

INCLINE BELT CONVEYOR (Slider Bed)

The BSI belt conveyor is ideal for transporting product from floor-to-floor or as a booster conveyor in gravity flow systems. It includes an adjustable double nose-over to ensure smooth transfer from incline to horizontal that can be easily adjusted up to 30 degrees. The frame design makes it ideal for matching up with other roller bed conveyors.



- 12 belt widths
- Double nose-over
- Readily bolts up to other roller bed conveyors in a system

BED LENGTH	DIMENSIONS @ 25° WITH 4" DIA. TAIL PULLEY *		CONVEYOR WEIGHT (LBS.)													
			OVERALL LENGTH (REF.)	BELT WIDTH								OVERALL LENGTH (REF.)	BELT WIDTH			
				10"	12"	14"	16"	18"	20"	22"	24"		28"	30"	34"	36"
				BETWEEN FRAME WIDTH									BETWEEN FRAME WIDTH			
				13"	15"	17"	19"	21"	23"	25"	27"		31"	33"	37"	39"
				OVERALL FRAME WIDTH									OVERALL FRAME WIDTH			
16"	18"	20"	22"	24"	26"	28"	30"	34"	36"	40"	42"					
4 IN. DIA. TAIL PULLEYS												6 IN. DIA. TAIL PULLEYS				
10'	4' - 7"	12' - 10"	13'-10"	665	719	787	840	894	946	999	14'	1,311	1,456	1,534	1,676	1,752
12'	5' - 5"	14' - 7"	15'-10"	692	749	820	876	932	988	1,043	16'	1,358	1,508	1,588	1,733	1,812
14'	6' - 3"	16' - 5"	17'-10"	720	779	853	911	971	1,029	1,088	18'	1,405	1,559	1,642	1,789	1,871
16'	7' - 1"	18' - 3"	19'-10"	755	816	891	951	1,011	1,071	1,132	20'	1,451	1,609	1,694	1,843	1,926
18'	8' - 0"	20' - 1"	21'-10"	783	846	924	986	1,050	1,112	1,176	22'	1,498	1,661	1,748	1,899	1,985
20'	8' - 10"	21' - 10"	23'-10"	813	878	957	1,021	1,086	1,150	1,215	24'	1,540	1,706	1,795	1,948	2,035
22'	9' - 8"	23' - 8"	25'-10"	841	909	990	1,057	1,125	1,191	1,259	26'	1,586	1,758	1,849	2,005	2,095
24'	10' - 6"	25' - 6"	27'-10"	868	939	1,023	1,093	1,163	1,232	1,304	28'	1,633	1,809	1,903	2,061	2,154
26'	11' - 4"	27' - 4"	29'-10"	900	972	1,058	1,128	1,199	1,270	1,342	30'	1,672	1,852	1,947	2,106	2,200
28'	12' - 2"	29' - 1"	31'-10"	928	1,003	1,091	1,164	1,238	1,311	1,386	32'	1,719	1,903	2,001	2,163	2,259
30'	13' - 0"	30' - 11"	33'-10"	958	1,035	1,124	1,198	1,274	1,348	1,425	34'	1,761	1,949	2,048	2,211	2,309
32'	13' - 11"	32' - 9"	35'-10"	986	1,065	1,157	1,234	1,313	1,390	1,469	36'	1,808	2,000	2,102	2,268	2,369
34'	14' - 9"	34' - 7"	37'-10"	1,014	1,095	1,190	1,270	1,351	1,431	1,514	38'	1,855	2,051	2,156	2,324	2,428
36'	15' - 7"	36' - 4"	39'-10"	1,046	1,128	1,224	1,305	1,387	1,468	1,552	40'	1,894	2,094	2,200	2,369	2,474
38'	16' - 5"	38' - 2"	41'-10"	1,073	1,159	1,257	1,341	1,426	1,510	1,596	42'	1,941	2,145	2,254	2,426	2,533
40'	17' - 3"	40' - 0"	43'-10"	1,104	1,191	1,290	1,375	1,462	1,547	1,635	44'	1,982	2,191	2,301	2,475	2,583

* See incline dimensional chart for full list of vertical and horizontal dimensions at different bed lengths and degrees of incline

STANDARD SPECIFICATIONS

BELT – Black Trackmate 120 Roughtop with PVC cover

BED – 6 1/2 in. deep x 12 ga. powder coated steel channel frame. Standard 4 ft., 6 ft., 8ft. and 10 ft. long bolt-together sections with splice plates. Bolt-in 12 ga. galvanized slider pans.

DOUBLE NOSE-OVER – A 26 in. long horizontal and 12 in. long nose-over section provides a 2 stage transition from incline to horizontal. Provides 30 degrees of adjustment.

POWERED INFEEED – Short section of slider bed belt conveyor chain driven from tail pulley of incline

CENTER DRIVE – Located on incline bed section. Chain guard is on left hand side when standing at infeed looking toward discharge.

- **DRIVE PULLEY** – 8 in. dia. with 1 7/16 in. dia. shaft at bearings. Machined crowned and fully lagged.
- **TAKE-UP PULLEY** – 6 in. dia. with 1 3/16 in. dia. shaft at bearings. Machined crown.
- **TAKE-UP** – Provides 16 in. of belt take-up in center drive.

TAIL PULLEY – 4 in. dia. with 1 in. dia. shaft at bearing or 6 in. dia. with 1 3/16 in. dia. shaft at bearing. Machined crown.

SNUB / NOSE-OVER ROLLERS – Adjustable 2 1/2 in. dia. rollers. Grease packed ball bearings. Includes guard.

RETURN ROLLERS – Adjustable 1.9 in. dia. rollers. Grease packed ball bearings.

BEARINGS – Sealed, pre-lubricated, self-aligning, ball bearings on drive and tail pulleys

BELT SPEED – Constant 65 FPM

SPEED REDUCTION – Sealed worm gear C-face speed reducer with No. 50 roller chain to drive pulley

MOTOR – 1 HP – 230/460 V – 3 phase – 60 Hz totally enclosed fan cooled brake motor, energy efficient

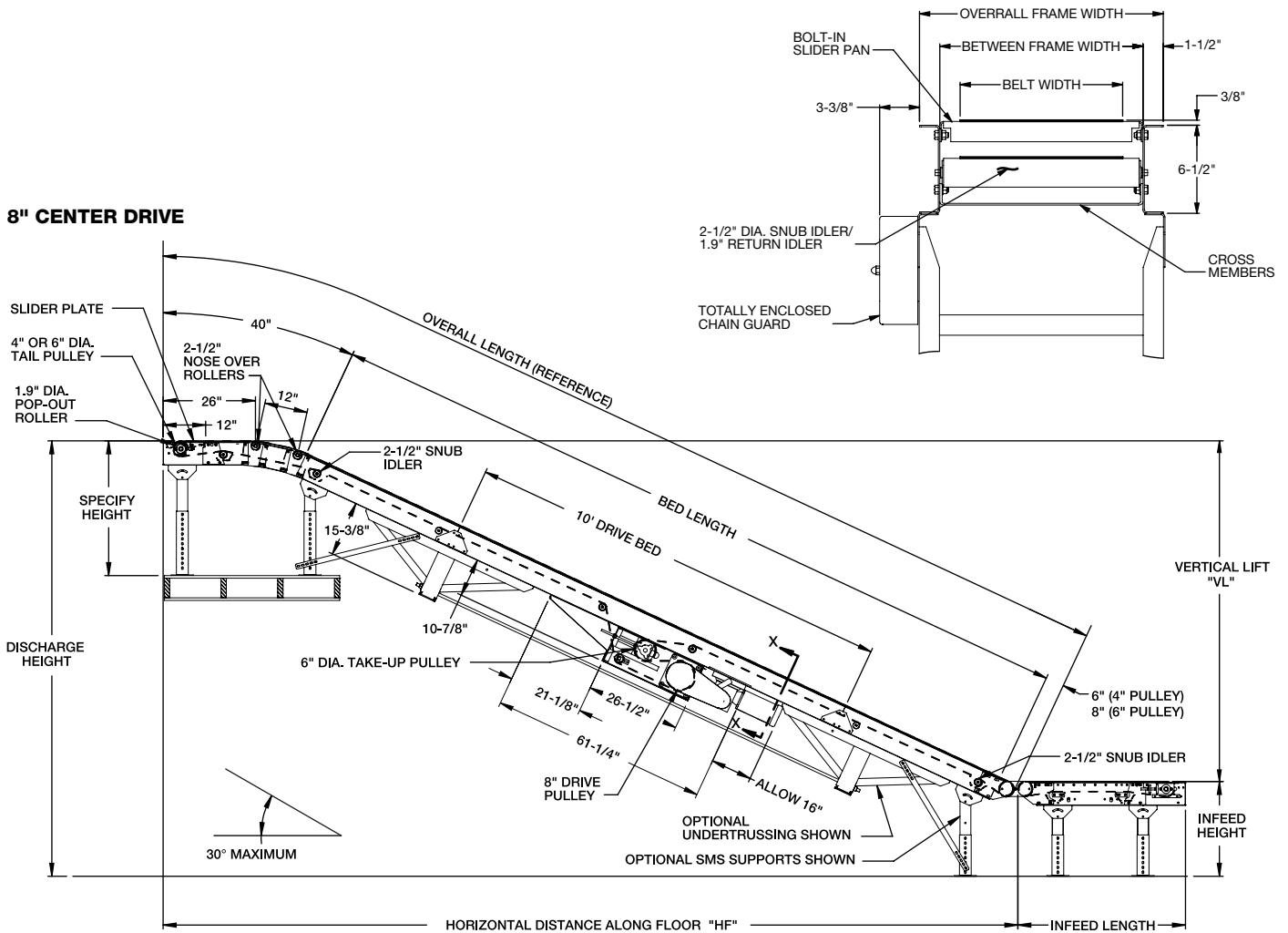
FRAME CAPACITY – Maximum load per linear foot of conveyor is 100 lbs. Not to exceed drive capacity in chart.

FPM	HP	BELT WIDTH	LOAD CAPACITY (LBS.)	
			25° INCLINE W/ ROUGHTOP BELT	
			24'	44'
35	1	10"-16"	819	813
		18"-24"	813	805
		28"-36"	805	791
65	1	10"-16"	434	426
		18"-24"	429	420
		28"-36"	420	406
	2	10"-16"	883	875
		18"-24"	877	868
		28"-36"	868	855
100	1	10"-16"	277	269
		18"-24"	272	263
		28"-36"	263	250
	2	10"-16"	569	561
		18"-24"	563	554
		28"-36"	555	541
135	1	10"-16"	202	194
		18"-24"	196	187
		28"-36"	188	174
	2	10"-16"	418	410
		18"-24"	412	403
		28"-36"	404	390

Note: Capacities shown assume a constant speed and maximum of 6 starts/stops per minute with no more than 30 starts/stops per hour.

SECTION VIEW "X-X"

8" CENTER DRIVE



OPTIONAL EQUIPMENT

FLOOR SUPPORTS – SMS floor supports are available in wide range of adjustments. Specify top of belt elevation. One support is required at every bed joint and at ends of conveyor. Holes in feet are provided for lagging to floor. Knee braces supplied on SMS-3 support and above.

BELT – Brown Polymate Roughtop w/ Nitrile cover, Pure Gum Rubber Roughtop

BELT SPEED – Other constant and variable speeds: 17-135 FPM in any increment. Contact factory for speeds not listed above.

MOTORS – Premium energy efficient, single phase, other characteristics. 2 HP maximum.

OTHER DRIVE VARIATIONS

- Side mount center drive
- End drive with underhung or side mount drive. Requires underside take-up.

PULLEYS – 6 in. dia. tail with 1-3/16 in. dia. shaft at bearing in place of 4 in. when not furnished as standard.

UNDERTRUSSING – Available under incline bed sections in place of floor supports or ceiling hangers. Maximum bed length is 40 ft. Maximum belt width is 24 in. See bed and undertrussing information.

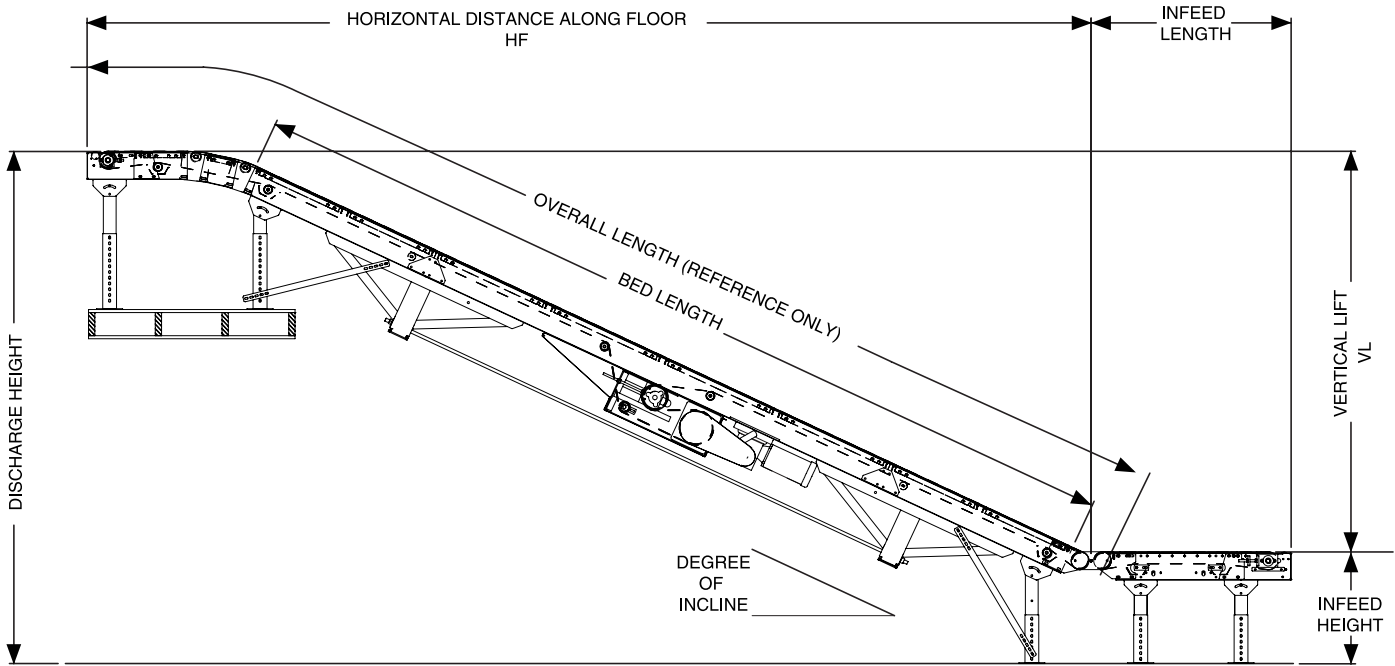
GUIDE RAILS – Adjustable channel guard rails, fixed angle and channel guide rails.

OTHER ACCESSORIES – Ceiling hangers. See accessory section.

ELECTRICAL CONTROLS – One direction manual start switch, reversing drum switch, non-reversing and reversible IEC starters, push button stations, AC variable frequency drive.

INCLINE DIMENSIONAL CHART

(MODELS BSI & BRI)



INCLINE BED LENGTH	DEGREE OF INCLINE																				OVERALL LENGTH (REF.)
	7.5°		10°		12.5°		15°		17.5°		20°		22.5°		25°		27.5		30		
	VL	HF	VL	HF	VL	HF	VL	HF	VL	HF	VL	HF	VL	HF	VL	HF	VL	HF	VL	HF	
10	1'-5"	13'-9"	1'-10"	13'-8"	2'-4"	13'-7"	2'-10"	13'-5"	3'-3"	13'-4"	3'-8"	13'-2"	4'-2"	13'-0"	4'-7"	12'-10"	5'-0"	12'-7"	5'-5"	12'-4"	13'-10"
12	1'-8"	15'-9"	2'-3"	15'-8"	2'-9"	15'-6"	3'-4"	15'-5"	3'-10"	15'-3"	4'-5"	15'-1"	4'-11"	14'-10"	5'-5"	14'-7"	5'-11"	14'-4"	6'-5"	14'-1"	15'-10"
14	1'-11"	17'-8"	2'-7"	17'-7"	3'-2"	17'-6"	3'-10"	17'-4"	4'-5"	17'-2"	5'-1"	16'-11"	5'-8"	16'-8"	6'-3"	16'-5"	6'-10"	16'-2"	7'-5"	15'-10"	17'-10"
16	2'-2"	19'-8"	2'-11"	19'-7"	3'-8"	19'-5"	4'-4"	19'-3"	5'-1"	19'-0"	5'-9"	18'-10"	6'-5"	18'-6"	7'-1"	18'-3"	7'-9"	17'-11"	8'-5"	17'-7"	19'-10"
18	2'-5"	21'-8"	3'-3"	21'-6"	4'-1"	21'-4"	4'-10"	21'-2"	5'-8"	20'-11"	6'-5"	20'-8"	7'-3"	20'-5"	8'-0"	20'-1"	8'-8"	19'-8"	9'-5"	19'-4"	21'-10"
20	2'-8"	23'-8"	3'-7"	23'-6"	4'-6"	23'-4"	5'-5"	23'-1"	6'-3"	22'-10"	7'-1"	22'-7"	8'-0"	22'-3"	8'-10"	21'-10"	9'-8"	21'-6"	10'-5"	21'-0"	23'-10"
22	3'-0"	25'-8"	3'-11"	25'-6"	4'-11"	25'-3"	5'-11"	25'-0"	6'-10"	24'-9"	7'-10"	24'-5"	8'-9"	24'-1"	9'-8"	23'-8"	10'-7"	23'-3"	11'-5"	22'-9"	25'-10"
24	3'-3"	27'-7"	4'-4"	27'-5"	5'-4"	27'-3"	6'-5"	27'-0"	7'-6"	26'-8"	8'-6"	26'-4"	9'-6"	25'-11"	10'-6"	25'-6"	11'-6"	25'-0"	12'-5"	24'-6"	27'-10"
26	3'-6"	29'-7"	4'-8"	29'-5"	5'-10"	29'-2"	6'-11"	28'-11"	8'-1"	28'-7"	9'-2"	28'-2"	10'-3"	27'-9"	11'-4"	27'-4"	12'-5"	26'-9"	13'-5"	26'-3"	29'-10"
28	3'-9"	31'-7"	5'-0"	31'-5"	6'-3"	31'-2"	7'-5"	30'-10"	8'-8"	30'-6"	9'-10"	30'-1"	11'-0"	29'-7"	12'-2"	29'-1"	13'-4"	28'-7"	14'-5"	27'-11"	31'-10"
30	4'-0"	33'-7"	5'-4"	33'-4"	6'-8"	33'-1"	8'-0"	32'-9"	9'-3"	32'-5"	10'-7"	31'-11"	11'-10"	31'-6"	13'-0"	30'-11"	14'-3"	30'-4"	15'-5"	29'-8"	33'-10"
32	4'-3"	35'-7"	5'-8"	35'-4"	7'-1"	35'-1"	8'-6"	34'-8"	9'-10"	34'-4"	11'-3"	33'-10"	12'-7"	33'-4"	13'-11"	32'-9"	15'-2"	32'-1"	16'-5"	31'-5"	35'-10"
34	4'-6"	37'-6"	6'-0"	37'-4"	7'-6"	37'-0"	9'-0"	36'-8"	10'-6"	36'-2"	11'-11"	35'-9"	13'-4"	35'-2"	14'-9"	34'-7"	16'-1"	33'-11"	17'-5"	33'-2"	37'-10"
36	4'-9"	39'-6"	6'-5"	39'-3"	8'-0"	38'-11"	9'-6"	38'-7"	11'-1"	38'-1"	12'-7"	37'-7"	14'-1"	37'-0"	15'-7"	36'-4"	17'-0"	35'-8"	18'-5"	34'-11"	39'-10"
38	5'-1"	41'-6"	6'-9"	41'-3"	8'-5"	40'-11"	10'-1"	40'-6"	11'-8"	40'-0"	13'-3"	39'-6"	14'-10"	38'-10"	16'-5"	38'-2"	17'-11"	37'-5"	19'-5"	36'-7"	41'-10"
40	5'-4"	43'-6"	7'-1"	43'-2"	8'-10"	42'-10"	10'-7"	42'-5"	12'-3"	41'-11"	14'-0"	41'-4"	15'-8"	40'-8"	17'-3"	40'-0"	18'-10"	39'-2"	20'-5"	38'-4"	43'-10"

Note: Dimensions "VL" and "HF" are based on 4" tail pulleys. For 6" tail pulleys, overall length increases by 2 inches and dimensions "VL" and "HF" will change slightly. Contact factory if exact dimensions are required.

BED & UNDERTRUSSING INFORMATION

(MODELS BRI & BSI)

