

Tensioning Techniques

Flat-Flex is a low tension belt and control of belt length is vital to maintain correct tension.

Tech Tip: Never over-tension your belt. Too much tension will inevitably cause premature belt failure

Use only the lowest tension needed to engage the drive sprockets properly.

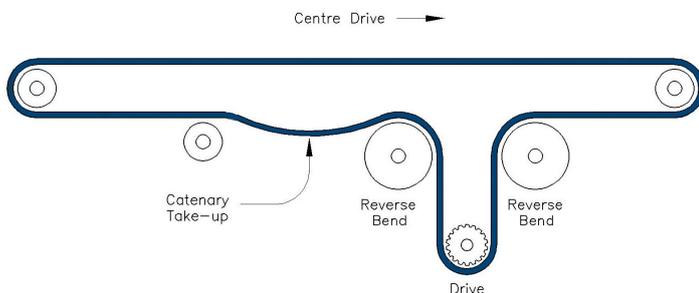
All conveyor circuits should have provision for adjusting belt tension and to facilitate installation of the belt. If excess belt length accumulates loosely on the return path the belt may slip or jump off the drive sprockets.

Take-up of slack can be done in several ways:

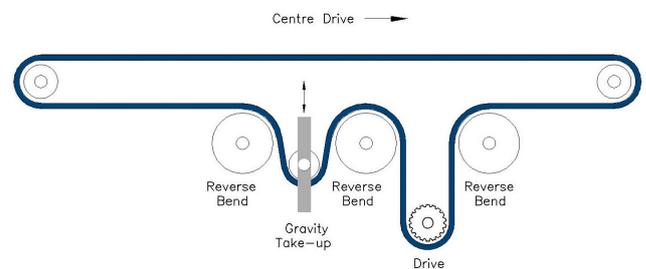
- The simplest method is to allow the belt to sag on the return side of the belt circuit (called a catenary). The weight of the belt itself keeps the needed tension on the drive shaft. This is the preferred approach for tensioning Flat-Flex.

Tech Tip: Rule of thumb: catenary sag should be 50-100mm for 900mm between support rolls.

- For the applications where catenary is not practical, we recommend 'gravity' take up. This is the case especially if the belt will be subjected to considerable variations in temperature. (Temperature affects belt length – if a belt goes through an oven or fryer, its length is extended).
- Manual or 'screw' take ups provide easy tensioning adjustment for short conveyors.
- For long conveyors, with appropriate drive arrangements, 'spring', 'hydraulic' or 'pneumatic' type tension adjustment are sometimes used.



Catenary Take-up



Gravity Take-up