



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

CUSTOM EQUIPMENT FOR THE WATER AND WASTEWATER TREATMENT INDUSTRY

Bridge Mounted Shaft Drives





Bridge Mounted Shaft Drives



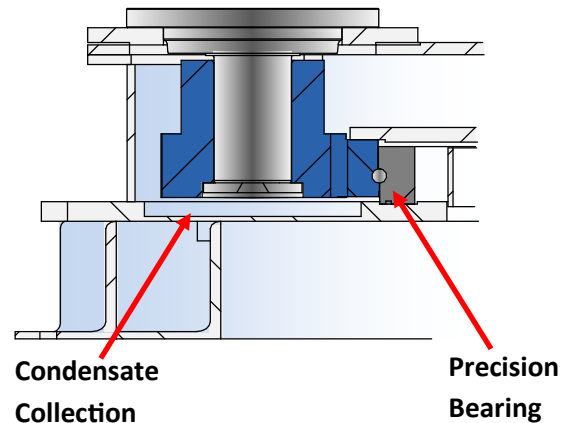
FEATURES

- ◆ 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.



DRIVE DESCRIPTION

- ◆ High torque / low speed, direct coupled gear drive.
- ◆ Totally encased with oil bath.
- ◆ Integrated Precision Bearing / Gear
- ◆ The Drive mounts to the access bridge.
- ◆ Design suitable for clarifiers or thickeners in municipal, industrial, power, pulp and paper, mining, others.
- ◆ Designed for a wide range of torque values and tank sizes.



No Lower Bearing Required

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



Water & Wastewater
Treatment Solutions
Municipal & Industrial

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



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TORQUE CAPACITY					
GEAR DIA.	MODEL	CONTINUOUS*		DUTY RATED**	
		Ft Lbs	N-m	Ft Lbs	N-m
25 SHAFT	S25-A	6,000	8,200	18,000	24,600
	S25-B	8,500	11,600	21,250	29,380
	S25-C	12,000	16,400	30,000	41,000
	S25-D	16,000	21,865	40,000	54,665
43 SHAFT	S43-A	17,500	23,900	43,750	59,790
	S43-B	25,500	34,850	63,750	87,125
	S43-C	35,000	47,500	87,500	119,580
	S43-D	42,500	58,080	106,250	145,200
	S43-E	51,000	69,000	127,500	174,250
54 SHAFT	S54-A	60,000	82,000	150,000	205,000
	S54-B	70,000	95,000	175,000	239,665
	S54-C	87,000	118,900	217,500	297,250
61 SHAFT	S61-A	100,000	136,665	250,000	339,000
	S61-B	120,000	154,000	300,000	410,000
	S61-C	140,000	191,330	350,000	478,330
	S61-D	160,000	218,665	400,000	546,665
61 DUAL PINION	S2P61-A	200,000	273,330	500,000	678,000
	S2P61-B	320,000	437,330	800,000	1,093,330
80 DUAL PINION	S2P80-A	500,000	678,000	1,250,000	1,708,330
80 (4) PINION	S4P80-B	1,000,000	1,366,665	2,500,000	3,416,665

* **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.

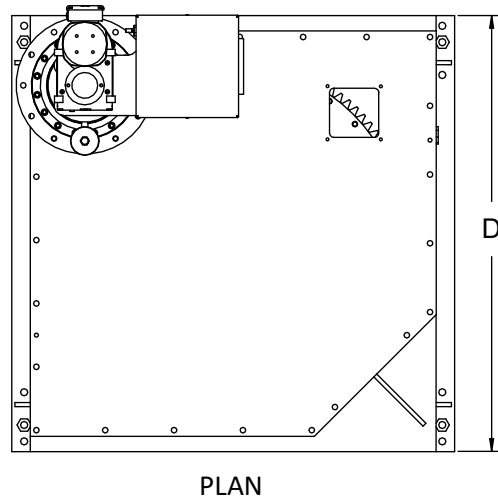
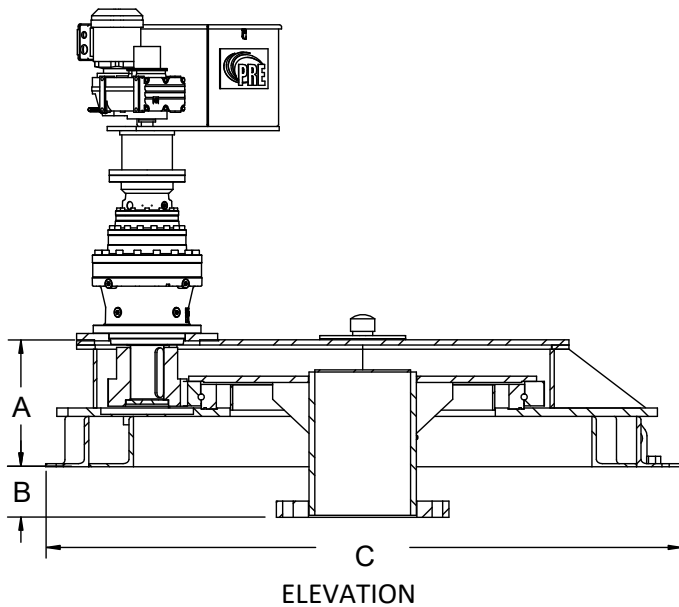
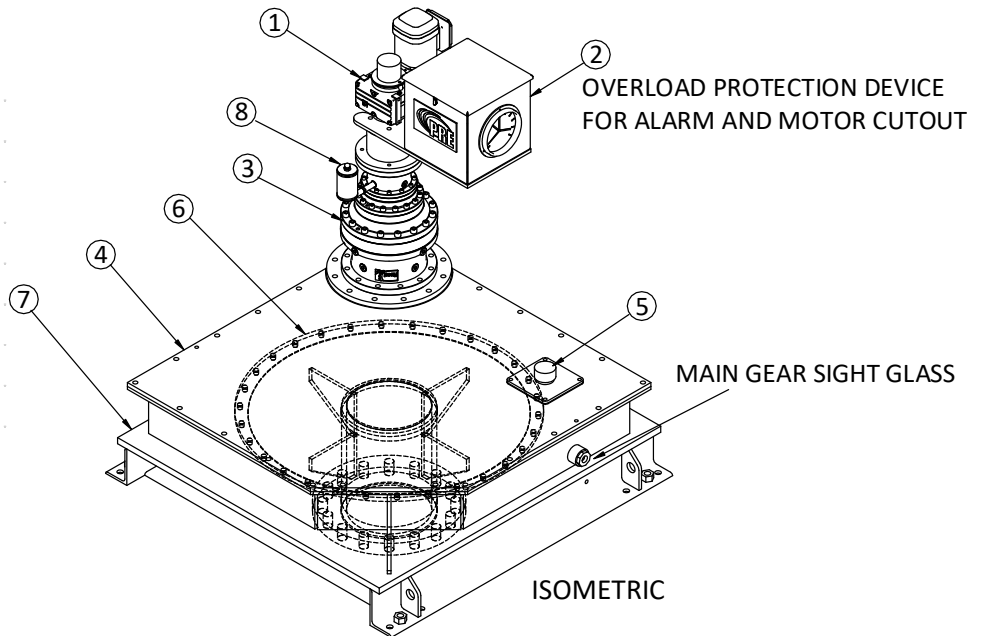


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PRE Column Mounted / Cage Drives

PART DESCRIPTION	
ITEM NO.	PART NAME
1	PRIMARY REDUCER
2	TORQUE BOX
3	SECONDARY REDUCER
4	COVER
5	MAIN GEAR OIL FILL CAP
6	SHAFT HUB
7	DRIVE BASE
8	OIL EXPANSION / FILL



Model	A		B		C		D		Weight	
	Inches	mm	Inches	mm	Inches	mm	Inches	mm	lbs	kg
S25	12.5	318	5.3	134	36	914	32.5	826	1,500	680
S43	15	381	6	152	46	1,168	53.25	1,352	2,600	1,179
S54	17	432	8	203	60	1,524	58	1,473	4,500	2,042
S61	19	483	11	279	78	1,981	66	1,676	7,400	3,357
S80	22	559	4	101	90	2,286	80	2,032	10,000	4,536