



APPLICATION & ESTIMATION GUIDE



APPLICATION, SELECTION, & PRICING
FOR POPULAR STANDARD CONVEYORS



HOW TO USE THIS GUIDE

1 CHOOSE YOUR PRODUCT.

Gravity Skatwheel
 Light Duty Rollers
 Heavy Duty Rollers
 Horizontal Belt
 Incline/Decline Belt

Live Roller
 Accumulation
 Sortation
 Conveyor Accessories

2 ESTIMATE YOUR MATERIAL COST.

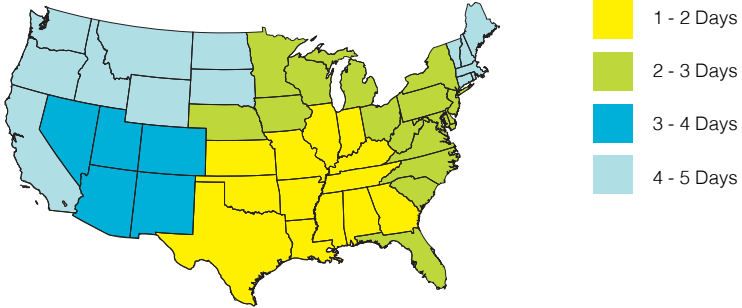
Quantity	Units (per ft or ea)	Item	Cost Per Unit	Total
1	6	Belt/TA	\$100	\$600
1	2	Ball Table/BTT	\$150	\$300
			Total Material Cost: \$900	

3 ESTIMATE YOUR INSTALLED PRICE.

Example 1 - Quick Method			
	Total Material	Factor	Total
Material Cost x 2.2	\$900	2.2	\$1,980

— OR —

Example 2 - Itemized Method		Itemized Summary	
Choose Required Items	Total Material	Factor	Total
Mechanical Installation (30% of Material Cost)	\$270	Material	\$900
Electrical Controls (30% of Material Cost)	\$270		
Field Wiring (Equal to Controls Cost or 30% of Material Cost)	\$270		
Shipping & Handling and Misc. (30% of Material Cost)	\$270		
	\$1,080		
		Total: \$1,980	

4**ESTIMATE YOUR TRANSIT TIME.****5****CONTACT AN INTEGRATION PARTNER.**

Your Hytrol integration partner can provide you with a detailed proposal for a solution that meets your specific requirements. For additional information or to locate an integration partner, please visit www.hytrol.com.

6**REMEMBER.**

This guide is intended to provide you with typical "ball park" information. Use it to get an idea if your concept warrants further investigation. Material costs include items that are normally supplied with a purchase. As you can imagine, a large variation can occur from one application to the next. Thus, pricing can vary greatly. Labor and Transportation estimates are also based on typical rates.

Hytrol conveyors come with a standard green powder paint coating. Hytrol offers five additional standard colors at no charge: blue, black, gray, beige, and white.



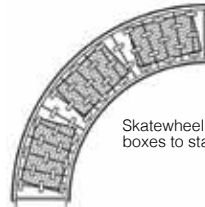
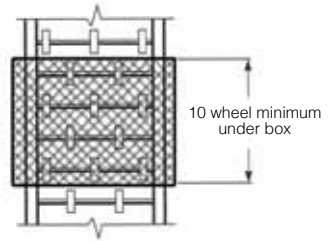
GRAVITY SKATEWHEEL

Manual operations, light product with firm bottom, and/or portable applications

SKATEWHEEL:

- Various patterns are available.
- Items may be up to 6" over each side.
- There should always be a minimum of ten wheels under a box.
- Skatewheel curves allow boxes to stay oriented.
- Wheel rails may be used for floor loading.
- Suitable for items with a smooth, flat bottom such as:
 - Totes
 - Bundles
 - Beverage cases
 - Cases
 - Lumber
 - Trays

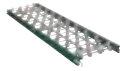
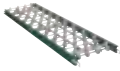

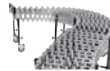

ITEM	APPROX. WEIGHT (POUNDS)	SLOPE (IN. PER 10 FT)
Boxes, Wood	15 – 25	6-1/4"
Boxes, Wood	25 – 50	5"
Boxes, Wood	50 – 100	3-3/4"
Boxes, Wood	100 – 250	3-1/8"
Cartons	3 – 6	8-3/4"
Cartons	6 – 12	7-1/2"
Cartons	12 – 25	6-1/4"
Cartons	25 – 30	5"
Crates	—	5" – 6-1/4"
Lumber	—	5"
Pans, Tote	—	2-1/2" – 5"



BALL CASTER:






- Boxes up to 100 lbs can be manually pushed.
- Boxes up to 200 lbs can be manually pushed using a ball transfer.

GRAVITY SKATEWHEEL & BALL CASTER COMPARISON CHART

						
Model	SW	AW	Wheel Rails	FX200	BTT	
KEY INDICATORS FOR TYPICAL CONFIGURATION						
Type	Skatewheel	Skatewheel	Skatewheel Conveyor Rails	Extendable Skatewheel	Ball Transfer Table	
Est. Cost/Foot	\$55	\$60	\$20	\$105	\$180	
Application	Light	Light	Light	Light	Light	
SPECIFICATIONS						
Lengths	5' Increments (5' & 10' bed sections)		10' Increments	12', 24' Increments	1' Increments	
Widths	12", 15", 18", 24"		N/A	18", 24"	12", 15", 16", 18", 20", 22", 24", 26", 28", 30", 34", 36", 40", 42"	
Capacity	10' ctr.	31 lbs/ft	10 lbs/ft	Up to 250 lbs/ft	200 lbs/ft	135 lbs/ft
	5' ctr.	250 lbs/ft	83 lbs/ft		620 lbs/ft	
Frame	Steel	Aluminum	Steel	Steel	Steel	
Wheel	1-15/16" dia.	1-15/16" dia.	1-15/16" dia.	1-15/16" dia.	1" dia. Ball Caster	
Conveying Surface	Galvanized Steel Wheels	Aluminum Wheels	Galvanized Steel Wheels	Galvanized Steel Wheels	Steel Ball Casters	
ACCESSORIES						
Permanent Supports	Optional	Optional	—	Included	Optional	
Temporary Supports	Optional	Optional	—	—	—	
Castors	Optional	Optional	—	Included	Optional	
Guard Rails	Optional	Optional	—	Optional	Optional	
End Stops	Optional	Optional	—	Included	Optional	

*Estimates based on fully equipped conveyor 24" wide x 50" long.

RELATED ITEMS

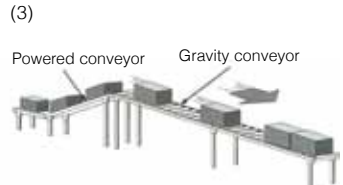
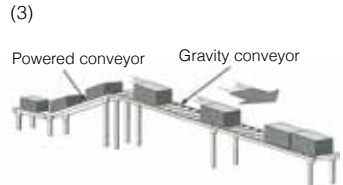
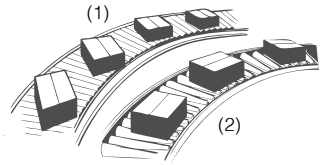
Curves	Floor Supports	Guard Rails	Package Stops	Tripods
				
Gravity curves compliment gravity and power units	Easy to install "H" type supports for permanent applications	Keep product contained within conveyor surface	Many styles of stops available for power and gravity conveyor	Hand adjustable supports for temporary applications
Minimum pitch required for unassisted flow	Many adjustable height ranges available	Adjustable or fixed positions available	Fixed positions or actuated styles available	Use with straight or curved sections
Configure the conveyor for the space you have	Available with casters for portable conveyor sections	Straight and curve guards available	Use stops at the end or intermediate points	For light duty conveyors

LIGHT DUTY GRAVITY ROLLERS

Manual operations, light product and/or irregular bottoms, side loading

- (1) Straight Roller Curves may not exit the curve in the same position.
- (2) Tapered Roller Curves will maintain better orientation through the curve.
- Although less expensive than powered conveyor, gravity does not provide a positive flow of packages. The degree of pitch needed on a gravity conveyor will depend on several factors:
 - The type of conveyor, roller, or skatewheel.
 - Bearings greased packed or lightly oiled. (Grease packed bearings roll slower.)
 - The weight of the package.
 - The quality of firmness of the package bottom.
- (3) Gravity Conveyors can be installed on a decline or horizontal.

ITEM	APPROX. WEIGHT (POUNDS)	SLOPE (IN. PER 10 FT)
Baskets	—	5"
Boxes, Wood	15 – 25	6-1/4"
Boxes, Wood	25 – 50	5"
Brick	—	5"
Cartons	3 – 6	8-3/4"
Cartons	6 – 12	7-1/2"
Cartons	12 – 25	6-1/4"
Cartons	25 – 30	5"
Drums	150 – 300	2-1/2" – 3-3/4"
Lumber	—	5"
Pans, Tote	—	2-1/2" – 5"



APPLICATIONS FOR ROLLER CONVEYORS:

Baskets



Cases



Lumber



Totes







Bricks



Barrels



LIGHT DUTY ROLLER COMPARISON CHART

					
Model	SSR	SAR	19SR	19GSR	
KEY INDICATORS FOR TYPICAL CONFIGURATION					
Type	1-3/8" dia. x 18 ga. Galvanized Roller	1-3/8" dia. x 18 ga. Aluminum Roller	1.9" dia. x 16 ga. Unplated Roller	1.9" dia. x 16 ga. Galvanized Roller	
Est. Cost/Foot	\$50	\$60	\$55	\$60	
Application	Light	Light	Medium	Medium	
SPECIFICATIONS					
Lengths	5' Increments (5' & 10' bed sections)				
Widths	12", 15", 18", 24"		16", 18", 20", 22", 24", 26", 28", 30", 34", 36", 40", 42"		
Capacity	10' ctr.	31 lbs/ft	10 lbs/ft	118 lbs/ft	118 lbs/ft
	5' ctr.	250 lbs/ft	83 lbs/ft	620 lbs/ft	620 lbs/ft
Frame	Steel	Aluminum	Steel	Steel	
Roller	1-3/8" dia.	1-3/8" dia.	1.9" dia.	1.9" dia.	
Conveying Surface	Galvanized Steel Wheels	Aluminum Wheels	Galvanized Steel Wheels	Galvanized Steel Wheels	
ACCESSORIES					
Permanent Supports	Optional	Optional	Optional	Optional	
Temporary Supports	Optional	Optional	—	—	
Casters	Optional	Optional	Optional	Optional	
Guard Rails	Optional	Optional	Optional	Optional	

*Estimates based on fully equipped conveyor 24" wide x 50" long.

RELATED ITEMS

Curves	Ball Transfer	Floor Supports	Guard Rails	Gate
				
Gravity curves compliment gravity and power units	Easily rotate or position products by hand	Easy to install "H" type supports for permanent applications	Keep product contained within conveyor surface	Create convenient passageway for personnel and equipment
Minimum pitch required for unassisted flow	Transfer products to parallel or perpendicular conveyors	Many adjustable height ranges available	Adjustable or fixed positions available	Available for most gravity and powered conveyors
Configure the conveyor for the space you have	Great for filling, taping, inspection and assembly	Available with casters for portable conveyors sections	Straight and curve guards available	Lift handles and locking mechanism for easy and safe operation

HEAVY DUTY GRAVITY ROLLERS

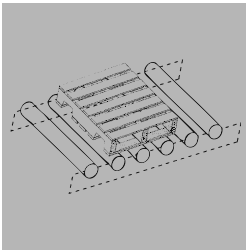
Manual operations, heavy product and/or irregular bottom, abusive applications

HEAVY DUTY LOAD APPLICATION:

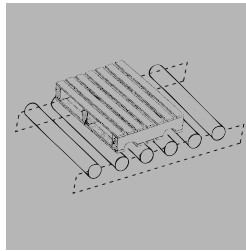
When a load application is presented, three key questions will be asked:

- (1) What does the conveying surface (bottom of the product) look like?
- (2) What is the load weight?
- (3) Will the pallet runners be parallel or perpendicular to the conveyor rollers?

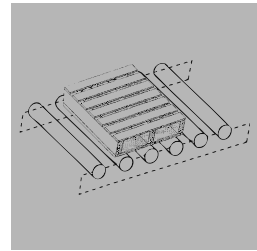
While pallets may appear to be similar, they are not. Careful attention must be given to the pallet bottom deck. Perpendicular runners are always the best. Parallel runners should be avoided. If runners are in both directions, the pallet could be used bi-directly (i.e. placed on the conveyor either way).



PERPENDICULAR



PARALLEL







OR BOTH

Horizontal Gravity

Many pallets are moved on horizontal gravity roller conveyors simply by hand pushing.

Decline Gravity

Pallets moving on decline conveyors, however, present different problems and usually require special braking to control the speed.

HEAVY DUTY GRAVITY ROLLERS COMPARISON CHART				
				
Model	199SR	20SR	25SR	36SR
KEY INDICATORS FOR TYPICAL CONFIGURATION				
Type	1.9" dia. x 9 ga. Unplated Roller	2.0" dia. x 12 ga. Unplated Roller	2.5" dia. x 11 ga. Unplated Roller	3.5" dia. x .300 wt. Unplated Roller
Est. Cost/Foot	\$85	\$65	\$120	\$200
Application	Heavy	Heavy	Heavy	Heavy
SPECIFICATIONS				
Lengths	5' Increments (5' & 10' bed sections)			
Widths	16", 18", 20", 22", 24", 26", 28", 30", 34", 36", 40", 42"		16-1/4", 18-1/4", 20-1/4", 22-1/4", 24-1/4", 26-1/4", 30-1/4", 34-1/4", 36", 40-1/4", 42-1/4", 46-1/4", 50-1/4", 54-1/4", 58-1/4"	
Capacity	10' ctr.	118 lbs/ft	288 lbs/ft	600 lbs/ft
	5' ctr.	620 lbs/ft	1620 lbs/ft	2500 lbs/ft
Frame	Steel	Steel	Formed Steel	Structural Channel
Roller	1.9" dia.	2.0" dia.	2.5" dia.	3.5" dia.
Conveying Surface	Unplated Steel Rollers	Unplated Steel Rollers	Unplated Steel Rollers	Unplated Steel Rollers
ACCESSORIES				
Permanent Supports	Optional	Optional	Optional	Optional
Casters	Optional	Optional	Optional	Optional
Guard Rails	Optional	Optional	Optional	Optional
End Stops	Optional	Optional	Optional	Optional

*Estimates based on fully equipped conveyor 24" wide x 50" long.

RELATED ITEMS				
Curves	Rollers Set Low	Floor Supports	Guard Rails	Stops
				
Gravity curves compliment gravity and power units	Great for use with manual side entry points	Easy to install "H" type supports for permanent applications	Keep product contained within conveyor surface	Fixed position or actuated styles available
Minimum pitch required for unassisted flow	Optional rollers set low for a built in guard rail	Many adjustable height ranges available	Adjustable or fixed positions available	Use stops at the end or intermediate points
Configure the conveyor for the space you have	Keeps product contained in section	Available with casters for portable conveyors sections	Straight and curve guards available	Easily relocated to adapt with you

HORIZONTAL BELT

Powered transportation, difficult to convey items, assembly line applications

HOW TO DETERMINE BELT REQUIREMENTS:

- (1) Characteristics of the product handled (Shape, size, condition of product, etc.)
- (2) Prevailing atmospheric conditions (Temperature, environment, current, etc.)
- (3) Operations to be performed (Assembly, shift in orientation, etc.)

ROLLER BED BELT CONVEYOR

This conveyor increases the amount of load which can be conveyed. This is because the belt is now traveling over rollers, which have a very low coefficient friction.








SLIDER BED BELT CONVEYOR

This type of conveyor is the most widely used package handling power conveyor. Its solid steel bed construction is inexpensive, simple, quiet, and easy to install. It is frequently used for assembly operations and general transportation.

TIPS FOR PACKAGE HANDLING:






- Boxes moved by belt conveyors should not exceed the overall width of the conveyor.
- Boxes of poor quality should not exceed the width of the belt since box edges may drag.

HORIZONTAL BELT COMPARISON CHART

					
Model	TA	TR	TL	SB	RB
KEY INDICATORS FOR TYPICAL CONFIGURATION					
Type	Belt sliding on formed box bed	Belt sliding on formed box bed w/ troughed sides	Belt sliding on formed box bed	Belt sliding on steel pan inserted in channel frame	Belt sliding on rollers inserted in channel frame
Est. Cost/Foot	\$100	\$145	\$165	\$145	\$145
Application	Light	Light	Medium	Medium	Heavy
SPECIFICATIONS					
Lengths	6' Min. – 102' Max. (5' Increments)	6' – 51' (5' Increments)	7' – 102' (5' Increments)	12' – 102' (5' Increments)	
Widths	10", 12", 14", 16", 18", 20", 22", 24", 28"	8", 10", 12", 14", 18", 20", 22", 26", 32"	30", 36", 42"	18", 24", 30"	16", 18", 20", 22", 24", 26", 28", 30", 34", 36", 40", 42"
Capacity	75 lbs/ft	75 lbs/ft	100 lbs/ft	100 lbs/ft	255 lbs/ft
Frame	Steel Slider Bed	Steel Slider Bed	Steel Slider Bed	Channel Frame	Channel Frame
Conveying Surface	Black Belt Brushed both sides	Black Belt Brushed both sides	Black Belt Brushed both sides	Black Belt Brushed both sides	Black Belt Brushed both sides
ACCESSORIES					
Floor Supports	Optional	Optional	Optional	Optional	Optional
Multi-Level Supports	Optional	Optional	Optional	Optional	Optional
Ceiling Supports	Optional	Optional	Optional	Optional	Optional
Guard Rails	Optional	Optional	Optional	Optional	Optional
Casters	Optional	Optional	Optional	Optional	Optional
Alternate Belting	Optional	Optional	Optional	Optional	Optional

*Estimates based on fully equipped conveyor 24" wide x 50' long.

RELATED ITEMS

Inclines	Portables	Belting	Guard Rails	Electrical Controls
				
Configured with roughtop belt and transition to horizontal	Portable units can be stored when not in use	Many belts for specific applications	Keep product contained within conveyor surface	Start/stop, forward/reverse push button stations
Use with mezzanines or overhead lines	Convey packages, parts, and small objects	High grip, low grip, cleanable, sanitary	Adjustable or fixed positions available	Variable speed controls
Reversing for use as an incline or decline	Use one conveyor for many applications	Many widths available	Transitions hardware to horizontal sections	Magnetic starters with overload protection

INCLINE/DECLINE BELT

Powered elevation changes, variety of product, reversing applications

TIPS FOR INCLINE/DECLINE APPLICATIONS:

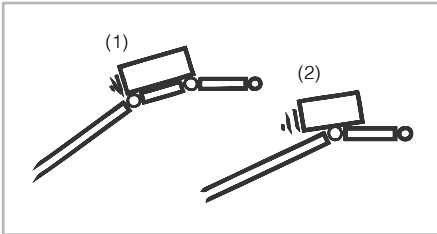
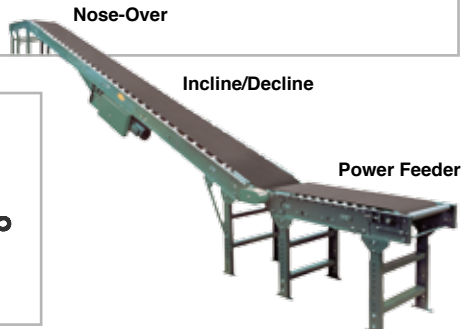
It takes more effort when moving boxes up from a horizontal unit. The amount of effort or power it takes depends on the degree of incline and the total load on the conveyor. For most applications the maximum angle for an incline conveyor is 20°. If a 20° incline is exceeded, the following problems occur:

- Boxes may slip back down the conveyor.
- Drive capacity may be exceeded.
- Boxes may tumble.

A power feeder should typically be 2.5 times as long as the belt width. Power feeders are best powered by a chain attached to the incline conveyor. This is called **chain driven power feeder**.

A **nose-over** allows smooth transition from the horizontal to the decline or the incline to the horizontal. It is available as a standard item on most incline conveyors and may require either a single or double nose-over.



- (1) Double nose-over adjusts 0° – 30°.
- (2) Single nose-over adjusts 0° – 15°.



ADDITIONAL CONSIDERATIONS FOR INCLINES:

- Boxes should not be wider than the conveyor.
- Small boxes may tumble at the transfer point of a feeder.
- It is easy to drive the feeder at a different speed than the incline by using a different size sprocket. This may be done to help pull a gap in the line of boxes or prevent bridging or staggering.
- Depending on the load and/or speed of the conveyor, some declines will drift after they have stopped.
- Brake motors are required on all incline and decline conveyors.

INCLINE/DECLINE BELT COMPARISON CHART

		
Model	SBI	RBI
COMPARATIVE PRICING FOR TYPICAL CONFIGURATION		
Type	Incline/decline belt sliding on steel pan insert in channel frame	Incline/decline belt sliding on rollers in the channel frame
Est. Cost/Foot	\$190	\$190
Application	Medium	Heavy
SPECIFICATIONS		
Lengths	13' – 10" Minimum, 43' – 10" Maximum (2' Increments)	
Widths	18", 24", 30"	
Capacity	100 lbs/ft	225 lbs/ft
Frame	Steel Slider Bed	Steel Slider Bed
Conveying Surface	Rough Top Belt	Rough Top Belt
ACCESSORIES		
Floor Supports	Optional	Optional
Ceiling Supports	Optional	Optional
Guard Rails	Optional	Optional

*Estimates based on fully equipped conveyor 24" wide x 50' long.

RELATED ITEMS

Horizontal Belt



Horizontal belts for infeed or discharge of inclines

Many lengths, widths, and types available

Drive options allow for reversing applications

Portables



Portable units can be stored when not in use

Convey packages, parts, and small objects

Use one conveyor for many applications

Ceiling Hanger



Save space by hanging conveyors overhead

Adjustable with fully threaded rods

Available for most conveyors

Belting



Many belts for specific applications

High grip, low grip, cleanable, sanitary

Many widths available

Electrical Controls



Start/stop, forward/reverse push button stations

Variable speed controls

Magnetic starters with overload protection

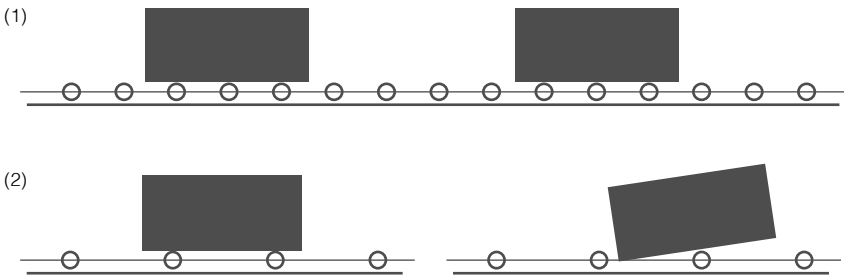
LIVE ROLLER

Powered transportation, many products, side loading, merge on and off

LIVE ROLLER CONVEYOR:

A series of rollers over which objects are moved by the application of power to all or some of the rollers. The power transmitting medium is available as **belting**, **chain**, or **shaft drive**.

It is possible to stop or hold a box momentarily on a live roller conveyor. More than one or two boxes cannot be accumulated due to the excessive drive pressure. To accumulate boxes, an accumulating conveyor is needed.



GUIDELINES FOR BOX WIDTHS:

- The box width on roller conveyors should never exceed the width of the rollers.
- The box should be at least 2" narrower than the between rail width.
- Boxes should always be supported by at least three rollers. (see figure 1)
- If less than three rollers are under the box, it will tumble. (see figure 2)
- Determine the roller centers required by measuring the dimensions of the smallest box to be placed on the conveyor.

LIVE ROLLER COMPARISON CHART

					
Model	190-NSP	ABLR	25-CRR	190-E24	
KEY INDICATORS FOR TYPICAL CONFIGURATION					
Type	Line shaft/spool driven live roller	Flat belt driven live roller	Roll to roll chain driven roller	24-Volt direct drive roller	
Est. Cost/Foot	\$165	\$175	\$315	\$300	
Application	Medium	Medium	Heavy	Medium	
SPECIFICATIONS					
Lengths	5' Minimum, 100' Maximum (5' Increments)	10' Minimum, 100' Maximum (5' Increments)	5' Minimum, 100' Maximum (1' Increments)	2' Minimum, 10' Maximum (6" Increments)	
Widths	18", 24", 30"	16", 18", 20", 22", 24", 26", 28", 30", 34", 36", 40", 42"	22-1/4", 30-1/4", 50-1/4", 54-1/4", 58-1/4"	9", 11", 13", 15", 17", 19", 21", 23", 25", 27", 31", 33", 37", 39"	
Capacity	10' ctr.	15 lbs/roller	200 lbs/ft	300 lbs/ft	16 – 36 lbs/ft
	5' ctr.				
Frame	Steel Roller Bed	Steel Roller Bed	Steel Roller Bed	Steel Roller Bed	
Roller	1.9" dia.	1.9" dia.	2.5" dia.	1.9" dia.	
Conveying Surface	Galvanized Steel Rollers	Galvanized Steel Rollers	Unplated Steel Rollers	Galvanized Steel Rollers	
ACCESSORIES					
Floor Supports	Optional	Optional	Optional	Optional	
Multi-Level Supports	Optional	Optional	—	Optional	
Ceiling Supports	Optional	Optional	—	Optional	
Guard Rails	Optional	Optional	Optional	Optional	
Casters	Optional	Optional	—	Optional	
End Stops	Optional	Optional	—	Optional	

*Estimates based on fully equipped conveyor 24" wide x 50' long.

RELATED ITEMS

Curves



Powered or slave driven curves

Minimum pitch required for unassisted flow

Configure the conveyor for the space you have

Stops



Fixed position for actuated styles available

Use stops at the end or intermediate points

Normally up position or normally down position

Guard Rails



Keep product contained within conveyor surface

Adjustable or fixed positions available

Straight and curve guards available

Ceiling Hanger



Save space by hanging conveyors overhead

Adjustable with fully threaded rods

Available for most conveyors

Controls



Start/stop, forward/reverse push button stations

Variable speed controls

Magnetic starters with overload protection

ACCUMULATION

Powered accumulation and/or transportation, automation, intermediate stop points

ACCUMULATING FEATURES:

Accumulating conveyors are similar to live roller conveyors, except the drive pressure can be adjusted to a minimum or even eliminated.

Many factors affect the proper operations of accumulating conveyors, such as speed, box weight, and box size. Zero pressure accumulation conveyors may be either mechanically, pneumatically, or electronically operated. Electronically operated units have no minimum weight requirement and use no sensing rollers.

Often, an application requires accumulation of a long line of boxes into one of the following types of operation:





- Sorting
- Palletizing
- Strapping
- Staging



TYPES OF ACCUMULATION:

- **Minimum Pressure** has enough drive to the tread rollers to move the package. The amount of back pressure on this type of conveyor allows a minimum of 2% of the total live load on the conveyor.
- **Zero Pressure** accumulates products with no product touching. This is done by using various methods to completely remove all driven pressure in select zones on the conveyor. These zones vary in length according to the product being conveyed.

ACCUMULATION COMPARISON CHART

				
Model	190-ACC	190-ACZ	ABEZ	190-E24EZ
KEY INDICATORS FOR TYPICAL CONFIGURATION				
Type	V-Belt driven minimum pressure accumulation	Flat belt driven minimum pressure	Flat belt driven zero pressure	24-Volt direct drive zero-pressure accumulation
Est. Cost/Foot	\$190	\$200	\$275	\$360
Application	Medium	Medium	Medium	Medium
SPECIFICATIONS				
Lengths	5' Minimum, 100' Maximum (5' Increments)	10' Minimum, 100' Maximum (5' Increments)	10' Minimum, 100' Maximum (24" or 30" zone length increments)	10' Minimum, 100' Maximum (12", 18", 24", 30", 36" zones)
Widths	16", 18", 20", 22", 24", 26", 28", 30", 34", 36", 40", 42"	18", 24"	18", 24"	9", 11", 13", 15", 17", 19", 21", 23", 25", 27", 31", 33", 37", 39"
Capacity	150 lbs/ft	200 lbs/ft	150 lbs/ft	20 – 41 lbs/ft
Frame	Steel Roller Bed	Steel Roller Bed	Steel Roller Bed	Steel Roller Bed
Roller	1.9" dia.	1.9" dia.	1.9" dia.	1.9" dia.
Conveying Surface	Galvanized Steel Rollers	Galvanized Steel Rollers	Galvanized Steel Rollers	Galvanized Steel Rollers
ACCESSORIES				
Floor Supports	Optional	Optional	Optional	Optional
Multi-Level Supports	Optional	Optional	Optional	Optional
Ceiling Supports	Optional	Optional	Optional	Optional
Guard Rails	Optional	Optional	Optional	Optional
Casters	Optional	Optional	—	Optional
End Stops	Optional	Optional	—	Optional

*Estimates based on fully equipped conveyor 24" wide x 50" long.

RELATED ITEMS

Curves



Powered or slave driven curves

Minimum pitch required for unassisted flow

Configure the conveyor for the space you have

Stops



Fixed position for actuated styles available

Use stops at the end or intermediate points

Normally up position or normally down position

Guard Rails



Keep product contained within conveyor surface

Adjustable or fixed positions available

Straight and curve guards available

Ceiling Hanger



Save space by hanging conveyors overhead

Adjustable with fully threaded rods

Available for most conveyors

Controls



Start/stop, forward/reverse push button stations

Variable speed controls

Magnetic starters with overload protection

SORTATION

Wide range of sortation rates, dual-side divert capacity, multiple angle divers.

PROSORT 400 ELITE:

The ProSort 400 Elite is a high-speed sliding shoe sorter designed for applications where product diverting needs to be both positive and gentle.

- High-efficiency gearmotor
- Wrap-around shoe design
- Integrated induction conveyor
- Pinch-resistant shoe design
- Bidirectional divers available
- Sealed lubricated carrying chain
- Continuous polyurethane bearing track
- Electric and pneumatic divert switch options
- ProLogix Plus controls with Plug-N-Go wiring
- 22° and 30° divers available

PROSORT MRT:

The Model ProSort MRT is a narrow belt sorter for mid-range rates. With the 90° MRT, rollers pop up between the belts to transfer items at a right angle. For 30° sortation, diverter wheels pop up between belts to transfer items.

- Individual pneumatic belt take up for 90°
- High strength, low stretch belt for 90°
- Bidirectional diverting for 90°
- Precise product tracking
- High efficiency shaft mounted drive
- ProLogix Plus controls with Plug-N-Go wiring

PROSORT SC:





The ProSort SC is a belt-driven sortation conveyor using pivot wheel diverters for sorting products. The SC series provides a reliable method of tracking packages to the divert stations. Takeaway spurs may be skatewheel-type or powered-type slaved from the main sorter. Packages with a minimum of 6" wide by 9" long are best suited for the SC. Diversers should be positioned at infeed of two-sided sorters to position packages for proper diverting.

- Bidirectional 30° sorting
- Pneumatic belt tensioner
- Flexible divert centers
- High efficiency shaft mounted drive
- Right, left, and two-sided divers available
- ProLogix Plus controls with Plug-N-Go

EXTENDA PUSHER:

The Extenda Pusher is a dual-stage 90° pusher designed for use on slider and roller bed conveyors where sorting of cartons or totes is required.





- Dual stage to reduce footprint
- Right and left hand sorting for 90°
- Uses less space
- Up to 50 cartons per minute

SORTATION COMPARISON CHART				
				
Model	ProSort 400 Elite	ProSort MRT	ProSort SC	Extenda Pusher
KEY INDICATORS FOR TYPICAL CONFIGURATION				
Type	Shoe sorter	Narrow belt sorter with pop-up transfer	Belt with pivot wheel sorter	Dual stage 90° pusher
Est. Cost/Foot	\$1,700	\$540	\$410	\$200 ea.
Est. Cost/Divert	\$2,500	\$4,500 - 30° \$6,600 - 90°	\$5,900	\$5,300
Application	High Rate	Medium Range	Medium Range	Low Rate
SPECIFICATIONS				
Widths	Conveying Surface 15", 21", 27", 33", 39"	OAW 18", 21", 24", 27", 30"	OAW 18", 24", 30", 36"	_____
Capacity	100 lbs Maximum load	75 lbs Maximum load	75 lbs Maximum load	75 lbs Maximum load
Frame	Formed Steel	Formed Steel	Formed Steel	Formed Steel
Rate	350 CPM*	120 CPM* - 90° 200 CPM* - 30°	100 CPM*	50 CPM*
Speed	700 FPM*	350 FPM*	300 FPM*	150 FPM*
Carton Gap	10"	30" - 90° 12" - 30°	12"	30"
Conveying Surface	Anodized Aluminum Slats or Steel tubing	Narrow Belts	Wide Belt	Aluminum Pusher Face
OPTIONAL EQUIPMENT				
	ProLogix Control Package	ProLogix Control Package	ProLogix SC Control Package	ProLogix Control Package
	Plug-N-Go Wiring	Plug-N-Go Wiring	Plug-N-Go Wiring	Plug-N-Go Wiring
FLOOR SUPPORTS				
	Adjustable MHS Type w/Knee Braces	Adjustable MS Type	Adjustable MS Type	Adjustable MSN Type




*Estimates based on fully equipped model. Actual rates and gap depend upon carton size, conveyor width, and/or induction capacity.

COMPARISON CHARTS





CONVEYOR SUPPORTS & CASTERS

					
	LS	MS	HS	Casters	
KEY INDICATORS FOR TYPICAL CONFIGURATION					
Type	Adjustable floor supports for permanent installation	Adjustable floor supports for permanent installation	Adjustable floor supports for permanent installation	Permanent supports can be configured to accept casters	
Est. Cost	\$60	\$60	\$100	4" dia. \$130	6" dia. \$200
Application	Light	Medium	Heavy	Portable	
SPECIFICATIONS					
For Use With	Fits light duty gravity & powered conveyors	Fits medium duty gravity & powered conveyors	Fits heavy duty gravity & powered conveyors	4" or 6", rigid or swivel, steel or rubber, wheel brakes	
Height	Min.	4-13/16"	5-3/4"	4-3/8"	4" dia. 5-7/8"
	Max.	106-11/16"	107-11/16"	174"	6" dia. 7-1/2"
Capacity	1500 lbs max.	1500 lbs max.	4000 lbs max.	—	







CONVEYOR SUPPORTS & CASTERS

					
	TS	PT	CH		
KEY INDICATORS FOR TYPICAL CONFIGURATION					
Type	Adjustable floor supports for temporary installation (No tools required)	Adjustable floor supports for permanent installation on multi-level system		Adjustable support for overhead installation	
Est. Cost	\$50	2 Tier \$210	3 Tier \$295	\$100	
Application	Temporary	Multi-level		Ceiling hanger	
SPECIFICATIONS					
For Use With	Light duty models	Most models		Most models	
Height	Min.	12"		48", 60", 72" Uprights	
	Max.	110"		96", 120", 144"	
Capacity	350 lbs	4500 lbs/set		1500 lbs/set	

GUARD RAILS






				
	Adjustable Channel	Type "A" Angle	Type "B" Angle	Fixed Channel
KEY INDICATORS FOR TYPICAL CONFIGURATION				
Type	Adjustable channel guard rails	Fixed angle guard rail (Vertical surface facing inward)	Fixed angle guard rail (Vertical surface facing inward)	Fixed channel guard rail (Vertical surface facing inward)
Est. Cost/Foot	\$10	\$5	\$7	\$15
Application	Medium	Medium	Medium	Medium
SPECIFICATIONS				
For Use With	Most belt and roller conveyors	Most roller conveyors		
Curved Sections	Available	Available	—	Available

FLOW CONTROL





						
	Angle End Stop	Terminal	Dead Type Stop	Air Operated Stop	Gates	Turning Wheels
KEY INDICATORS FOR TYPICAL CONFIGURATION						
Type	Fixed angle for placement in many locations along length	Flat plate for placement at the end point	Skid plate for placements in many locations along length	Roller stop for placement in many locations along length	Manual Gate	Non-powered wheel
Est. Cost	\$25	\$25	\$30	\$1100	\$100 (less conveyor)	\$135
Application	Medium	Medium	Light	Medium	All light and medium duty gravity conveyor	All light and medium duty gravity conveyor
SPECIFICATIONS						
For Use With	All roller models	Many roller models	Light duty roller and skatewheel models	Many gravity roller models, limited powered roller models	Passageway for personnel and equipment	Merging and guiding applications

COMPARISON CHARTS






ELECTRICAL CONTROLS

					
	Push Button Stations	Disconnect	Motors	Magnetic Starter	Variable Speed Drive
KEY INDICATORS FOR TYPICAL CONFIGURATION					
Type	Push button stations	Safety disconnect	Electrical motors UPGRADE	Magnetic starter	AC Variable speed drives
Est. Cost	\$110	\$135	\$185	\$850	\$1,250
Application	Start-Stop, Fwd-Rev-Stop, Up-Down-Stop	30 AMP, 3 pole disconnect	AC Motors with C-Face	Overload protection device	Programmable electronic speed controller
SPECIFICATIONS					
Conveyor Models	All Powered Conveyors				
For Use With	110V control voltage	Single or 3 phase	110V, 200V, 208V, 230V, 460V, 575V	Single or 3 phase	3 phase motors, single or 3 phase controller input
H.P.	—	—	1/2 — 2	1/2 — 2	1/2 — 2

CURVES

				
	Roller	Skatewheel	V-Belt	Line Shaft
KEY INDICATORS FOR TYPICAL CONFIGURATION				
Type	Non-powered gravity roller curve	Non-powered gravity skatewheel curve	V-belt driven live roller curve	Line shaft driven live roller curve
Est. Cost	\$500	\$350	\$3,000	\$1,900
Application	Medium	Light	Medium	Medium
SPECIFICATIONS				
Degree of Curve	90°, 60°, 45°, 30°	90°, 60°, 45°, 30°	90°	90°
Rollers/Wheels	Straight or tapered rollers	Skatewheels	Straight or tapered rollers	Straight or tapered rollers
Conveying Surface	Steel or aluminum rollers	Steel or aluminum rollers	Galvanized steel rollers	Galvanized steel rollers

DRIVE CONFIGURATION OPTIONS

					
	Center Drive	Unified Drive	Power Feeder	Take-Up	Slave Drive
KEY INDICATORS FOR TYPICAL CONFIGURATION					
Type	Power train mounted in the center of the conveyor length	Center drive shaft mounted with motor and reducer	Horizontal transition conveyor for inclines/declines	Auxiliary belt take-up	Replaces power train with connection
Est. Cost	\$690	\$820	\$1,425	\$525	\$600
Application	Alternate to power trains located at the center of the conveyor	Provides power without chain and sprocket	Transition conveyor for use with inclines/declines	Provides additional belt take-up for longer belt conveyors	Allows one conveyor to share the power train of another
SPECIFICATIONS					
For Use With	Most belt conveyors	Most powered conveyors	Most belt conveyors	Most belt conveyors	Most belt conveyors

BELTING

						
	Friction Surface	Trackmate	White Polymate	Trackmate Roughtop	Polymate Roughtop	Glide Top
KEY INDICATORS FOR TYPICAL CONFIGURATION						
Type	Ultimate 140 BBS Belt	Black Trackmate 533 COS-PVC	White Polymate 100 RMP-COS	Black Trackmate 120 COS-PVC	Brown Polymate Roughtop w/ Nitrile Cover	Tan Glide Top Belt
Est. Cost/Foot	\$0/ft add on	\$12/ft add on	\$17/ft add on	\$15/ft add on	\$30/ft add on	\$37/ft add on
Application	General purpose package handling	Application where belt tracking may be difficult	FDA and USDA approved	General purpose incline belt with gripping surface	High grip incline belt for harsh application	Use when diverting products on and off the conveyor is required
SPECIFICATIONS						
For Use With	Standard on most horizontal slider bed and roller conveyors	Most horizontal belt conveyors	Most horizontal belt conveyors	Standard on most incline and decline conveyors	Most incline/decline conveyors where angle is great or product is wet	Most horizontal belt conveyors. Nylon top is low friction.

Contact your Hytrol Integration Partner for more info:



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