

## LINESHAFT CONVEYOR

### DEFINITION:

*Lineshaft driven live roller conveyors are a unique concept in powered conveyors. The basic design employs rollers which are independently driven by a urethane drive belt from a common drive shaft.*

*The general operation of the conveyor is a driveshaft that spans the full length of the conveyor and transmits power to the rollers via a drive spool and belt. When back pressure is applied to the conveyed product, the spools driving the rollers under the product will slip on the driveshaft allowing the product to accumulate with a minimum amount of back pressure.*

### ADVANTAGES:

- Capable of powering over 100 feet of straight sections, curves and many other accessories with one motor, therefore reducing the high costs of power consumption, installation and maintenance.
- Ideal for transportation, minimum back pressure and accumulation, zero pressure accumulation and sortation of cases or totes in medium to light duty applications.
- Line pressure can easily be reduced in the field by removing or reversing the urethane drive belts at specific intervals, or by installing zones of roller brakes or blade stops.
- The modular design of lineshaft driven live roller conveyor allows for quick, lowcost changeovers enabling customers to modify their systems to meet future needs.
- Lineshaft driven conveyor is safe and clean. Moving parts are guarded and clearly labeled, and bearings are greased for life. Slippage of the drive spools enables personnel to stall rollers out by simply applying pressure to the roller.
- Lineshaft driven conveyor is quiet. Fewer motors decrease the sound of the drive chain, and belt tension on the rollers keeps the roller axles from rattling in the axle holes.
- With 1.9 diameter or 1.4 diameter rollers on varying centers, Lineshaft driven live roller conveyor can accept a wide variety of product sizes.

### LIMITATIONS:

- Lineshaft driven conveyor should not be used at excessively slow speeds. Rollers will easily stall out at slow speeds, especially with heavier products. Similarly, consult product development for speeds greater than 120 feet per minute.
- Oily or wet conditions will impair the frictional drive characteristics of the conveyor.
- Lineshaft driven conveyor should not be used for inclines. Maximum allowable incline is 1°, or 2" per 10 foot section.
- Plow arms should not be used for diverting product on lineshaft conveyor. Products will tend to jam and accumulate.
- Products need a flat bottom surface to transport effectively on the conveyor rollers.
- 1.9 diameter rollers have a capacity of 15 pounds per roller, and 1.4 diameter rollers have a capacity of 10 pounds per roller. Maximum product weight should be no more than 75 to 80 pounds.