#### Z-Series Coro-Vane® Truck Pumps Are Meeting The Demands

# A new generation of truck pumps...

The Z-Series Coro-Vane<sup>®</sup> truck pumps are a new generation of truck pumps specifically designed to comply with the pumping requirements demanded by the LPG industry. Bulk delivery of LPG requires the use of heavy duty, reliable equipment and is an important part of every LPG marketer. The equipment used in modern bulk trucks must be designed and constructed to perform in a broad spectrum of operating conditions.

## Meeting the demands of today's pumping conditions...

The operating conditions of a truck pump are very demanding, and only a pump designed to perform under these extreme conditions can successfully do the job day in and day out. The Z-Series truck pumps are specifically designed to perform in such severe operating conditions as high differential pressure, pump overspeeding, poor suction conditions and heavy thrust loads associated with a power take-off (PTO) drive system.

Many of the environmental and safety regulations require the bulk truck's unloading point to be located at a considerable distance away from the field tanks, and in many instances, the field tanks are located at higher elevations than the bulk truck unloading point. This type of installation creates additional head requirements that the truck pump must overcome. In addition, many fill valves in tanks have restricted openings. The Z-Series truck pumps were designed to operate under these restrictive and high head piping arrangements. Furthermore, the internal relief valve is designed to fully open only at the factory preset pressure of 150 psi to maintain optimum capacity at high differential pressures.

#### Designed for your application...

The Z2000 is a foot-mounted, sliding vane, two inch NPT pump designed for bulk delivery trucks requiring 41 to 85 gpm (155 to 323 L/min) flow capacity. The pump is securely mounted on a steel frame fixed to the truck's chassis and is piped from the internal valve on the truck's barrel. The Z2000 pump is typically installed close to the power take-off box between the front of the truck's barrel and the cab of the truck to limit the length of the power take-off drive line. The line strainer is normally installed in the suction piping ten pipe diameters from the pump inlet. Due to the limited space, it is not uncommon to find pressure drops at the pump suction port in excess of 5 psi which will make any pump cavitate—contributing to premature damage to

the pump. The unique and innovative cam design of the Z-Series truck pumps replenishes any loss of liquid at the suction port, diverting the swept volume inside the pump through engineered channels making the Z-Series virtually cavitation-proof for typical operations.

The Z3200 is a three inch flanged truck pump that is typically used on delivery trucks requiring capacities of 63 to 121 gpm (238 to 460 L/min) while the Z4200 is a four inch flanged truck pump used on transports requiring capacities of 200 to 400 gpm (756 to 1,511 L/min). They are designed with 300# ANSI flanges for maximum strength and are mounted to the belly of the truck's barrel. The belly-mount flange design minimizes cavitation and increases pumping efficiency.

### Maintenance procedures made simple...

The Z-Series truck pumps not only maintain Corken's tradition of excellence but also its commitment to simplicity when the equipment requires service. The Z-Series truck pumps are designed with a preset, no-adjust internal relief valve which assures the proper setting. The mechanical seals are easily replaced by simply removing the head assembly. Corken's mechanical seal is compatible with propane, butane and ammonia so you can pump either without changing seals.

