

APPLICATION BULLETIN

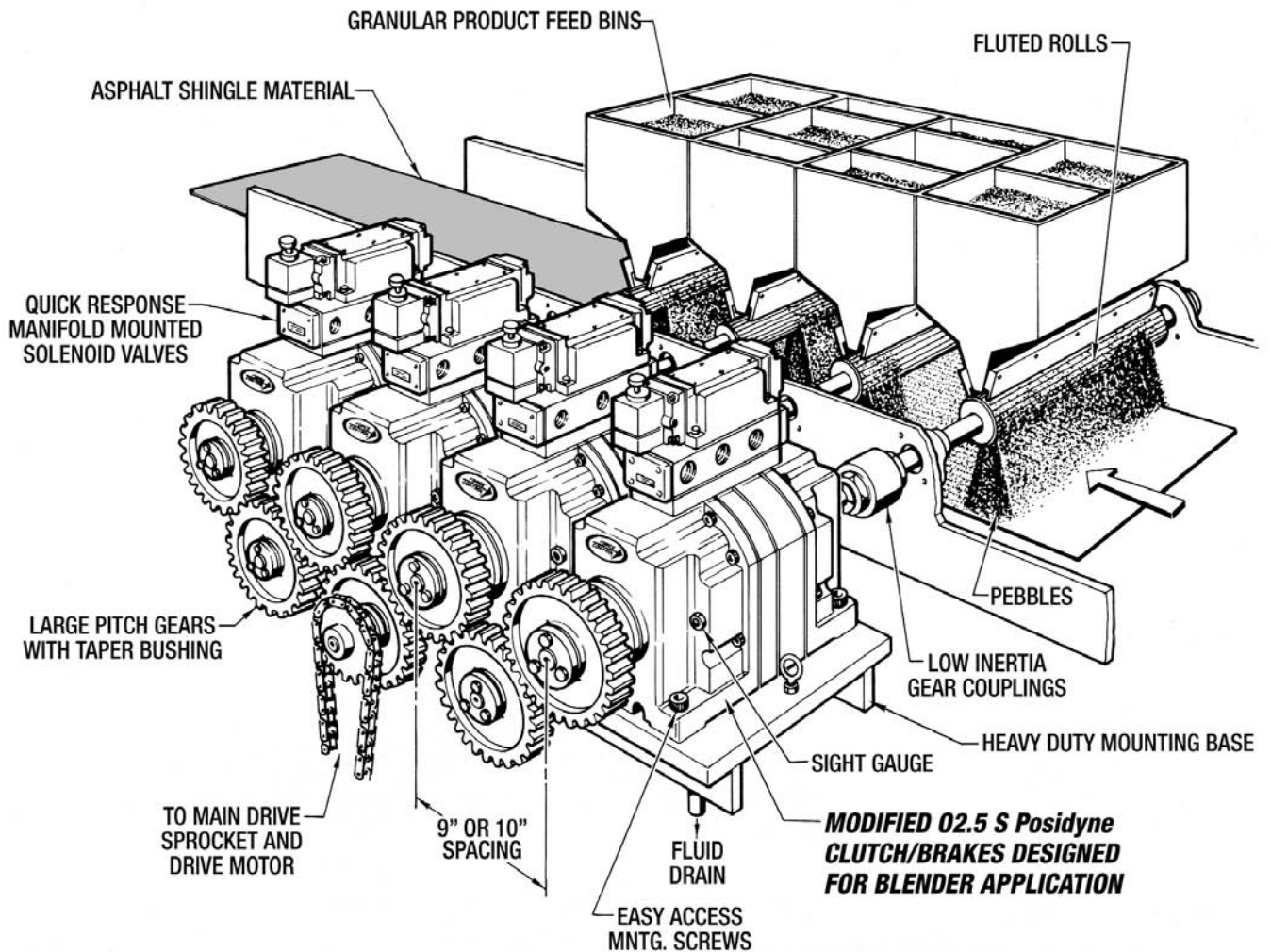


APPLICATION: Shingle Blender Drive Assembly

INDUSTRY: Asphalt Roofing Shingle Plants

PRODUCT: Oil Shear 02.5S *Posidyne* Clutch/Brake

SHINGLE BLENDER DRIVE ASSEMBLY



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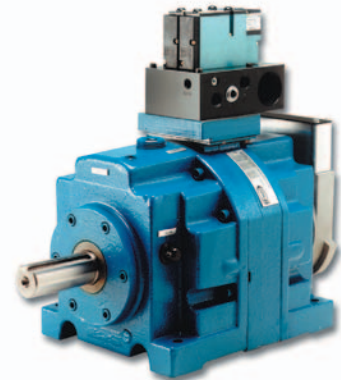
WHERE THEY ARE USED: The Blender Drive Assembly, used in asphalt shingle mills, drives a set of fluted rolls which distribute granules on the hot asphalt coated material. The granules are distributed in such a way as to achieve a specific pattern on the shingle.

HOW THEY WORK: The granular material, which determines the type and color of roofing shingles, is placed in bins located above each fluted roll. When rotated, the fluted roll draws a measured amount of granular material out of the bin and throws it onto the asphalt coated material, which is continuously moving below. The amount of time that the fluted rolls are rotated determines the length of the pattern on the shingle material. The **Posidyne** Clutch/Brakes, which drive the fluted rolls, cycle individually based on a pre-determined program to distribute the desired pattern on the shingle material. The blender drive assembly rotates at a speed mechanically synchronized with the line speed. The speed at the **Posidyne** is relatively slow, typically 50 to 200 R.P.M., but cycle rates can reach 100 C.P.M.

PROBLEMS SOLVED: Improved consistency of acceleration and deceleration results in improved shading (pattern consistency), and product quality. Inconsistency can result in scrapped product and lost production time. Quick response is critical to definition and consistency of the pattern, particularly with varying line speeds. The totally enclosed **Posidyne** Clutch/Brake is protected from the dusty, dirty environment. Oil shear design provides lubrication and cooling to the **Posidyne** Clutch/Brake's working surfaces, to reduce maintenance and downtime caused by high cycle rates.

IMPORTANT FEATURES:

- Low inertia multiple disc design, low air volume required, and manifold mounted valve all attribute to quick acceleration and deceleration response.
- **Oil Shear** technology and innovative friction materials provide consistent, accurate starts and stops.
- Totally enclosed, sealed design eliminates problems associated with dust and dirt or other contaminants.
- Complete assembly on heavy duty fabricated base including input gears, low inertia output coupling and compression type shaft connections. Assembly is ready to install.
- Designed to fit 9 inch or 10 inch roll center blenders. Blenders with larger or smaller roll centers can be easily accommodated.



FORCE CONTROL INDUSTRIES, INC.

3660 Dixie Highway Fairfield, Ohio 45014

Phone: 513-868-0900 Fax: 513-868-2105

E-Mail: info@forcecontrol.com Web: www.forcecontrol.com