

Conveyor Belt Selection - Analysis Data Sheet

Material _____ Wt./Cu. Ft. _____ Lbs. Max. Lump Size _____ In. % Fines _____
 Max. Temp _____ F° Avg. Temp _____ F° Oil Condition _____
 Abrasion: Slight Moderate Extreme
 Other Conditions: _____

Total Belt Length _____ Ft. Belt Width _____ In. Capacity _____ Max. TPH _____ Belt Speed _____
 Indicate whether conveyor is: Horizontal Incline Decline
 HORIZONTAL: Give Horizontal C-C _____ Ft.
 INCLINE (or DECLINE): Give Horizontal C-C _____ Ft. or Contour C-C _____ Ft.
 Give Vertical C-C _____ Ft. or Angle of Slope _____ Ft.

Drive: No. of Drive Pulleys _____ Location: Tall Return Run Head
 Arc of Contact _____ ° Wrap: Lagged Bare
 Motor Type _____
 Type of Starting _____

Idlers: Idler Angle _____ ° Spacing: Carrying _____ Ft. _____ In. Return _____ Ft. _____ In.
 Diameter: Carrying _____ In. Return _____ In.
 Type: High Grade Roller Bearing Standard Antifriction Special Type, Describe: _____

Loading Point: Type: _____ Spacing: _____ Ft. _____ In.
 Takeup: Screw Gravity or Automatic Takeup Travel: _____ Ft. _____ In.
 Takeup Location _____ Actual Takeup Wt. _____ Lbs.

Splice: Vulcanized Splice Mechanical Fastener, Type: _____

Pulley Diameters: Drive _____ In. Drive Snub _____ In. Head _____ In. Head Snub _____ In.
 Takeup _____ In. Takeup Bend _____ In. Tail _____ In. Tripper _____ In.

Loading Conditions: From _____ Loading Point _____
 Total Vertical Drop _____ Ft. [Made up of _____ Ft. free fall and _____ Ft. of vertical height on loading chute at _____ ° angle to horizontal]
 Discharge: End Plow Tripper, Lift _____ Ft. Other _____
 Previous Conveyor Belt: Width _____ In. Fabric _____ Plies _____
 Quality _____ Top Cover _____ In. Pulley Cover _____ In.
 Manufacturer _____ Life _____
 Pattern of Belt Failure: Ply Separation Carcass Breaks Cover Worn Off Other _____

Elevator Belt Selection - Suspended Weight Method

This chart, when filled in completely, will indicate the proper elevator belt to use in terms of tension. Other factors such as bucket projections, chemical and/or heat exposure, and service conditions will influence the type of belt to select.

Drive Info: _____ **Elevator Centers** _____ **Length & Width of Belt** _____ **Material/Cu. Ft.** _____
Type & Size of Buckets: **Bucket Capacity** _____ **Bucket Spacing** _____ **No. of Rows** _____

1. **Empty Buckets** _____ × _____ Lbs. = _____ Lbs.
 (No. of Buckets on Ascending Side) (Weight of Each Bucket) (Weight of Buckets)

2. **Load in Buckets** a. _____ ÷ _____ Lbs. = _____ Lbs.
 (Cu. In. Operating Capacity Each Bucket) (Cubic Inches per Cubic Foot) (Cu. Ft. per Bucket)
 b. _____ × _____ Lbs. = _____ Lbs.
 (Cu. Ft. per Bucket) (Weight of Material per Cu. Ft.) (Weight of Material per Bucket)
 b. _____ × _____ Lbs. = _____ Lbs.
 (Weight of Material per Bucket) (No. of Buckets on Ascending Side) (Weight of Material)

3. **Belt Weight** _____ × _____ Lbs. = _____ Lbs.
 (No. of Ft. of Belt on Ascending Side) (Weight of Belt per Linear Ft.) (Weight of Belt)

4. **Tension** _____ [Add Results of Nos. 1, 2c and 3 Above] = _____ Lbs.
 (Tension)

5. **Maximum Tension** _____ × _____ Lbs. = _____ Lbs.
 (Tension) (Dig Factor) (Maximum Tension)

6. _____ ÷ _____ Lbs. = _____ Lbs.
 (Maximum Tension) (Width of Belt) (Max. Tension per In. of Width)

7. Select belt with next highest rated tension figure. Double check minimum bucket projection allowed for selected belt.