

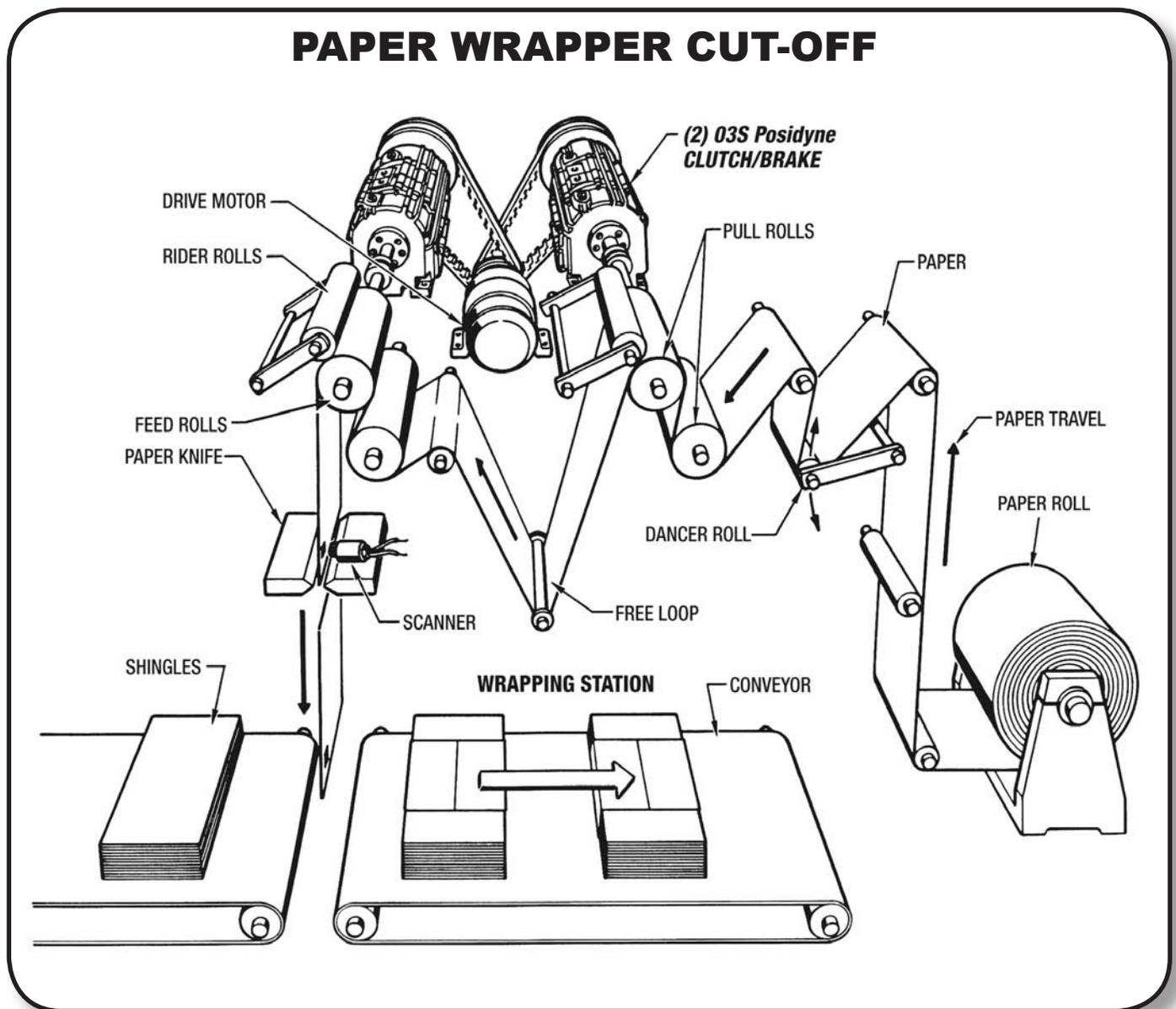
APPLICATION BULLETIN



APPLICATION: Paper Wrapper Cut-Off

INDUSTRY: Asphalt Roofing Shingle Plants

PRODUCT: Oil Shear *Posidyne* Clutch/Brake



PAPER WRAPPER CUT-OFF

WHERE THEY ARE USED: The Paper Wrapper Cut-Off is used in shingle and roofing products plants to cut paper from a roll to a length used to wrap shingles into bundles or squares.

HOW THEY WORK: Many are vertical cutters with the paper unwinding from the roll, taken overhead around a pull roll, into a slack loop, around a feed roll, and down through guides to the cut-off knife. The pull roll and feed roll are each driven by a Clutch/Brake. A scanner, reading a guide mark on the paper, determines the length to feed. On a signal from the wrapper, the clutch/brakes index the paper. The pull roll pulls paper from the main roll, and the feed roll feeds paper to the knife.

Since the main paper roll inertia is high, the **Posidyne** Clutch/Brake driving the pull roll must have adjustable clutch torque so that the paper can be pulled off smoothly without tearing. The clutch/brake driving the feed roll must stop accurately and consistently to achieve correct paper length.

PROBLEMS SOLVED: The **Posidyne** Oil Shear Clutch/Brakes offer many advantages over dry friction clutch/brakes that are electromagnetic or air actuated. Low inertia, multiple disc design reduces power consumption and unit size required. Cushioned engagements and adjustable acceleration and deceleration rates reduce paper tears and provide smoother operation. Consistent, accurate stops improve paper length consistency, reducing scrap resulting from paper that is cut too short, and lost material resulting from paper that is cut too long.

IMPORTANT FEATURES:

- **Oil Shear** technology and innovative friction materials provide consistently accurate cut length.
- Excellent static to dynamic torque relationship for smooth acceleration and deceleration.
- Adjustable acceleration and deceleration rates.
- Totally enclosed, oil cooled unit provides improved service life and low maintenance.
- Compact, low inertia design for reduced power consumption and high torque in a small unit size.



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