

SPIRAL CURVE[®] **PORTEC** SPIRAL BELT CONVEYORS **Flomaster**[®]

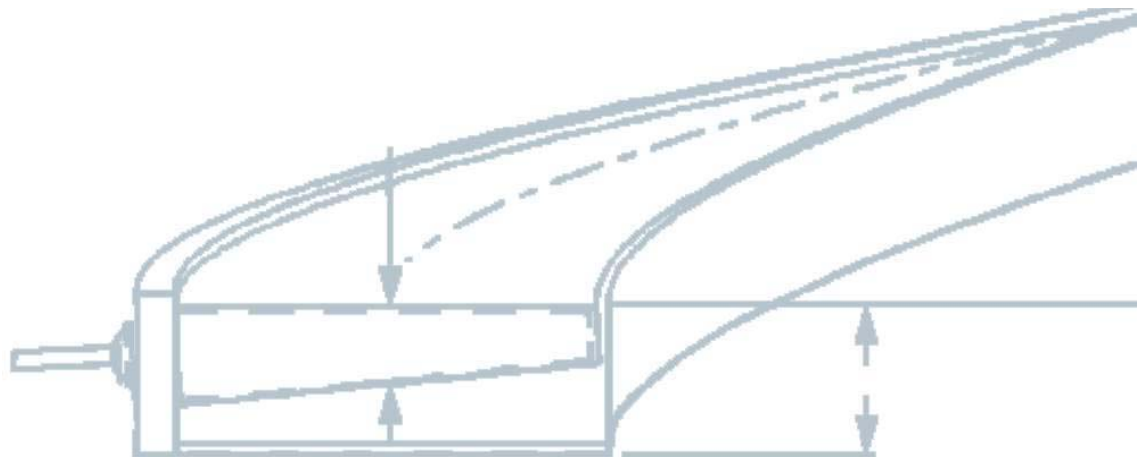
ELEVATION AND DIRECTIONAL UNIT HANDLING

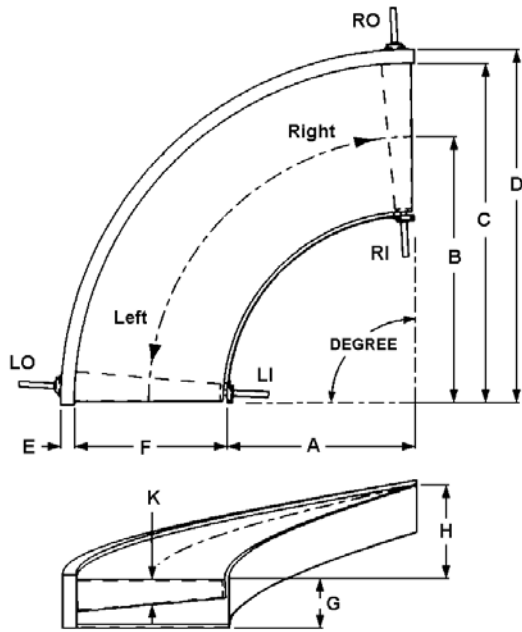
Getting up and around made easy...



Proven Portec Technology

- High speed capacity
- Low noise operation
- Positive drive belt system means no end roll slip
- Rugged steel construction
- Low belt tension for long component life
- Wide conveying widths available
- Simplified maintenance enhancements
- Complies with latest safety standards
- Over 45 years experience
Portec invented the Spiral Curve





Standard Model Dimensions

MODEL NUMBERS	CONSTANT DIMENSIONS	Inside Radius A	Conveying Centerline B	Conveying Width F	End Roll Dia.* K	Gear-In 1 rpm= mm	Maximum Elevation per 90° H
"LT" Spiral Curve Family (127-381 conveying width; standard 25 mm shaft Ø)							
573LM127SP	C=700 D=789 Frame Ht.=178	573	636.5	127	80.3	225	305
522LM178SP		522	611	178	77.5	216	305
319LM381SP		319	509.5	381	66.1	180.1	305
"LN" Spiral Curve Family (178-483 conveying width; standard 25 mm shaft Ø)							
772LM178SP	C=950 D=1039 Frame Height=178	772	861	178	81.7	229.3	381
620LM330SP		620	785	330	75.3	209	381
467LM483SP		467	708.5	483	68.8	188.7	381
"A" Spiral Curve Family (178-635 conveying width; standard 25 mm shaft Ø)							
1022M178SP	C=1200 D=1289 Frame Height=216	1022	1111	178	128.7	376.9	660
717M483SP		717	958.5	483	112.2	325.2	660
565M635SP		565	882.5	635	104	299.4	508
"B" Spiral Curve Family (178-940 conveying width; standard 30 mm shaft Ø)							
1322M178SP	C=1500 D=1589 Frame Height=216	1322	1411	178	131.9	386.8	813
1017M483SP		1017	1258.5	483	118.6	345	813
814M686SP		814	1157	686	109.7	317.2	660
560M940SP		560	1030	940	98.6	282.4	508
"C" Spiral Curve Family (178-1000 conveying width; standard 35 mm shaft Ø)							
2022M178SP	C=2200 D=2289 Frame Height=216	2022	2111	178	136	399.7	1270
1616M584SP		1616	1908	584	123.7	360.9	1270
1362M838SP		1362	1781	838	116.1	337.3	1169
1200M1000SP		1200	1700	1000	111.2	321.9	1042
"HC" Spiral Curve Family (1001-1245 conveying width; standard 35 mm shaft Ø)							
1160HM1680SP	C=2200 D=2289 Frame Height=305	1160	1680	1040	158.8	471.3	915
1110HM1655SP		1110	1655	1090	156.5	464.3	915
955HM1245SP		955	1577.5	1245	149.6	442.6	915

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 Curve based upon the outside conveying radius (C) and a range of conveying widths (F). Any conveying width with 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 Curves, the standard models represent the best value and shortest production lead-time.

* End roll diameter at conveying centerline including belt thickness of 6.35 mm.
Note: Conveying width (F) is equivalent to the "between sideguards" (BSG) width. The exposed belt width is approximately 25 mm narrower than the nominal conveying width (F).
 The chain cover and both sideguards extend 9.5 mm 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 290 kg.; ultimate strength 2459 kg.; 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 2.65 mm 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 rolls: Rubber covered wheels with precision ball bearings are positioned along a steel shaft or on hanger brackets.

Sideguards: 1.89 mm steel is standard. 2.65 mm steel is optional. Sideguards over 300mm high have a 25 mm angled out top flange. The height is measured perpendicular to the top surface of the slider bed. If no sideguards are requested, a 51 mm high 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.