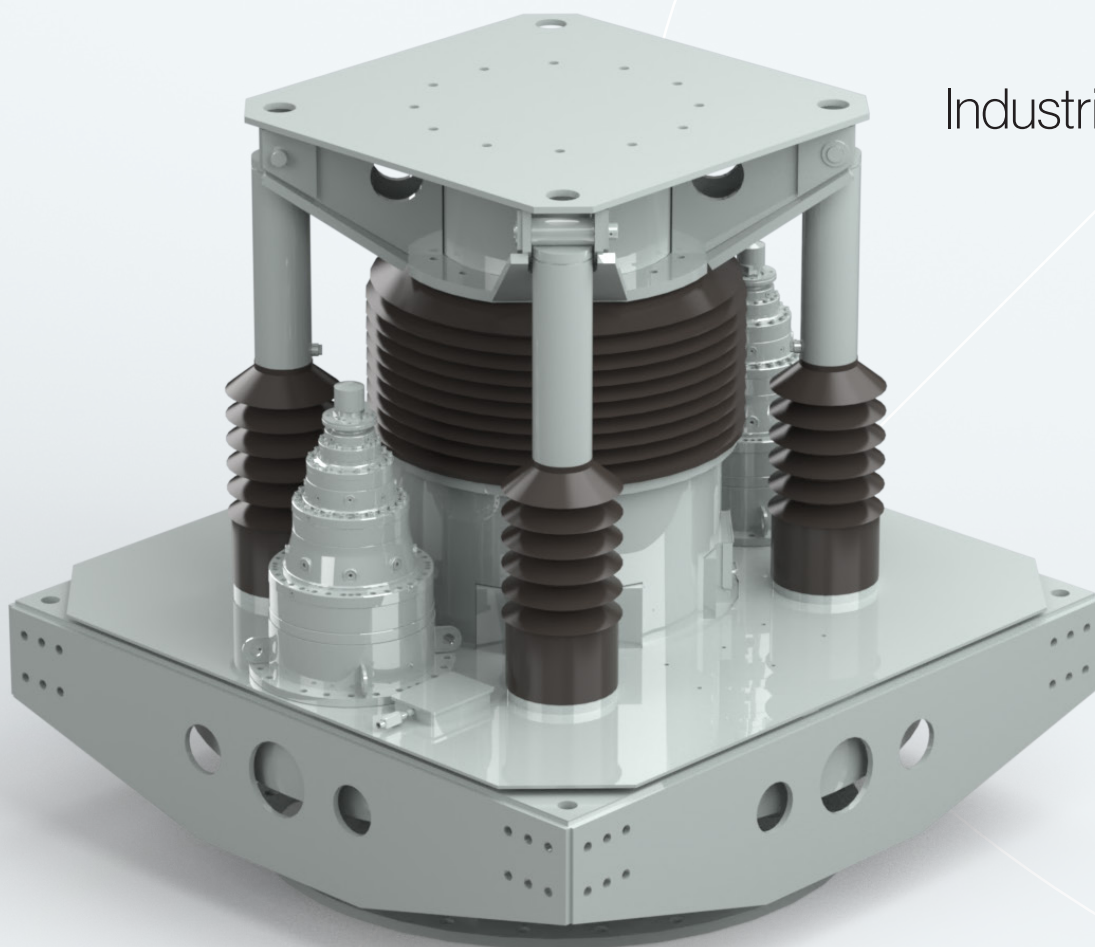


DBS[®] MANUFACTURING

ENGINEERED FIRSTS | BUILT TO LAST



Industrial | Drives

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OVERVIEW

With over 50 years of experience in designing and building drive units, DBS will provide you with the right solution for every application. Our Industrial Drives are designed for pier mounted or bridge mounted installations, and all can be fitted with lifting capabilities.

Features

- Forged alloy steel main gears designed for 20 years of life calculated per AGMA 2001-D04.
- Precision four-point-contact main bearing with 10-year warranty.
- Accurate torque measurement for process control with 4-20 mA and visual output.
- Alarm and cutoff switches and maximum torque limiting via pressure relief valve or shear pin.
- Designed for minimum maintenance with permanently lubricated intermediate reducers.
- Variable speed available.



Torque Capacity — Industrial Drive Units

D-Series Center Pier Mounted Drives

Model	Continuous		Maximum Overload		Yield	
	ft-lbs	N-m	ft-lbs	N-m	ft-lbs	N-m
D80-E	350,000	475,000	700,000	950,000	950,000	1,300,000
D80-E*2	700,000	950,000	1,400,000	1,900,000	1,900,000	2,600,000
D80-E*3	1,050,000	1,400,000	2,100,000	2,800,000	2,850,000	3,900,000
D80-E*4	1,400,000	1,900,000	2,800,000	3,800,000	3,800,000	5,200,000
D104-G*2	1,250,000	1,700,000	2,500,000	3,400,000	8,840,000	12,000,000
D104-G*3	1,875,000	2,550,000	3,750,000	5,100,000	13,260,000	18,000,000
D104-G*4	2,500,000	3,400,000	5,000,000	6,800,000	17,680,000	24,000,000
D120-H*2	1,750,000	2,400,000	3,500,000	4,800,000	11,000,000	15,000,000
D120-H*3	2,625,000	3,500,000	5,250,000	7,100,000	16,500,000	22,400,000
D120-H*4	3,500,000	4,750,000	7,000,000	9,500,000	22,000,000	29,800,000
D120-H*5	4,375,000	5,900,000	8,750,000	11,900,000	27,500,000	37,300,000
D120-H*6	5,250,000	7,100,000	10,500,000	14,250,000	33,000,000	44,750,000

S-Series Bridge Mounted Drives

Model	Continuous		Maximum Overload		Yield	
	ft-lbs	N-m	ft-lbs	N-m	ft-lbs	N-m
S70-E	250,000	340,000	500,000	680,000	750,000	1,000,000
S70-E-2	500,000	678,000	1,000,000	1,400,000	1,500,000	2,000,000
S70-E-3	750,000	1,000,000	1,500,000	2,000,000	2,250,000	3,050,000
S70-E-4	1,000,000	1,350,000	2,000,000	2,700,000	3,000,000	4,070,000

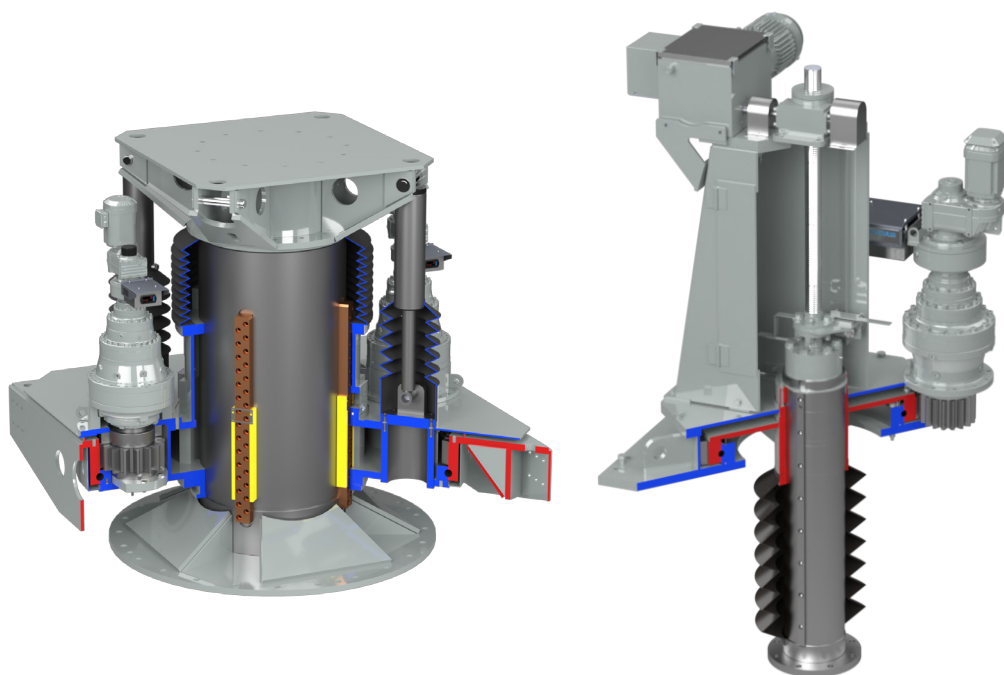
Continuous: Torque at which main gear will have a life in excess of 20 years at normal operating speeds.

Maximum Overload: The maximum safe, short term operating torque.

Yield: The structural maximum torque based on the minimum yield strength of the main gear.

LIFT MECHANISM OPTIONS

The DBS lift mechanism provides the ability to raise and lower the thickener rakes up to 36 inches (910 millimeters). Lift mechanisms are equipped with upper and lower limit switches and a 4-20 mA vertical position transducer.



OPTIONAL FEATURES

1. Bi-directional Operation (available for F and H-type primary reducers)
2. Explosion proof switches
3. Special coatings
4. Oil heater (available for F and H-type primary reducers and main gear housing)
5. Special electric motor
6. Oil temperature switch
7. Oil level switch

D-Series

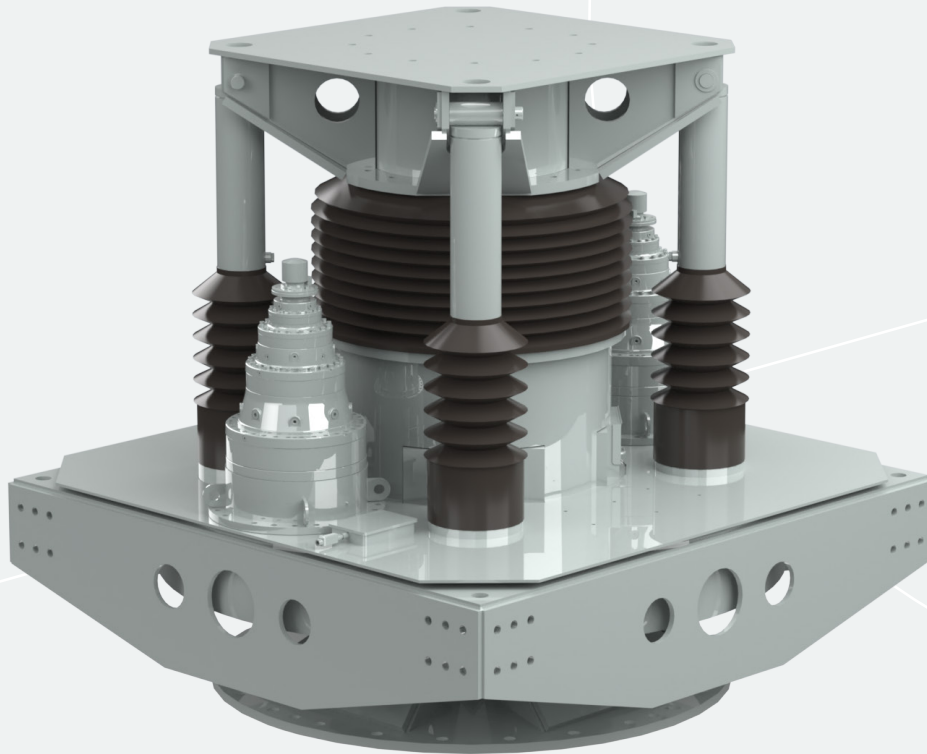
The D-Series lift mechanism operates by raising the entire drive unit and is fully contained within the drive unit. In most cases, the installation of a DBS thickener drive unit with a lift mechanism is no more complicated than a normal, non-lifting thickener drive unit.

S-Series

The S-Series lift mechanism operates by raising and lowering the output drive shaft. The DBS lift design does not require the screw-jack to rotate, therefore there are no rotary electrical slip rings to maintain.

DBS[®] MANUFACTURING

- Clarifier & Thickener Drives
- Hyperbolic Mixers
- Low-Speed Surface Aerators
- Rotary Distributor Center Mechanisms



Industrial Drive Units | D-SERIES
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