

MODEL "190LSE"

Line Shaft Live Roller Conveyor

- **Zero pressure accumulation**
- **Clean room installation**
- **Easy installation**
- **True product singulation**
- **No mechanical sensor rollers**
- **Photo eye controlled**



STANDARD SPECIFICATIONS

Driving Belts - $\frac{3}{16}$ " diameter round urethane "O" rings from drive shaft to tread rollers.

Bed - 7" x 1 $\frac{1}{2}$ " x 12 gauge powder painted formed steel channel frame with heavy duty cross braces and splice plates.

Rollers - 1.9" diameter x 16 gauge galvanized steel tread rollers with $\frac{7}{16}$ " hex shaft and sealed, greased for life bearings, spaced on 3" centers.

Sensing Device - Photoelectric sensor in each zone detects presence of product and activates accumulation feature in the trailing zone if leading zone is occupied.

Power Supply - 120 VAC power supply controls accumulation feature with 24 VDC output. Power supply will control 40 accumulation zones.

Air Requirements - 20 to 35 psi recommended operating pressure with free air consumption of .0062 cu. ft. per sensor operation.

Accumulation Zones - 24", 30", or 36" long, air operated. Conveyor frame length changes with zone lengths. Note: Zone length must be evenly divisible by roller centers.

Filter/Regulator - Supplied loose for mounting to conveyor side frame, with $\frac{3}{8}$ " NPT ports.

Guard Rails - 1 $\frac{1}{2}$ " x 1 $\frac{1}{2}$ " x 12 gauge galvanized guard rails - both sides. NOTE: Product contact with guard rails will affect product flow.

Floor Supports - Adjustable 31 $\frac{1}{2}$ " to 45 $\frac{1}{2}$ " from floor to top of tread roller. One support supplied at each end of conveyor and at each bed joint.

Drive - 2 foot module with motor and reducer. Drive module will be bolted to intermediate section.

Drive Shaft - 1" diameter steel shaft, driven by motor and reducer, runs full length of conveyor. Chain coupling supplied at bed joints to couple sections together.

Drive Spools - Delrin spools located on drive shaft supplies driving power to tread rollers.

Drive Shaft Bearings - Sealed, prelubricated, self aligning, precision ball bearings on drive shaft.

Speed Reducer - C-Face mounted heavy duty worm gear reducer.

Motor - $\frac{1}{2}$ HP 230/460/3-60 TE motor.

Drive Guard - Expanded metal guard full length of conveyor covers drive shaft and other moving drive components.

Conveying Speed - 60 FPM constant.

Capacity - 15 lbs. per tread roller maximum. Not to exceed Load Capacity Chart.

OPTIONAL EQUIPMENT

Conveying Speed - Constant and variable speeds from 30 to 120 FPM available.

Timing Belt Drive - For speeds 90 FPM and above a timing belt drive in lieu of #50 chain drive is recommended.

Roller Centers - 2 $\frac{1}{4}$ ", 4", 6", or 8" centers. NOTE: Capacities change as roller centers change. See engineering section of price list for capacity changes.

Accumulation Zones - 18" long, air operated. Conveyor frame lengths change with zone lengths. NOTE: Zone length must be evenly divisible by roller centers.

Diffused Photo Eyes - To be used when retro-reflective photo eyes can't be used due to product interference.

Floor Supports - Lower or higher supports available. Minimum elevation with standard drive mounting is 18" from floor to top of rollers.

Powered Right Angle Belt Transfer - Air operated pop-up round belt transfer mounted in 32" long modular section, 75 lbs. maximum unit load. - Reversing UBT is 39" long.

Package Stops - Manual or air operated, blade or roller stops available.

Slug Release - Allows for conveyor to be quickly unloaded when accumulation feature is not required.

Motor - Single phase, energy efficient, explosion proof, etc. Other HP available.

Ceiling Hangers - $\frac{1}{2}$ " diameter threaded rods 8 feet long with locking nuts and mounting hardware.

Jump Chain - One-to-one chain drive moves drive shaft to opposite side for driving various optional accessories.

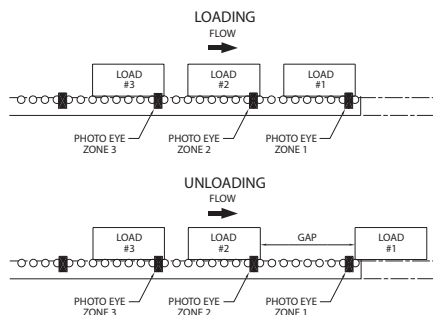
MODEL "190LSE"



Overall Length	Intermediate Length	Between Frames	15"	21"	27"	33"	39"
		Overall Frame Width	18"	24"	30"	36"	42"
5'	3'	Weight (lbs.) Weights Based on 3" Roller Centers	336	390	443	494	546
10'	8'		542	642	737	830	924
15'	13'		747	893	1029	1164	1302
18'	20'		953	1143	1323	1500	1680
25'	23'		1160	1395	1616	1836	2057
30'	28'		1365	1646	1910	2172	2435
35'	33'		1571	1896	2202	2507	2813
40'	38'		1776	2148	2496	2843	3191
45'	43'		1983	2399	2789	3178	3569
50'	48'		2189	2649	3083	3513	3947
55'	53'		2394	2901	3375	3849	4325
58'	60'		2600	3152	3669	4185	4703
65'	63'		2807	3402	3962	4521	5081
70'	68'		3012	3654	4255	4856	5459
75'	73'		3218	3905	4548	5191	5836
80'	78'		3423	4155	4842	5528	6215
85'	83'		3630	4406	5178	5864	6591
90'	88'		3836	4658	5429	6198	6969
95'	93'		4041	4908	5723	6536	7347
100'	98'		4247	5159	6015	6870	7725

OPERATIONAL SEQUENCE

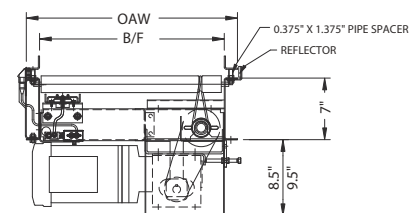
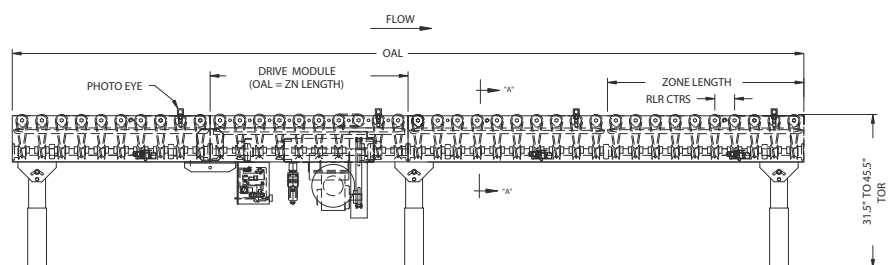
- Model "190LSE" is loaded at the infeed end of conveyor. The first load travels the entire length of the conveyor to Zone #1. If the photoelectric sensor in Zone #1 has been activated by an external signal (normally open contact, not supplied) the product will stop in Zone #1.
- The second load travels the length of the conveyor until it reaches Zone #2. If Zone #1 is occupied, the second load will stop in Zone #2. Load #3 will stop in Zone #3 and continue to accumulate at "zero pressure" until fully loaded.



- To unload, an external signal (normally open contact, not supplied) to the photoelectric sensor in Zone #1 will release the accumulation feature and allow the product in Zone #1 to leave the conveyor. The load in Zone #2 will not advance into Zone #1 until the load in Zone #1 has completely cleared Zone #1's photoelectric sensor; the third load will not advance into Zone #2 until the second load clears the photoelectric sensor in Zone #2. Once the first load clears the photoelectric sensor in Zone #1, the external signal must be restored to Zone #1's photoelectric sensor for the accumulation process to continue.

HP	Overall Frame Width 16" to 22"			Overall Frame Width 24" to 30"			Overall Frame Width 34" to 42"		
	Total Load (lbs.)			Total Load (lbs.)			Total Load (lbs.)		
	Up to 60'	Up to 90'	Up to 120'	Up to 60'	Up to 90'	Up to 120'	Up to 60'	Up to 90'	Up to 120'
1/2	1550	580	-	1340	250	-	1020	-	-
3/4	3310	2330	1360	3090	2010	920	2770	1530	280
1	*3600	4090	3110	*3600	3770	2680	*3600	3280	2040
1 1/2	-	*5400	6620	-	*5400	6190	-	*5400	5550
2	-	-	*7200	-	-	*7200	-	-	*7200

***NOTE:** Capacities based on 3" roller centers with all rollers driven. Rollers limited to 15 lbs. maximum live load per roller. See Engineering Section of Price List for capacities with other than 3" roller centers.



SECTION VIEW "A-A"