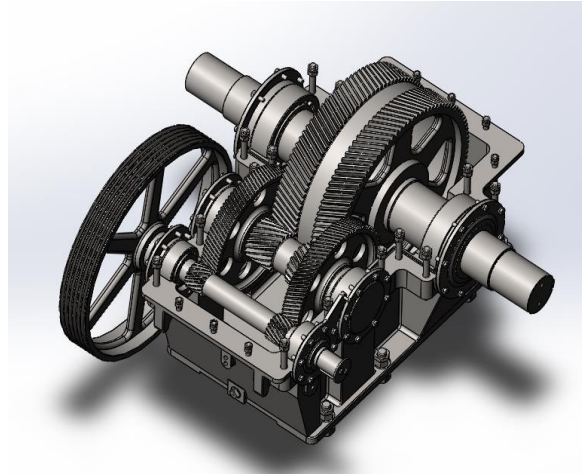


Gear Reducer

The gearbox is made of ASTM A48 C35 (Class 35) cast iron or equivalent HT250 and be made up of two pieces divided at the horizontal centerline of the shafting to permit easy field removal and replacement of all rotating elements. C35 or HT250 cast iron has better mechanical properties than C25 that is used by the competitors.

In addition the gear train is designed with dual high-speed gears and pinions insuring even distribution of load about the centerline of the gear box.

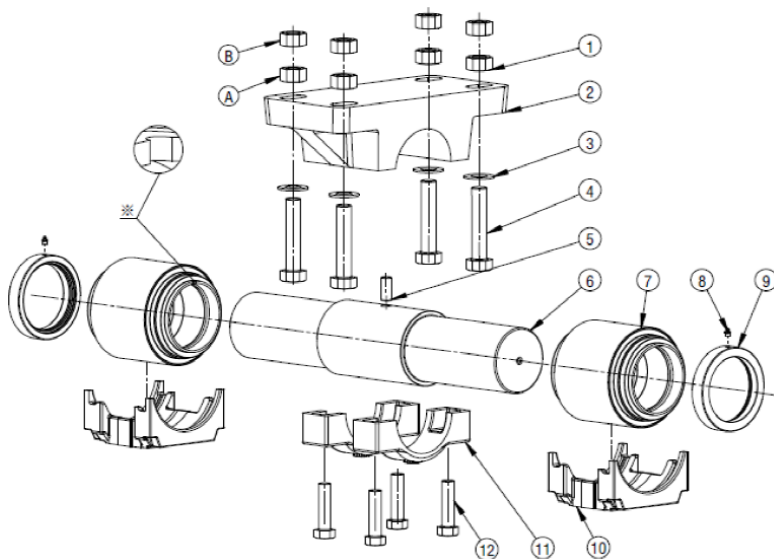
The industry's largest shafting and bearings contribute to higher safety factors. Innovative lubrication system allows excellent lubrication throughout the operating speed range.



Gear Reducer Parameters

Reducer Model	Peak Torque Rating [in-lbs]	Reduction Ratio	Gear Box Oil Capacity [US Gallons]	Sheave Dimensions	Crankshaft Diameter
1824D	1,824,000	28.889	246	Bore 5 1/2", 68"/12C	9.84"
1280D	1,280,000	28.672	208	Bore 5", 58"/10C	9.84"
912D	912,000	28.79	180	Bore 4 3/8", 50"/8C	7.87"
640D	640,000	27.21	100	Bore 4 3/8", 50"/6C	7.87"
456D	456,000	28.255	100	Bore 3 5/8", 44"/5C	7.87"
320D	320,000	28.807	75	Bore 3 1/2", 44"/4C	6.89"
228D	228,000	28.873	42	Bore 3", 36"/4C	6.89"
160D	160,000	28.507	27	Bore 2 5/8", 30"/3C	5.91"
114D	114,000	29.818	25	Bore 2 1/2", 30"/3C	5.13"
80D	80,000	31.747	13	Bore 1 9/16", 25"/3B	3.54"

* The sheave diameter and number of belts could be changed as per customers requirements if the condition is allowed;
 * Dimensions and parameters may change without notices.

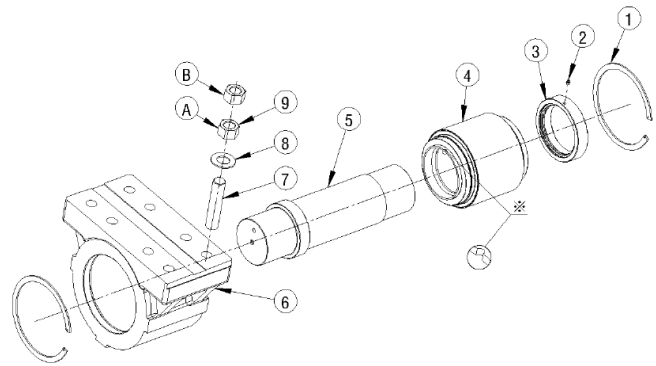


Saddle Bearing Assembly

1. Hexagon Nut
2. Trunnion
3. Wide Flat Washer
4. Hexagon Bolt
5. Trunnion Pin
6. Shaft
7. Bearing
8. Grease Fitting
9. Retainer Ring
10. Pedestal Adaptor
11. Trunnion Clamp
12. Hexagon Bolt

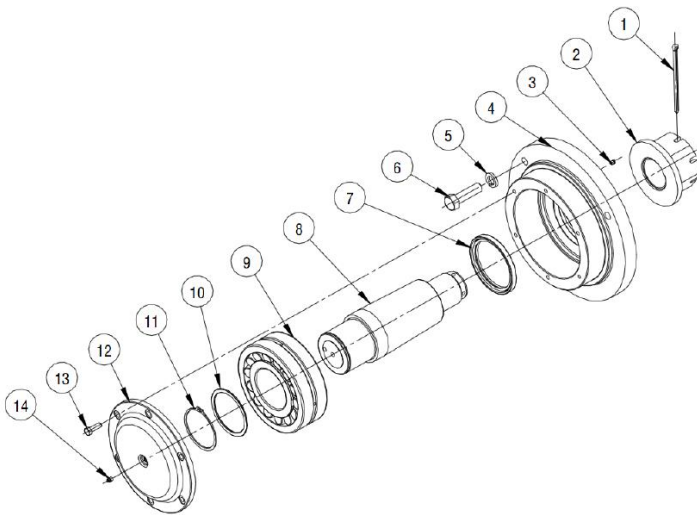
Equalizer Bearing Assembly

1. Retaining Ring
2. Grease Fitting
3. Retainer Ring
4. Bearing
5. Shaft
6. Housing
7. Double-screw Bolt
8. Hardened Flat Washer
9. Hexagon Nut



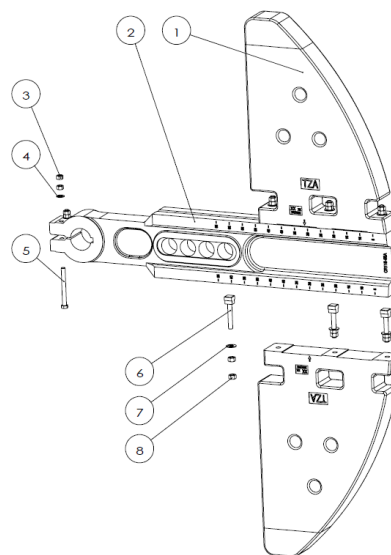
Wrist Pin Bearing Assembly

1. Cotter Pin
2. Castle Nut
3. Vent plug
4. Housing
5. Spring Washer
6. Hexagon Bolt
7. Oil Seal
8. Wrist Pin
9. Bearing
10. Support Washer
11. Retaining Ring
12. Cover Plate
13. Hexagon Bolt
14. Grease Fitting

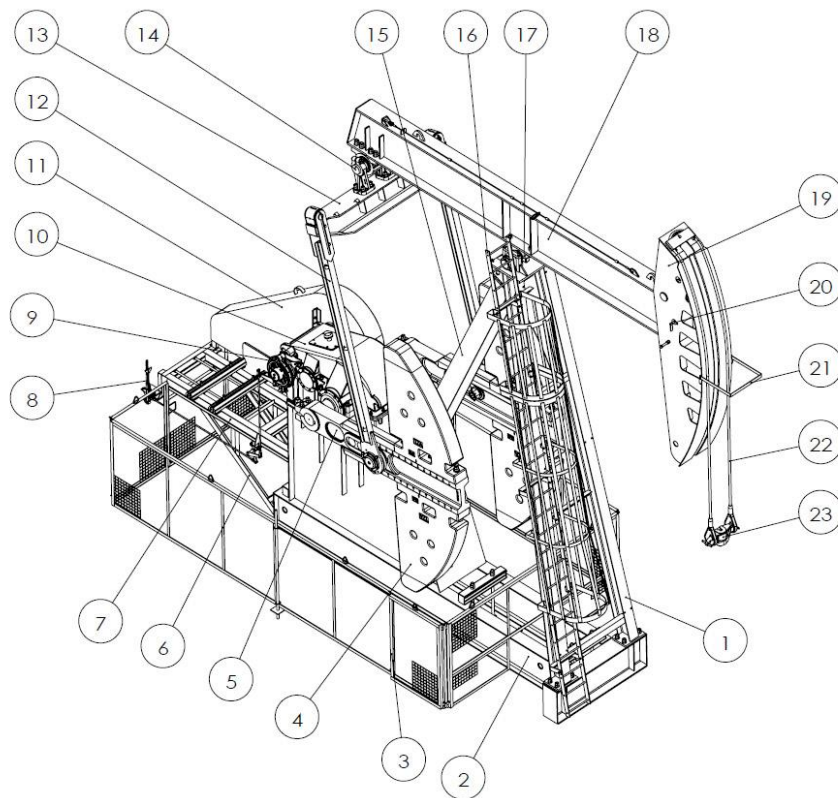


Crank Counterbalance Assembly

1. Counterweight
2. Crank
3. Hexagon Nut
4. Hardened Flat Washer
5. Hexagon Bolt
6. Counter weight Bolt
7. Wide Flat Washer
8. Hexagon Nut



General API Specifications



- | | |
|------------------------------|--------------------------------|
| 1. Sampson Post Front Leg | 13. Equalizer |
| 2. Main Base | 14. Equalizer Bearing Assembly |
| 3. Crank Guards | 15. Sampson Post Support Leg |
| 4. Counter Weight | 16. Ladder |
| 5. Crank | 17. Saddle Bearing Assembly |
| 6. High-Mount Base Extension | 18. Walking Beam |
| 7. Motor Base | 19. Horsehead |
| 8. Brake Handle | 20. Flag |
| 9. Brake Assembly | 21. U frame |
| 10. Gear Reducer | 22. Wireline |
| 11. Reducer Sheave | 23. Carrier Bar |
| 12. Pitman Arm | |

Model	Gear Reducer Torque Rating (in-lbs)	Polished Rod Capacity (lbs)	Stroke Length (in)
C1824D-365-240	1,824,000	36,500	240,207,175,145
C1824D-427-216	1,824,000	42,700	216,186,158,131
C1824D-365-216	1,824,000	36,500	216,186,158,131
C1280D-365-240	1,280,000	36,500	240,207,175,145
C1280D-305-240	1,280,000	30,500	240,207,175,145
C1280D-427-216	1,280,000	42,700	216,186,158,131
C1280D-365-216	1,280,000	36,500	216,186,158,131
C1280D-427-192	1,280,000	42,700	192,165,139,114
C1280D-365-192	1,280,000	36,500	192,165,139,114
C912D-427-192	912,000	42,700	192,165,139,114
C912D-365-192	912,000	36,500	192,165,139,114
C912D-427-168	912,000	42,700	168,144,121,99
C912D-365-168	912,000	36,500	168,144,121,99
C640D-365-192	640,000	36,500	192,165,139,114
C640D-365-168	640,000	36,500	168,144,121,99
C640D-305-168	640,000	30,500	168,144,121,99
C640D-305-144	640,000	30,500	144,124,104,85
C456D-305-168	456,000	30,500	168,144,121,99
C456D-305-144	456,000	30,500	144,124,104,85
C456D-256-144	456,000	25,600	144,126,110,93
C456D-256-120	456,000	25,600	120,105,91,78
C320D-256-144	320,000	25,600	144,126,110,93
C320D-305-120	320,000	30,500	120,105,91,78
C320D-256-120	320,000	25,600	120,105,91
C320D-256-100	320,000	25,600	100,88,76,65
C228D-213-120	228,000	21,300	120,105,91,78
C228D-173-120	228,000	17,300	120,102,85
C228D-213-100	228,000	21,300	100,85,70
C228D-246-86	228,000	24,600	86,73,60
C160D-173-100	160,000	17,300	100,85,70
C160D-200-74	160,000	20,000	74,63,52
<p>*PPRL and Stroke Length can be customized for certain applications</p> <p>*Both Three (3) and Four (4) stroke length design available</p> <p>*Other models are available</p>			