

APPLICATION BULLETIN

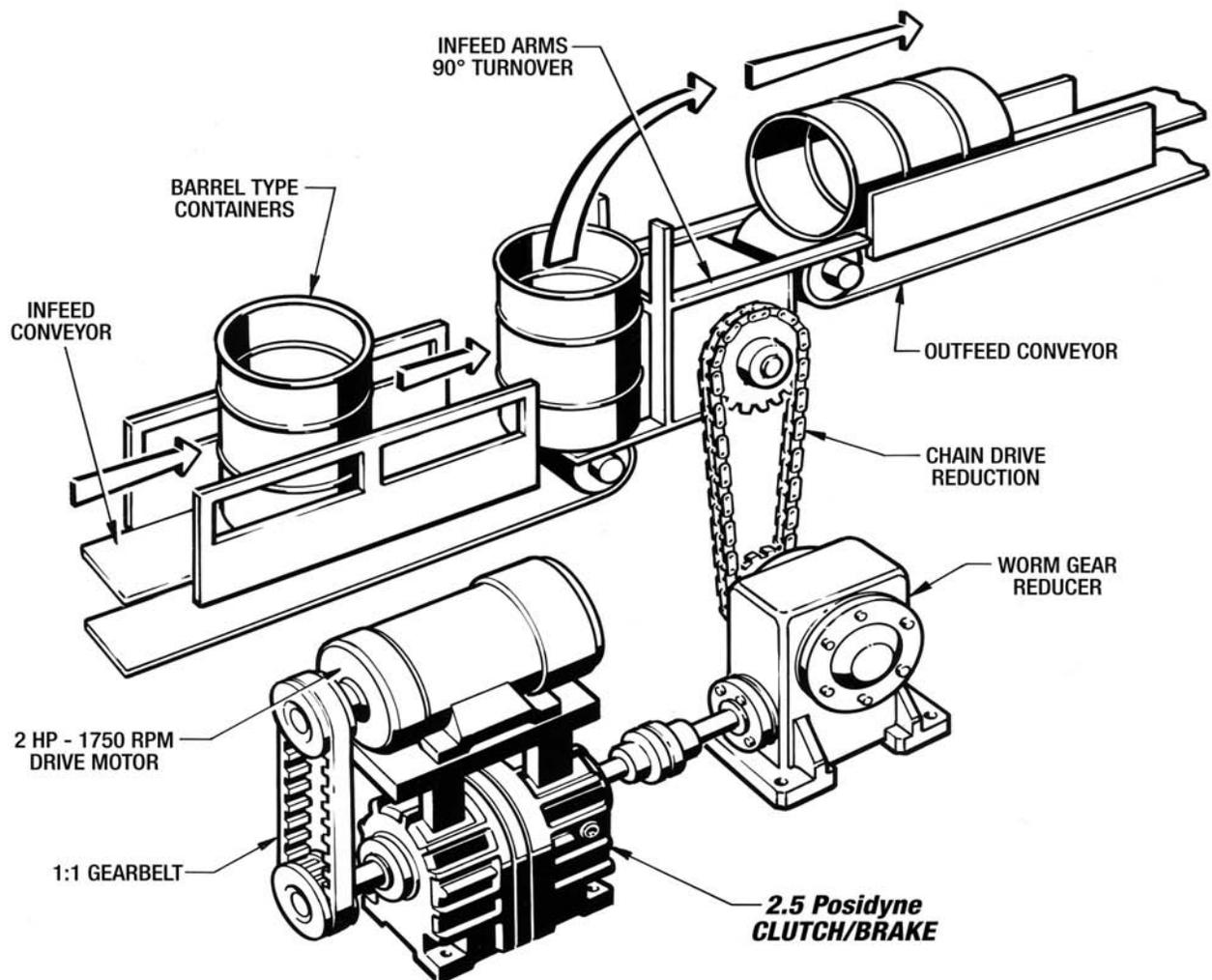


APPLICATION: Barrel 90° Turnover

INDUSTRY: Packaging (Container Manufacturing)

PRODUCT: Piggyback 2.5 Posidyne Clutch/Brake

BARREL 90° TURNOVER



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DRIVE REQUIREMENT:

The drive is to index the Turnover Wheel or device on a cycle on demand basis. Normally these will be in 90° increments. The position of the wheel needs to be within a reasonable limit so as to have the in-feed arms below the in-feed conveyor and not catch the container moving into the wheel.

APPROACH:

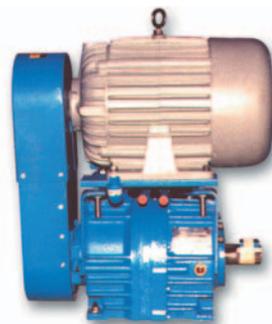
The motor will run on a continuous basis, which will drive our Clutch/Brake. The Clutch/Brake is coupled to a gear reducer with its output chain driving the Turnover Wheel Shaft. The chain and reducer would be selected in such a manner as to give the required response times. A soft-start and soft precision stop would be realized by adjusting the actuation pressures of the **Posidyne**. The Turnover is bi-directional and can operate in either direction on a cycle on demand basis.

SEQUENCE:

1. The index wheel is held in position with the **Posidyne** brake engaged. The infeed conveyor moves a container into position in the wheel satisfying a limit or sensor.
2. The **Posidyne** Brake is released and its clutch is engaged driving the reducer and chain drive causing rotation of the wheel in an appropriate direction. As the arms on the wheel approach the index position a limit or sensor is satisfied.
3. The clutch is then released and the brake is engaged stopping the index wheel in the required position. This position is such that, the container is then carried away by an out-feed conveyor. When the container has cleared the index wheel, the limit or sensor is satisfied indicating the cycle is complete. The logic is such that the container must be clear before the in-feed logic can signal the drive to rotate the index wheel.

FEATURES:

- Soft-start and precision stops are obtainable.
- The **Posidyne** is capable of handling high inertia loads.
- High cycle rates are easily handled by the **Posidyne** with its superior thermal dissipation capabilities.
- Rotation in either direction can be obtained by reversing the drive motor leads.



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