



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

CUSTOM EQUIPMENT FOR THE WATER AND WASTEWATER TREATMENT INDUSTRY

Bridge Mounted Dual Shaft Drives



PRE Bridge Mounted Dual Shaft Drives



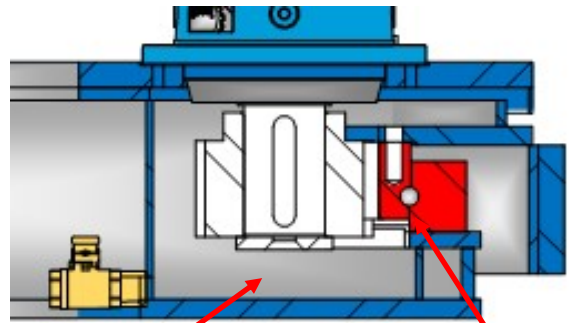
FEATURES

- ◆ 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.



**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.



**Water & Wastewater
Treatment Solutions**
Municipal & Industrial

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Sandy, UT 84070
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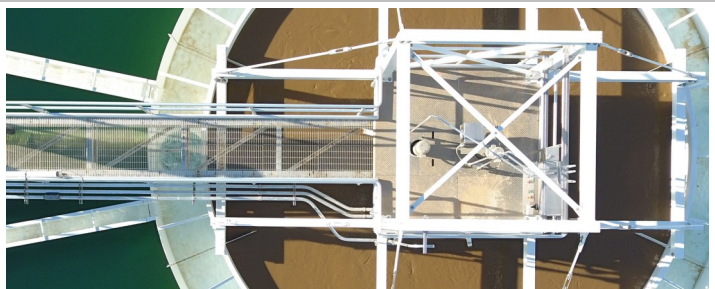
Bridge Mounted Dual Shaft Drives

TORQUE CAPACITY					
GEAR DIA.	MODEL	CONTINUOUS*		DUTY RATED**	
		Ft Lbs	N-m	Ft Lbs	N-m
25 DUAL SHAFT	SD25-A	6,000	8,200	18,000	24,600
	SD25-B	8,500	11,600	21,250	29,380
	SD25-C	12,000	16,400	30,000	41,000
	SD25-D	16,000	21,865	40,000	54,665
43 DUAL SHAFT	SD43-A	17,500	23,900	43,750	59,790
	SD43-B	25,500	34,850	63,750	87,125
	SD43-C	35,000	47,500	87,500	119,580
	SD43-D	42,500	58,080	106,250	145,200
	SD43-E	51,000	69,000	127,500	174,250
54 DUAL SHAFT	SD54-A	60,000	82,000	150,000	205,000
	SD54-B	70,000	95,000	175,000	239,665
	SD54-C	87,000	118,900	217,500	297,250
61 DUAL SHAFT	SD61-A	100,000	136,665	250,000	339,000
	SD61-B	120,000	154,000	300,000	410,000
	SD61-C	140,000	191,330	350,000	478,330
	SD61-D	160,000	218,665	400,000	546,665
61 DUAL PINION DUAL SHAFT	SD2P61-A	200,000	273,330	500,000	678,000
	SD2P61-B	320,000	437,330	800,000	1,093,330
80 (2) PINION DS	SD2P80-A	500,000	678,000	1,250,000	1,708,330
80 (4) PINION DS	SD4P80-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.

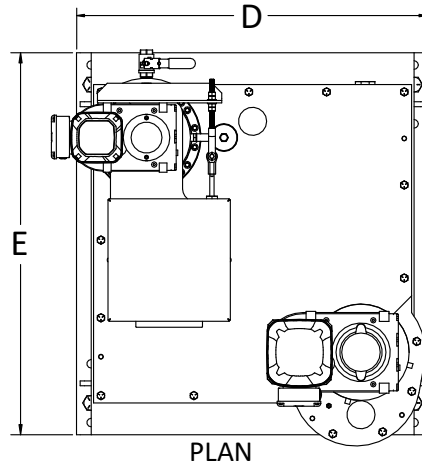
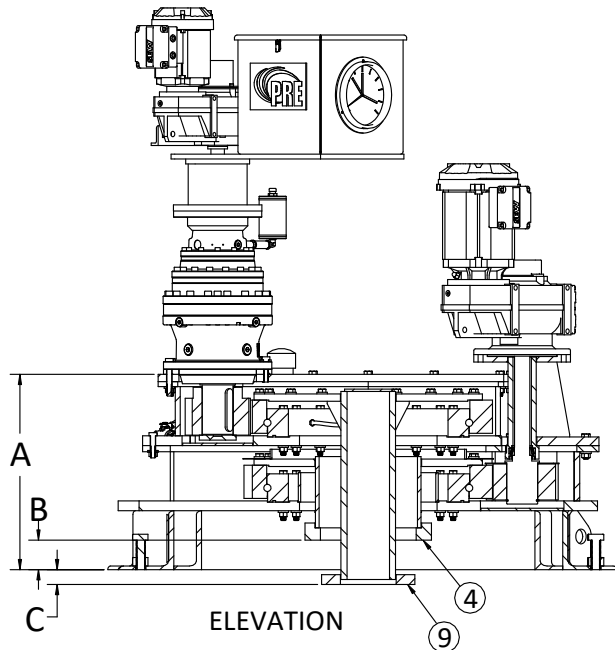
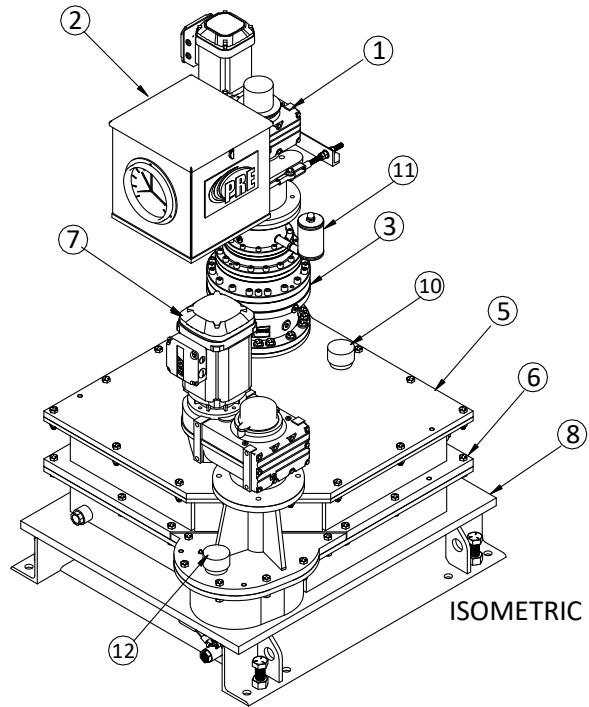
****Duty Rated:** The maximum allowable, momentary torque to prevent component failure.

Note: Consistently operating at this torque (or any percentage above Continuous torque) will exponentially reduce the lifetime of drive components.



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PART DESCRIPTION	
ITEM NO.	PART NAME
1	PRIMARY REDUCER (RAKE)
2	TORQUE BOX (RAKE)
3	SECONDARY REDUCER (RAKE)
4	OUTPUT SHAFT (TURBINE)
5	COVER
6	UPPER BASE (RAKE)
7	PRIMARY REDUCER (TURBINE)
8	LOWER BASE (TURBINE)
9	OUTPUT SHAFT (RAKE)
10	MAIN GEAR OIL FILL CAP (RAKE)
11	OIL EXPANSION / FILL
12	MAIN GEAR OIL FILL CAP (TURBINE)



Model	A		B		C		D		E		Weight	
	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	lbs	kg
SD25	19 7/8	505	3	76	1 1/2	38	36	914	39	991	2,400	1,089
SD43	18 3/4	476	- 3*	-76	9	229	58	1473	53 1/4	1353	4,500	2,041
SD54	25 1/4	641	-6 1/2*	-165	12 1/2	318	70	1778	78	1981	6,300	2,858
SD61	31	787	- 8*	-203	14 1/4	362	81	2057	89	2261	9,200	4,173
SD80	39	991	-9 1/4*	-235	16	406	107	2718	107	2972	14,000	6,350

* THE FLANGE IS BELOW THE MOUNTING SURFACE



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