

# PROSORT 121 & 131 ELITE

The ProSort 121 is designed to sort products at a 22 degree angle where higher speeds are required and close divert centers are not so critical. The ProSort 131 is designed to sort products at a 30 degree angle where close divert centers are required. Products are transported on anodized aluminum slats where at a predetermined location, divert shoes move diagonally across the conveyor to push the product onto a take-away line. The ProSort 100 family of sorters are designed for high speed applications where product diverting needs to be both positive and gentle.

## High Speed Sortation Conveyor (Small Item)

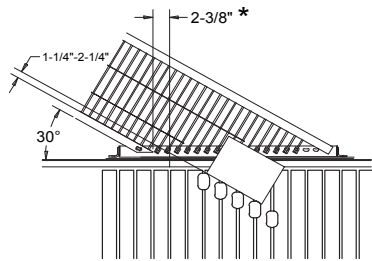
- 4 Widths Available
- Right or Left Hand Diverts Available
- High Sort Rates
- Sorts Small Fragile Items
- Anodized Aluminum Slats
- Adjustable MHS-Type Floor Supports Available



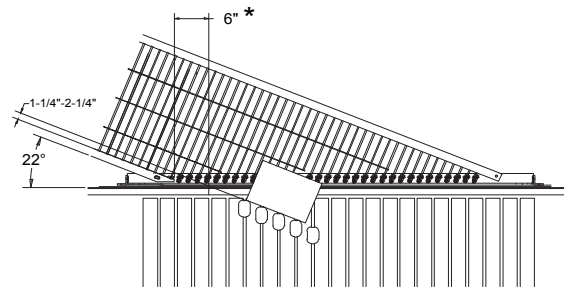
Conveyor shown with optional floor supports



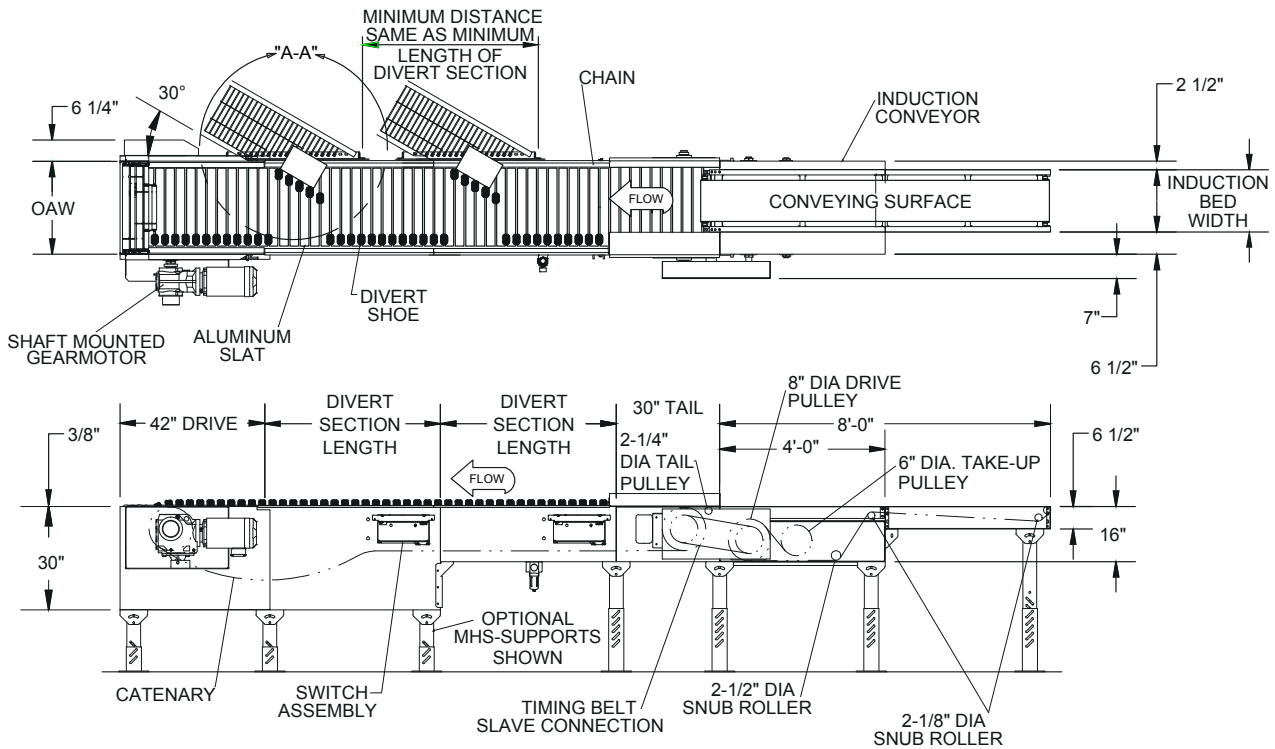
\* Note: Spur location is measured beyond the end of the section on both the 22 degree and the 30 degree diverts (the chain cover is not shown).



VIEW "A-A"  
PROSORT 131



VIEW "A-A"  
PROSORT 121



HYTROL CONVEYOR COMPANY, INC.

# • STANDARD SPECIFICATIONS PROSORT 121 & 131 ELITE

- INTERMEDIATE**—16 in. deep x 1 1/2 in. bottom flange inside, 12 ga. formed steel frame-powder painted.
- TAIL BED**—16 in. deep x 1 1/2 in. bottom flange inside, 7 ga formed steel frame - powder painted
- DRIVE/CATENARY BED**—30 in. deep formed steel frame-powder painted.
- CARRYING CHAIN**—Dual strands of No. 60 prelubricated o-ring roller chain with precision bearings and extended pins.
- CATENARY TAKE-UP**—Underside catenary take-up provided at drive end.
- CHAIN LUBRICATOR**—Installed at infeed end to lubricate carrying chains. Gravity feed with 24 volt DC on/off switch. Flow control valves to control the amount of oil allowed to flow to each of the brush applicators.
- SLATS**—Anodized aluminum slats supported at each end by bushings and extended chain pins on 1 1/2 in. centers.
- DIVERT SHOES**—Low friction molded base with high friction pusher face. Steel guide pin for switching and ball bearing cam follower for diverting. Located on 3 in. centers.
- SWITCH ASSEMBLY**—Pneumatic operated switch assembly mounted with rubber isolators for quietness and easily removable for maintenance.
- AIR REQUIREMENTS**—Free air consumption at 60 P.S.I. equals .002 cu. ft. per divert.
- AIR VALVE**—High Speed 24 volt DC single solenoid 4-way air valve at each divert station.
- AIR FILTER, REGULATOR**—Supplied for main air supply line.—1/2 in. NPT ports. Required working pressure of 60 P.S.I.

- AIR PRESSURE SWITCH**—Install in main air line near the last divert switch. Used to detect low air pressure and turn off drive.
- SMART PROXIMITY SWITCHES**—24 Volt DC inductive proximity switch. One at each divert. Requires maintained electrical signal for duration of each divert.
- SAFETY SWITCHES**—Switches located at infeed and discharge ends to detect stray divert shoes or internal jams. Additional switch supplied at 30 ft. intervals. Interrupts power to drive motor when these conditions are detected.
- DRIVE**—Shaft mounted gear motor. Mounted at discharge end on the opposite side from the divers. 230/460V- 3Ph. 60HZ. Horsepower based on speed and length requirements.
- VARIABLE SPEED CONTROLLER**—Provides smooth acceleration of drive motor and speed variations if necessary.
- CONVEYING SPEED**—Determined by application requirements. Up to 450 FPM on ProSort 121. Up to 350 FPM on ProSort 131.
- PACKAGE SIZE**—Minimum 4 1/2 in. long.
- CAPACITY**—Maximum load-25 lbs. per ft. Maximum product weight is 50 lbs.
- INDUCTION CONVEYOR**—Belt conveyor slave driven from sorter at same speed as sorter.
- FLOOR SUPPORTS**—Not supplied as standard. See optional equipment.

## • STANDARD SPECIFICATIONS - INDUCTION CONVEYOR

- BELT**—Black, high-grip, longitudinal groove with high speed lacing, belt width is 6 in. less than bed width.
- BED**—12 ga. galvanized slider pan mounted in 6 1/2 in. x 12 ga. painted formed steel channel frame.
- DRIVE**—Slave driven at same speed as sorter via timing belt and bolted directly to infeed of sorter. Access holes designed into side plate for ease of pulley removal.

- DRIVE PULLEY**—8 in. dia. with 1 1/16 in. dia. shaft at bearings-machine crowned.
- TAKE-UP PULLEY**—6 in. dia. with 1 7/16 in. dia. shaft at bearings-machine crowned.
- TAIL PULLEY**—2 1/4 in. dia.-Machine crowned and easily removable.
- TAKE-UP**—Take-ups in drive provide 16 in. of belt take-up.
- BEARINGS**—Sealed, pre-lubricated, self-aligning, ball bearings on drive.

Sorter Conveying Surface Width	Sorter Overall Width "OAW"	Induction Bed Width "OAW"	Spur Width "OAW"	CONVEYOR SECTION									
				Drive (not including gearmotor)		Tail (not including induction belt)		Divert section with 22 degree divert ProSort 121		Divert section with 30 degree divert ProSort 131		Intermediate with no Diverter	
				Length	Wt (LBS)	Length	Wt (LBS)	Length	Wt (LBS)	Length	Wt (LBS)	Length	Wt (LBS/FT)
15"	27"	18"	18"	42"	546	30"	306	69"	336	51"	248	9" to 120" in 3" increments	53
21"	33"	24"	24"		583		329	84"	456	60"	326		63
27"	39"	30"	30"		619		351	99"	590	72"	429		73
33"	45"	36"	36"		652		371	114"	727	81"	517		82

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

Gearmotor Wt.	
HP	LBS
3	100
5	181
7.5	209
10	254
15	287

## • OPTIONAL EQUIPMENT

- FLOOR SUPPORTS**—MHS 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 MHS-6 support. Vibration pads between channel and supports.
- TAKE AWAY LINES**—Gravity spurs are available. Consult factory for recommendation of type and configuration.
- GUARD RAILS**—6 1/2" Solid Side Guards on Shoe Side Only
- PROSORT LOGIX CONTROL PACKAGE**—Provides complete controls for proper sorter operation. Contact factory for details.

