APPLICATION BULLETIN

APPLICATION: Heat Treating Oven Door Drive

INDUSTRY: Appliance Manufacturing

PRODUCT: PMD-2000
HEAT TREATING OVEN DOOR DRIVE

WHERE THEY ARE USED: Manufacturing plants. Heat treating facilities in appliance manufacturing.

HOW THEY WORK: Baskets for dishwashers are indexed through a three station heat treating process involving a pre-heating oven, a powder bin where a coating in powder form is applied to the warm baskets, and a heat-treat oven where the powder is baked on the baskets to form a plastic-type coating. When the baskets are indexed into the ovens, all four oven doors are raised to closed position by a motor turning a chain drive through a clutch. A brake holds the doors closed. After both heating processes are complete, the doors are lowered to the open position. The baskets are then indexed to the next station, and the cycle is repeated.

PROBLEMS SOLVED: Because of the Posidyne’s high thermal capacity, it can withstand the high temperatures on top of the ovens. The powder coating does not contaminate the totally enclosed housing. Multiple-disc oil shear design provides long service life with minimum downtime. Advanced friction material provides smooth reliable engagements and excellent repeatability.

IMPORTANT FEATURES:

• Adjustable air pressure to clutch and brake for independent torque control.

• Oil Shear design for long service life with minimum downtime and maintenance.

• Advanced friction material for smooth, controlled engagements and less wear and tear on related equipment.

• High thermal capacity endures the high temperatures on top of the ovens.

• Totally enclosed design eliminates contamination from the powder coating.

• Keyless connection between Clutch/Brake and reducer reduces shaft and coupling damage.