

transtex belting

conveyor belts



PVC Elevator Belting

- ▶ Resists stretching & shrinking
- ▶ Excellent bolt holding strength
- ▶ Interwoven polyester carcass for added strength and fastener holding
- ▶ Resistant to mildew and moisture
- ▶ Meets OSHA Specifications for surface electrical resistance of 300 megohms or less
- ▶ Meets MSHA Standards for flame resistance
- ▶ PVC 450 ORG (Oil Resistant Grain)
- ▶ PVC 350 also available in ORG
- ▶ We also have the following in approved MSHA specifications
PVC 200 & 250 (white and black)
PVC 300 in black

For more information contact your Account Manager or Territory Sales Manager



MOVEMENT SYSTEMS

Forbo Movement Systems

Transtex® Belting
10125 South Tryon Street
Charlotte, NC 28273

Toll Free: (800) 922-1735
E-Mail: transtex.us@forbo.com
www.forbo-transtex.com

transtex®—lightweight rubber & pvc

DATE _____

COMPANY _____

ADDRESS _____

DATE SUBMITTED BY _____ Title _____

Total Belt Length _____ (ft.) Belt Width _____ (in.) C to C Pulleys _____ (ft.)
Rated Elevator Capacity _____ (BPH) Material Handled _____ Wt. Per Cu. In.¹ _____ (lbs.)

BUCKETS:

Style and Manufacturer _____ Size _____ Projection _____ (in.)

Spacing on Belt _____ (in.) No. of Rows _____ Staggered _____ Number (C to C) Ascending Side _____

Empty Weight _____ (lbs.) 100% Cup Capacity _____ @ _____ % = _____ (cu.in.) Total Weight of Material in Bucket _____ (lbs.)

Head Pulley Diameter _____ (in.) Type Lagging _____ Boot Pulley Diameter _____ (in.)

Boot Pulley Face Width _____ (in.) Type Take Up: Screw _____ Floating _____ Approximate Weight² _____ (lbs.)

Weight per Foot For Type _____ Belt _____ = _____ (lbs.)
(Weight P.I.W. x Belt Width)

PICK UP IN BOOT: (To compensate for digging action)

For UP Loaded Leg – Use **10%** of Total Bucket Load

For DOWN Loaded Leg – Use **20%** of Total Bucket Load

For UP and DOWN Loaded Leg – Use **30%** of Total Bucket Load

SUSPENDED WEIGHT: (Ascending Side)

Empty Buckets: _____ x _____ lbs. – _____ lbs.
(No.) (Wt.)

Load In Buckets: _____ x _____ lbs. – _____ lbs.
(No.) (Wt.)

Belt C to C _____ x _____ lbs. – _____ lbs.
(Ft.) (Wt.)

Pickup in Boot _____ lbs. – _____ lbs.
(% Bucket Load)

Floating Takeup Weight ^{2**} – _____ lbs.

Maximum Tension – _____ lbs.

THEREFORE:

The workload (t) is calculates as follows:

maximum tension
belt width _____ = _____ lbs. per inch of belt width

The proper Belt per the above information is Forbo Transtex® _____

TOTAL BELT LENGTH CALCULATIONS*:

1. Center to Center Pulleys _____

2. Center to Center Pulleys _____

3. ½ Head Pulley Circum.² _____

4. ½ Boot Pulley Circum.² _____

5. Belt Splice³ _____

6. Plus Contingency Factor
(1% of Sub-Total) _____

TOTAL _____

*Round off fractions to the nearest whole number

¹ See Table 1 ² See Table 2 ³ See Table 3



MOVEMENT SYSTEMS

**TABLE #1
BULK MATERIAL WEIGHT**

	Lbs. Cu.In.	Lbs. Cu.Ft.
Alfalfa Meal	.013	22
Alfalfa Pellets	.025	43
Alumina	.038	65
Baking Soda	.032	55
Barley, Whole	.028	48
Bauxite	.052	90
Bean, Castor	.021	37
Borax	.041	70
Buckwheat	.024	42
Calcium Carbonate	.058	100
Cashew Nuts	.021	37
Caustic Soda	.051	88
Cement, Portland	.054	94
Clay, Brick	.069	120
Clover Seed	.028	48
Coal, Bituminous	.032	55
Cocoa Beans	.023	40
Coconut, Shredded	.013	22
Coffee, Roasted Bean	.015	26
Copper Ore	.087	150
Corn, Shelled	.026	45
Cottonseed Cake	.026	45
Cottonseed Meal	.023	40
Cullet, Glass	.069	120
Distiller's Grain, Wet	.035	60
Earth, Wet	.064	110
Flaxseed	.026	45
Flour, Wheat	.023	40
Garbage, Household	.029	50
Gravel	.058	100
Gypsum	.046	80
Hominy, Dry	.021	37
Hops, Dry	.020	35
Iron Ore	.116	200
Limestone, Crushed	.052	90
Magnesium Chloride	.019	23
Malt, Dry	.017	30
Mica, Pulverized	.009	15
Milo	.026	45
Oats	.015	26
Oyster Shells, Whole	.046	80
Peanuts, Shelled	.026	45
Peas, Dried	.029	50
Phosphate Acid Fertilizer	.035	60
Rice, Hulled	.028	49
Rye	.028	48
Safflower, Meal	.029	50
Salt, Dry	.046	80
Sand, Dry	.075	130
Sand, Dry Silica	.058	100
Sludge, Sewage	.029	50
Soda Ash, Heavy	.038	65
Soy Bean Meal	.023	40
Soy Beans, Whole	.029	50
Sugar, Raw	.038	65
Sulfur, Lumpy	.050	85
Taconite, Pellets	.075	130
Vermiculite, Ore	.046	80
Wheat	.028	48
Zinc Ore, Crushed	.093	160

**TABLE #2
PULLEY SPECIFICATIONS**



Diameter (Inches)	Circumference (Feet)	1/2* Circumference (Feet)	Floating** Take-Up Factor (lbs. per inch of Pulley Face Width)
8	2.07	2	5
9	2.35	2	5
10	2.64	2	7
11	2.89	2	7
12	3.14	2	7
13	3.39	2	8
14	3.64	2	8
15	3.92	2	9
16	4.18	3	9
18	4.71	3	9
20	5.21	3	10
21	5.50	3	10
22	5.75	3	12
24	6.28	4	12
28	7.32	4	15
30	7.85	4	18
32	8.35	5	20
36	9.42	5	24
40	10.46	6	29
42	10.99	6	31
48	12.57	7	40
54	14.4	8	47
60	15.71	8	53
66	17.28	9	-
72	18.85	10	-
84	21.99	11	-
96	25.13	13	-

* Rounded off to nearest whole number

** Floating Take-Up Factor Includes Pulley Weight, Structural Assembly and Steel Weights.

TO CALCULATE: Multiply Take-Up Factor Listed for Given Boot Pulley diameter x total inches of Boot Pulley Face width.

**TABLE #3
BELT-BUCKET SPECIFICATIONS***

	BUTT-RIDER	LAP
		
	Minimum Buckets Per Row on Each End of Main Belt	Minimum Buckets Per Row in Splice Area
Pulley Centers		
0 - 99'	3	3
100' - 149'	4	4
150' - 199'	5	5
200' - 249'	6	6
250' & over	7	7

* For Handling Grain or Similar Lightweight Materials

Note: For Pulley Centers above 300' or Special Applications contact Forbo Transtex® Representative or Charlotte Offices.