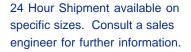
# Live Roller Conveyors





### General Operating Principle:

General operation of the Lineshaft Driven Live Roller Conveyor is achieved through a drive shaft that spans the full length of the conveyor and transmits power to the rollers via a drive spool and belt. When back pressure is applied to the conveyed product, the spools driving the rollers will slip on the shaft, allowing the product to accumulate with a minimum amount of back pressure.

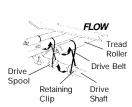
Applications include transportation, minimum pressure accumulation, zero pressure accumulation and sortation. This conveyor offers quiet operation and easy maintenance.

40	
3/8 in. dia. Lineshaft Conveyor	Z
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# Lineshaft Driven Live Roller Conveyor 1 3/8 in. dia. x 16 ga. Rollers





Drive

Section

(ft.)

10'

1'

2'

3'

Drive Section

(ft.)

3'

Between

Frame Width

> 13" 14"

15"

16"

17"

18"

19"

20"

21"

22"

23"

24"

25"

26"

27"

28"

The Lineshaft Driven Live Roller Conveyor is a unique concept in powered conveyors. It has the capability of accumulating products with minimum back pressure. Typical characteristics include quiet operation and easy maintenance.

Slaved Sections (ft.)

6'

7'

8'

9'

10'

5'

Weight (lbs.)

**4'** 

Minimum Back
Pressure Accumulation

- 16 Between Frame Widths
- Single Drive Powers Straight Sections, Curves and Spurs
- Semi-Precision Bearings for Longer Life and Noise Reduction
- Reversible
- Safe
- Quiet

## **Standard Specifications:**

**Frame** - 5 1/2 in. deep x 1 1/2 in. flange x 12 ga. galvanized steel formed channel frames with bolt on end couplers.

Between Frame Widths - 13 through 28 in full one inch increments.

**Rollers** - 1 3/8 in. dia. x 16 ga. galvanized rollers with 5/16 in. hex axle and grease packed, semi-precision ball bearings. Rollers spaced on 1 1/2 in. centers. 1 3/8 in. dia. x 18 ga. galvanized rollers are available at speeds less than 60 FPM.

Floor Supports - Adjustable 36 in. to 48 in. from floor to top of rollers.

**Drive Shaft** - 1 in. dia. steel shaft full length of conveyor. Delrin chain coupling at bed joints.

**Drive Spools** - 2 in. dia. Delrin spool held in place on shaft by "snap on" retaining clips. One drive spool drives two rollers.

**Drive Belts** - 3/16 in. dia. urethane belts from drive spools to rollers.

**Spool Guard** - Encloses underside of drive shaft, spools and drive belts for full length of conveyor.

**Bearings** - Sealed, self-aligning, pre-lubricated ball bearings support drive shaft.

**Drive Section** - Reducer and motor are mounted underneath conveyor. **Note: Motor extends beyond frame of conveyor if between frame width is less than 20 inches.** Side mounted drive sections are also available.

**Speed Reduction** - "C" face speed reducer. No. 50 chain from reducer to drive shaft.

Motor - 1/2 HP - 230/460V - 3 Phase - 60 Hz - totally enclosed, fan cooled - 1750 RPM.

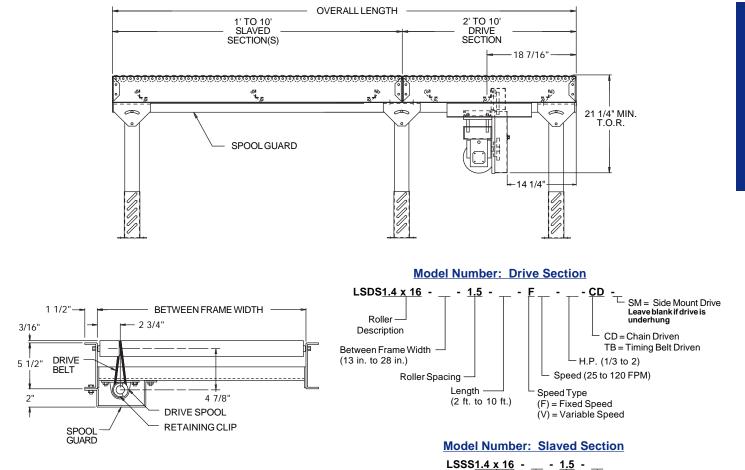
Conveying Speed - Constant 60 FPM.

### Load Capacities:

- Max. load per powered roller = 10 lbs.\*
- Max. driven length with single drive at center = 70 ft.
- Max. driven length per 1/4 HP = 10 ft.
- Do not exceed a 75 lb. total product load without consulting an Omni Metalcraft Corp. Sales Engineer.
- \* Will be less if product has uneven or soft bottom.

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Roller Description

Between Frame Width (13 in. to 28 in.)

## **Optional Equipment:**

Keyed Spools - Spools are keyed and fit into a keyseat on the drive shaft. Instead of slipping on the shaft, spools provide positive drive. NOTE: Keyed spool conveyor sections cannot exceed 4 ft. long.

**Speed-Up Spools** - Larger diameter spools that increase speed 1.3 times the original speed.

**Pneumatic Roller Brake** - Air operated conveyor accessory that stops rollers in 2 ft. or 3 ft. zones. See page 188 for details.

**Blade Stops** - Pneumatically or manually operated blade that pops up between rollers in order to accumulate product. See page 186 and 187 for details.

**Timing Belt Drive** - Used as an option to chain drive, allowing for quieter operation. Timing belt drive is required at a speed of 120 FPM.

Roller Centers - 3 in., 4 1/2 in. and 6 in. roller centers are also available.

**Power Crossover** - 1 ft. long section that switches drive shaft from one side of the conveyor to the other. Timing belt and chain driven models available. See page 186 for details. Can also be used to increase speeds.

**External Jump Chain** - 3 ft. long section with a jump chain that transmits power from one conveyor line to a parallel conveyor line. One drive can power two parallel lines. Chain driven and timing belt driven models available. See page 190 for details. Can also be used to increase speeds.

**Conveying Speed** - Constant and variable speeds from 25 to 120 FPM. AC or DC variable speed controllers available.

**Urethane Belt Transfer** - 3 ft. long section has an air operated lifting device that raises urethane transfer belts above the roller surface to transfer product off @ 90°. See pages 178,179,180 and 181 for details.

**Spring Assisted Gate Section** - 6 ft. section consisting of 2 ft. fixed section and 4 ft. gate section. See page 182 for details.

**Guard Rails** - 1 1/2 in. wide x 2 in. high x 12 ga. galvanized steel formed angle. One or both sides. **Note: If product contacts guard rails, product flow may be affected.** 

**Floor Supports** - Available in higher or lower height adjustments. **Ceiling Hangers** - 5/8 in. dia. x 10 ft. long threaded rod with mounting hardware.

**Other Rollers** - 1 3/8 in. dia. x 18 ga. or 1 3/8 in. dia. x 3/16 in. wall tubing. Closed style non-precision bearings also available.

**Motors** - Single phase, drip proof, DC motors, inverter duty motors available through 2 HP.

**Electrical Controls** - Start-Stop push button stations, reversing drum switch, one direction and reversible magnetic starters.

**Side Mount Drive** - Allows minimum top of roller height of 10 3/4 inches. **Note: Motor is vertical.** 



Length (1 ft. to 10 ft.)

Roller Spacing

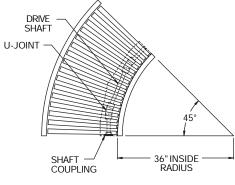
# Lineshaft Driven Curve and Spur Conveyor Curves - 1 in. to 1 1/2 in. dia. x 18 ga. Tapered Rollers Spurs - 1 3/8 in. dia. x 16 ga. Straight Rollers

Lineshaft Curves and Spurs are slave driven from lineshaft straight sections or powered by their own drive unit. Curves allow for turns in the product line, whereas spurs are used when product lines converge or diverge.

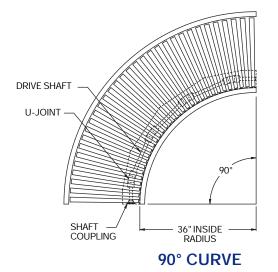


- Slave Driven from Straight Section or Self Powered
- 30°,45°,60° and 90° Curves;
  30° and 45° Spurs
- Tapered Rollers on Curves

 16 Between Frame Widths
 Curves are Transportation Conveyors Only

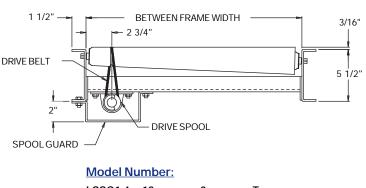


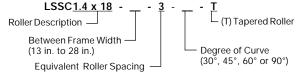




**Note:** 30° curves have 1 ft. tangent sections at each end.

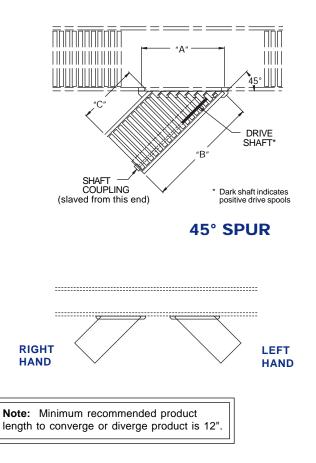
	90° C	urve	CONVEYOR			
Between Frame	Number of Rollers	Roller Centers @	W	EIGH	T (lbs	.)
Width	on Curve		<b>30°</b>	<b>45°</b>	<b>60°</b>	<b>90°</b>
13" 14" 15" 16" 17"	32 Tapered Rollers	2.086" 2.111" 2.135" 2.160" 2.184"	51 53 55 56 58	93 95 97 99 101	109 113 115 118 121	174 179 183 187 191
18" 19" 20" 21" 22"		2.209" 2.234" 2.258" 2.283" 2.307"	59 60 61 62 63	103 105 107 110 112	123 126 128 130 133	195 199 203 207 211
23" 24" 25" 26" 27" 28"		2.332" 2.356" 2.381" 2.405" 2.430" 2.430" 2.454"	176 179 183 186 189 192	105 107 109 111 113 116	140 143 146 148 151 154	228 232 237 241 245 249



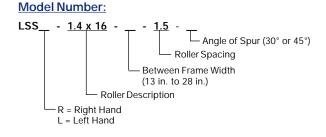


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	30° SP	EYOR	45° SPUR CONVEYOR					
Between Frame Width	"A" (in.)	"B" (in.)	"C" (in.)	Wt. (Ibs.)	"A" (in.)	"B" (in.)	"C" (in.)	Wt. (Ibs.)
13"	30 13/16	36	12	47	28 1/8	36	21	56
14"	37 3/4	48	21	73	28 1/8	36	21	59
15"	37 3/4	48	21	76	28 1/8	36	21	62
16"	37 3/4	48	18	77	32 3/8	36	18	62
17"	44 11/16	48	15	78	32 3/8	36	18	64
18"	44 11/16	48	15	80	32 3/8	36	18	67
19"	44 11/16	48	12	80	36 9/16	36	15	66
20"	44 11/16	48	12	82	36 9/16	36	15	68
21"	53 1/2	60	21	117	39 9/16	36	15	71
22"	53 1/2	60	18	118	40 13/16	36	12	70
23"	53 1/2	60	18	120	40 13/16	36	12	72
24"	58 9/16	60	15	121	40 13/16	36	12	74
25"	58 9/16	60	15	124	45 1/16	48	21	113
26"	58 9/16	60	12	124	45 1/16	48	21	115
27"	58 9/16	60	12	126	45 1/16	48	21	119
28"	67 3/16	72	21	167	49 5/16	48	18	118



### Standard Specifications:

**Frame** - 5 1/2 in. deep x 1 1/2 in. flange x 12 ga. galvanized steel formed channel frames with bolt on end couplers. **Note: Outside** rail of curve has "triple-punched" hex holes to allow skewing of rollers which affects product tracking. Curve rollers do not represent a true taper.

Between Frame Widths - 13 through 28 in full one inch increments.

**Curve Rollers** - 1 1/2 in. dia. tapered to 1 in. dia. x 18 ga. zinc plated rollers. Grease packed, semi-precision ball bearings.

**Spur Rollers** - 1 3/8 in. dia. x 16 ga. galvanized rollers on 1 1/2 in. centers. Grease packed ball bearings.

Floor Supports - Adjustable 36 in. to 48 in. from floor to top of rollers.

**Slave Driven** - Curves or spurs are slave driven from the drive shaft of a lineshaft straight section. Shafts are coupled by a Delrin chain coupling at bed joints.

**Drive Shaft** - 1 in. dia. steel shaft with universal joints as necessary.

**Drive Spools** - 2 in. dia. Delrin spool held in place on shaft by "snap on" retaining clips. One drive spool drives two rollers.

**Drive Belts** - 3/16 in. dia. high tension urethane belt from drive spools to rollers.

**Spool Guard** - Encloses underside of drive shaft, spools and drive belts.

**Bearings** - Sealed, pre-lubricated, self-aligning ball bearings on drive shaft.

**Load Capacities** - Same roller capacity as lineshaft 1.4 straight sections.

### **Optional Equipment:**

**Drive** - Drive units can be mounted to curves and spurs to give them power without being slave driven.

**Guard Rails** - 1 1/2 in. wide x 2 in. high x 12 ga. galvanized steel formed angle. One or both sides. **Note: If product contacts guard rails, product flow may be affected.** 

**Floor Supports** - Available in higher or lower height adjustments.

**Ceiling Hangers** - 5/8 in. dia. x 10 ft. long threaded rod with mounting hardware.

**Wheel Diverter** - Pneumatically controlled device that automatically diverts product from main line onto a 30° spur. See page 189 for more details.

**Traffic Cop** - Controls product flow where two lines converge eliminating product collisions. Only one line is open at a given time. See page 188 for more details.

**Turning Wheel** - Used on converging lines to insure proper product orientation when product is transferred onto a main line. See page 189 for more details.

**Slaved Merge** - Integral spur and straight section used in applications where products must merge with another conveying line. Both sections are slaved off a common drive. See page 183 for more details.

True Tapered Roller Curve - True tapered roller curve available. Will require special radius or special rollers.

# Lineshaft Driven Live Roller Conveyor 1.9 in. dia. x 16 ga. Rollers

The Lineshaft Driven Live Roller Conveyor is a unique concept in powered conveyors. It has the capability of accumulating products with minimum back pressure. Typical characteristics include quiet operation and easy maintenance.

		and the second s												
							١	Neight	(lbs.)					
		•	Drive Section (ft.)	Drive Section (ft.)				Sla	aved So	ections	s (ft.)			
_		Between Frame Width*	3'	10'	1'	2'	3'	4'	5'	6'	7'	8'	9'	10'
	Minimum Back Pressure Accumulation	13" 14" 15" 16" 17"	134 137 139 142 145	283 292 297 306 315	29 30 31 32 33	50 52 53 55 57	71 73 75 77 80	91 95 97 100 103	114 119 121 125 130	135 140 143 148 153	156 162 165 171 177	179 186 189 196 203	199 207 211 219 227	220 229 233 242 250
	27 Between Frame Widths	18" 19" 20" 21"	147 150 152 155	320 329 334 343	34 35 35 36	58 59 60 62	81 84 85 88	105 109 111 114	132 137 139 143	156 161 164 169	180 186 189 195	207 214 217 224	231 238 242 250	254 263 267 276
	Reversible	22" 23" 24"	157 160 164	348 357 366	37 38 39	63 65 67	90 92 95	116 119 123	146 150 154	172 177 182	198 204 210	228 235 242	254 262 270	280 289 297
	Single Drive Powers Straight Sections, Curves and Spurs	25" 26" 27" 28" 29"	166 168 171 174 176	371 376 385 394 399	40 40 41 43 43	68 69 71 73 74	96 98 100 103 104	125 126 130 133 135	157 159 163 168 170	185 188 193 198 201	213 216 222 228 231	245 249 256 263 266	274 278 285 293 297	302 306 315 323 328
	Safe	30" 31" 32"	178 181 183	404 413 418	44 45 45	75 77 78	106 109 110	137 140 142	172 177 180	204 209 211	235 241 244	270 277 281	301 309 313	332 341 345
	Quiet	33" 34" 35" 36" 37" 38" 39"	183 186 188 191 193 196 198 202	427 432 441 446 455 460 469	47 47 48 49 50 51 52	80 81 82 83 85 86 88	110 113 114 117 118 121 122 125	146 148 151 153 156 158 162	180 184 186 190 193 197 199 204	217 219 225 227 232 235 240	250 253 259 262 268 271 277	288 291 298 302 309 312 319	321 325 332 336 344 348 356	354 358 367 371 380 384 393

## **Standard Specifications:**

Frame - 5 1/2 in. deep x 1 1/2 in. flange x 12 ga. galvanized steel formed channel frames with bolt on end couplers.

Between Frame Widths - 13 through 39 in full one inch increments.

Rollers - 1.9 in. dia. x 16 ga. galvanized rollers with 7/16 in. hex axle and grease packed ball bearings. Rollers spaced on 3 in. centers.

Drive Shaft - 1 in. dia. steel shaft full length of conveyor. Delrin chain coupling at bed joints.

Drive Spools - 2 in. dia. Delrin spool held in place on shaft by "snap-on" retaining clips.

Drive Belts - 3/16 in. dia. urethane belts from drive spools to rollers.

Spool Guard - Encloses underside of drive shaft, spools and drive belts for full length of conveyor.

Bearings - Sealed, self-aligning, pre-lubricated ball bearings support drive shaft.

Drive Section - Reducer and motor mounted underneath conveyor. Note: Motor extends beyond frame of conveyor if between frame width is less than 20 in.

Speed Reduction - "C" face speed reducer. No. 50 chain from reducer to drive shaft.

Motor - 1/2 HP - 230/460V - 3 Phase - 60 Hz - totally enclosed, fan cooled - 1750 RPM.

Conveying Speed - Constant 60 FPM.

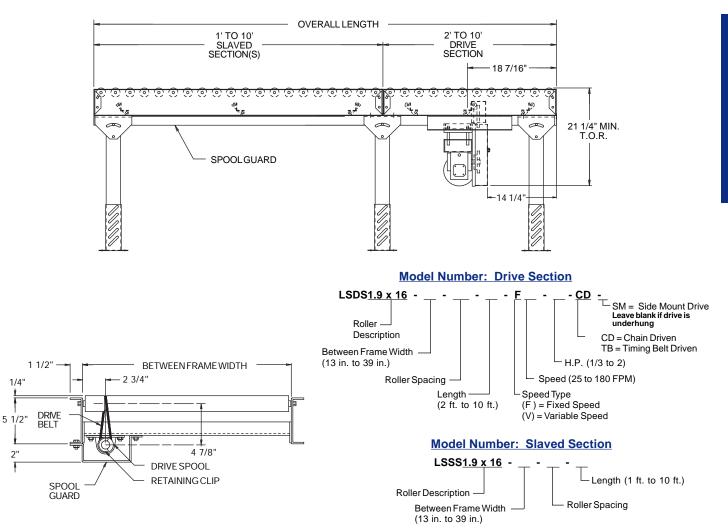
Load Capacities:

- Max. load per powered roller = 15 lbs.\*
- Max. driven length with single drive at center = 120 ft.
- Max. driven length per 1/4 HP = 20 ft.
- Do not exceed a 75 lb. total product load without consulting an Omni Metalcraft Corp. Sales Engineer.

\* Will be less if product has uneven or soft bottom.

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# **Optional Equipment:**

**Keyed Spools** - Spools are keyed and fit into a keyseat on the drive shaft. Instead of slipping on the shaft, spools provide positive drive. NOTE: Keyed spool conveyor sections cannot exceed 4 ft. long.

**Speed-Up Spools** - Larger diameter spools that increase speed 1.3 times the original speed.

**Pneumatic Roller Brake** - Air operated conveyor accessory that stops rollers in 2 ft. or 3 ft. zones. See page 188 for details.

**Blade Stops** - Pneumatically or manually operated blade that pops up between rollers in order to accumulate product. See page 186 and 187 for details.

**Timing Belt Drive** - Used as an option to chain drive, allowing for quieter operation. Timing belt drive is required at speeds from 120 to 180 FPM.

Roller Centers - 3 in., 4 in., 6 in. and 8 in. roller centers are also available.

**Power Crossover** - 1 ft. long section that switches drive shaft from one side of the conveyor to the other. Timing belt and chain driven models available. See page 186 for details. Can also be used to increase speeds.

**External Jump Chain** - 3 ft. long section with a jump chain that transmits power from one conveyor line to a parallel conveyor line. One drive can power two parallel lines. Chain driven and timing belt driven models available. See page 190 for details. Can also be used to increase speeds.

Floor Supports - Available in higher or lower height adjustments.

**Conveying Speed** - Constant and variable speeds from 25 to 180 FPM. AC or DC variable speed controllers available.

**Urethane Belt Transfer** - 3 ft. long section has an air operated lifting device that raises urethane transfer belts above the roller surface to transfer product off @ 90°. See pages 178, 179, 180 and 181 for details.

**Spring Assisted Gate Section** - 6 ft. section consisting of 2 ft. fixed section and 4 ft. gate section. See page 182 for details.

**Guard Rails** - 1 1/2 in. wide x 2 in. high x 12 ga. galvanized steel formed angle. One or both sides. **Note: If product contacts guard rails, product flow may be affected.** 

**Ceiling Hangers** - 5/8 in. dia. x 10 ft. long threaded rod with mounting hardware.

**Other Rollers** - 1.9 in. dia. x 13 ga. or 1.9 in. dia. x .145 wall, semi-precision and precision bearings available for extended life and noise reduction.

**Motors** - Single phase, drip proof, DC motors, inverter duty motors available through 2 HP.

**Electrical Controls** - Start-Stop push button stations, reversing drum switch, one direction and reversible magnetic starters.

**Side Mount Drive** - Allows minimum top of roller height of 10 3/4 inches. **Note: Motor is vertical.** 

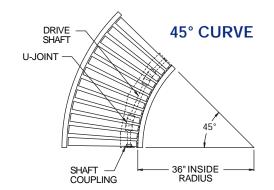


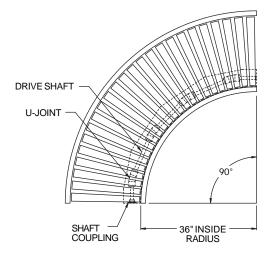
# Lineshaft Driven Curve and Spur Conveyor Curves - 1 11/16 in. to 2 1/2 in. dia. x 14 ga. Tapered Rollers Spurs - 1.9 in. dia. x 16 ga. Straight Rollers

Lineshaft Curves and Spurs are slave driven from lineshaft straight sections and are powered by their own drive unit. Curves allow for turns in the product line, whereas spurs are used when product lines converge or diverge.

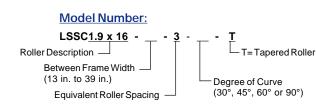


- Slave Driven from Straight Section or Self Powered
- 30°, 45°, 60° and 90° Curves;
  30° and 45° Spurs
- Tapered Rollers on Curves





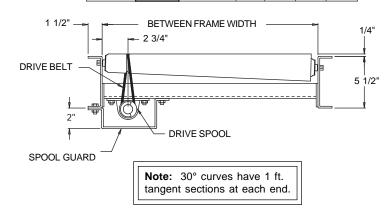
90° CURVE



27 Between Frame Widths
Curves are Transportation

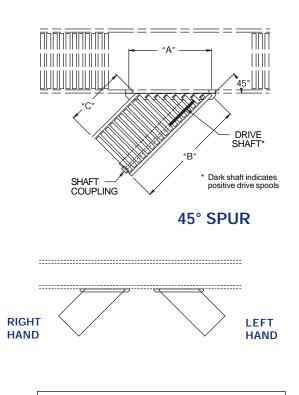
Conveyor Only

	90°	Curve	TAPERED ROLLE				
Between Frame	Rollers Per 90°	Roller Centers @			t (Lbs	.)	
Width	Curve	Centerline	<b>30°</b>	45°	<b>60°</b>	90°	
13" 14" 15" 16" 17"		2.781" 2.814" 2.847" 2.880" 2.913"	126 130 132 136 140	89 92 93 96 99	121 125 127 131 136	194 199 203 208 214	
18" 19" 20" 21" 22"		2.945" 2.978" 3.011" 3.043" 3.076"	142 146 148 152 155	101 104 105 108 110	138 142 144 148 151	218 223 227 233 236	
23" 24" 25" 26" 27"	24 Tapered Rollers	3.109" 3.142" 3.174" 3.207" 3.240"	158 162 164 167 170	113 116 117 119 122	155 159 161 164 168	242 248 251 254 260	
28" 29" 30" 31" 32"		3.272" 3.305" 3.338" 3.371" 3.403"	174 177 179 183 185	125 127 128 131 133	172 174 177 181 183	266 269 273 279 282	
33" 34" 35" 36" 37"		3.436" 3.469" 3.502" 3.534" 3.567"	182 185 189 191 195	136 138 140 142 145	187 189 193 196 200	288 291 297 300 306	
38" 39"		3.600" 3.632"	197 201	147 150	202 206	309 315	



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**Note:** Minimum product length recommended to converge or diverge product is 12".

### **Standard Specifications:**

**Frame** - 5 1/2 in. deep x 1 1/2 in. flange x 12 ga. galvanized steel formed channel frames with bolt on end couplers. **Note: Outside** rail of curve has "triple-punched" hex holes to allow skewing of rollers which affects product tracking. Curve rollers do not represent a true taper.

Between Frame Widths - 13 through 39 in full one inch increments.

**Curve Rollers** - 2 1/2 in. dia. tapered to 1 11/16 in. dia. x 14 ga. zinc plated rollers. Grease-packed ball bearings.

**Spur Rollers** - 1.9 in. dia. x 16 ga. galvanized rollers with 7/16 hex axle on 3 in. centers. Grease-packed ball bearings.

Floor Supports - Adjustable 36 in. to 48 in. from floor to top of rollers.

**Slave Driven** - Curves or spurs are slave driven from the drive shaft of a lineshaft straight section. Shafts are coupled by a Delrin chain coupling at bed joints.

**Drive Shaft** - 1 in. dia. steel shaft with universal joints as necessary.

**Drive Spools** - 2 in. dia. Delrin spool held in place on shaft by "snap on" retaining clips.

**Drive Belts** - 3/16 in. dia. high tension urethane belt from drive spools to rollers.

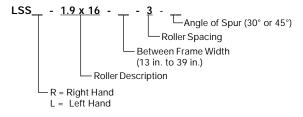
**Spool Guard** - Encloses underside of drive shaft, spools and drive belts.

**Bearings** - Sealed, pre-lubricated, self-aligning ball bearings on drive shaft.

**Load Capacities** - Same roller capacity as lineshaft 1.9 straight sections.

	3	0° SF	PUR		4	5° SF	PUR	
Between Frame Width	"A" (in.)	"B" (in.)	"C" (in.)	Wt. (Ibs.)	"A" (in.)	"B" (in.)		Wt. (Ibs.)
13" 14" 15" 16" 17"	30 13/16 37 3/4 37 3/4 37 3/4 44 11/16	36 48 48 48 48	12 21 21 18 15	32 47 49 48 48	28 1/8 28 1/8 28 1/8 32 3/8 32 3/8	36 36 36 36 36	21 21 21 18 18	37 38 40 39 40
18" 19" 20" 21" 22"	44 11/16 44 11/16 44 11/16 53 1/2 531/2	48 48 48 60 60	15 12 12 21 18	49 49 50 70 69	32 3/8 36 9/16 36 9/16 39 9/16 40 13/16	36 36 36 36 36	18 15 15 15 15 12	42 40 42 44 41
23" 24" 25" 26" 27"	53 1/2 58 9/16 58 9/16 58 9/16 58 9/16	60 60 60 60 60	18 15 15 12 12	71 70 72 71 73	40 13/16 40 13/16 45 1/16 45 1/16 45 1/16	36 36 48 48 48	12 12 21 21 21	43 45 65 67 70
28" 29" 30" 31" 32"	67 3/16 67 3/16 67 3/16 72 3/8 72 3/8	72 72 72 72 72 72	21 18 18 15 15	96 96 98 97 99	49 5/16 49 5/16 49 5/16 53 9/16 53 9/16	48 48 48 48 48	18 18 18 15 15	67 69 72 68 71
33" 34" 35" 36" 37"	72 3/8 72 3/8 81 1/16 81 1/16 81 1/16	72 72 84 84 84	12 12 21 18 18	98 100 127 126 129	53 9/16 57 7/8 57 7/8 57 7/8 57 7/8 62 1/16	48 48 48 48 60	15 12 12 12 12 21	73 69 72 74 100
38" 39"	84 1/2 84 1/2	84 84	15 15	128 130	62 1/16 62 1/16	60 60	21 21	103 106

### Model Number:



### **Optional Equipment:**

**Drive** - Drive units can be mounted to curves and spurs rather than being slave driven.

**Guard Rails** - 1 1/2 in. wide x 2 in. high 12 ga. galvanized steel formed angle. One or both sides. **Note: If product contacts guard rails, product flow may be affected.** 

Floor Supports - Available in higher or lower height adjustments.

**Ceiling Hangers** - 5/8 in. dia. x 10 ft. long threaded rod with mounting hardware.

Wheel Diverter - Pneumatically controlled device that automatically diverts product from main line onto a 30° spur. See page 189 for more details.

**Traffic Cop** - Controls product flow where two lines converge eliminating product collisions. Only one line is open at a given time. See page 188 for more details.

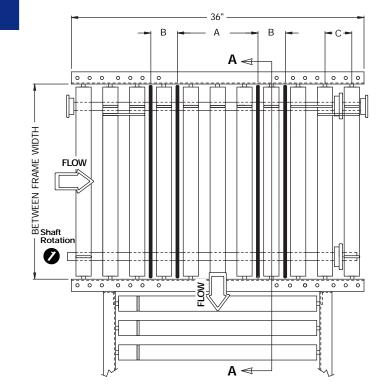
**Turning Wheel** - Used on converging lines to insure proper product orientation when product is transferred onto a main line. See page 189 for more details.

**Slaved Merge** - Integral spur and straight section used in applications where products must merge with another conveying line. Both sections are slaved off a common drive. See page 183 for more details.

Omni Metalcraft<sub>corp.</sub>

# Urethane Belt Transfer Device - Standard Flow 1 3/8 in. or 1.9 in. dia. Rollers

The Belt Transfer Device is slaved from other lineshaft sections. Transfer belts are raised pneumatically above conveying surface to transfer product at 90° onto another conveyor line.



NOTE: Min. Top of Roller = 11 1/4 in.

## **Standard Specifications:**

Load Capacity - Maximum package weight: 75 lbs.

**Frame** - 11 in. deep x 1 1/2 in. flange x 12 ga. galvanized steel formed channel frames with bolt-on end couplers.

**Between Frame Widths** - 13 through 28 in full one inch increments for 1 3/8 in. roller. 13 through 39 in full one inch increments for 1.9 in. roller.

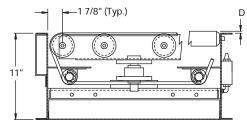
**Rollers** - 1 3/8 in. dia. galvanized rollers with 5/16 in. hex axle on 1 1/2 in. centers or 1.9 in. dia. x 16 ga. galvanized rollers with 7/16 hex axle on 3 in. centers. Both have grease-packed ball bearings.

**Transfer Belts** - Four powered 3/8 in. dia. urethane belts are pneumatically lifted above roller surface to transfer product off @ 90°. See chart for belt centers.

**Jump Chain** - Transmits power from power shaft to idler shaft. Available in chain driven & timing belt driven models.

### **Transfer Belt Centers -**

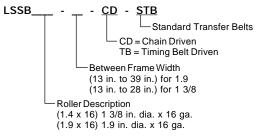
BELT TRANSFER STANDARDS										
Roller Diameter	А	В	С	D						
1 3/8	7 5/8	4 1/2	1 1/2	3/16						
1.9	10 1/2	3 1/2	3	1/4						



**End View** 

**NOTE:** This is a slaved unit. Speed and direction of the product being transferred is dictated by the speed and direction of the shaft from which it is slaved. Minimum recommended product width =  $15^{"}$ . If product is less than  $15^{"}$  wide or not long enough to contact the four transfer belts, consult an Omni sales engineer for pricing on extended belts or special belt centers.





**Transfer Belt Height** - Factory assembled to raise 3/8 in. above conveying surface, but adjustable to 3/4 in.

**Slave Driven** - Unit is slave driven from the drive shaft of a lineshaft straight section. Shafts are coupled by a Delrin chain coupling at bed joints.

**Air Bag** - No-maintenance air bag provides approximately 100 to 600 lbs. force from 45 to 100 PSI respectively.

**Air Requirements** - 45 PSI to 100 PSI. Pressure should be regulated to minimum PSI required to actuate device at installation.

 $\ensuremath{\textit{Valve}}$  - Single solenoid 4-way valve. 1/4 in. NPT valve ports. Requires maintained electrical signal of 115V - 1 Phase - 60 Hz

Filter/Regulator - Supplied for main air supply line - 3/8 in. NPT port.

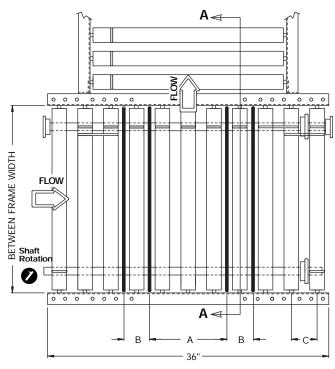
- Drive Unit
  - 5th Belt on Center
- Optional Belt Centers
- Roller Brake Installed
- Timing Belt Jump Chain
- End Guard Kit
- Blade Stop Installed





# Urethane Belt Transfer Device - Reverse Flow 1 3/8 in. or 1.9 in. dia. Rollers

The Belt Transfer Device is slaved from other lineshaft sections. Transfer belts are raised pneumatically above conveying surface to transfer product at 90° onto another conveyor line. Product transfers opposite that of device on page 178 even though shaft rotation is the same.



NOTE: Min. Top of Roller = 11 1/4 in.

## **Standard Specifications:**

Load Capacity - Maximum package weight: 75 lbs.

**Frame** - 11 in. deep x 1 1/2 in. flange x 12 ga. galvanized steel formed channel frames with bolt on end couplers.

**Between Frame Widths** - 13 through 28 in full one inch increments for 1 3/8 in. roller. 13 through 39 in full one inch increments for 1.9 in. roller.

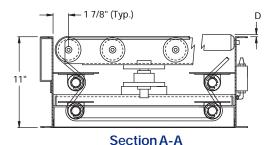
**Rollers** - 1 3/8 in. dia. galvanized rollers with 5/16 in. hex. axle on 1 1/2 in. centers or 1.9 in. dia. x 16 ga. galvanized rollers with 7/16 hex. axle on 3 in. centers. Both have grease-packed ball bearings.

**Transfer Belts** - Four powered 3/8 in. dia. urethane belts are pneumatically lifted above roller surface. See chart for belt centers.

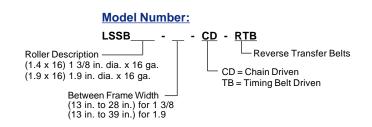
**Jump Chain** - Transmits power from power shaft to idler shaft. Available in chain driven and timing belt driven models.

### Transfer Belt Centers -

BELT TRANSFER STANDARDS										
Roller Diameter	А	В	С	D						
1 3/8	7 5/8	4 1/2	1 1/2	3/16						
1.9	10 1/2	3 1/2	3	1/4						



**NOTE:** This is a slaved unit. Speed and direction of the product being transferred is dictated by the speed and direction of the shaft from which it is slaved. Minimum recommended product width = 15". If product is less than 15" wide or not long enough to contact the four transfer belts, consult an Omni sales engineer for pricing on extended belts or special belt centers.



**Transfer Belt Height** - Factory assembled to raise 3/8 in. above conveying surface, but adjustable to 3/4 in.

**Slave Driven** - Unit is slave driven from the drive shaft of a lineshaft straight section. Shafts are coupled by a Delrin chain coupling at bed joints.

Air Bag - No maintenance air bag provides approximately 100 to 600 lbs. force from 45 to 100 PSI respectively.

**Air Requirements** - 45 PSI to 100 PSI. Pressure should be regulated to minimum PSI required to actuate device at installation.

**Valve** - Single solenoid 4-way valve. 1/4 in. NPT valve ports. Requires maintained electrical signal of 115V - 1 Ph. - 60 Hz.

Filter/Regulator - Supplied for main air supply line - 3/8 in. NPT port.

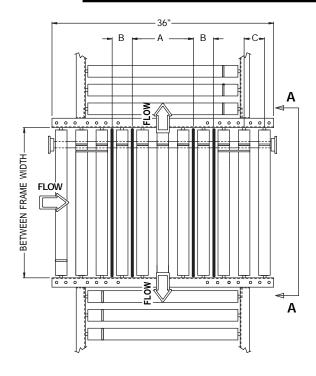
- Drive Unit
- 5th Belt on Center
- Optional Belt Centers
- Roller Brake Installed
- Timing Belt Jump Chain
- End Guard Kit
- Blade Stop Installed





# Urethane Belt Transfer Device - Bi-Directional 1 3/8 in. or 1.9 in. dia. Rollers

This Belt Transfer Device's tread rollers are slaved from other lineshaft sections. Transfer belts are independently powered by a separate drive and are pneumatically raised above conveying surface to transfer products at 90°, in either direction, onto another conveyor line.



### **Standard Specifications:**

Load Capacity - Maximum package weight: 75 lbs.

**Frame** - 11 in. deep x 1 1/2 in. flange x 12 ga. galvanized steel formed channel frames with bolt on end couplers.

Between Frame Widths - 16 through 28 in full one inch increments for 1 3/8 in. roller. 16 through 39 in full one inch increments for 1.9 in. roller.

**Rollers** - 1 3/8 in. dia. galvanized rollers with 5/16 in. hex. axle on 1 1/2 in. centers or 1.9 in. dia. x 16 ga. galvanized rollers with 7/16 hex. axle on 3 in. centers. Both have grease-packed ball bearings.

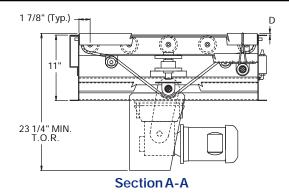
**Transfer Belts** - Four powered 3/8 in. dia. urethane belts are pneumatically lifted above roller surface. See chart for belt centers.

**Transfer Belt Height** - Factory assembled to raise 3/8 in. above conveying surface, but adjustable to 3/4 in.

**Slave Driven** - Rollers are slave driven from the drive shaft of a lineshaft straight section. Shafts are coupled by a Delrin chain coupling at bed joints.

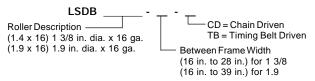
### Transfer Belt Centers -

BELT TRANSFER STANDARDS										
Roller Diameter	А	В	С	D						
1 3/8	7 5/8	4 1/2	1 1/2	3/16						
1.9	10 1/2	3 1/2	3	1/4						



**NOTE:** Transfer belts are driven independent of lineshaft. Lineshaft is slaved from adjoining section to power rollers. Minimum recommended product width = 15". Bi-directional transfers are not available at widths less than 16". If product is less than 15" wide or not long enough to contact the four transfer belts, consult an Omni sales engineer for pricing on extended belts or special belt centers.

### Model Number:



**Speed Reduction** - "C" face speed reducer. No. 50 chain from reducer to drive shaft.

Filter/Regulator - Supplied for main air supply line - 3/8 in. NPT port.

Motor - 1/2 HP - 230/460V - 3 Phase - 60 Hz - totally enclosed, fan cooled - 1750 RPM.

**Transfer Belt Drive Sheaves** - Positively driven independent sheaves power the transfer belts.

Air Bag - No-maintenance air bag provides approximately 270 to 600 lbs. force from 45 to 100 PSI respectively.

**Air Requirements** - 45 PSI to 100 PSI. Pressure should be regulated to minimum PSI required to actuate device at installation.

**Valve** - Single solenoid 4-way valve. 1/4 in. NPT valve ports. Requires maintained electrical signal of 115V - 1 Phase - 60 Hz.

- Drive Unit
- 5th Belt on Center
- Optional Belt Centers
- Timing Belt Jump Chain
- End Guard Kit
  - Blade Stop Installed

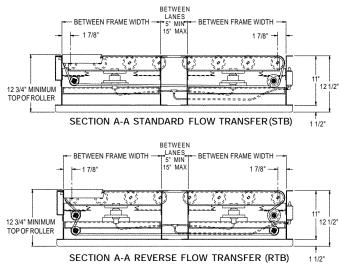




# Lineshaft Driven Live Roller Conveyors

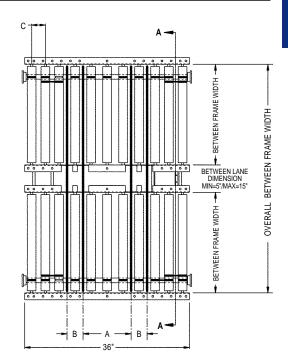
# Urethane Belt Transfer Device - Dual Lane 1 3/8 in. or 1.9 in. dia. Rollers

A Dual Lane Belt Transfer Device is slaved from other lineshaft sections. Transfer belts are pneumatically raised above the conveying surface to transfer product at 90° onto another parallel conveying line.



### Model Number:

LSBB \_\_\_\_\_ Transfer Type Roller Description \_\_\_\_\_ (1.4 x 16) 1 3/8 in. dia. x 16 ga. (1.9 x 16) 1.9 in. dia. x 16 ga. Between Frame Width \_\_\_\_\_\_ TB = Reverse Flow Belt Transfer STB = Standard Flow Belt Transfer STB = Standard Flow Belt Transfer CD = Chain Driven TB = Timing Belt Driven S in. min./15 in. max.



**NOTE:** This is a slaved unit. Speed and direction of the product being transferred is dictated by the speed and direction of the shaft from which it is slaved. If product is not long enough to contact the four transfer belts, consult an Omni sales engineer for pricing on special belt centers.

**Standard Specifications:** 

Load Capacity - Maximum package weight: 75 lbs.

**Frame** - 11 in. deep x 1 1/2 in. flange x 12 ga. galvanized steel formed channel frames with bolt-on end couplers.

**Between Frame Widths** - 13 through 28 in full one inch increments for 1 3/8 in. roller. 13 through 39 in full one inch increments for 1.9 in. roller.

**Between Lane Dimension** - 5 through 15 in full one inch increments.

**Rollers** - 1 3/8 in. dia. galvanized rollers with 5/16 in. hex. axle on 1 1/2 in. centers or 1.9 in. dia. x 16 ga. galvanized rollers with 7/16 hex. axle on 3 in. centers. Both have grease-packed ball bearings.

Transfer Belts - Four powered 3/8 in. dia. urethane belts are pneumatically lifted above roller surface. See chart for belt centers.

**Jump Chain** - Transmits power from one lane to the next lane. Available in chain driven and timing belt driven models.

### Transfer Belt Centers -

BELT TRANSFER STANDARDS				
Roller Diameter	А	В	С	D
1 3/8	7 5/8	4 1/2	1 1/2	3/16
1.9	10 1/2	3 1/2	3	1/4

**Transfer Belt Height** - Factory assembled to raise 3/8 in. above conveying surface, but adjustable to 3/4 in.

**Slave Driven** - Unit is slave driven from the drive shaft of a lineshaft straight section. Shafts are coupled by a Delrin chain coupling at bed joints. Both lanes are powered by a common drive.

**Air Bag** - No-maintenance air bag provides approximately 100 to 600 lbs. force from 45 to 100 PSI respectively.

Air Requirements - 45 PSI to 100 PSI. Pressure should be regulated to minimum PSI required to actuate device at installation.

**Valve** - Single solenoid 4-way valve. 1/4 in. NPT valve ports. Requires maintained electrical signal of 115V - 1 Phase - 60 Hz.

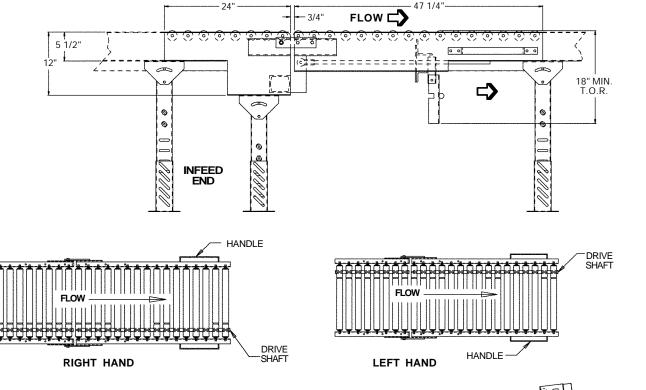
Filter/Regulator - Supplied for main air supply line - 3/8 in. NPT port.

- Drive Unit5th Belt on Center
- Roller Brake Installed
  Timing Bolt Jump Chai
- Timing Belt Jump Chain
- Optional Belt Centers
  End Guard Kit



# **Spring Assisted Gate** 1 3/8 in. dia. or 1.9 in. dia. Rollers

Lineshaft Spring Assisted Gates are slaved from other lineshaft sections at the infeed end. Gate sections provide easy access for personnel and equipment. They rest against a support which is mounted to the next conveyor in line. Power does not continue through to the end of the gate. A new drive must be supplied for conveyors beyond the end of the gate section.



## **Standard Specifications:**

**Frame** - 5 1/2 in. deep x 1 1/2 in. flange x 10 ga. painted steel formed channel frames with welded steel spreaders. Overall length is 6 ft. which includes a 2 ft. stationary section and 4 ft. gate section. Painted silver.

Between Frame Widths - 13 through 28 in full one inch increments for 1 3/8 in. roller. 13 through 39 in full one inch increments for 1.9 in. roller.

**Rollers** - 1 3/8 in. dia. x 16 ga. galvanized rollers with 5/16 in. hex axle on 1 1/2 in. centers or 1.9 in. dia. x 16 ga. galvanized rollers with 7/16 hex axle on 3 in. centers. Both have grease-packed ball bearings.

**Springs** - Provide counter-balancing forces to assist in raising and lowering of the gate.

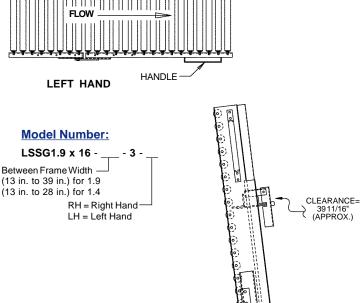
**Coupling** - Disengages to stop driving gate section when raised and re-engages when gate section is lowered.

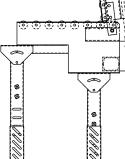
**Drive Spools** - 2 in. dia. Delrin spools held in place on shaft by "snap on" retaining clips.

 $\ensuremath{\text{Drive Belts}}$  - 3/16 in. dia. urethane belts from drive spools to rollers.

**Spool Guard** - Encloses underside of drive shaft, spools and drive belts for full length of conveyor.

Option - Pivot Leg Support.





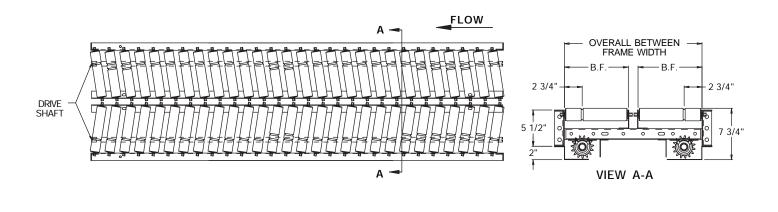
Lineshaft Driven Live Roller Conveyors

# (989) 358-7000

# Lineshaft Driven Live Roller Conveyor Options

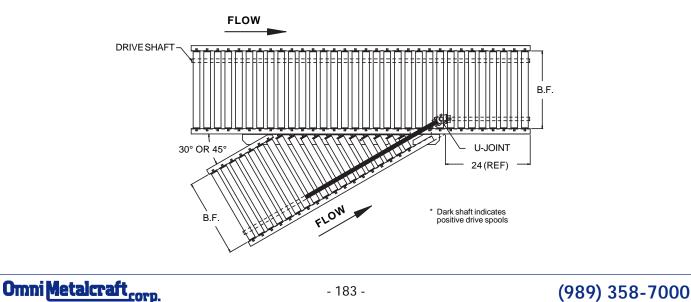
# Herringbone 1.9 in. dia. x 16 ga. Rollers or 1 3/8 in. dia. x 16 ga. Rollers

The Lineshaft Driven, Herringbone Conveyor consists of (2) parallel lanes powered by a common drive. Rollers are skewed in order to center product. Products can infeed from parallel lanes and discharge into a single lane.



# **Slaved Merge** 1.9 in. dia. x 16 ga. Rollers or 1 3/8 in. dia. x 16 ga. Rollers

The Lineshaft Driven, Slaved Merge Conveyor is an integral spur and straight section used in applications where products must merge with another conveying line. Both sections are slaved off a common drive.



# Zero Pressure Lineshaft Driven Live Roller Conveyor

1.9 in. dia. x 16 ga. Rollers or 1 3/8 in. dia. x 16 ga. Rollers

The lineshaft driven, Zero Pressure Accumulation Conveyor is a horizontal live roller conveyor that allows products to accumulate without colliding.

- Cascade Release
- Positive Pneumatic Brake For Each Zone
- Zero Back Pressure Reduces Possibility of Product Damage
- Multiple Zones Driven From a Single Drive
- Pneumatic Logic Controls Each Zone (Electrical Logic Not Required)

### General Operation Procedure: "Cascade Release"

The lineshaft driven, zero pressure accumulation conveyor is divided into individual brake zones. The brake zones are controlled by air logic. The rollers in a given brake zone will stop when their corresponding pneumatic brake is actuated. When a load reaches the sensing roller in the last unoccupied zone, the roller brake is actuated and the preceding roller brake is armed. When a load depresses the sensing roller in the preceding zone, its brake is then actuated. This sequence repeats itself until all zones are full. When a load is removed from any zone on the conveyor, preceding zone loads will move forward one at a time. This type of flow is called "**Cascade Release**".

## **Standard Specifications:**

**Frame** - 5 1/2 in. x 1 1/2 in. x 12 ga. galvanized formed steel channel frames with bolt-on end couplers.

Accumulation Zones - 24 in. long is standard. 18 in., 30 in. and 36 in. zone lengths available. Each zone is controlled by air logic.

Between Frame Widths - 13 in. to 39 in. in full inch increments.

**Rollers** - 1.9 in. x 16 ga. galvanized rollers with 7/16 in. hex axle and grease packed bearings. Rollers spaced on 3 in. centers.

**Sensing Roller** - 7/8 in. dia. x 18 ga. wall aluminum roller. (One roller in each Accumulation Zone.) Minimum product weight required to depress trigger roller is 5 lbs.

Zero Pressure Options: 1 3/8 in. x 16 ga. dia. galvanized rollers on 1 1/2 in. centers, slug release, electric sensor instead of sensor rollers.

**Conveying Speed** - Constant 60 FPM. Other constant and variable speeds available.

**Speed Reduction** - Sealed worm gear "C" face speed reducer. No. 50 chain from reducer to drive shaft. **Motor** - 1/2 HP-230/460V-3 Ph-60 Hz.-totally enclosed - fan cooled. Maximum HP available is 2 HP.

Air Requirements - Minimum 30 PSI on main air supply line.

Filter/Regulator/Lubricator - Supplied for main air supply line - 3/8 in. NPT port.

**Floor Supports** - Adjustable 36 in. to 48 in. from floor to top of rollers. Other heights available.

**Drive** - Mounted underneath with a minimum 23 1/4 in. top of roller. If between frame dimension is less than 20 in., motor will extend beyond frame of conveyor. Side mounted drives are available with a minimum 12 3/4 in. top of roller.

**Electrical Controls** - 115V-1 Ph-60 Hz. solenoid valve in discharge zone to override air logic. Limit switch is also supplied to revert control back to air logic once the product is clear.

**Roller and Drive Capacity** - 1.9 in. dia. maximum load - 15 lbs. per driven roller. Maximum driven length with single drive @ center -120 ft. 1 3/8 in. dia. maximum load - 10 lbs. per driven roller. Maximum driven length with single drive @ center - 70 feet for 1.4 rollers.

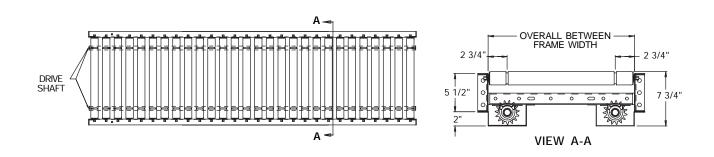




# Lineshaft Driven Live Roller Conveyor Options

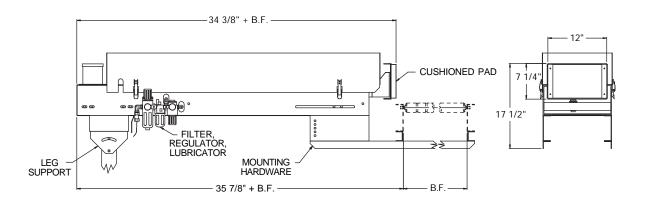
# Dual Shaft 1.9 in. dia. x 16 ga. Rollers or 1 3/8 in. dia. x 16 ga. Rollers

Dual Shaft Lineshaft Conveyors involve a single lane of rollers powered by 2 shafts, increasing the drive capacity of the rollers. Both shafts are powered by a common drive.



# **Pusher Device**

The High Speed Pusher Device is used to automatically divert product. The ram is pneumatically actuated to divert product at 90° onto another conveyor, chute, etc. Cycle time may vary due to product weight and/or size.



### **Standard Specifications:**

Load Capacity - Maximum package weight - 75 lbs. Air Requirements - 10 PSI to 80 PSI. Pressure should be regulated to minimum PSI required to actuate device at installation.

**Valve** - Double solenoid 4-way valve to actuate air cylinder. Single solenoid 4-way valve to provide air cushion on return stroke. 1/4 in. NPT valve ports. Valves require maintained electrical signal of 115V - 1 Phase - 60 Hz. Filter/Regulator/Lubricator - Supplied for main air supply line - 3/8 NPT port.

Air Cylinder - 2 in. bore, double acting cylinder.

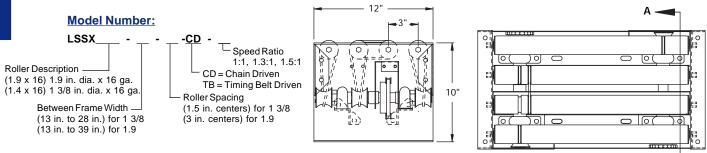
**Cycles** - Vary with product weight and between frame width. **Ram** - 12 in., 18 in. or 24 in. wide with cushioned pad. Also available in wider widths.





# Power & "Speed Up" Power Crossover Device 1 3/8 in. or 1.9 in. dia. Rollers

The Power Crossover Device is slaved from other lineshaft sections. It is often used to switch power from one side to the other or to change the speed of different zones in the same conveying line.



# Standard Specifications:

**Frame** - 10 in. deep x 1 1/2 in. flange x 12 ga. galvanized steel formed channel frames with bolt on end couplers.

**Between Frame Widths** - 13 through 28 in full one inch increments for 1 3/8 in. roller. 13 through 39 in full one inch increments for 1.9 in. roller.

**Slave Driven** - Unit is slave driven from the drive shaft of lineshaft straight and/or curve sections. Shafts are coupled by a Delrin chain coupling at bed joints.

**Rollers** - 1 3/8 in. dia. x 16 ga. galvanized rollers with 5/16 in. hex axle on 1 1/2 in. centers or 1.9 in. dia. x 16 ga. galvanized rollers with 7/16 hex axle on 3 in. centers. Both have grease-packed ball bearings.

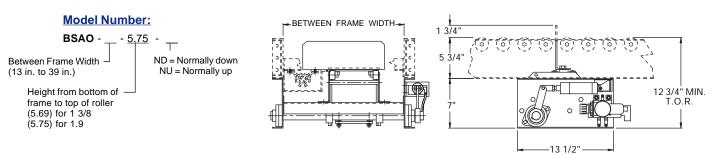
Α

**Sprockets and Chain** - Two 50B15 sprockets and No. 50 chain. Specify if other than 1:1 ratio is preferred.

**Chain Guard** - Encloses sprockets and chain and includes an integral chain tensioner.

# Lineshaft Accessories - Blade Stops Pneumatic Blade Stops

The Blade Stop bolts to the underside of lineshaft straight section and pneumatically raises a blade above the conveying surface to stop products in the conveying line.



# **Standard Specifications:**

**Frame** - 7 in. deep x 1 1/2 in. flange x 10 ga. galvanized steel formed channel frames. Bolts to underside of standard frame.

Between Frame Widths - 13 through 39 in full one inch increments. Stop Height - Blade stop lifts approximately 2 in. above conveying surface.

Air Cylinder - 1 1/2 in. bore x 2 in. stroke, double acting cylinder.

Filter Regulator - Supplied for main air supply line - 3/8 in. NPT port.

**Air Requirements** - 10 PSI to 60 PSI. Pressure should be regulated to minimum PSI required to actuate device at installation.

**Valve** - Single solenoid 4-way valve. 1/4 in. NPT valve ports. Requires maintained electrical signal of 115V - 1 Phase - 60 Hz. Use flow controls on valve to set speed of blade stop.

**Shipped Loose** - Customer to mount the Blade Stop to conveyor in the field.

 $\mbox{Load}\ \mbox{Capacity}$  - Rated for maximum accumulated back pressure of 75 lbs.

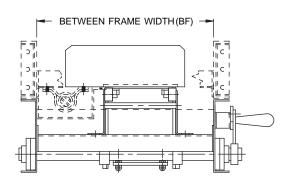
Omni <u>Metalcraft corp.</u>

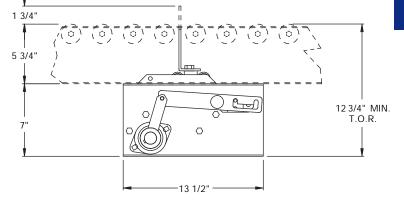
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# Lineshaft Accessories - Blade Stops

# Manually Operated (Hand)

The Blade Stop bolts to the underside of a lineshaft straight section and manually raises a blade above the conveying surface to stop products in the conveying line.





### **Standard Specifications:**

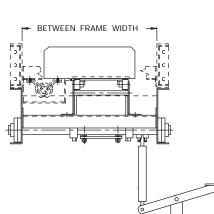
Frame - 7 in. deep x 1 1/2 in. flange x 10 ga. galvanized steel formed channel frames. Bolts to underside of standard frame.

Between Frame Widths - 13 through 39 in full one inch increments.

**Stop Height** - Blade stop lifts approximately 2 in. above conveying surface.

Shipped Loose - Customer to mount the Blade Stop to conveyor in the field.

Load Capacity - Rated for maximum accumulated back pressure of 75 lbs.



### **Standard Specifications:**

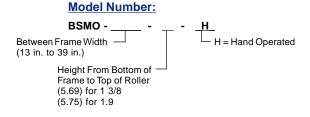
Frame - 7 in. deep x 1 1/2 in. flange x 10 ga. galvanized steel formed channel frames. Bolts to underside of standard frame.

Between Frame Widths - 13 through 39 in full one inch increments.

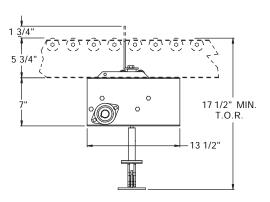
**Stop Height** - Blade stop lifts approximately 2 in. above conveying surface.

**Shipped Loose** - Customer to mount the Blade Stop to conveyor in the field.

**Load Capacity** - Rated for maximum accumulated back pressure of 75 lbs.



# Manually Operated (Foot)



## Model Number:

BSMO - \_\_\_\_ - F - \_\_\_\_ Between Frame Width \_\_\_\_\_\_ (13 in. to 39 in.) Height From Bottom of \_\_\_\_\_\_ Frame to Top of Roller (5.69) for 1 3/8 (5.75) for 1.9

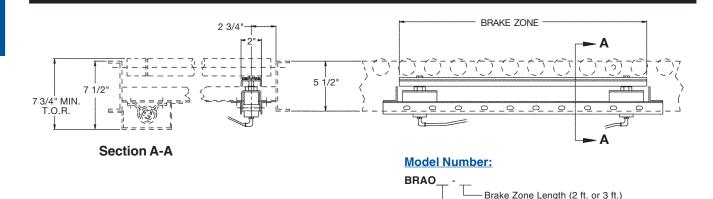




# **Lineshaft Accessories**

# **Pneumatic Roller Brake**

The Pneumatic Brake bolts to spreaders underneath standard lineshaft conveyor straight sections. It is used to stop all rollers in a specific area to halt or accumulate product.



### **Standard Specifications:**

Hardware - 10 ga. galvanized steel formed brackets and support angle. Brake support angle bolts between spreaders of standard lineshaft frame.

Between Frame Widths - Brake will mount on any width 13 in. to 39 in.

**Brake Channel** - 1 1/4 in. x 5/8 in. x 10 ga. galvanized brake channel with rough top lagging attached.

Air Cylinder - 1 1/2 in. bore x 1/2 in. stroke spring-return, rotating air cylinder. Brake is supported by two cylinders.

Lengths - Available in 2 ft. or 3 ft. lengths.

**Air Requirements** - 10 PSI to 60 PSI. Pressure should be regulated to minimum PSI required to adequately stop rollers

1.9 or 1.4 Rollers

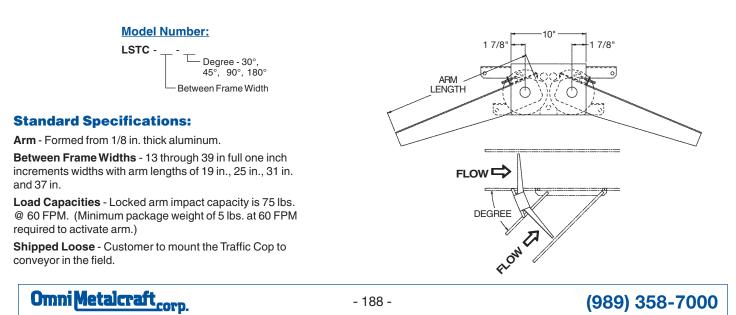
from rotating. **Valve** - Single solenoid 4-way valve. 1/4 in. NPT valve ports. Requires maintained electrical signal of 115V - 1 Phase - 60 Hz in order to raise brake pad.

Shipped Loose - Customer to mount the Roller Brake to conveyor in the field.

Load Capacity - Rated for maximum accumulated back pressure of 75 lbs.

# **Traffic Cop**

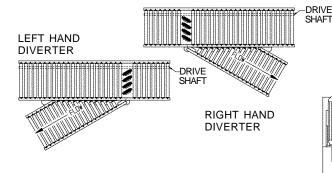
Traffic Cops control product flow where two conveyor lines converge, eliminating collision of products by allowing only one line to be open at any given time. They are available for 30°, 45°, 90° and 180° applications. **NOTE: Not for accumulating on curves or great lengths of product; the purpose of a traffic cop is to prevent products from colliding, not for accumulation.** 

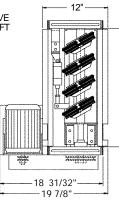


# Lineshaft Accessories

# **Bolt-Up Inline Diverter**

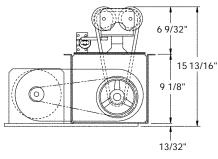
The Diverter bolts to the underside of a straight section. Diverter wheels take the place of 2 rollers and pivot 30° to transfer product from the straight section to a 30° spur. The wheels should travel 1.5 times faster than conveyor rollers.





WIDTH

**BETWEEN FRAME** 



NOTE: Min. Top of Roller = 15 3/4 in. Min. Recommended Product Length = 12 in.

### **Standard Specifications:**

Load Capacity - Maximum package weight - 75 lbs.

**Support Brackets** - 9 1/4 in. deep x 1 1/2 in. flange x 10 ga. mild steel painted Omni Blue. Bolts to underside of straight section.

Between Frame Widths - 16 through 39 in full one inch increments.

**Drive Bands -** 3/8 in. dia. urethane bands power diverter wheels.

**Diverter Bands** - 3/8 in. dia. urethane bands replace tread rollers to transport product.

Drive Shaft - 1 in. dia. steel shaft.

**Controls** - AC variable speed or DC variable speed continuous. **Air Cylinder** - 1 1/2 in. bore x 1 in. stroke, double acting rotating air cylinder.

 $\mbox{Drive}$  - 1/2 HP - 230/460V - 3 Phase - 60 Hz  $% \mbox{inverter}$  duty motor or DC motor.

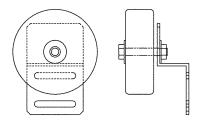
**Air Requirements** - 45 PSI. Pressure should be regulated to minimum PSI required to actuate device at installation.

**Valve** - Single solenoid 4-way valve. 1/4 in. NPT valve ports. Requires maintained electrical signal of 115V - 1 Phase - 60 Hz.

Filter/Regulator - Supplied for main air supply line - 3/8 in. NPT port.

# **Turning Wheel**

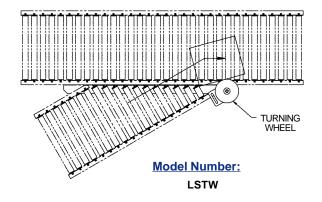
Turning Wheels are used on converging lines to insure proper product orientation when products are transferred from spurs onto the main line. They are also used with Traffic Cops, Stops and other accessories to control package flow.



### **Standard Specifications:**

**Bracket** - 7 ga. formed "Z" bracket can be attached to spur or main conveyor line.

**Wheel** - 6 in. dia. x 2 in. wide face rubber wheel with internal bushing. Material is non-absorbent, oil and chemical resistant, non-marking and non-chipping.



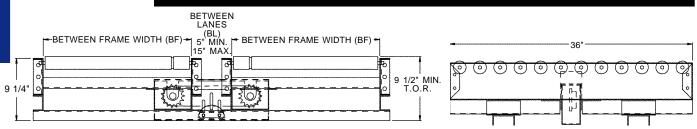


# Lineshaft Accessories

# Lineshaft Driven Live Roller Conveyors

# Lineshaft External Jump Chain

The External Jump Chain consists of two 3 ft. long parallel lanes of conveyor. Both lanes can be powered by a common drive section.



### **Standard Specifications:**

**Frame** - 5 1/2 in deep x 1 1/2 in. flange x 12 ga. galvanized steel formed channel frames with bolt on end couplers.

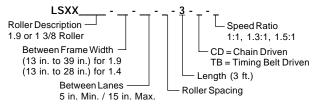
**Between Frame Widths** - 13 through 28 in full one inch increments for 1 3/8 in. roller. 13 through 39 in full one inch increments for 1.9 in. roller.

Between Lane Widths - 5 through 15 in full one inch increments.

**Rollers** - 1 3/8 in. dia. galvanized rollers with 5/16 in. hex axle on 1 1/2 in. centers or 1.9 in. dia. x 16 ga. unplated rollers with 7/16 hex axle on 3 in. centers. Both have grease-packed ball bearings.

**Slave Driven** - Unit is slave driven from the drive shaft of a lineshaft straight section. Shafts are coupled by a Delrin chain coupling at bed joints. Both lanes are powered by common drive.





# **Conveyor Accessories**

Fixed Angle Stop - 1 1/2 in. x 1 1/2 in. x 10 ga. galvanized formed angle end stop.

**Fixed Roller Stop** - 1 3/8 in. dia. or 1.9 in. dia. rollers mounted in 10 ga. galvanized formed angle brackets above sideframe of conveyor.

Multi-Tier Supports - 3 in. x 1 1/2 in. x 12 ga. galvanized formed channel leg uprights (1500 lb. capacity).

**Portable H-Stands** -  $3 \text{ in. } x 1 1/2 \text{ in. } x 12 \text{ ga. galvanized formed channel leg uprights (800 lb. capacity).$ 

Knee Brace Supports - 3/4 in. x 1 1/2 in. x 10 ga. galvanized angle adds stability to conveyor and leg supports.

# $\label{eq:adjustable Channel Guard Rail - 1 5/8 in. x 1 in. x 12 ga. galvanized formed channel.$

**Fixed Channel Guard Rail** - 2 1/2 in. x 1 in. x 12 ga. galvanized formed channel or 3 1/2 in. x 1 1/2 in. x 12 ga. galvanized formed channel.

Fixed Angle Guard Rail - 1 1/2 in. x 2 in. x 12 ga. galvanized formed angle or 1 1/2 in. x 6 in. x 12 ga. - galvanized formed angle.

# Lineshaft Driven Live Roller Conveyor Special Options

Other Rollers - Other standard roller options are as follows:

- 1.9" dia. x 16 ga. Mild Steel
- 1.9" dia. x 9 ga. Mild Steel
- 1.9" dia. x 9 ga. Galvanized
- 1.9" dia. x 13 ga. Mild Steel
- 1.9" dia. x 16 ga. with Precision Bearings
- 1.9" dia. x 9 ga. with Semi-Precision Bearings
- 1 3/8" dia. x 18 ga. with Non-Precision Bearings
- 1 3/8" dia. x 16 ga. with Non-Precision Bearings
- 1 3/8" dia. x 3/16" with Non-Precision Bearings
- 1 3/8" dia. x 3/16" with Semi-Precision Bearings

**Coated Rollers** - Rollers available zinc plated, urethane coated or teflon coated.

Heat Treated Rollers - Rollers available with hardened tube surface to prevent wear when transporting abrasive products.

**Clutch** - Mounted between motor and reducer. Provides soft start and intermittent overload protection.

**Brake** - Mounted between motor and reducer. Provides failsafe stopping of conveyor when motor is not running.

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