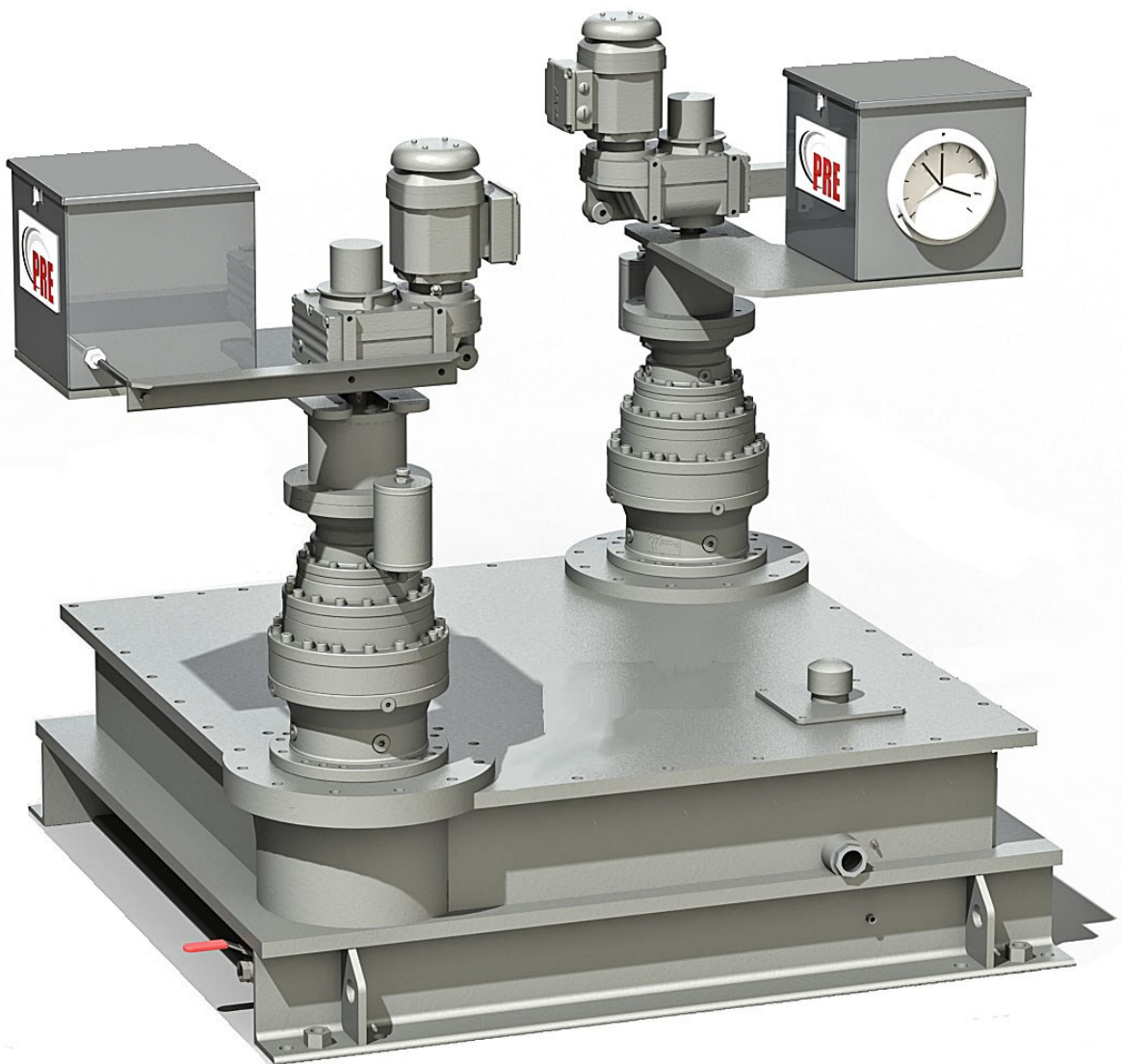




PRECISION **R**OTATING **E**QUIPMENT

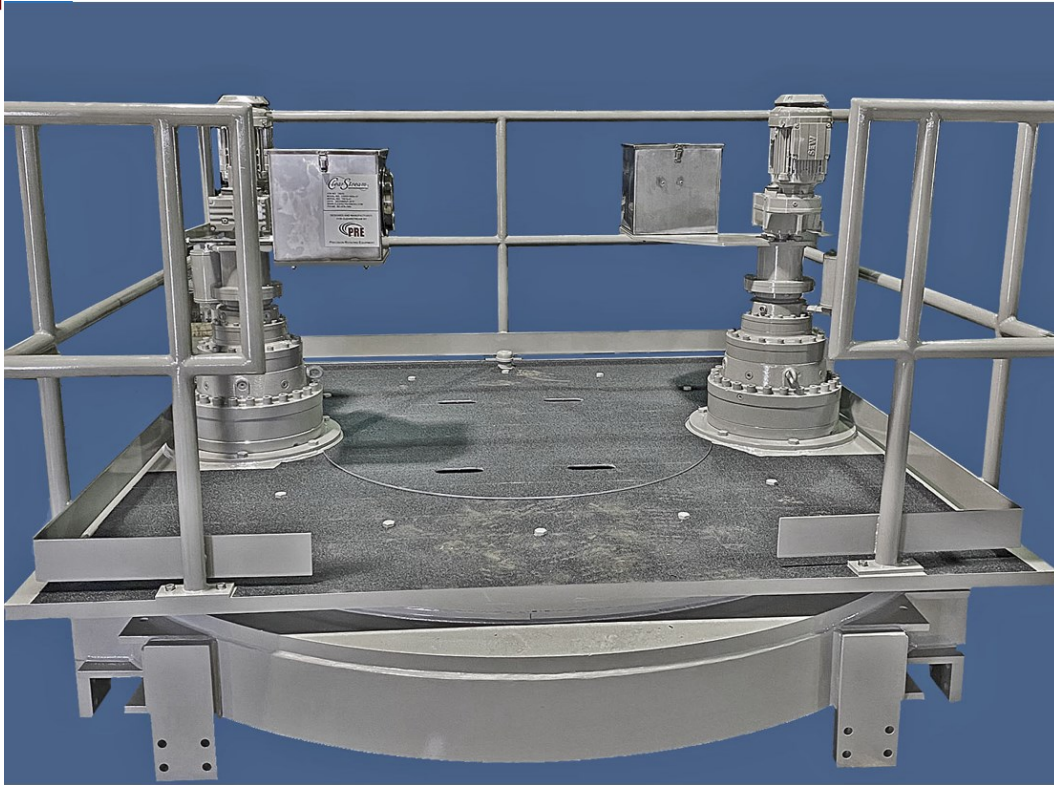
CUSTOM EQUIPMENT FOR THE WATER AND WASTEWATER TREATMENT INDUSTRY

Multi-Pinion, Drives





Multi-Pinion, , Column Mounted Cage Drives

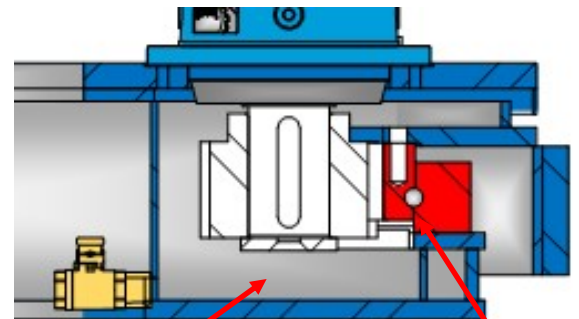


FEATURES

- ◆ Precision main gears and bearings allow for a more robust drive unit as opposed to cast iron strip liner drives, which can have inclusions that will weaken the gearing and housing. Design life for PRE Drives is a calculated L10 life in excess of 100 years as the standard.
- ◆ Hydraulic torque control, measured by the reaction of the rotation of the upper gear housing, offers a more accurate measurement of torque, along with eliminating the use of worm gears or mechanical overload devices, which can both seize up over time.
- ◆ Planetary and Helical speed reducers allow for high efficiency designs, which in turn can reduce power consumption, thus saving the plant money in electricity costs.
- ◆ Direct coupled components eliminate the use of chains and sprockets, which makes maintenance of your drive unit simpler.
- ◆ Elimination of the use of a lower pinion bearing, which is a common failure point in competitors' drive units.
- ◆ Drive units can be provided with torques in excess of 1 million foot-pounds of continuous torque.
- ◆ Available On-site, Turnkey Inspection, Repair, and Replacement Services. Standard components save time and money.
- ◆ 5 year Standard Warranty on Precision Bearing Drives (less motors and paint)

DRIVE DESCRIPTION

- ◆ High torque / low speed, direct coupled gear drive.
- ◆ Totally encased with oil bath.
- ◆ Center column mounted with external drive ring attached to drive cage.
- ◆ Access bridge mounts directly to the drive.
- ◆ Design suitable for clarifiers or thickeners in municipal, industrial, power, pulp and paper, mining, others.
- ◆ Designed for a wide range of torque values and output speeds.



Condensate
Collection

Precision
Bearing

No Lower Bearing Required

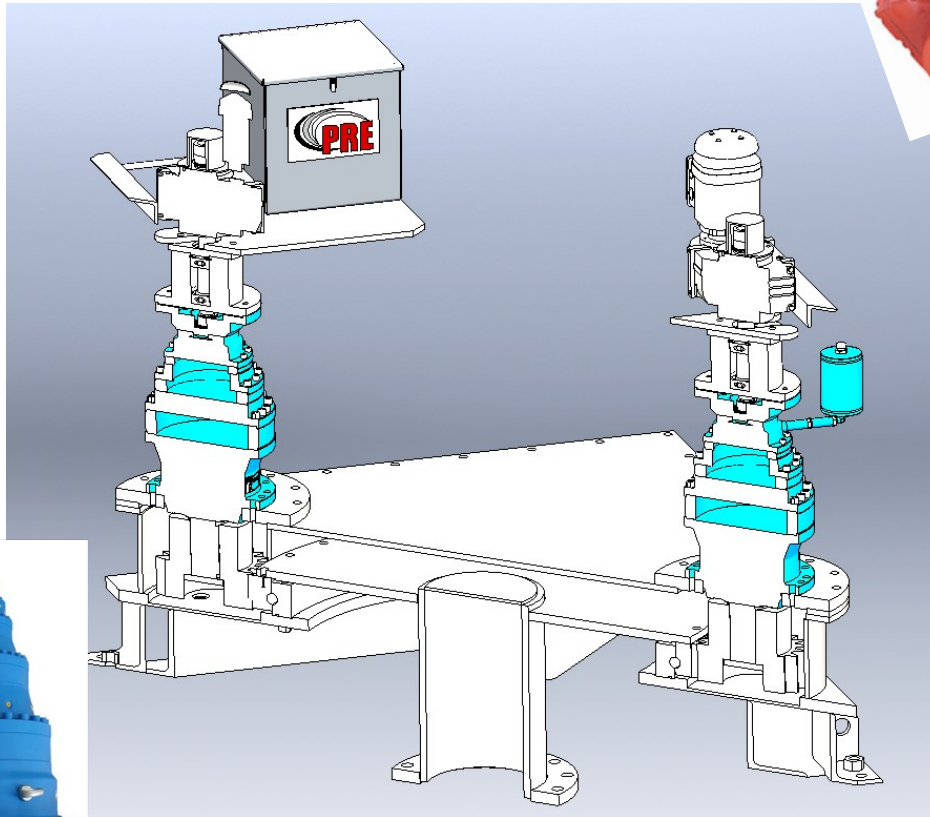
Moment Arm is all but eliminated plus the Reducer has a 1.25 service factor to handle radial loads.



Dual Pinion, Column Mounted Cage Drives

PRIMARY STAGE MOTOR AND GEARBOX

- Severe Duty TEFC Motor
- Minimum helical gear efficiency of 98%
- L10 life in excess of 100,000 hours at continuous torque



SECONDARY STAGE GEARBOX

- Double Seal on Output Shaft
- L10 life in excess of 100,000 hours at continuous torque
- 95% Efficiency per Stage

HYDRAULIC MULTI-PINION DRIVES



Water & Wastewater
Treatment Solutions
Municipal & Industrial

9090 South 300 West
Sandy, UT 84070
Phone (801) 949-2083 | Fax (801) 676-1893
www.premfg.net



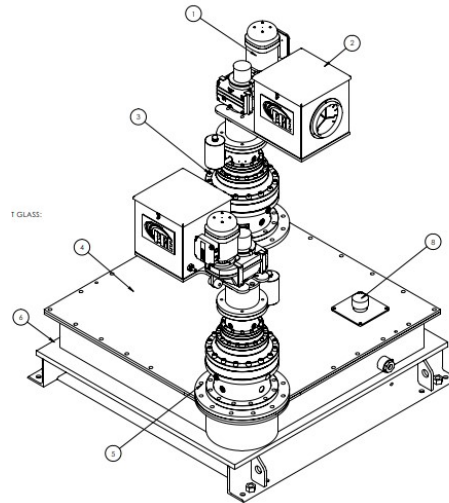
Multi-Pinion, , Bridge Mounted Shaft Drives

Torque Capacity					
Gear Diameter	Model	Continuous		Duty Rated	
		Ft-Lb	N-m	Ft-Lb	N-m
43" Dual Pinion	S2P43-A	102,000	138,312	255,000	345,780
43" (4) Pinion	S4P43-A	204,000	276,624	510,000	691,560
54" Dual Pinion	S2P54-A	140,000	189,840	350,000	474,600
54" (4) Pinion	S4P54-A	280,000	379,680	700,000	949,200
61" Dual Pinion	S2P61-A	160,000	216,960	400,000	542,400
61" (4) Pinion	S4P61-A	320,000	433,920	800,000	1,084,800

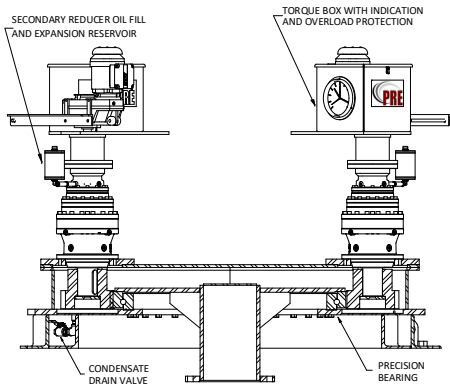
* **Continuous:** Torque at which the drive main gear will have a life in excess of 20 years when operating at rated speeds.

****Duty Rated:** The maximum allowable, momentary torque to prevent component failure. **Note:** Consistently operating at this torque (or any percentage above Continuous torque) will exponentially reduce the lifetime of drive components.

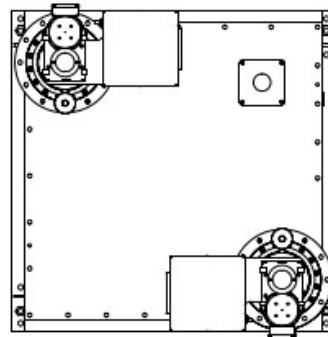
PART DESCRIPTION	
ITEM NO.	PART NAME
1	PRIMARY REDUCER / MOTOR
2	TORQUE BOX
3	SECONDARY REDUCER
4	COVER
5	BRIDGE PADS
6	MAIN GEAR OIL FILL
7	CAGE ADAPTER
8	DRIVE BASE
9	OIL EXPANSION / FILL



ISOMETRIC



ELEVATION



PLAN



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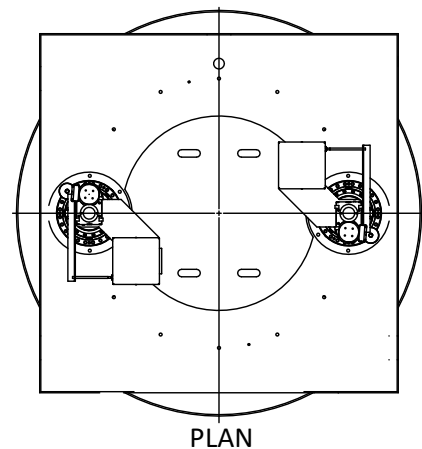
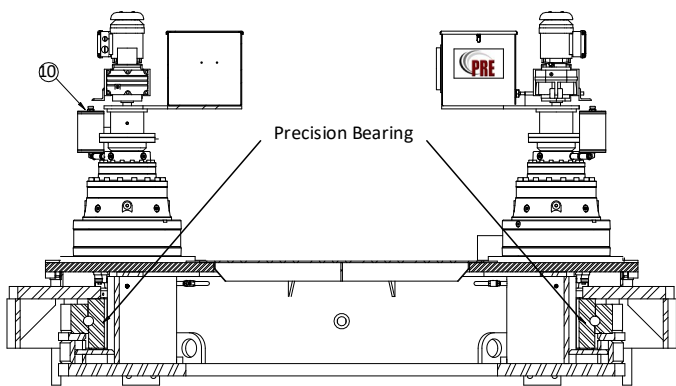
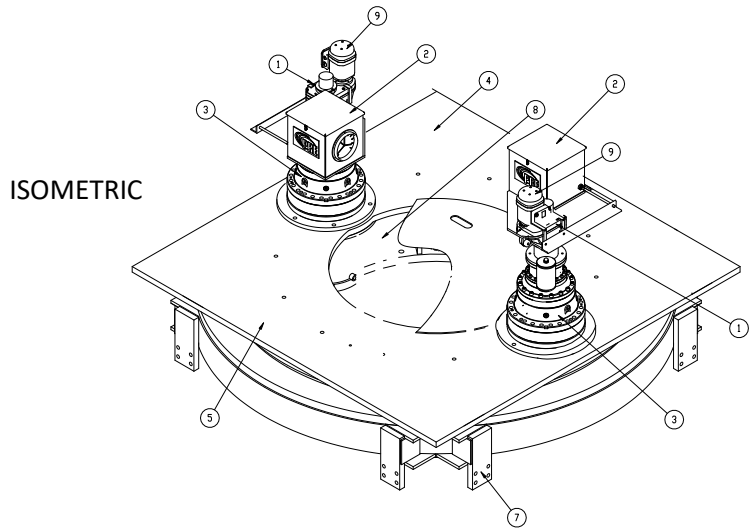
Multi-Pinion, Column Mounted Cage Drives

Torque Capacity					
Gear Diameter	Model	Continuous		Duty Rated	
		Ft-Lb	N-m	Ft-Lb	N-m
60" Dual Pinion	C2P60-A	300,000	406,800	750,000	1,017,000
60" (4) Pinion	C4P60-A	600,000	813,600	1,500,000	2,034,000
80" Dual Pinion	C2P80-A	500,000	678,000	1,250,000	1,695,000
80" (4) Pinion	C4P80-A	1,000,000	1,356,000	2,500,000	3,390,000

* **Continuous:** Torque at which the drive main gear will have a life in excess of 20 years when operating at rated speeds.

****Duty Rated:** The maximum allowable, momentary torque to prevent component failure. **Note:** Consistently operating at this torque (or any percentage above Continuous torque) will exponentially reduce the lifetime of drive components.

PART DESCRIPTION	
ITEM NO.	PART NAME
1	PRIMARY REDUCER
2	TORQUE BOX
3	SECONDARY REDUCER
4	COVER
5	BRIDGE PADS
6	MAIN GEAR OIL FILL CAP
7	CAGE ADAPTER
8	DRIVE BASE
9	DRIVE MOTOR
10	OIL EXPANSION / FILL



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