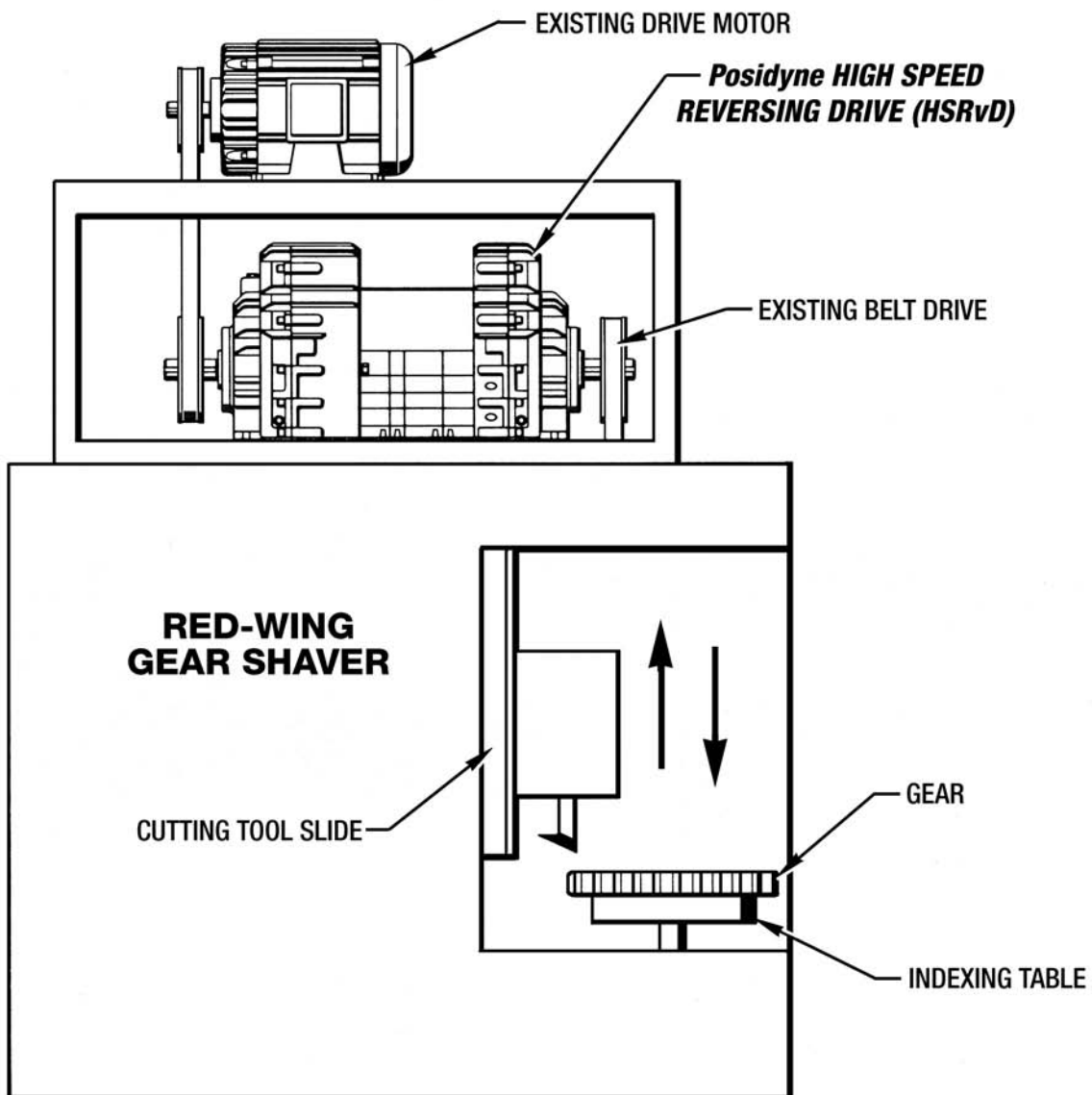# APPLICATION BULLETIN

APPLICATION: Red-Wing Gear Shaver Retrofit

INDUSTRY: Gear Manufacturing

PRODUCT: *Posidyne* High Speed Reversing Drive (HSRvD)

RED-WING GEAR SHAVER RETROFIT

- EXISTING DRIVE MOTOR
- *Posidyne* **HIGH SPEED REVERSING DRIVE (HSRvD)**
- EXISTING BELT DRIVE
- RED-WING GEAR SHAVER
- CUTTING TOOL SLIDE
- GEAR
- INDEXING TABLE

RED-WING GEAR SHAVER RETROFIT

WHERE THEY ARE USED: Automotive, Farm Equipment, and Power Transmission Equipment Manufactures who machine gearing.

HOW THEY WORK: The **Red-Ring Gear Shaver** is driven by a standard AC brake motor. The cutting tools reciprocate up and down on a vertical slide. After each tooth is cut the gear is indexed the cutting tool is positioned up and out of the way.

PROBLEMS SOLVED: The constant starting and stopping of the AC brake motor often exceeds the start/stop capabilities of the motor and the motors fail. Motor starters also fail under the severe duty cycle. As the dry friction brake wears and slips, the cutting tools lose position. This wear requires constant maintenance. If the machine is not properly maintained and the gear is indexed with the cutting tools out of position an expensive and time-consuming wreck is caused.

The Force Control **High Speed Reversing Drive HSRvD** eliminates these problems by allowing the AC motor to run continuously. This allows the motor to run cooler and reduces the power consumption. The motor starters also have a greatly reduced cycle rate, which increases their life. The ***Oil Shear*** technology used in the ***HSRvD*** reduces wear so the tooling can be positioned more accurately and with better repeatability and less maintenance avoiding costly "wrecks".

IMPORTANT FEATURES:

- Motor runs continuously reducing electrical consumption and downtime due to motor failure.

- Lower duty cycle of motor prolongs starter life

- ***Oil Shear*** design provides long service life and eliminates frequent adjustment of dry friction brakes.

- Consistent repeatability and accuracy avoids costly wrecks.