heavy-duty undercarriage for stability, safety, and support.

In-house Design engineers calculate and design Structural frames to your specific application needs. We provide portable radial stackers as per your Requirement, cost-effective solution with custom options and features.

Top-Fold Frame - Optional manual or hydraulic top-folding frame is available on stackers 70' through 150'. Single- or double-fold options reduce load lengths for optimal portability.

Portability Option such as power-fold head and tail sections, gullwing axles, air brakes and lighting packages offer quick set-up and superior road portability.

Optional Electrical Control Electrical control panels with all necessary starters and wiring are installed by our UL-certified electrical department. Compatibility Hydraulic options allow our radial stackers to be powered

Quality Construction All-jig-welded lattice frames with heavy-duty chord angles ensure a straight and reliable conveyor frame. Made in India by experienced personnel using proven manufacturing techniques to ensure unmatched quality.

### OPERATING SPECIFICATION

OPERATING DIMENSIONS	50'	60'	95'	100'	125'	150'
(A)Conveyor length (m)	50'-0"(15.2)	60'-0"(18.2)	95'-0"(29.9)	100'-0"(30.4)	125'-0"(38.1)	150'-0"(45.7)
(B)Conveyor ground length (m)	45'-0"(14.0)	55'-2"(16.8)	88'-7"(27.0)	93'-0"(28.5)	116'-2"(33.4)	139'-9"(42.6)
(C)Raised height to center of pulley(m)	17'-11"(5.5)	21'-4"(6.5)	31'-7"(9.6)	33'-11"(10.3)	36'-0"(11.0)	49'-6"(15.1)
(D)Lowered height to center of pulley(m)	12'-5"(3.8)	13'-3"(3.9)	14'-4"(4.3)	13'-6"(4.1)	19'-5"(5.9)	17'-11"(5.5)
(E)Anchor pivot to center of axle(m)	25'-5"(7.8)	31'-2"(9.5)	48'-4"(14.6)	51'-5"(15.6)	60'-2"(18.4)	77'-3"(23.6)





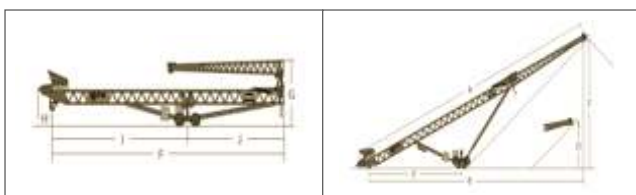


## VERTEX PORTABLE RADIAL STACKER CONVEYOR

PRIME Conveyor is its 22-degree stockpiling incline. Standard conveyors only stockpile at 18 degrees. The VERTEX Conveyor's increased incline is suitable for smaller footprints. Manufactured in 80-foot, 100 foot, and 125 foot lengths, the VERTEX Conveyor has the capacity to stockpile 25-40% more material than standard radial stackers. A 125-foot conveyor creating a 270 degree pile can stockpile over 100,000 tons of material.

OPERATING DIMENSIONS	80'	100'	125'
(A)Conveyor length (m)	80'-0"(24.4)	100'-0"(30.5)	125'-0"(38.1)
(B)Conveyor ground length (m)	72'-3"(22.0)	91'-8"(22.9)	116'-4"(35.4)
(C)Raised height to center of pulley(m)	32'-5"(9.9)	39'-4"(12.0)	50'-8"(15.4)
(D)Lowered height to center of pulley(m)	18'-1"(5.5)	20'-1"(6.1)	18'-2"(5.4)
(E)Anchor pivot to center of axle(m)	32'-2"(9.8)	39'-4"(11.9)	46'-5"(14.2)

TRAVEL DIMENSIONS	80'	100'	125'
(A)Travel length-Kingpin to rear (m)	53'-7"(16.4)	68'-8"(21.0)	84'-2"(25.7)
(B)Travel height (m)	13'-5"(4.0)	13'-2"(4.0)	13'-11"(4.2)
(C)Kingpin to end to tow eye(m)	34'-7"(10.6)	39'-7"(12.1)	49'-4"(15.1)
(D) axle to head pulley(m)	19'-0"(5.8)	29'-1"(8.9)	34'-10"(10.6)
(E)Anchor pivot to center of axle(m)	32'-2"(9.8)	39'-4"(11.9)	46'-5"(14.2)
FD Axle size	Fd1520,	Fd20	Fd4039,
Weight at Axle-36" Belt width (kg)	000(9,072)	27, 250(12,360)	500(17,917)
Weight at Kingpin-36" Belt width (kg)	6,500(2,948)	6,300(2,858)	9,500(4,309)



# TRACK MOUNTED HOPPER FEEDER CONVEYOR

Heavy duty high capacity feeder stacker is designed to deliver enhanced handling and stockpiling of a wide range of materials across industries including aggregates, composting, landscaping and mining. The is an excellent alternative when a traditional direct load stacker may not be the right match for the material, and offers an economical yet highly productive options to the larger the features a large capacity hopper 5cu.m. with adjustable height, ensuring optimized operational efficiency on the job. The design reflects feedback from customers in a cross-section of applications and industries, and PRIME commitment to deliver the best products based on that input



## FEATURES & BENEFITS

- The unit can also be compacted for transport on one low loader for easy site to site transport.
- The feeder Conveyor comes with the following features as standard:
  - Dual hydraulic main drive system.
  - Hydraulic folding heading section for transport minimizing setup time.
  - Hydraulically adjustable discharge height up to 10 meters
  - 4 Meter tracks for superior manoeuvrability and stability.
  - Fixed speed giving a rating of up to 1500 TPH.
  - Fuel efficient Hydraulics system.
  - User Friendly Hydraulic Controls.
  - Hopper extensions increasing capacity
  - Engine - Power Unit Diesel
  - Transport Height 11' 3" (3.4m) Transport
  - Length 60', (18.3m) 70', 80'
  - Transport Width 8' 5" (2.6m) Stockpile Height 31' 10" (9.7m)
  - Stockpile Capacity 2,217 yds<sup>3</sup> (1,695 m<sup>3</sup>)
  - Heavy duty design and manufacture.
  - Hydraulic folding head section allowing for compact road transportation.
  - Can be packed into 40ft containers for easy, cost effective transport around the globe.
  - High specification machine designed for ease of maintenance commanding an excellent resale value at project conclusion.
  - Heavy duty design and manufacture.



# STACKABLE & JUMP CONVEYOR

PRIME CONVEYOR has taken notice and have designed a series of portable conveyors that are not only user friendly to transport, they are easy to set up. PRIME CONVEYORS Portable Jump Conveyors (PPJC) offers our clients versatility without compromising performance. If you don't see the size you need, please contact us as we aren't afraid to custom design one specifically for you!

These variable height portable transfer conveyors are specially designed to roll one on top of the other for transport, saving you on shipping and Transport costs. Stackable Conveyors include engineered truss supports and head end rollers for an effortless, stable glide to and from stacked mode. No dangerous picks or lifts common to traditional "stackable" conveyor designs.

Conveyors only require one operator for setup or teardown, helping you save time and labor costs associated with jump conveyor installation. We offer 18mtrs, 21mtrs, 24mtrs lengths, with belt capacities up to 1,200 tons per hour.

## DRIVE, BELTING & PULLEY SPECIFICATIONS

MODEL	CAPACITY	MOTOR	REDUCER	BELTING	BELT SPEED	HEAD PULLEY	TAIL PULLEY
PC55X36-0800 (Top)	800 STPH	15 HP	TXT415	36"X108'330PIW Ply	400 Fpm	14"X38", ½ Dia. Lag.	12"X38"
PC55X36-0800 (Middle)	800 STPH	15 HP	TXT415	36"X108'330PIW Ply	400 Fpm	14"X38", ½ Dia. Lag.	12"X38"
PC55X36-0800 (Bottom)	800 STPH	20 HP	TXT415	36"X108'330PIW Ply	400 Fpm	14"X38", ½ Dia. Lag.	12"X38"

### ALL MODELS AVAILABLE 24" – 42" BELT WIDTHS

MODEL	LENGTH	BELT WIDTH	CAPACITY (TPH)
PPJC-50-36	50	36	100-800
PPJC-60-36	60	36	100-800
PPJC-80-36	80	36	100-800
PPJC-100-36	100	36	100-800

### BOTTOM CONVEYOR DIMENSIONS

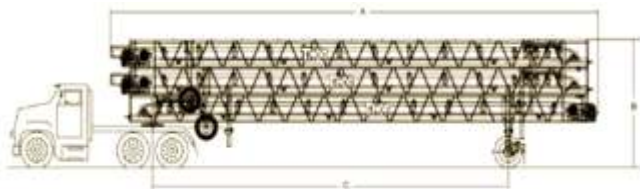
MODEL	A	B	C	D
PC55X36-0800	55	10'-4"	10'-5"	8'-4"

### TRANSPORT DIMENSIONS

MODEL	A	B	C	D
PC55X36-0800	55'-8"	12'-10"	40'-7"	10'-5"

### TOP & MIDDLE CONVEYOR DIMENSIONS

MODEL	A	B	C	D
PC55X36-0800	55'	6'-0"	7'-2"	7'-4"





## BELT CONVEYOR

Prime conveyors is the provider of custom conveying systems. We offer heavy-duty belt conveyors for bulk handling applications.

The right material handling system can add automation and fluidity to any application. We offer a wide range of optional equipment to complement our conveying systems in order to provide you with a complete system designed to handle your specific material. Belt trippers, weighing units, delumpers, reclaiming equipment, loading shelters and load out systems for trucks, rail cars, and barges are all available.

All belt conveyors and conveyor systems are engineered around your unique application to ensure the best handling solution possible.

## CHAIN CONVEYOR

Chain conveyor is a continuous operating machine within a bolted rectangular cross-section casing. It may be arranged horizontally or inclined with bends to suit customer requirements. Our chain conveyors are renowned for their long service life, quiet operation and gentle handling of the bulk. The bulk material is fed in at the inlet/bottom end where the chain tensioning station is also fitted. The conveying chain runs on a special wear resistant floor and conveys the material through the upper or lower section to the discharge opening where it is discharged to a silo inlet or to a following conveyor. The drive station is also installed at this end. The construction type of the conveyor chain is chosen and adapted according to the specific bulk material to be transported. All chain links are manufactured from high grade drop forged steel with welded.



Scrapper  
Chain Conveyor



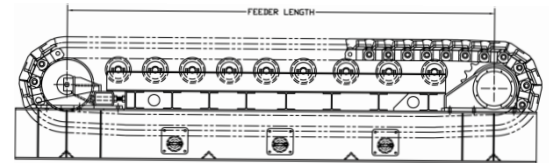
Submerged  
Ash Conveyor



# APRON FEEDER

## STANDARD DESIGN FEATURES:

- Frame - Rugged welded steel beam frame with impact rails to limit flight deflection.
- Two Deck Options - Feeder flight are available in either cast manganese or formed steel.
- Heavy Duty Tractor Chain - Common crawler tractor components with hardened steel construction with a unique sealed design for long life.
- Carrying and Return Rollers - Both types of rollers feature lifetime lubricated, fully sealed bearings and are common crawler tractor components.
- Head shaft Bearing - Large anti-friction spherical bearings are used on the head shaft with cast steel bearing housings and labyrinth seal covers.
- Tail Wheel Assembly - Tractor idler wheels (Seal for Life) are mounted to a movable tail frame weldment, that is adjustable with take-up screws to the main frame.
- Drive Shaft and Sprockets - Cast manganese segmental sprockets are bolted to heavy steel hubs keyed to an oversized front drive shaft. Replaceable segmental sprockets are designed with an odd number tooth for optimum wear, easy removal and reversing without breaking the flight chains.

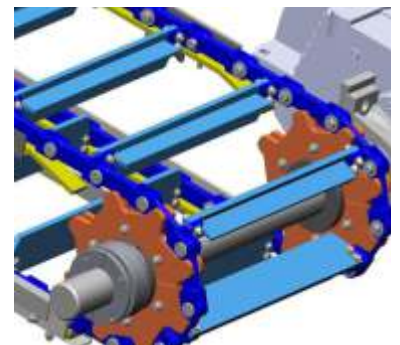


## APRON FEEDER CAPACITY CHART (T.P.H.) & MAXIMUM FEED SIZE (INCH)

FLIGHT SPEED FPM	WIDTH OF FEEDER IN INCH														
	24	30	36	42	48	54	60	66	72	78	84	90	96	108	120
10	96	150	216	294	384	486	600	726	864	1014	1176	1350	1536	1944	2400
15	144	225	324	441	576	729	900	1089	1296	1521	1764	2025	2304	2916	3600
20	192	300	432	588	768	972	1200	1452	1728	2028	2352	2700	3072	3888	4800
25	240	375	540	735	960	1215	1500	1815	2160	2535	2940	3375	3840	4860	6000
30	288	450	648	882	1152	1458	1800	2178	2592	3042	3528	4050	4608	5832	7200
35	336	525	756	1029	1344	1701	2100	2541	3024	3549	4116	4725	5376	6804	8400
40	384	600	864	1176	1536	1944	2400	2904	3456	4056	4704	5400	6144	7776	9600
MAXIMUM FEED SIZE INCH	12	15	18	21	24	27	30	33	36	39	42	45	48	54	60

## DRAG CHAIN CONVEYOR

The size of double chain conveyors can reach up to 55", thanks to the presence of two traction elements, which allow the use of longer scrapers. For these machines, Motridal uses specially designed case-hardened and tempered drop-forged forked links. Flights are fixed by means of special pins to the chain links. The chain guides made in wear-resistant steel are bolted to the internal side of the conveyor casing for easy maintenance and replacement.



## PRIME CONVEYORS

We Provide technically sophisticated solutions are at the same time both innovative and highly developed, and are installed all over the world. The extensive degree of customisation to individual customer specifications is one of the major factors that have led to the PRIME CONVEYORS becoming the world leader in its field that it is today.

### SERVICES

PRIME CONVEYORS to deliver the highest standards of customer support and after-sales service worldwide. We Can support All over the world where our dedicated team of engineers provide full after-sales service and support; from quality control and commissioning to maintenance and repair. Our experience of operating in heavy industries and ports means we understand that continuous production is vital to your profitability. As such, we have developed a customer support team to provide the highest standards of on-site services. Our commitment is to delivering effective and timely customer-orientated service at every stage of the equipment lifecycle, helping to protect your production and maximize your return on capital investment.

### ERECTION & COMMISSIONING

A comprehensive service for the erection, site assembly and commissioning of all Prime Conveyor products, plus operator and maintenance training is always available either based on the supervision of your local engineers or as part of the complete supply package.

Supported by efficient and effective contracts management and documentation services including all associated health and safety issues relating to the equipment and its installation and operation in line with your specific requirements.

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### CONVEYOR ACCESSORIES



## PRIME CONVEYORS

20, Near Codea Industrial Estate,  
Sathyamangalam Road, Kurumbapalayam,  
Coimbatore- 641107. Tamil Nadu. India.

Mobile : + 91 96777 37122, 98422 37122

E-Mail : [sales@primeconveyors.com](mailto:sales@primeconveyors.com), [www.primeconveyors.com](http://www.primeconveyors.com)