

# Design Data Sheet for Conveyors

Complete this Form for a Customized Core Systems™ Pulley Quotation

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Date \_\_\_\_\_

Submitted By \_\_\_\_\_

Customer \_\_\_\_\_

Contact Name \_\_\_\_\_

Plant/Mine/Project \_\_\_\_\_

Contact Phone or Email \_\_\_\_\_

**Application Data:**

Ambient Temp Range (degrees) \_\_\_\_\_

Altitude (ft) \_\_\_\_\_

Operation (hours/day) \_\_\_\_\_

Operation (days/year) \_\_\_\_\_

**Conveyor Data:**

Conveyor Name/Tag \_\_\_\_\_

Material (type & max lump size) \_\_\_\_\_

Conveyor Capacity (TPH) \_\_\_\_\_

Material Density (lbs/ft<sup>3</sup>) \_\_\_\_\_

Conveyor C/C Length (ft) \_\_\_\_\_

Material Repose Angle (degrees) \_\_\_\_\_

Conveyor Lift (ft) or Incline (deg) \_\_\_\_\_  
(if not linear, please sketch curve below)

Trough Idler Angle, Spacing & Roll Diameter \_\_\_\_\_

Return Idler Angle, Spacing & Roll Diameter \_\_\_\_\_

Belt Width (in) \_\_\_\_\_

Number of Belt Scrapers/Cleaners \_\_\_\_\_

Belt Speed (FPM) \_\_\_\_\_

Number of Belt Plows \_\_\_\_\_

Motor Horsepower (if known) \_\_\_\_\_

Length of Skirtboards (ft) \_\_\_\_\_

Type of Soft Start \_\_\_\_\_  
(Electronic; VFD; Fluid Coupling; or none)

Height of Material on Skirts (In) \_\_\_\_\_

Conveyor Belt Details (if known) \_\_\_\_\_

Take-Up Type (manual or automatic) \_\_\_\_\_

Fabric or Steel Cord \_\_\_\_\_

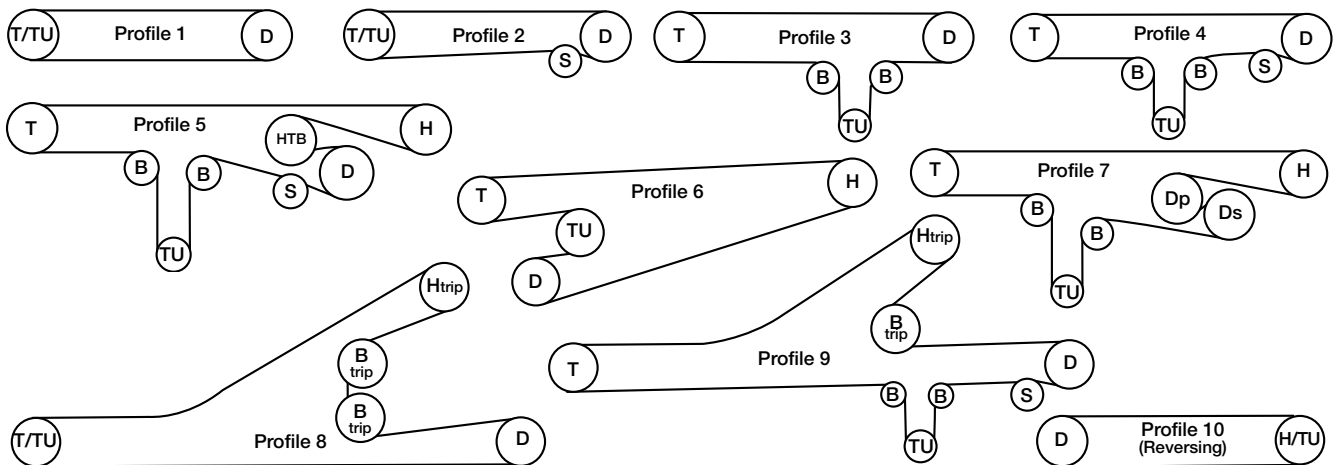
Total Installed Counterweight (lbs) \_\_\_\_\_

Number of Plies & PIW (if known) \_\_\_\_\_

Bearing Centers (in) \_\_\_\_\_

Covers Top x Bottom (in x in) \_\_\_\_\_

**Conveyor Profile (See types 1 – 10 below). Circle one.**



If profile differs from one shown, please sketch here:

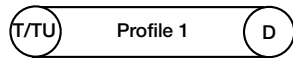
\*Refer to appendix A-40 for further details.

# Conveyor Profiles

## Profile 1

Type = Head/Drive with Manual/Screw Take-Up

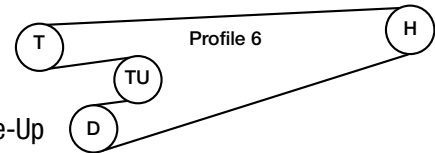
- ▶ Drive location = head/discharge
- ▶ Takeup location = manual at tail
- ▶ Drive snub = no



## Profile 6

Type = Wrap Drive (on return) with Manual/Screw Take-Up

- ▶ Drive location = wrap on return
- ▶ Takeup location = manual on return
- ▶ Drive snub = no



## Profile 2

Type = Head/Drive with Snub and Manual/Screw Take-Up

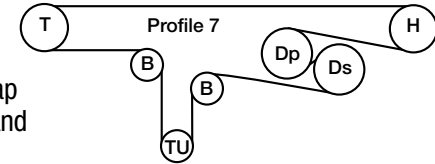
- ▶ Drive location = head/discharge
- ▶ Takeup location = manual at tail
- ▶ Drive snub = yes



## Profile 7

Type = Primary and Secondary Wrap Drives (on return) and Automatic Take-Up (commonly called "S" or "Z" Drives - as used in underground mining conveyors)

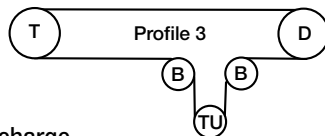
- ▶ Drive location = (2) primary and secondary wrap on return
- ▶ Takeup location = automatic on return
- ▶ Drive snub = no



## Profile 3

Type = Head/Drive with Automatic/Gravity Take-Up

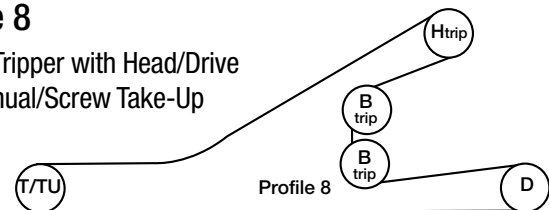
- ▶ Drive location = head/discharge
- ▶ Takeup location = automatic on return
- ▶ Drive snub = no



## Profile 8

Type = Tripper with Head/Drive and Manual/Screw Take-Up

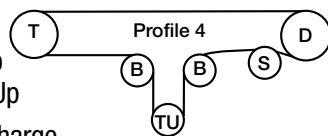
- ▶ Drive location = head/discharge
- ▶ Takeup location = manual on tail
- ▶ Drive snub = no as shown (but could be yes)



## Profile 4

Type = Head/Drive with Snub and Automatic/Gravity Take-Up

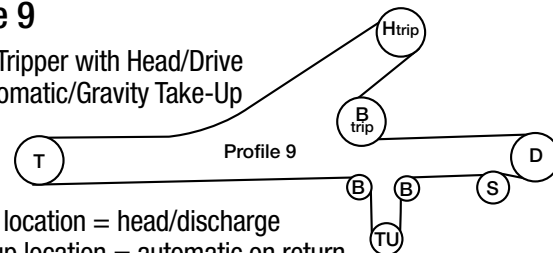
- ▶ Drive location = head/discharge
- ▶ Takeup location = automatic on return
- ▶ Drive snub = yes



## Profile 9

Type = Tripper with Head/Drive and Automatic/Gravity Take-Up

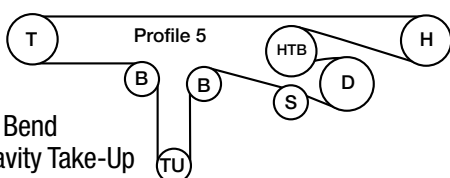
- ▶ Drive location = head/discharge
- ▶ Takeup location = automatic on return
- ▶ Drive snub = yes as shown (but could be no)



## Profile 5

Type = Wrap Drive (on return) with Snub and HT Bend and Automatic/Gravity Take-Up

- ▶ Drive location = wrap on return
- ▶ Takeup location = gravity on return
- ▶ Drive snub = yes



## Profile 10

Type = Reversing/Tail Drive

- ▶ Drive location = tail
- ▶ Takeup location = manual at head
- ▶ Drive snub = no as shown (but could be yes)



\*NOTE: For Horizontal applications only (no lift/incline).\*