Eye-Flex® Conveyor Belt
Conveyor Design Guidelines
Reinforcing Plate Belt Edges — Positively Sprocket Driven

Simple Loop Circuit

Typical Belt Circuits

Inclined Conveyor with Single Reverse Bend Arrangement.

Reverse bend curved guide wear strips at belt edge reinforcing plate positions.* Do not trap reinforcing plate edges between top & bottom curved guides—see page 5.

Optional free to rotate edge wheels to reduce belt tension and edge wear.

This edge support wear strip may not be necessary when horizontal infeed section is short.

Curved support/guide wear strip at belt reinforcing plate edges.
Inclined Conveyor with Single Forward Bend Arrangement.

Curved support wear strip at belt reinforcing plate edges.

Drive Discharge

Reverse bend reinforcing plate edge support curved guide support wear strips.*

* For minimum reverse bend radius contact Wire Belt Technical Sales. Radius can vary depending upon the height of any side guards and the chain specification selected. DO NOT support belt on wire links at reverse bend position.

Take-up Idle Infeed. Free rotating sprockets and/or rollers.
Inclined Conveyor with Reverse & Forward Bend Arrangements. ("Swan Neck — Z" Configuration).

Reverse bend curved guide wear strips at belt edge reinforcing plate positions.*
Do not trap reinforcing plate edges between top & bottom curved guides—see page 5

Take-up Idle Infeed.
Free rotating sprockets and/or rollers.

(Optional free to rotate edge wheels to reduce belt tension and edge wear.)

Curved support wear strip at belt reinforcing plate edges.

Drive Discharge

Reverse bend support guide wear strips at belt reinforcing plate edges*.

* For minimum reverse bend radius contact Wire Belt Technical Sales. Radius can vary depending upon the height of any side guards and the chain specification selected. DO NOT support belt on wire links at reverse bend position.

Idle Infeed Take-up Options (all circuits):

- (Gravity weight adjustable)
- (Screw Adjustable)
- (Pneumatically Adjustable)
- (Spring Adjustable)

Note: Ensure that belt take-up adjustment operates evenly on each side of the conveyor. DO NOT over tension belt.
Drive & Idle Infeed Shaft Setup

Reinforcing Plates—Edges & Intermediate

Drive Shaft

Drive Sprockets with keyways + fixing screw.

Intermediate Belt Sprocket(s) with keyway + fixing screw

Idle Infeed Shaft

Edge sprockets with keyway + fixing screw. Alternatively blanks with keyways.

Intermediate Blank Roller(s) with keyway + fixing screw.

Optional cross flights & side plates.

NOTE: Ensure all shafts are parallel & horizontal with sprocket teeth in true alignment and set symmetrically about the conveyor centre line.
Typical Conveyor Cross Section

Alternative Chevron (Herringbone) pattern wear strips can be used to support mesh on straight running conveyor sections. This arrangement shares the load and wear across the full width of the belt. Straight running wear strips will be required to support roller chain edges in combination with the Chevron wear strips. If used on the carry way the cross section of the Chevron wear strips should have a feathered edge. See below:

Roller Chain belt edges to be supported on straight running wear strip rails.

NOTE: Where possible always use low friction wear strip material.