

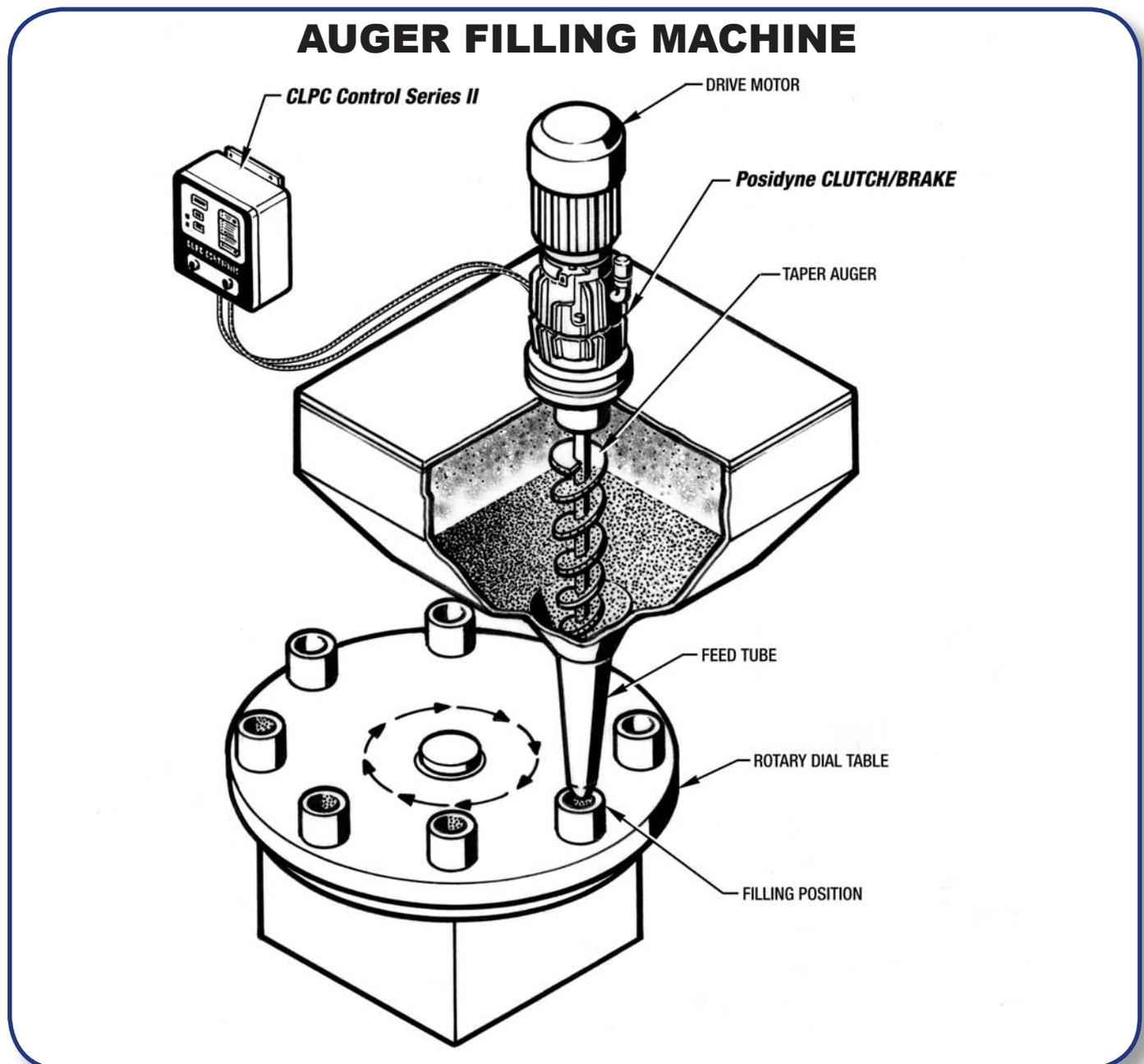
APPLICATION BULLETIN



APPLICATION: Auger Filling Machine

INDUSTRY: Packaging-Free Flowing Products such as Sugar, Coffee, Jello, Pharmaceuticals, etc.

PRODUCT: Oil Shear *Posidyne* Clutch/Brake with CLPC II Control



AUGER FILLER

WHERE THEY ARE USED: Auger fillers are used to dispense powder or granular materials in measured amounts into containers. The container could be paper or foil pouches, bottles, cans or jars. Typical applications would be food products such as sugar or coffee, pharmaceuticals, or any other type of material, which is free flowing and can be augered from a hopper. Major auger filler manufacturers are All-Fill, Mateer Burt, AMS, Per-Fill and Bartelt.

HOW THEY WORK: The auger filler consists of a hopper of material with an auger located in it. At the lower end of the auger the hopper becomes a tight fitting tube so that all material has to be dispensed by turning the auger. To dispense a measured amount of material the auger is turned a pre-determined number of revolutions. This can be controlled by weight, time or number of turns of the auger.

The auger is driven by either a motor Clutch/Brake system or servo motor. The Clutch/Brake system can be a Warner, Horton, or Carlyle Johnson. If counting is used a pulse gear with a sensor is needed in the system as well as a digital counter.

The Clutch/Brake is generally mounted vertically over the auger. It can then be driven by a C-faced motor or belt drive over to a motor. The speed is controlled by changing belt ratio on a 3-step pulley or VFD

PROBLEMS SOLVED: The **Posidyne** Clutch/Brake with **CLPC II Control** solves many problems associated with dry friction clutches. The **Oil Shear** system provides very consistent starting and stopping which is important to a clean start and stop, improving accuracy. Newer high-speed machines cycle at rates to 400 CPM, which is far beyond both the capability of dry friction units and the service life.

When counting is used to determine the amount of product dropped start and stop points are critical. As the dry clutch/brake warms up the stopping distance changes, causing more or less product to be dispensed. The **Posidyne** Clutch/Brake with the **CLPC Series II** includes an encoder, and adjusts for any change in stopping position eliminating these errors.

The long service life of the **Oil Shear Posidyne** Clutch/Brake allows for continuous production at the very high cycle rates needed today with minimal downtime.

IMPORTANT FEATURES:

- **Oil Shear** technology gives the **Posidyne** Clutch/Brake extremely long life, as well as consistent starting and stopping.
- The **CLPC Series II** Closed Loop Positioning Control provides very accurate control to give an exact amount of rotation. It is also very easy to change count just through the push of a button. No programming is required.
- The manifold mounted valve provides extremely quick response for improved accuracy.
- The low inertia components of the multiple disk stack and output shaft allow quick response and very high cycle rates.



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