



partnered with



12", 18", 24"
Mat-Style Conveyor
Specifications

Complete Conveyor Systems and Equipment

Conveyor Specifications

Frame	Material Thickness	Material	Finish	Design	
	12 GA	Mild steel	"Stardust Silver" powder coat paint	Open top	
	12 GA	Stainless Steel	#4 finish		
Standard Modules	<i>Parts</i> <ul style="list-style-type: none"> • Idle ends • Drive ends • Center drives • 30°, 45°, 90° Turns • Intermediates • Parallel transfer 12" ONLY • Copes <ul style="list-style-type: none"> ▶ Adjustable vertical turns 				
Wearstrips	<i>Carryway</i> <ul style="list-style-type: none"> • 1/8" Thick UHMW in straights • Turns: <ul style="list-style-type: none"> ▶ UHMW outside ▶ Duravar inside 		<i>Return</i> UHMW edge guide		
Motor/Reducer	Brand/Style	Voltage	Frame Body	Mounting	Options
	<ul style="list-style-type: none"> • Nord <ul style="list-style-type: none"> ▶ "C" face motor ▶ Inverter duty ▶ VFD & IP55 rated 	230/460-3	Corrosion resistant aluminum	C-face	<ul style="list-style-type: none"> • Below or above • Washdown painted • Stainless/TuPh finish
	<ul style="list-style-type: none"> • Nord • Hollow bore reducer 	N/A	Corrosion resistant aluminum	Vertical shaft with torque arm	
Conveyor Speeds	Standard Nominal (FPM)	Minimum	Maximum	Above Maximum	
	<ul style="list-style-type: none"> • 40 • 60 • 100 • 125 • 165 • 250 	30 FPM* *Speed obtained using a VFD	290 FPM* *Speed obtained using a VFD	Consult factory for speeds above 300 FPM	
Supports	Style	Elevation Change	Elevation Range	Options	
	<ul style="list-style-type: none"> • "H" Formed 2"x2" • Angled • Bolt pad base 	±2"	Nominal 22" - 50"	Ceiling hanger brackets	

Conveyor Specifications

Bearings	Construction	Finish	Options
	<ul style="list-style-type: none"> • 2-Hole flange • Steel insert with set-screw 	<ul style="list-style-type: none"> • Painted • Sealed for life • General purpose lube 	<ul style="list-style-type: none"> • Polymer housing • Food grade lube • Zinc plated or Stainless Steel inserts • Safety covers
Shafts	Diameter		
	<ul style="list-style-type: none"> • Idle = 1.0" • Drive = 1.25" 		
Conveyor Accessories	Parts		
	<ul style="list-style-type: none"> • Low Back Pressure (LBP) roller transfer • Stainless Steel (SS) dead plate 		

Guide Rail & Brackets

- See page 12

Mat-Style Chains and Sprockets

- See page 13

Part Specifications

Drive End

Standard Configurations

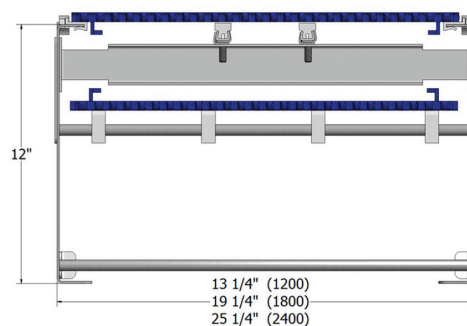
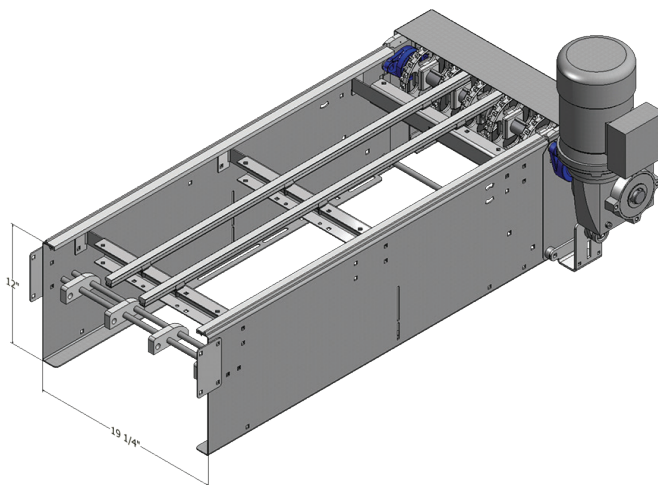
- 45" long
- Right-hand (Illustrated below)
- *Unless otherwise specified
- Flush mount on left side
- Shaft mount includes torque arm

Optional Configurations

- Left-hand shaft mount
- 30" long available (Consult factory)

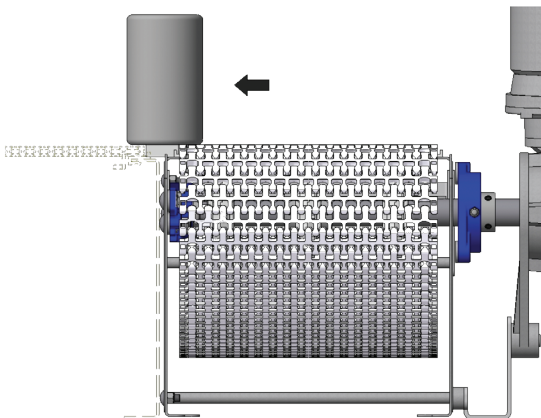
Specifications

- See page 3 for standard speeds (FPM)
- Support incline range $\pm 22^\circ$
- Shoes must be moved to outside edge of frame to run friction top chain



Side Transfer Configurations

- Bearing will be installed on inside of frame on flush side
- Carriage head bolt fasteners on both sides
- Extended wearstrip with a gap filling leg will be provided on flush side
- Minimum typical product size to clear transfer is 3"
- ▶ Product stability through transfer is affected by height & base contour



Part Specifications

Center Drive

Standard Configurations

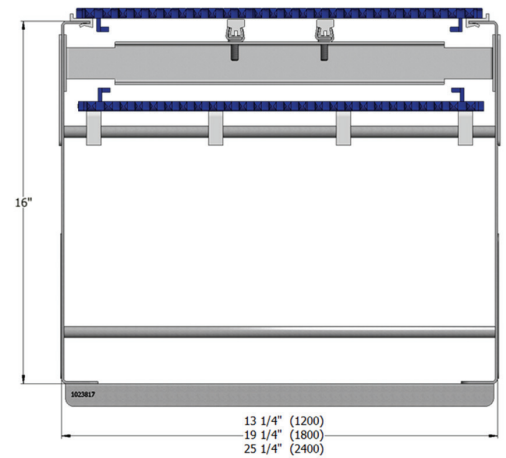
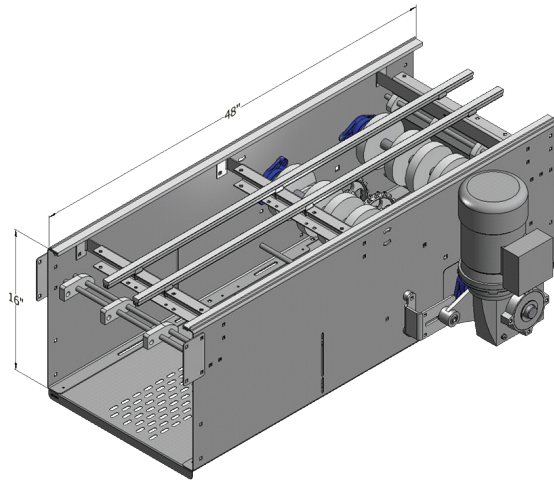
- Right-hand shaft mount (Illustrated below)
- *Unless otherwise specified
- Shaft mount includes torque arm

Optional Configurations

- Left-hand shaft mount

Specifications

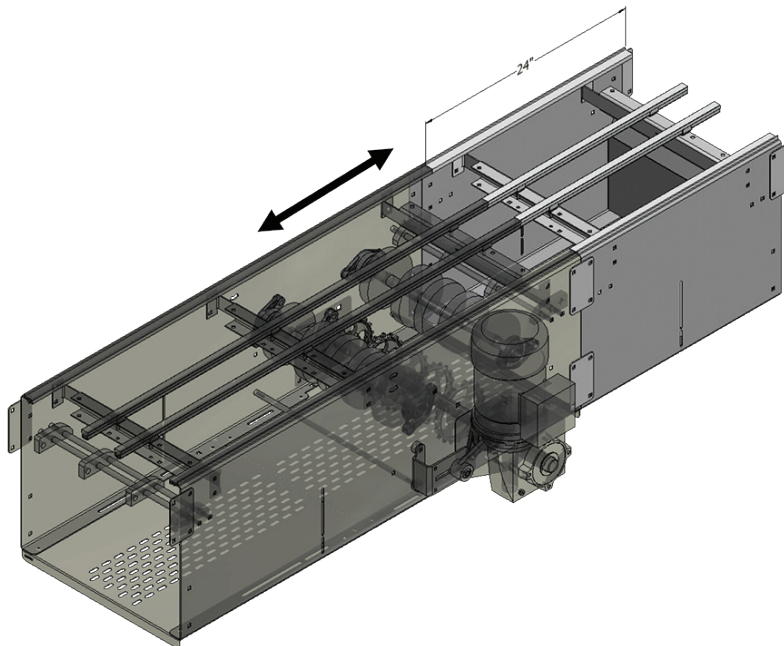
- See page 3 for standard speeds (FPM)
- Support incline range $\pm 22^\circ$



Note: All images depict 18" conveyor.

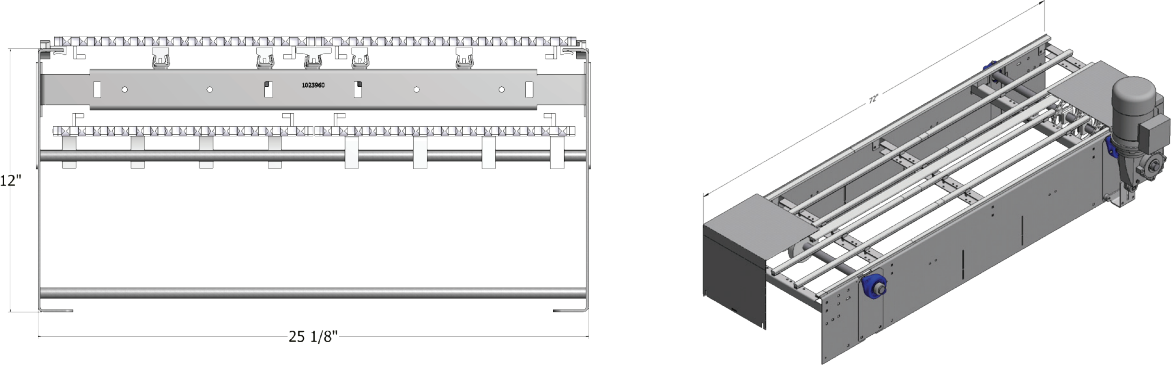
Extension Specification

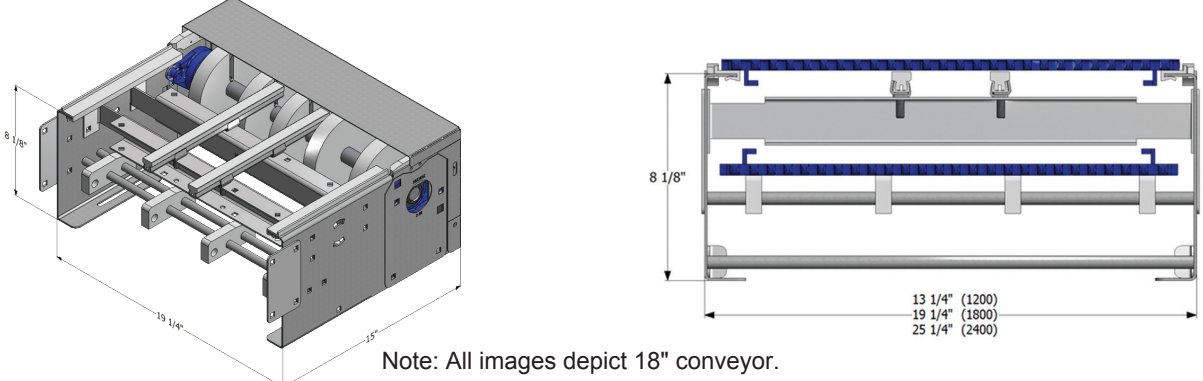
- 24" long extension assembly allows the conveyor to be bi-directional



Note: All images depict 18" conveyor.

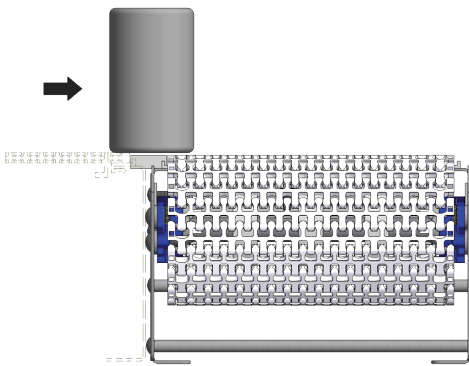
Part Specifications

Parallel Transfer <i>(Available for only 12")</i>	<i>Standard Configurations</i> <ul style="list-style-type: none"> • Right to left-hand, RH shaft mount (Illustrated below) • Shaft mount includes torque arm • End caps (Finger guards) included 	<i>Optional Configurations</i> <ul style="list-style-type: none"> • Right-to-left LH • Left-to-right RH • Left-to-right LH • Right or left-hand below mount 	<i>Specifications</i> <ul style="list-style-type: none"> • 72" Long • Support incline range $\pm 22^\circ$ 	<i>Advantages</i> <ul style="list-style-type: none"> • Used when product stability is not critical • Helps reduce back pressure when accumulating
				

Idle End	<i>Standard Configurations</i> <ul style="list-style-type: none"> • Side transferable both sides (Shown below) 	<i>Specifications</i> <ul style="list-style-type: none"> • Support incline range $\pm 22^\circ$ • Shoes must be located outside edge of frame when using friction top chain
		
<p>Note: All images depict 18" conveyor.</p>		

Side Transfer Configurations

- Bearing installed on inside of frame on both sides
- Carriage head bolt fasteners on both sides
- Extended wearstrip with a gap filling leg will be provided on flush side
- Minimum typical product size to clear transfer is 3"
 - ▶ Product stability through transfer is affected by height & base contour



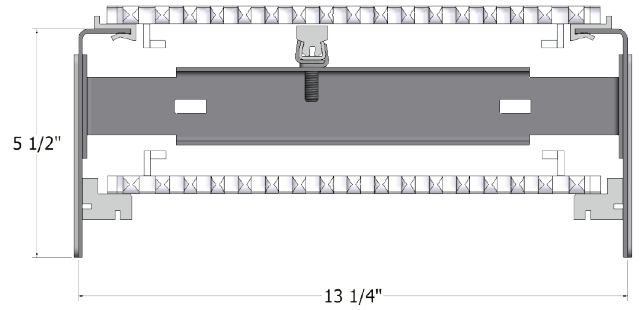
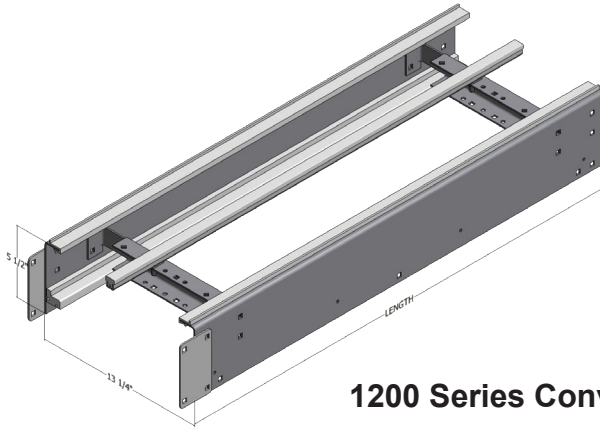
Note: All images depict 18" conveyor.

Part Specifications

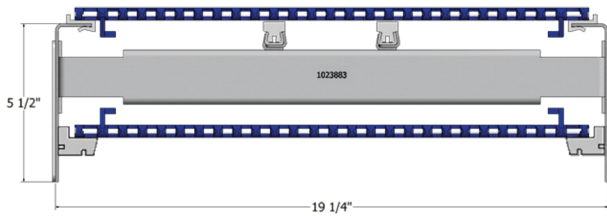
Intermediate

Available Standard Lengths

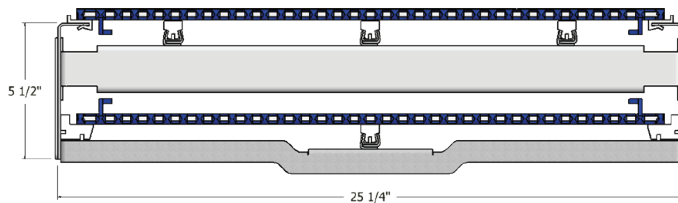
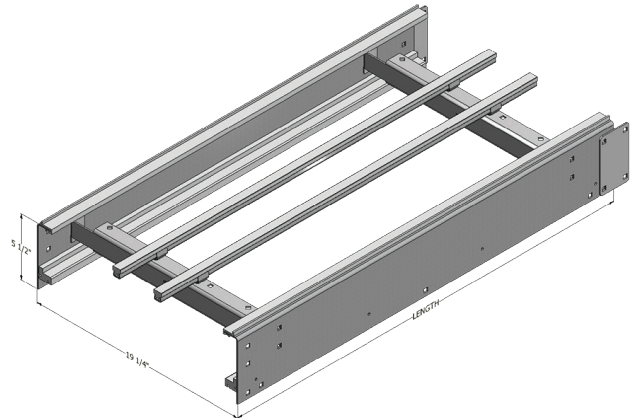
- 18"
- 36"
- 64"
- 92"
- 118"
- 1/2" increments from 6" to 41 1/2"



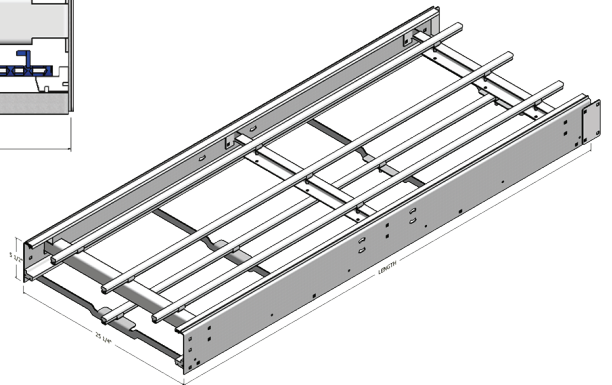
1200 Series Conveyor



1800 Series Conveyor



2400 Series Conveyor

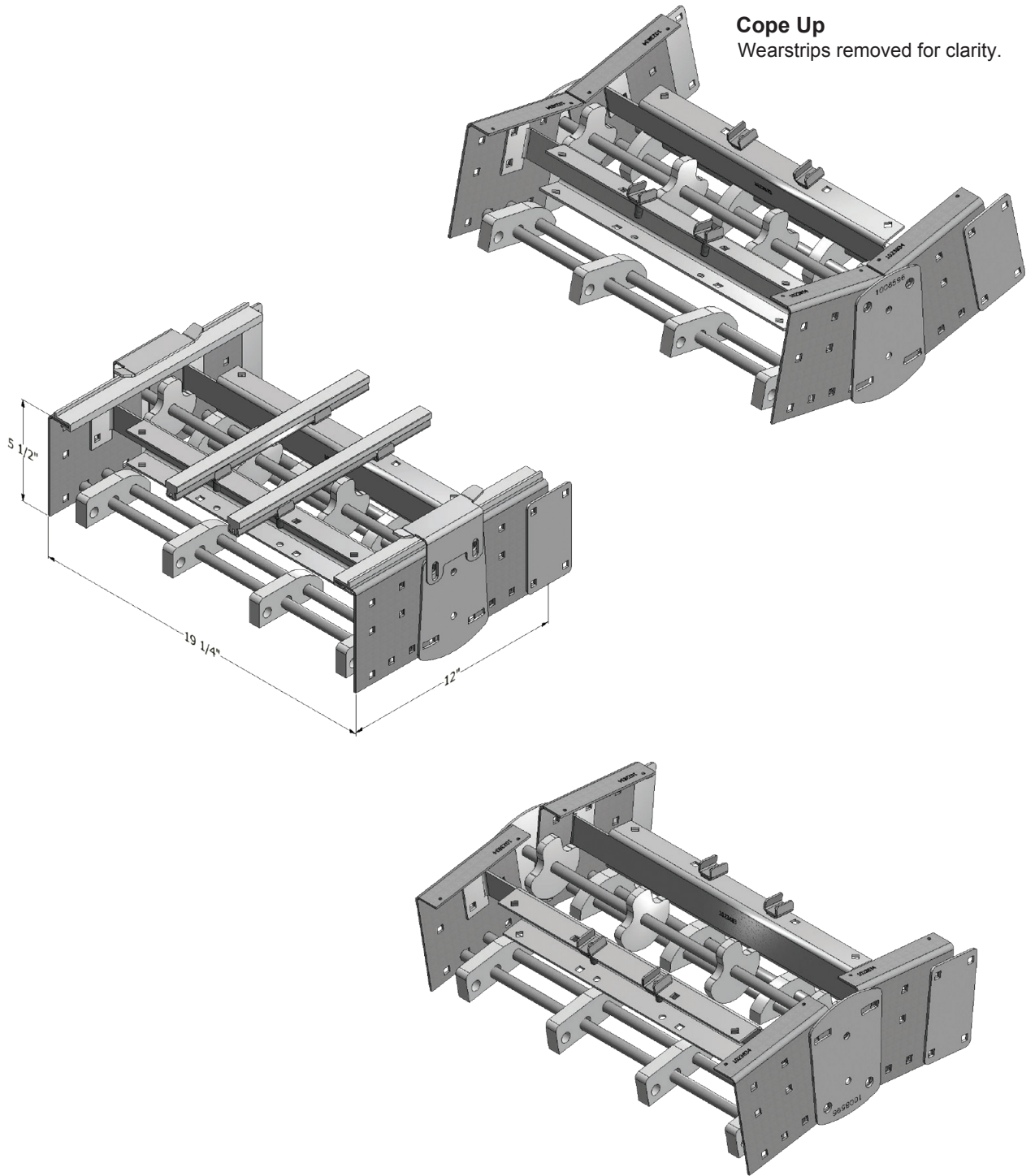


Part Specifications

Cope (Adjustable Vertical Turns)

Specifications

- Copes are adjustable $\pm 15^\circ$
- Use two copes for elevation changes between 15° and 30°
- Provisions for supports -- None



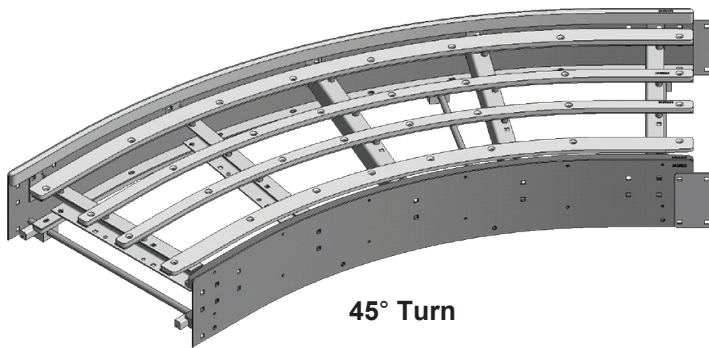
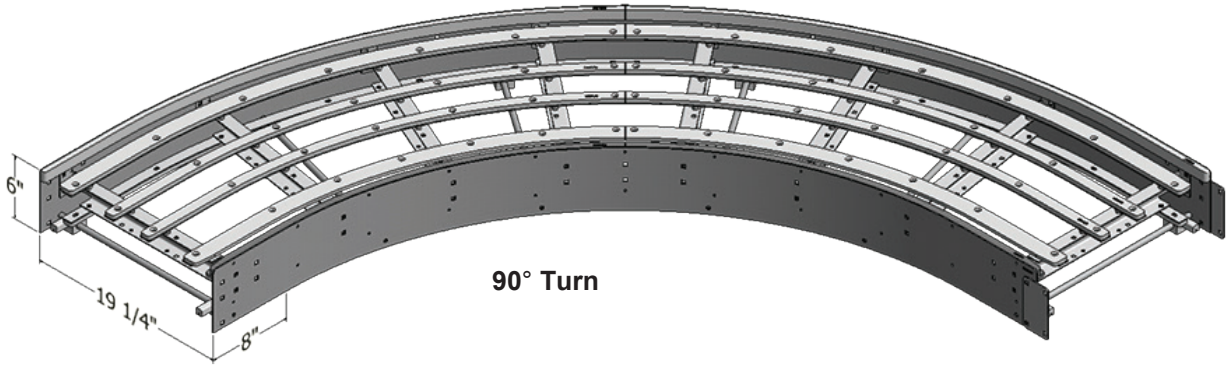
Cope Up
Wearstrips removed for clarity.

Cope Down
Wearstrips removed for clarity.

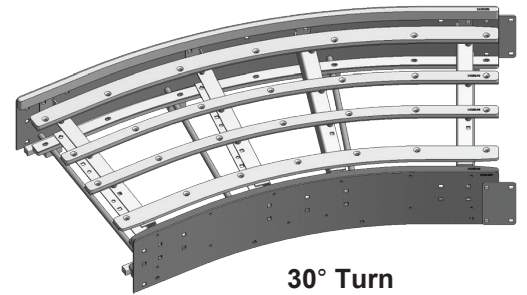
Note: All images depict 18" conveyor.

Part Specifications

Turns	Standard Configurations	Specifications
	<ul style="list-style-type: none"> • 12" wide (30 ²³/₃₂" centerline radius) • 18" wide (46 ³¹/₃₂" centerline radius) • 24" wide (63 ⁵/₁₆" centerline radius) • Available in 30°, 45° & 90° turns • Slider on tab returns 	<ul style="list-style-type: none"> • Support incline range ±0° <ul style="list-style-type: none"> ▶ Incline requires spiral turn design (consult factory)

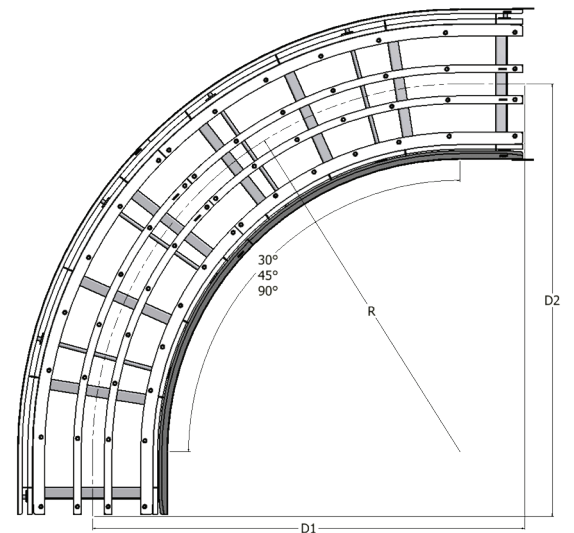
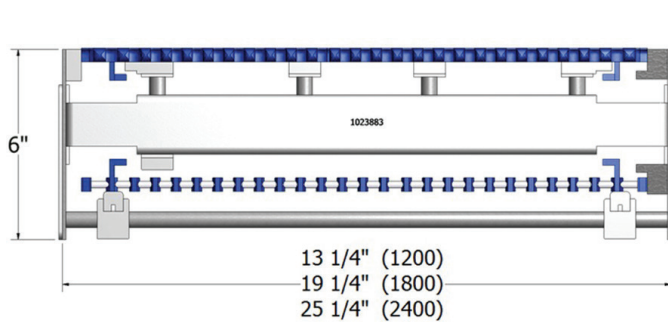


45° Turn



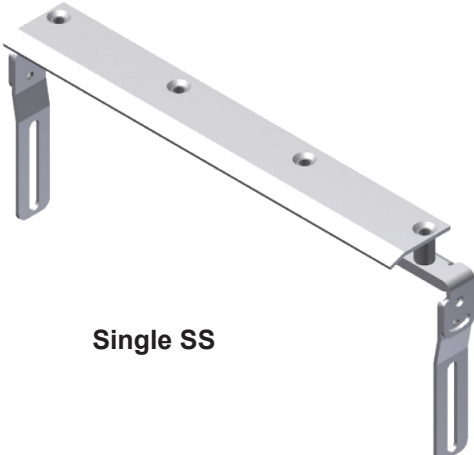
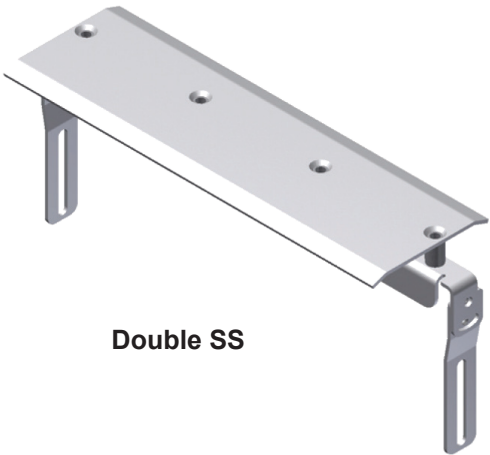
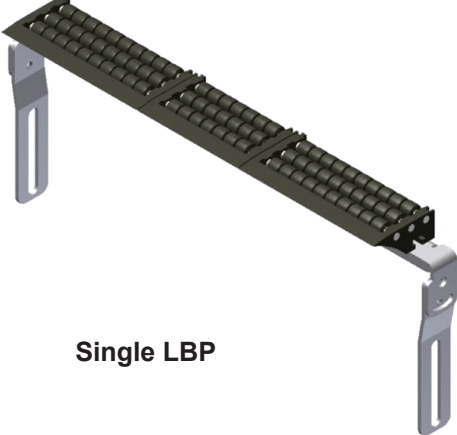
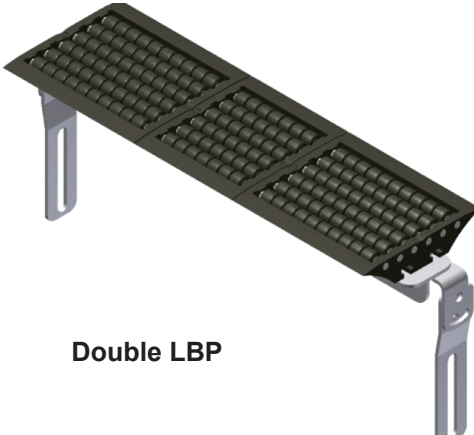
30° Turn

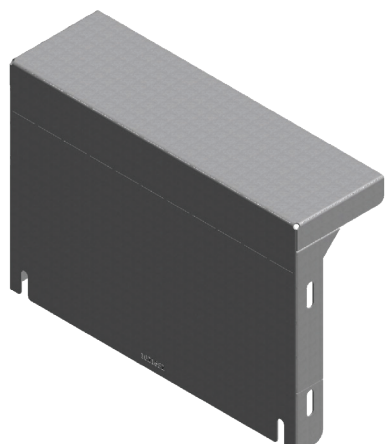
Width	R	30°		45°		90°	
		D1	D2	D1	D2	D1	D2
12"	30 ²³ / ₃₂ "	8 ³ / ₄ "	32 ⁵ / ₈ "	15 ¹¹ / ₁₆ "	37 ⁷ / ₈ "	41"	41"
18"	46 ³¹ / ₃₂ "	10 ⁵ / ₁₆ "	38 ¹⁵ / ₃₂ "	19 ⁷ / ₁₆ "	46 ¹⁵ / ₁₆ "	55"	55"
24"	63 ⁵ / ₁₆ "	11 ¹³ / ₁₆ "	44 ⁵ / ₃₂ "	23 ⁹ / ₃₂ "	56 ³ / ₁₆ "	70"	70"



Note: All images depict 18" conveyor.

Part Specifications

End Transfers	Standard Design	Optional Design (Consult Factory)
	<ul style="list-style-type: none"> • Single & double LBP roller transfers • Single & double SS deadplate • Mounting brackets adjustable for angle and elevation 	<ul style="list-style-type: none"> • Single roller transfer (not shown) • Bolt-on powered transfer (not shown)
	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Single SS</p> </div> <div style="text-align: center;">  <p>Double SS</p> </div> </div> <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 20px;"> <div style="text-align: center;">  <p>Single LBP</p> </div> <div style="text-align: center;">  <p>Double LBP</p> </div> </div>	

End Caps	Standard Design
	<ul style="list-style-type: none"> • 16 GA Mild & Stainless Steel • Standard on all drive, idle and transfer sections • Perforated edges allow manual removal of end cap segments for end transfers on drive/idle ends
	

Part Specifications

Guide Rail	Standard Configurations (Illustrated below)		Optional Configurations			
	<ul style="list-style-type: none"> • Single high • Double high 			<ul style="list-style-type: none"> • Sheet rail • UHMW 		
	<p>VG-SSR Round Face</p>	<p>VG-SST 1.25" T- Face</p>	<p>VG-SST 2.25" T- Face</p>	<p>Aluminum Channel w/UHMW Cover</p>		
Guide Rail Openings						
	VG-SSR		VG-SST		Alum. Channel	
	<i>Min.</i>	<i>Max.*</i>	<i>Min.</i>	<i>Max.*</i>	<i>Min.</i>	<i>Max.*</i>
12"	7 5/8"	15 3/8"	7 3/8"	15 1/8"	7 7/8"	15 5/8"
18"	13 5/8"	21 3/8"	13 3/8"	21 1/8"	13 7/8"	21 5/8"
24"	19 5/8"	27 3/8"	19 3/8"	27 1/8"	19 7/8"	21 5/8"
*Consult factory for wider openings						

Bracket	Standard Configuration	Optional Configurations
	<ul style="list-style-type: none"> • Adjustable formed "L" shaped brackets • 7 GA Mild or Stainless Steel ▶ Mild steel is "Stardust Silver" powder coat painted 	<ul style="list-style-type: none"> • Gusseted "L" shaped brackets • Molded plastic brackets • Tool-less adjust-ability

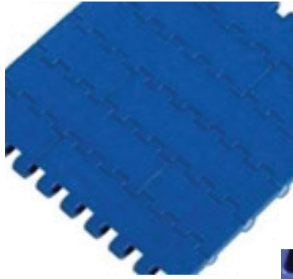
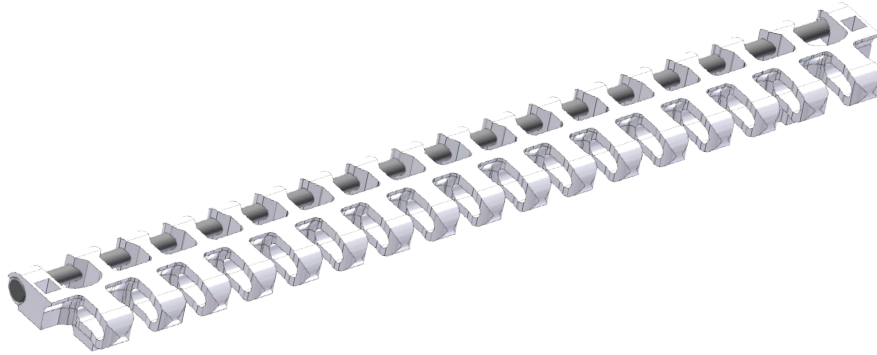
Supports	Standard Configuration	Optional Configurations
	<ul style="list-style-type: none"> • "H" style formed 2"x2" angled with bolt pad base • ±4 Elevation change • Normal elevation range 22" - 50" • 7 GA Mild or Stainless Steel ▶ Mild steel is "Stardust Silver" powder coat painted 	<ul style="list-style-type: none"> • Mild or Stainless Steel • Drop rods PROVIDED BY CUSTOMER
	<p>Formed Angle</p>	<p>Ceiling Hanger</p>

Part Specifications

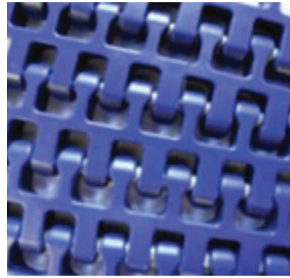
Mat-Style Chain

Standard

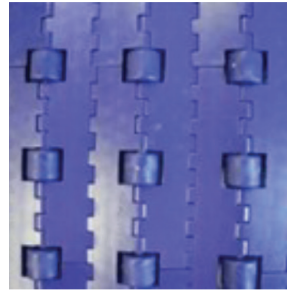
- M2500 Series
 - ▶ All M2500 Series chains use common sprockets



Flat Top



Radius Flush Grid



LBP Roller Top



Flat Friction Top

Sprockets

Specifications

- Approx. 6.0" Pitch Diameter
- M2500 Series Sprocket
- Sprocket location dependent on chain type
- Roller top sprocket locations vary from other chain types within the same series



Maintenance Information

1. Pre-Start Checklist

- Fasteners - Some may have loosened during shipment. Re-tighten as required
- Inspect all splice points for proper wearstrip alignment
- Hand run a 48" long chain section through conveyor, both carryway and return paths, to check for binding.
- Verify motor rotation
- Verify chain direction is correct (See Figure 1)
- Guide Rail - Check for proper product width before operation

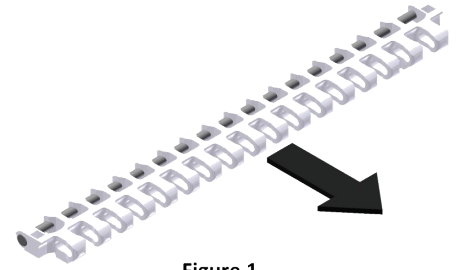


Figure 1

2. Start-up/Break-in

- During first 250 hours of operation - Monitor the following
 - ▶ Initial chain stretch - Chain will have an initial stretch. Monitor catenary length, as described below, and remove excess links.
 - ▶ Chain dusting - Normal occurring issue that subsides after the first 250 hours of run time. Clean as required

3. Maintenance

- *Catenary length* - (See Figure 2)
 - ▶ Chain length - Replace when catenary sag reaches below indicator slot
 - ▶ Sprocket wear - Look for excessive wear or hooked teeth
 - ▶ Reducer - Look for leaking seals
- *Wearstrip wear*
 - ▶ Inside turn - When edge of chain is $\frac{1}{8}$ " or less from inside edge of frame, it is time to replace wearstrip
- *Chain Surging (Slip - Stick)*
 - ▶ Hard to predict natural phenomenon that depends on speed, load, construction and lubrication
 - ▶ Most common in long and/or slow running conveyors
 - ▶ Poses no operational concerns unless it causes product tipping
 - Look for chain binding at turns and copes in both carryway (product path) and the return path
- *Motor Hop & Wobble*
 - ▶ Natural phenomenon that is desirable
 - ▶ Poses no operational concerns with life expectancy of conveyor or reducer
 - ▶ Wobble releases stress build-up due to normal machining tolerances in rotating shaft
 - ▶ Increases equipment longevity compared to rigidly mounted reducers where misalignments are trapped
 - Longer reducer life
 - Longer bearing life
 - Longer shaft life

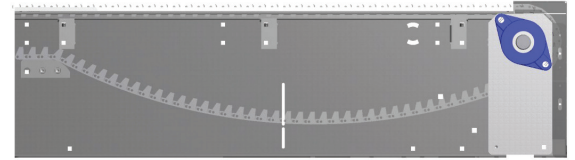


Figure 2

Warranty

MODULAR CONVEYOR EXPRESS WARRANTY

MODULAR CONVEYOR EXPRESS will repair or replace any products that have failed under normal use due to faulty material or defective workmanship for 1 year. Motors and chain carry the manufacturer's warranty. No other warranty is expressed or implied unless otherwise set forth in writing and approved by representative duly authorized to extend such approval by MODULAR CONVEYOR EXPRESS. All rights of design and invention are reserved.

1/3/2013

Made in
the U.S.A. 