

## **CORKEN** IFCX **Coro-Vane®** Pumps for LPG & NH<sub>3</sub>

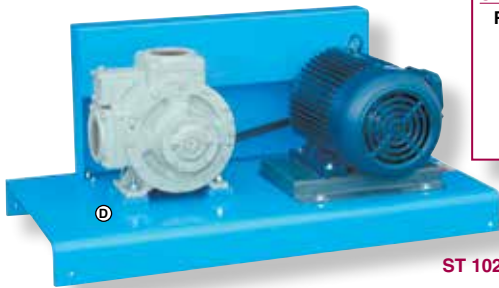
**CORKEN®** base mounted pumps are complete with base, V belt drive assembly and belt guard, 3 PH TEFC motor. Pumps are standard with FPT bolt-on flanges. Use 1-1/4" relief valve on 521/522 pumps; 2" on 1021/1022 pumps.

**Coro-Vane®** is a positive displacement pump line that is designed for stationary applications at bulk plants.

- Only **CORKEN®** Coro-Vane® pumps have heavy duty roller bearings for longer service life. The bearings are interchangeable in all sizes of Coro-Vane® pumps.
- All parts, including the hydraulically self-adjusting blades, are easily accessible for inspection or replacement without disturbing the piping.
- Models 521 and 1021 have a built-in internal relief valve (*external relief valve still recommended*).
- Bolt On FPT flanges of ductile iron save money by eliminating pipe unions and also simplify installation. Steel slip on welding flanges also available.
- Maximum differential pressure: 125 PSI. **Also see chart below.** (Max. casing pressure: 400 PSI).
- Use Valvoline high temperature grease only. 1/2 Stroke per year.

### SPECIFICATIONS:

**RPM:** 420 - 950  
**Temperature:**  
-25°F to 225°F  
**Connections:**  
521: 2" x 2"  
1021: 3" x 3"



ST 1021EG

Pump Model	RPM	HP	Capacity, GPM@ 20 PSI	*Maximum Differential Pressure	Recommended Piping Sizes			Bypass Valve			Recommended Hose Sizes		
					Inlet	Outlet	Vapor	Valve	Liquid	Vapor	Liquid	Vapor	
521	780	5	70	55 psig	2"	1-1/2"	1-1/4"	1-1/2"	1-1/2"	1"			
	950	7.5	95	65 psig	3"	2"	1-1/4"	1-1/2"	2"	1-1/4"			
1021	780	10	140	50 psig	3"	2-1/2"	1-1/4"	2"	2"	2"	1-1/4"		
	950	15	190	60 psig	4"	3"	2"	2"	2"	2"	1-1/2"		

\* Maximum pressure differential for motor or RPM shown.

Part No.	Description	Wt.
ST 521EG	2" Pump Only for Plant Use.....	132 lbs.
ST 521EG-103	2" Pump with 5 HP/3PH Motor, for LPG.....	450 lbs.
ST 521EG-103A	2" Pump with 5 HP/3PH Motor, Base & Belt Drive for NH <sub>3</sub> .....	400 lbs.
ST 1021EG	3" Pump only for plant use.....	200 lbs.
ST 1021EG103A	3" Pump with 10HP/3PH Motor, Base & Drive.....	510 lbs.
ST LGL3021	3" <b>Blackmer</b> NH <sub>3</sub> /LPG Pump Only.....	-
ST T166-1.25	1-1/4" Bypass Valve, <i>Corken</i> (Range: 50-150 PSI).....	13 lbs.
ST T166-1.5	1-1/2" Bypass Valve, <i>Corken</i> (Range: 50-150 PSI).....	16 lbs.
ST BV1.25	1-1/4" Bypass Valve, <i>Blackmer</i> (Range: 91-125 PSI).....	13 lbs.
ST BV2-70	* 2" Bypass Valve, <i>Blackmer</i> (Range: 40-71 PSI).....	-
ST BV2	* 2" Bypass Valve, <i>Blackmer</i> (Range: 91-125 PSI).....	45 lbs.
ST 2904X2	Repair Kit for 521/522 Pump.....	-
ST 2906X2	Repair Kit for 1021/1022 Pump.....	-
ST 1769XRA6	Seal Kit for 521/2021EG.....	-

\* Use BV2 for propane in most cases; use BV2-70 for NH<sub>3</sub>.

**Specify Explosion-Proof Motors for LPG - Blackmer Pumps also Available.**

## **CORKEN** IFCX

### "Z" Series Pumps for NH<sub>3</sub> / LPG For Stationary Plant & Truck Use

The **Z3500 Pump** offers higher flow rates (177 GPM at 780 RPM & 50 PSI differential pressure) than the *Corken* 1021 series. Design features include reversible sideplates, improved cam design to reduce cavitation and improve efficiency, patented needle roller thrust bearings to minimize side plate wear.

Maintenance is also simple: simply remove twelve head bolts to inspect the bearings, seals, sideplates, rotor, vanes & vane drivers. Rated to 800 RPM. Retrofits easily to replace the *Corken* 1021 and other 3" vane pumps with little or no change in piping.

Ductile iron body, gray iron cam & sideplates; steel shaft, bearings & relief valve; Buna-N-O-rings. Z4500 provided even higher flow rates (382 GPM @ 780 RPM).



### CAPACITY COMPARISON\* 3" Pump

	RPM			
	420	520	640	780
Corken gpm (L/min)	86 (326)	116 (439)	143 (541)	177 (670)
Competitor gpm (L/min)	80 (303)	108 (409)	133 (503)	---

\* All capacities are rated at 50 psid and system and condition dependent.

Part No.	Description	Wt.
ST Z2000	2" NH <sub>3</sub> / LPG Truck Pump.....	150 lbs.
ST Z3500	3" NH <sub>3</sub> / LPG Plant Pump.....	160 lbs.
ST LGLD3F	3" <b>Blackmer</b> NH <sub>3</sub> /LPG Pump Only.....	-
ST Z4500	4"x3" Flanged NH <sub>3</sub> / LPG Plant Pump..	160 lbs.
DU Z3500-10	3" Pump with 10 HP / 3 Phase Motor, Base and Belt Drive.....	510 lbs.
DU Z3500-15	3" Pump with 15 HP / 3 Phase Motor, Base and Belt Drive.....	510 lbs.
ST 4431-XA6	Seal Assembly for Z2000 & Z3500 Pumps.....	-
ST 3195-X2	Repair Kit for Z3500 with Z Seal Assemblies.....	-
ST 3193-X1	Repair Kit for Z2000 with Z Seal Assemblies.....	-

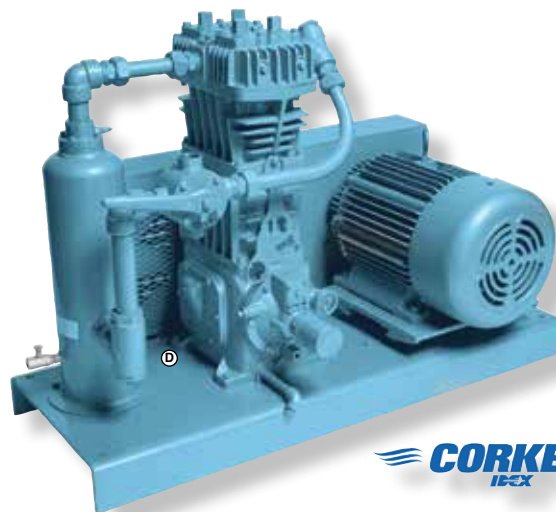
## **CORKEN** IFCX **Compressor Units** for NH<sub>3</sub>

### Standard Features:

- Pressure Gauges
- Steel Baseplate
- Mechanical Liquid Trap
- Four-Way Valve
- Strainer
- Interconnecting Piping
- Adjustable Driver-Slide-Base
- V-Belt Drive & Belt guard
- TEFC Motors

This standard unit is typically used for liquid transfer and vapor recovery in applications including rail car unloading.

Part No.	Description	Wt.
ST 291-107	Corken Compressor Unit LESS Motor.....	400 lbs.
ST 291-10A	Corken Compressor Unit with 10HP/3PH/TEFC Motor.....	580 lbs.
ST 491-107	Corken Compressor Unit LESS Motor.....	570 lbs.
DU 491-15	Corken Compressor Unit with 15HP/3PH/TEFC Motor.....	850 lbs.



**CORKEN** IFCX