

# SPIRAL-LIFT<sup>®</sup>

SPIRAL BELT CONVEYORS



CONTINUOUS • VERTICAL • UNIT • HANDLING

The answer to your vertical conveying needs...

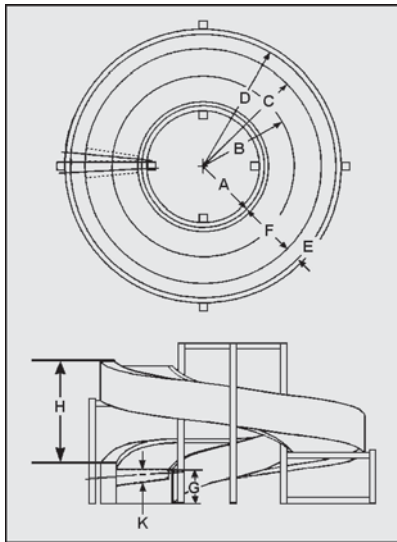
## *Spiral-Lift Applications*

- *Airport Baggage Handling*
- *Distribution Centers*
- *Factories*
- *Printing Plants*
- *Food Processing Facilities*
- *Beverage Plants*

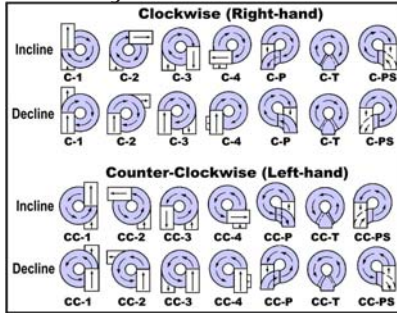
## *Convey It Up or Down*

- Saves floor space
- Requires no metering, accumulation or indexing
- Positive drive belt system means no end roll slip
- Wide selection of entry and exit combinations
- Custom designed for your particular operation
- Durable all steel construction
- Fully assembled or modular construction
- High conveying speeds available
- Steep angles of incline/decline available (over 30° @ centerline)
- Wide belt widths available
- Over 45 years experience building spiral belt conveyors





### Entry/Exit Orientation



Note: Conveyors in white are not provided by Portec.

### STANDARD MODELS

The above list is only a small example of the model sizes available from Portec. There are 6 standard family sizes of Spiral-Lift based upon the outside conveying radius (C) and a range of conveying widths (F). Any conveying width within the available range and having one of the 5 standard outside conveying radii, is considered a standard model. While Portec frequently designs and builds special radius Spiral-Lifts, the standard models represent the best value and shortest production lead-time.

### Standard Model Dimensions

MODEL NUMBERS * *	CONSTANT DIMENSIONS	A	B	F	K*	H MAXIMUM ELEVATION PER 360°
18LT9 SP	C-27"	18"	22.5"	9"	2.92"	48"
16LT11 SP	D-30.5"	16"	21.5"	11"	2.81"	48"
14LT13 SP	E-3.5"	14"	20.5"	13"	2.69"	48"
12LT15 SP	G-7"	12"	19.5"	15"	2.58"	48"
28LN9 SP	C-37"	28"	32.5"	9"	3.13"	60"
26LN11 SP	D-40.5"	26"	31.5"	11"	3.04"	60"
24LN13 SP	E-3.5"	24"	30.5"	13"	2.96"	60"
22LN15 SP	G-7"	22"	29.5"	15"	2.87"	60"
20LN17 SP		20"	28.5"	17"	2.78"	60"
32A15 SP	C-47"	32"	39.5"	15"	4.63"	104"
30A17 SP	D-50.5"	30"	38.5"	17"	4.52"	104"
28A19 SP	E-3.5"	28"	37.5"	19"	4.41"	80"
26A21 SP	G-8.5"	26"	36.5"	21"	4.30"	80"
24A23 SP		24"	35.5"	23"	4.20"	80"
22A25 SP		22"	34.5"	25"	4.09"	80"
36B23 SP	C-59"	36"	47.5"	23"	4.49"	104"
34B25 SP	D-62.5"	34"	46.5"	25"	4.41"	104"
32B27 SP	E-3.5"	32"	45.5"	27"	4.32"	104"
30B29 SP	G-8.5"	30"	44.5"	29"	4.23"	80"
28B31 SP		28"	43.5"	31"	4.14"	80"
26B33 SP		26"	42.5"	33"	4.06"	80"
24B35 SP		24"	41.5"	35"	3.97"	80"
22B37 SP		22"	40.5"	37"	3.88"	80"
68C19 SP	C-87"	68"	77.5"	19"	5.00"	200"
66C21 SP	D-90.5"	66"	76.5"	21"	4.94"	200"
64C23 SP	E-3.5"	64"	75.5"	23"	4.88"	200"
62C25 SP	G-8.5"	62"	74.5"	25"	4.81"	184"
60C27 SP		60"	73.5"	27"	4.75"	184"
58C29 SP		58"	72.5"	29"	4.69"	184"
56C31 SP		56"	71.5"	31"	4.63"	184"
54C33 SP		54"	70.5"	33"	4.57"	184"
52C35 SP		52"	69.5"	35"	4.51"	164"
50C37 SP		50"	68.5"	37"	4.45"	164"
48C39 SP		48"	67.5"	39"	4.39"	164"
46HC41 SP	C-87"	46"	66.5"	41"	6.26"	144"
44HC43 SP	D-90.5"	44"	65.5"	43"	6.17"	144"
42HC45 SP	E-3.5"	42"	64.5"	45"	6.08"	144"
40HC47 SP	G-12"	40"	63.5"	47"	5.99"	144"
38HC49 SP		38"	62.5"	49"	5.90"	144"

\* End roll diameter at conveying centerline including belt thickness of .25".  
 Note: Conveying width (F) is equivalent to the "between sideguard" (BSG) width. The exposed belt width is approximately 1" narrower than the nominal conveying width (F).  
 The chain cover and both sideguards extend 3/8" past the true angle at both ends of the conveyor. The inside and outside radius frame lengths match the true angle.

### STANDARD FEATURES

**Conveyor drive system:** Positive-drive precision sidebow chain is attached to the edge of the conveyor belt to both drive and track the belt

**Belt drive chain:** #50 sidebow steel chain with belt attachment links; design load 640 lbs.; ultimate strength 5420 lbs.; optional nickel plated chain for special applications

**Conveyor belt:** 2-ply black SBR-Rough Top; a wide range of optional belt materials available; laced belt seams

**Frame construction:** Welded 12 gauge painted steel. Stainless steel/washdown construction for special applications.

Models with a stainless steel frame may have a different frame height

**End roll sprockets:** Steel beveled-tooth sprockets to match #50 sidebow chain. 17, 27 or 40 tooth sprockets are used, depending upon the conveyor frame height. Models with a stainless steel frame use 21, 24, 30, or 40 tooth sprockets. Stainless steel or hardened tooth sprockets are available as an option.

**End roll shafts:** Turned, ground and polished 1045 or 1144 stress-proof steel

**End roll bearings:** Precision, sealed for life, and fitted in a cast iron housing. Grease fitting for the self-aligning feature. Nickel-plated housings are available as an option.

**End rolls:** Fabricated, all-steel rolls using spun-formed shells and weldable cast steel hubs. No lagging is required. Stainless steel or solid plastic rolls are available as an option.

**Return wheels:** Rubber covered wheels with precision ball bearings are positioned along a steel shaft or on hanger brackets.

**Sideguards:** 14 gauge steel is standard. 12 gauge steel is optional. Sideguards over 12" high have a 1" angled out top flange. The height is measured perpendicular to the top surface of the slider bed. If no sideguards are requested, a 2" sideguard will be provided on the outside radius of the conveyor.

**Paint:** DTM (direct to metal) paint in 5 colors. A wide range of optional colors and paint types are available.