Ladder-Track™ conveyor belt

Conveyor Design Guidelines
Straight Running - Positively Sprocket Driven

Typical Belt Circuits

Simple Loop Circuit

Take-up Idle Infeed

Drive Discharge

Idle Infeed Take-up Options:

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

Note: Ensure that belt take-up adjustment is the same on each side

Fixed Centres with Return
Way Screw Take-up Circuit

Fixed Centres with Return
Way Gravity Take-up Circuit

Belt Take-up (screw adjustable only)

Belt Take-up (Gravity weight)
**Alternative gravity belt circuit:**

**Fixed Centres with Return Way Gravity Take-up Circuit**

**NOTE:** If you wish to use an alternative belt circuit then please contact Wire Belt Technical Sales to discuss your options.

**Drive, Idle Infeed & Other Circuit Shafts Setup**

- Drive Shaft
  - Drive Sprockets with keyways + fixing screw.
  - Additional blank supports will be required for wide belts

- Idle Infeed Shaft
  - Drive Sprocket with keyway + fixing screw.
  - Additional blank supports will be required for wide belts
  - Drive Sprocket without keyway—free rotating between spaced locking collars.
Conveyor Alignment

The conveyor should be set up to run with all shafts parallel and level to each other.

- Make sure all support beds are level and align with the sprocket tooth root dia.
- Ensure that the conveyor framework runs straight between the idle infeed and the discharge (drive) shaft and that the belt take-up mechanism operates in parallel motion.
- Ensure belt support surfaces are free from obstructions (e.g. protruding framework)
Belt Supports (Typical Arrangement)

Optional wear strip rail for wider belts

Side frame of conveyor

Typical wear strip using round bar & half round clip-on UHMW Polyethylene. Other types are possible. Consult with Wire Belt Technical