

Part & Unit Handling

Chain Driven Live Roller Conveyor (CDLR) consists of (2) structural channel side frames separated by welded-on structural angle spreaders. The side frames support a bed of rollers with internal bearings that allow the roller tubes to rotate around a fixed axle that extends through holes in each side frame. There is a welded-on drive base that supports a motor and gear reducer. A b-hub sprocket keyed to the output shaft of the reducer delivers rotation to (2) of the rollers through the drive chain. The subsequent rollers are driven by a series of roller to roller chains. A guard is required for safety purposes and consists of a formed steel bottom guard that is welded to the spreaders and a formed steel top guard that is bolted to the side frame and typically painted safety yellow. A separate drive guard is formed to cover the drive chain and sprocket. Structural channel legs can be welded or bolted to the frames.

Chain Conveyors (Drag Chain) are used primarily for pallets or racks. Structural tube steel rails are connected together by welded on structural angle spreaders. Either a UHMW chain track or a steel wear bar provides the structural support for the chain that is typically driven by an underhung center drive. Idler sprockets with pressed in bearings allow the chain to wrap around the end of the conveyor and begin its return path through the inside of the structural tube. Idler sprockets placed intermittently along the return path prevent the chain from riding on the bottom of the tube.

On straight **Belt Driven Live Roller (BDLR)** Conveyors, the bed rollers contact a flat driving belt on the underside which creates a friction drive between the belt and the rollers. Minimum (and zero) pressure accumulations are a major benefit for using BDLR. When a curve is needed, a V-belt is used to power the bed rollers. The pop-out friction driven rollers provide a better industrial condition when working around the conveyors vs. “fixed in place” rollers. Because the top of the rollers can be physically above the side frames, BDLR conveyors are capable of handling products wider than the BF (between frame) of the conveyor. The belt is normally powered using a motor/reducer drive package.