

# ALT1000

The ALT1000 is a plastic chain belt conveyor with anodized aluminum beam frame designed to carry light weight products. The components can be combined in many different ways; therefore the system can grow as production increases.

## Carryline Plastic Chain Conveyor

- 4 Belt Widths - White Acetal
- Anodized Aluminum Beam Frames
- Module Design
- 1/2HP - 230/460/575V Shaft Mounted Gearmotor
- Tubular Guide Rails Included
- Floor supports not included

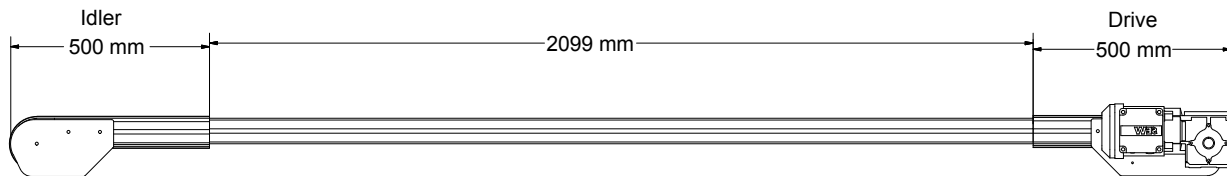


Section Length	Series	140	220	620	830
	Overall Beam Width	141 mm	224 mm	64 mm	86 mm
	Beam Height	65 mm	62.5 mm	65 mm	65 mm
3.1 m (10.17 ft)	Weights (lbs.)	84 lbs	93 lbs	104 lbs	125 lbs
Per Meter (1 m = 3.28 ft)	Weights (lbs.)	27.1 lbs	30.1 lbs	33.6 lbs	40.3 lbs



Standard fingerchain belt shown.

**NOTE:** • Idler and Drive Lengths included in Overall length. Idler is 500 mm and Drive is 500 mm.



## • STANDARD SPECIFICATIONS

**BELT**—White Acetal finger chain available in 4 widths.

**FRAME**—Anodized Aluminum Beam Frame available in 4 widths.

**BEARINGS**—Sealed, pre-lubricated, self-aligning, ball bearings on drive and tail pulley. Re-lube type.

**GUARD RAILS**—Aluminum Round with brackets

**GEARMOTOR**—½HP 230/460/575V Shaft Mounted Drive

**BELT SPEED**— 58 feet per min constant speed (17.68 meters per min)

**CAPACITY**—50 lbs per foot at 58 ft per minute with clean environmental conditions

**FLOOR SUPPORTS**—Now supplied as optional equipment. See chart below for available elevations.

## • OPTIONAL EQUIPMENT

**ROLLER TRANSFER**— Available on all series.

**BELTS**—Friction Chain Available in 4 widths

**GEARMOTORS**—other HP's available, 3/4 HP maximum

**GUARD RAILS**—Flat Face UHMW and Slide Rail

**ELECTRICAL CONTROLS**—AC variable frequency drives available

**BENDS & CURVES**—See chart for options & contact factory for wheel bend application.

		Horizontal Bends				
Series	Angle	Radius				
		300 mm	400 mm	500 mm	600 mm	
140 141 mm wide	15	6.4 lbs	7.3 lbs	7.5 lbs	8.4 lbs	
	30	7.5 lbs	9.3 lbs	10.4 lbs	14.8 lbs	
	45	9.5 lbs	11.5 lbs	13.1 lbs	18.3 lbs	
	90	14.8 lbs	18.3 lbs	21.9 lbs	29.3 lbs	
220 224 mm wide	15		12.6 lbs		11.5 lbs	
	30	N/A	16.3 lbs	N/A	19 lbs	
	45		20.1 lbs		23.2 lbs	
	90		32.2 lbs		37.2 lbs	
Series	Angle	Radius				
		191	289	389	489	589
620 64 mm wide	15	5.2 lbs	5.7 lbs	6 lbs	6.4 lbs	6.8 lbs
	30	6 lbs	7.1 lbs	7.8 lbs	8.8 lbs	9.7 lbs
	45	6.8 lbs	8.4 lbs	9.7 lbs	11 lbs	12.6 lbs
	90	9.7 lbs	12.6 lbs	15.3 lbs	18.3 lbs	21.2 lbs
Series	Angle	Radius				
		150	200	300	500	600
830 86 mm wide	15	4.9 lbs	5.1 lbs	5.6 lbs	6.4 lbs	6 lbs
	30	5.5 lbs	6 lbs	7.1 lbs	8.8 lbs	13.3 lbs
	45	6.2 lbs	7.1 lbs	8.4 lbs	11.3 lbs	16.3 lbs
	90	8.4 lbs	10 lbs	12.9 lbs	18.6 lbs	25.6 lbs

		Vertical Bends		
Series	Angle	Radius		
		400 mm	860 mm	
140 141 mm wide	5	n/a	2.9 lbs	
	30	5.7 lbs	11 lbs	
	45	7.9 lbs	15.9 lbs	
	60	10.4 lbs	21 lbs	
	90	15 lbs	31 lbs	
220 224 mm wide	5		4.2 lbs	
	30		19.4 lbs	
	45	n/a	28 lbs	
	60		36.9 lbs	
	90		54.1 lbs	
620 64 mm wide	5	n/a	2.2 lbs	
	30	4.9 lbs	9.5 lbs	
	45	7.5 lbs	13.7 lbs	
	60	8.9 lbs	17.9 lbs	
	90	12.8 lbs	26.3 lbs	
830 86 mm wide	5	n/a	2.2 lbs	
	30	4.9 lbs	9.5 lbs	
	45	7.5 lbs	13.7 lbs	
	60	8.9 lbs	17.9 lbs	
	90	12.8 lbs	26.3 lbs	

**NOTE:** • Weight includes (2) 80 mm tangets and belt on top and bottom.  
• Floor supports, drive, and idler are not included in weight.



# PROSORT SS

The Model ProSort SS is a right-angle sortation solution to sort standard poly bags, blister packs, and small packages weighing up to 8lbs. It has been designed to interface with the ALT1000, but can be incorporated with other models. The aftersort module can be used with the sorter to divert products on single or dual levels towards the left or right.

## Right Angle Sortation

- Dual Direction Divert
- Servo-Motor Driven Divert
- Single or Dual-Tiered Chutes
- ProLogix Controls
- Modular Divert Banks



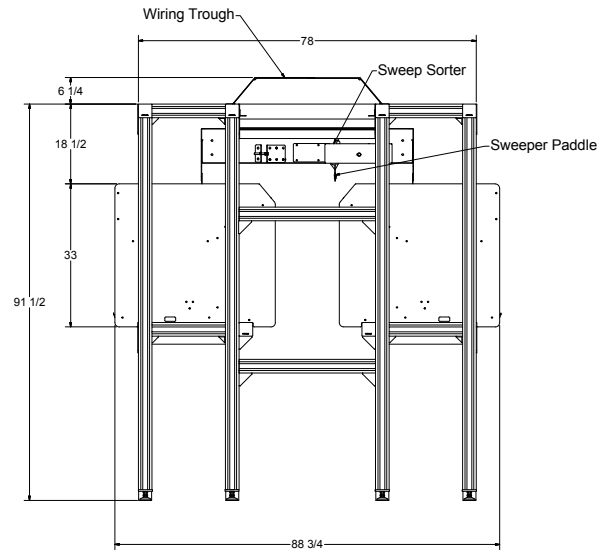
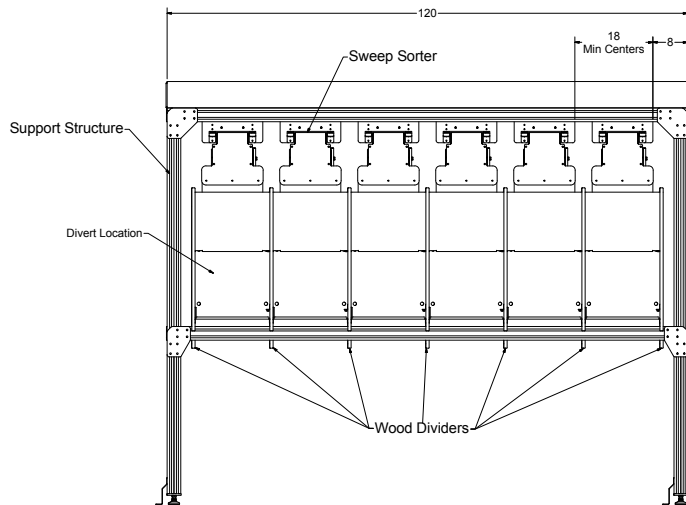
U.S. Patent Number: 6,533,099



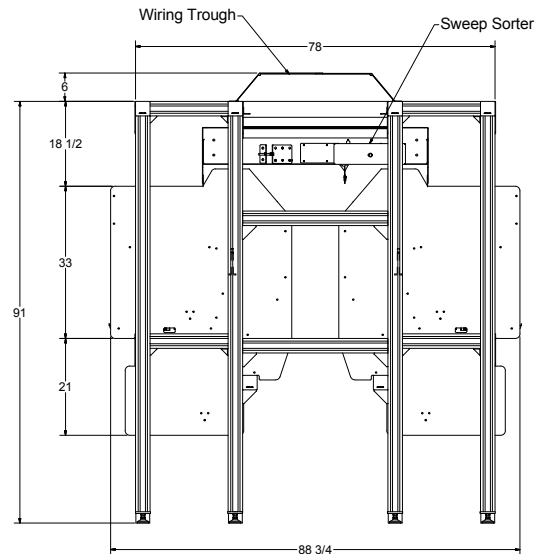
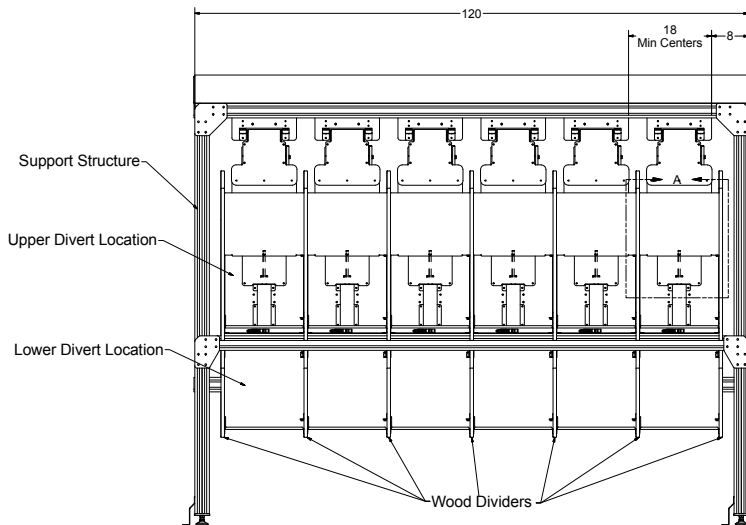
Divert Locations	1	2	3	4	5	6
Single Level/Single-sided	419	728	1038	1347	1657	1966
Single Level/Double-sided	478	846	1215	1583	1952	2320
Dual Level/Single-sided	487	864	1242	1619	1997	2374
Dual Level/Double-sided	614	1118	1623	2127	2632	3136

NOTE: Weight includes sweeper, mounting structure and aftersort.. Accessories, crating, etc., are not included.

## Single Level Aftersort - Double-Sided (Single-Sided available)



## Dual Level Aftersort - Double-Sided (Single-Sided available)



# STANDARD SPECIFICATIONS - SWEEP SORTER

# PROSORT SS

## SWEEPER DETAIL

**RATE**— Single Level/Dual Level Non-concurrent – 85 PPM, Dual Level Concurrent – 24 PPM

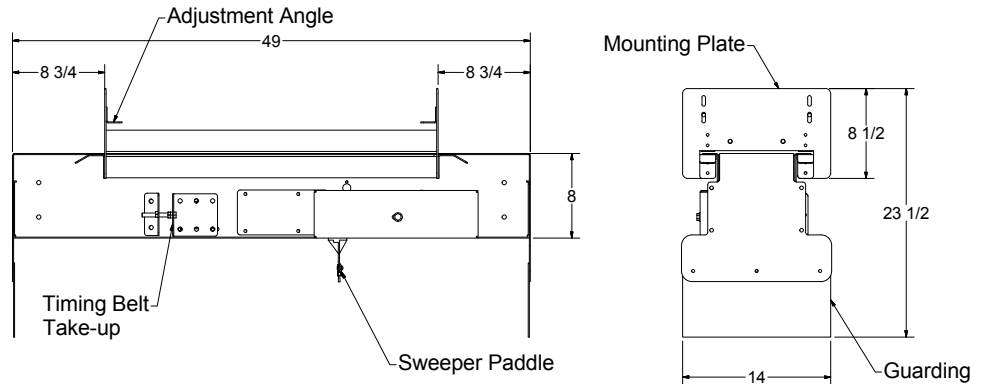
**CAPACITY**— Maximum unit package weight 8 lbs.

**PACKAGE SIZE**— Minimum length: 4 in.; minimum width: 4 in.; minimum height: ½ in. Maximum length: 12 in.; maximum width: 12 in.; maximum height: 4 in.

**BELT**— 100ATM10 Timing belt.

**SERVO MOTOR**— 48 VDC, Absolute positioning.

**TIMING BELT PULLEY**— AT10 Machined aluminum.



# STANDARD SPECIFICATIONS - AFTERSORT

**AIR CYLINDER**— 1-1/2 in. bore, 2 in. stroke, double acting.

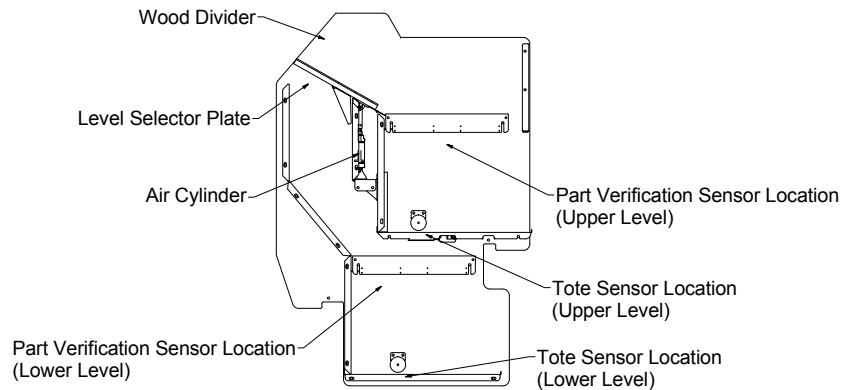
**AIR REQUIREMENTS**— Working pressure 60 psi.

**AIR VALVE**— 4-way single solenoid, 24 VDC.

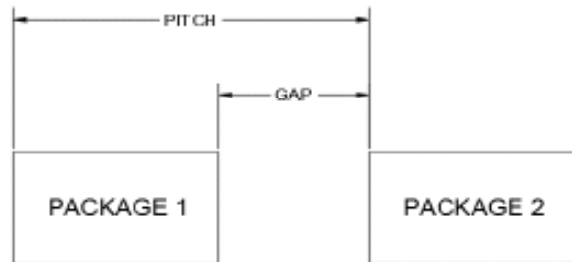
**PART VERIFICATION SENSOR**— Diffuse, 8 beams, 24 VDC, LED.

**TOTE SENSOR**— Retroreflective, 24 VDC, LED.

## AFTERSORT DETAIL



Gap Calculations - Single/Dual Non-Concurrent			Gap Calculations - Dual Concurrent		
Speed (FPM)	Rate (PPM)	Pitch (in)	Speed (FPM)	Rate (PPM)	Pitch (in)
60	85.00	9.00	60	24.00	30.00
70	85.00	10.00	70	24.00	35.00
80	85.00	12.00	80	24.00	40.00
90	85.00	13.00	90	24.00	45.00
100	85.00	14.00	100	24.00	50.00
110	85.00	16.00	110	24.00	55.00
120	85.00	17.00	120	24.00	60.00
130	85.00	19.00	130	24.00	65.00
140	85.00	20.00	140	24.00	70.00
150	85.00	21.00	150	24.00	75.00
160	85.00	23.00	160	24.00	80.00
170	85.00	24.00	170	24.00	85.00
180	85.00	26.00	180	24.00	90.00
190	85.00	27.00	190	24.00	95.00
200	85.00	28.00	200	24.00	100.00



# OPTIONAL EQUIPMENT

**DUAL TIER CHUTE DESIGN**—Provides the addition of divert lanes saving space and installation cost.

**PROSORT LOGIX CONTROL PACKAGE**—Provides complete controls for proper sorter operation. Consult factory for details.



# PSB

## Plastic Belt Conveyor

The Model PSB with modular plastic belting uses a positive drive system to eliminate belt slippage and mistracking.

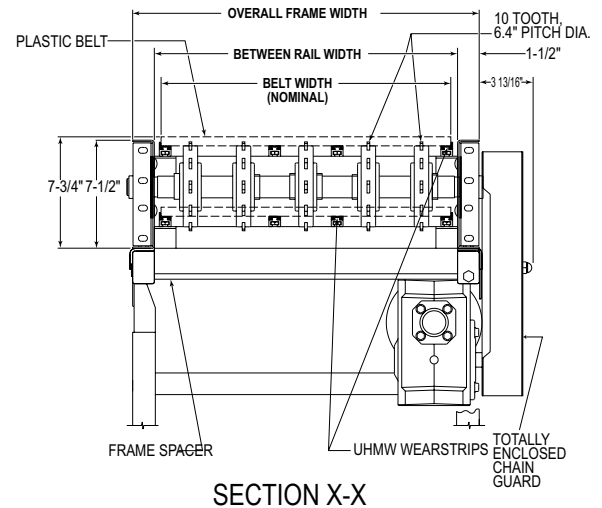
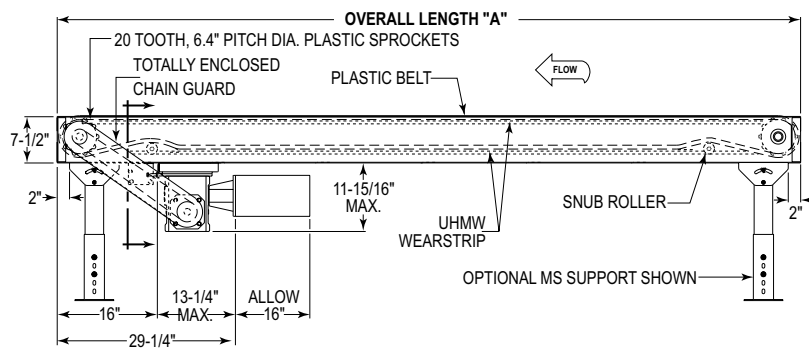
- 16 Belt Widths
- Polypropylene 2" Pitch Plastic Belt
- Adjustable MS-Type Floor Supports Available



Conveyor shown with optional floor supports

SIZE TO ORDER Overall Length	Belt Width	8"	10"	12"	14"	16"	18"	20"	22"	24"	26"	28"	30"	32"	34"	36"	38"
	Between Rail Width	9"	11"	13"	15"	17"	19"	21"	23"	25"	27"	29"	31"	33"	35"	37"	39"
	Overall Frame Width	12"	14"	16"	18"	20"	22"	24"	26"	28"	30"	32"	34"	36"	38"	40"	42"
10'	Weights	328	248	368	388	408	428	448	468	488	508	528	548	568	588	608	628
	Weights Per Foot	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48

HP	16" TO 28" OVERALL WIDTH	
	TOTAL LOAD (LBS.)	UP TO 50'
1/2	750	
1	1750	
2	3750	



## STANDARD SPECIFICATIONS

**END DRIVE**—Located on discharge end of conveyor. Chain guard located on left hand side.

**BELT**—Polypropylene 2 in. pitch Flush Grid, nominal 1 in. less than BR.

**BED**—UHMW on aluminum slider bars, mounted to frame spacers. Mounted in 7 1/2 in. x 12 ga. powder painted, formed steel channel frame bolted together with butt couplings.

**CROSS BRACING**—Rods with turnbuckles are fastened to underside of bed to provide proper alignment of bed rollers and insure tracking. (1) supplied in first 50' of bed section lengths and (1) per 50' of bed section length thereafter. Supplied in approximate center of lengths.

**DRIVE AND TAIL SPROCKETS**—10 tooth 6.4 in. pitch dia. molded plastic sprockets on 1 1/2 in. sq. shaft, 1 3/16 in. dia. shaft at bearings.

## OPTIONAL EQUIPMENT

**FLOOR SUPPORTS**—MS Type floor supports are available with a wide range of adjustment. Specify top of belt or roller elevation. One support required at every bed joint and ends of conveyor. Holes in feet for lagging to floor. Knee braces recommended above MS-6 support.

**BED**—Stainless steel in lieu of powder painted HRS (Excluding Aluminum Support Bars).

**BELT**—Other belts available, contact factory.

**BELT SPEED**—Other constant and variable speeds. V-belt drive supplied on speeds under 15 FPM and with variable speeds. **Note:** Capacity affected with speed change.

**V-BELT DRIVE**—V-belt supplied between motor and reducer. Allow 65 in.

**SNUB ROLLERS**—Located at drive and tail ends.

**RETURN BARS**—UHMW on aluminum.

**BEARINGS**—Sealed, pre-lubricated, self-aligning ball bearings on drive and tail shafts.

**SPEED REDUCTION**—Sealed worm gear C-Face speed reducer. No. 50 roller chain to drive sprocket.

**MOTOR**—1/2 HP—208/230/460/575V—3 Ph. 60 Hz. Totally Enclosed C-Face.

**BELT SPEED**—Constant 65 FPM.

**CAPACITY**—Maximum load per linear foot of conveyor 200 lbs. NOT TO EXCEED capacity in chart.

**O-RING DRIVE CHAIN**—With sealed in lubricant (Recommended for applications that do not permit regular lubrication).

**CEILING HANGARS**—5/8 in. dia. x 8 ft. long unplated rods fully threaded. Other lengths and galvanized rods available.

**NOSEOVER AND NOSEUNDER**—Can be incorporated to provide continuous belt travel from horizontal to incline or decline.

**MOTORS**—Energy efficient, single phase, braked motor, other characteristics. 2 HP maximum.

**ELECTRICAL CONTROLS**—One direction magnetic starters and push-button stations. AC Variable Frequency Drive.



# PSBC

## Plastic Belt Conveyor

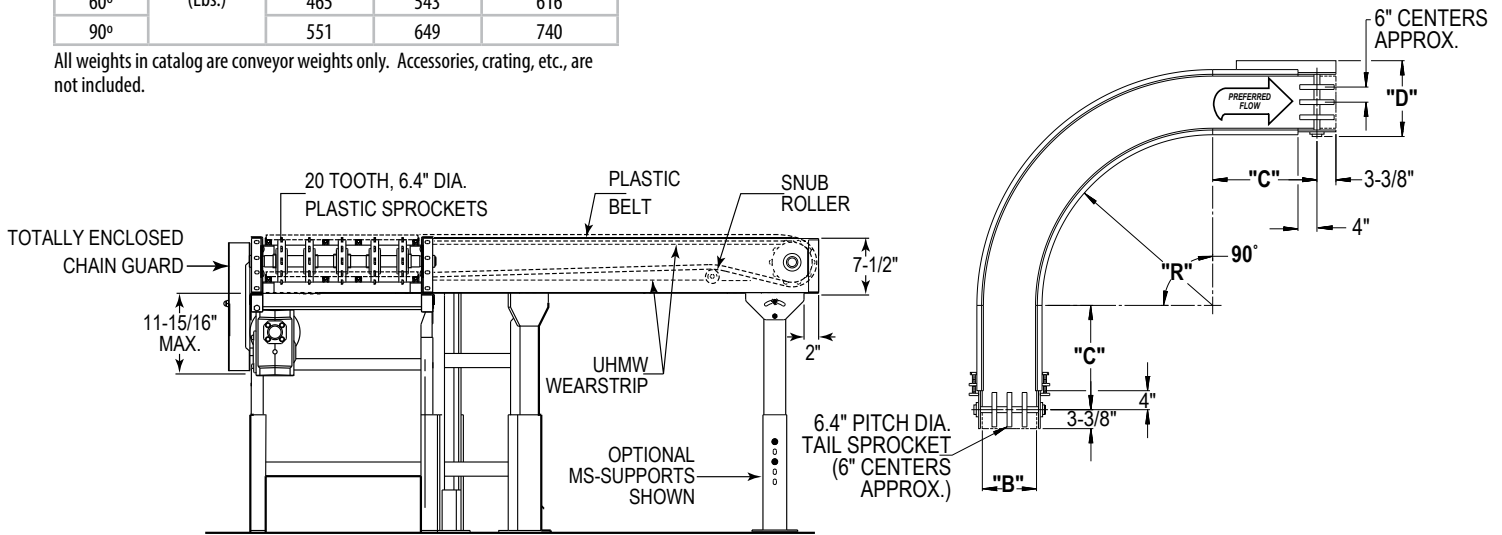
The Model PSBC with modular plastic belting uses a positive drive system to eliminate belt slippage and mistracking.

- 3 Belt Widths
- Polypropylene 1" Pitch Plastic Belt
- Adjustable MS-Type Floor Supports Available

Curve Angle	Belt Width	12"	18"	24"
	Between Rail Width	13"	19"	25"
	Overall Frame Width	16"	22"	28"
30°	Weights (Lbs.)	279	317	354
45°		366	424	479
60°		465	543	616
90°		551	649	740

All weights in catalog are conveyor weights only. Accessories, crating, etc., are not included.

Belt Width	Bed Width	"B" Actual Conveying Surface	"C"	"D"	"R"
12"	16"	11"	18"	16"	27"
18"	22"	17"	27"	22"	40"
24"	28"	23"	36"	28"	53"



## • STANDARD SPECIFICATIONS

**END DRIVE**—Located on discharge end of conveyor. Chain guard located on left hand side.

**BELT**—Polypropylene 1 in. pitch Flush Grid Radius Belt, nominal 1 in. less than BR.

**BED**—UHMW on aluminum slider bars, mounted to frame spacers. Mounted in 7 1/2 in. x 12 ga. powder painted, formed steel channel frame bolted together with butt couplings.

**DRIVE AND TAIL SPROCKETS**—20 tooth 6.4 in. pitch dia. molded plastic sprockets on 1 1/2 in. sq. shaft, 1 3/4 in. dia. shaft at bearings.

**SNUB ROLLERS**—Located at drive and tail ends.

**RETURN BARS**—UHMW on aluminum.

**BEARINGS**—Sealed, pre-lubricated, self-aligning ball bearings on drive and tail shafts.

**SPEED REDUCTION**—Sealed worm gear C-Face speed reducer. No. 50 roller chain to drive sprocket.

**MOTOR**—1/2 HP—208/230/460/575V—3 Ph. 60 Hz. Totally Enclosed C-Face.

**BELT SPEED**—Constant 65 FPM.

**CAPACITY**—300 lbs. distributed live load.

## • OPTIONAL EQUIPMENT

**FLOOR SUPPORTS**—MS Type floor supports are available with a wide range of adjustment. Specify top of belt or roller elevation. One support required at every bed joint and ends of conveyor. Holes in feet for lagging to floor. Knee braces recommended above MS-6 support.

**BED**—Stainless steel in lieu of powder painted HRS (Excluding Aluminum Support Bars).

**BELT**—Other belts available, contact factory.

**BELT SPEED**—Other constant and variable speeds. V-belt drive supplied on speeds under 15 FPM and with variable speeds. **Note:** Capacity affected with speed change.

**V-BELT DRIVE**—V-belt supplied between motor and reducer. Allow 65 in.

**CEILING HANGARS**—5/8 in. dia. x 8 ft. long unplated rods fully threaded. Other lengths and galvanized rods available.

**MOTORS**—Energy efficient, single phase, brakemotor, other characteristics. 2 HP maximum.

**ELECTRICAL CONTROLS**—Non-reversing magnetic starters and push-button stations. AC variable frequency drive.



# PLEZD

The Model PLEZD is a plastic belt conveyor designed to handle footed pallets, slip sheets, and unitized loads – items normally non-conveyable on roller conveyor. The PLEZD provides zero pressure accumulation, reducing the possibility of product damage.

## Heavy Duty Plastic Belt Accumulating Conveyor (Zero Pressure Accumulating Type)

- EZDrive™ System (Individual zone drive)
- EZLogic® Accumulation System (Retro-Reflective)
- Heavy Duty Plastic Belt
- Shaft Mounted Drives
- Adjustable HS-Type Floor Supports Available



Conveyor shown with optional floor supports



### EZLOGIC®

U.S. Patent Numbers  
7,243,781 • 7,591,366  
7,905,345 • 6,860,381  
Other Patents Pending.

Belt Width	30.1"	33.4"	36.8"	40.2"	43.5"	46.8"	50.2"	60.2"	73.6"
Between Rail Width	31"	35"	37"	41"	45"	47"	51"	61"	75"
Overall Frame Width	34"	38"	40"	44"	48"	50"	54"	64"	78"
WEIGHTS PER ZONE (Lbs.)	525	575	600	640	690	715	760	880	1025

All weights in catalog are conveyor weights only. Accessories, crating, etc., are not included. Weights in chart are for one 60" zone.



## HOW IT WORKS

The conveyor is made up of accumulation zones. Each zone contains an individual zone drive interfaced to Hytrol's EZLogic® Zone Controllers which sense product presence and control the accumulation and release of the zones by starting and stopping the zone drives.

