

APPLICATION BULLETIN

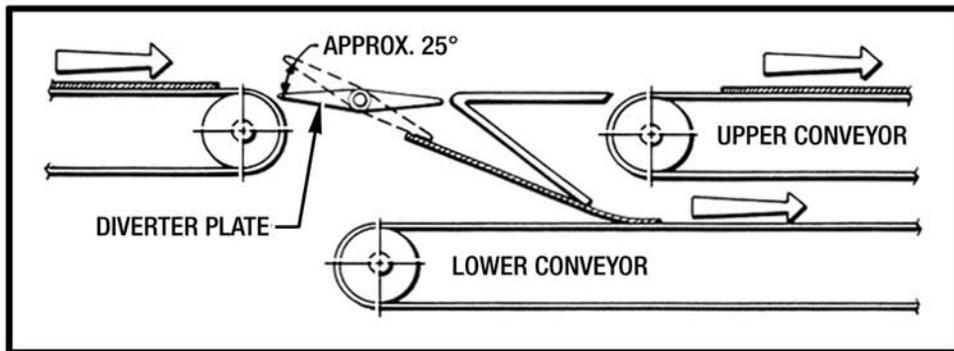
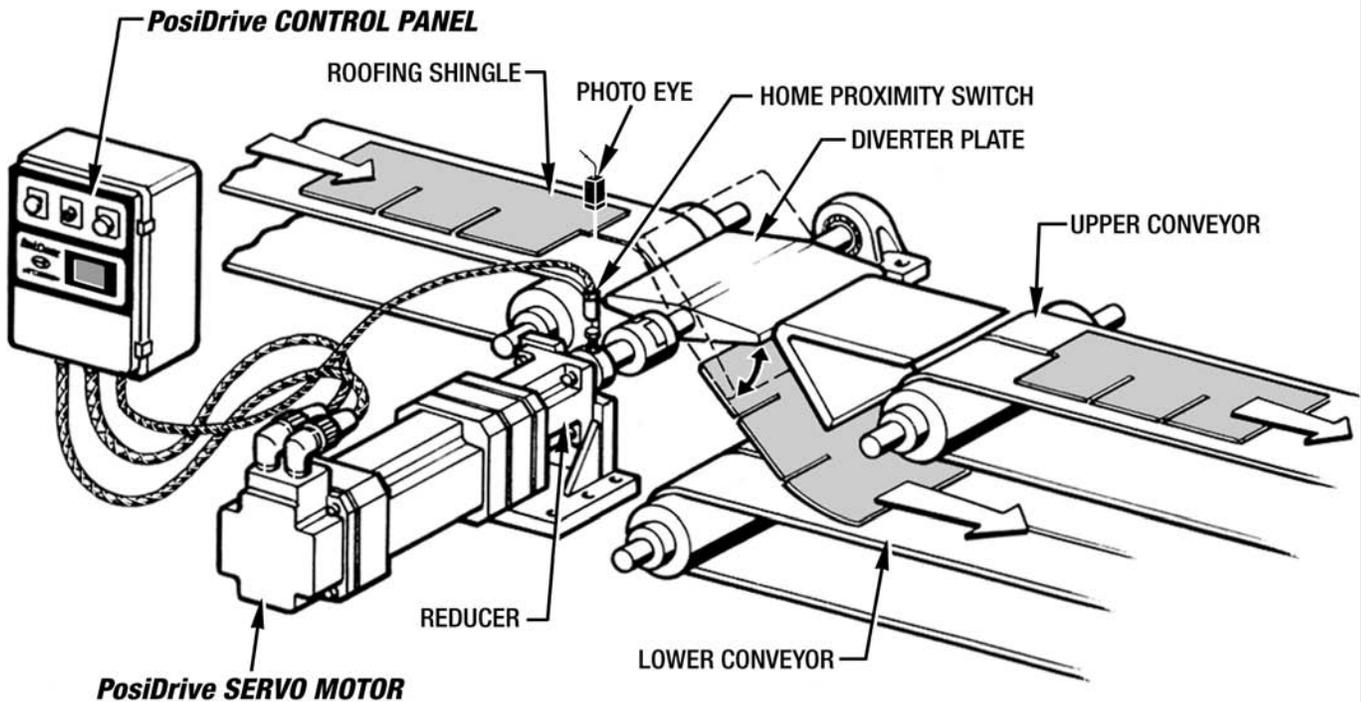


APPLICATION: Shingle Diverter Drive

INDUSTRY: Asphalt Roofing Shingle Plants

PRODUCT: PosiDrive Servo System

SHINGLE DIVERTER DRIVE



SHINGLE DIVERTER DRIVE

WHERE THEY ARE USED:

The Shingle Diverter is used in the production of architectural (laminated) roofing shingles. The catching/flipping/stacking cannot keep up with the machine production so the finished shingles are split between two catching/flipping/stacking systems for maximum machine output.

HOW THEY WORK:

A photo eye detects the trailing edge of the shingle entering the diverter and signals the **PosiDrive Servo System** to move the diverter plate to the other position. This move needs to take place in approximately 50 milliseconds (.05 sec.) so that it is ready for the next shingle.

PROBLEMS SOLVED:

The **PosiDrive Servo System** provides more consistent performance to minimize shingle jams and maximize machine output.

There are very few mechanical components so there is little maintenance required.

IMPORTANT FEATURES:

- **PosiDrive Servo Motor** with low inertia and high torque provides maximum performance for this demanding application.
- **PosiDrive Servo Control** is prepackaged and pre-programmed for the customer. The control panel may have two or more **PosiDrive Servo Amplifiers** for multiple diverters, catchers, flippers, or stackers for a customized solution to the plant. Final system startup variables are input through the **TSI (Touch Screen Interface)**. There is no complex programming language to learn.
- The **TSI** can be mounted in its own small enclosure near the diverter with the main amplifier control panel being remote on multi-axis systems. This saves space in the critical area near the diverter while providing operators the flexibility of having the **TSI** nearby for system operation and monitoring. The **TSI** can communicate with multiple (8) **PosiDrive Servo Drives** on multi-axis systems.



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