PARKERSBURG PUMPING UNITS

The Parkersburg complete line provides three distinct types of Pumping Units, which makes it possible to select the unit specifically fitted to any given pumping conditions.

PARKERSBURG AIR-BALANCED UNITS
PARKERSBURG GEAR DRIVEN UNITS
PARKERSBURG CHAIN DRIVEN UNITS.

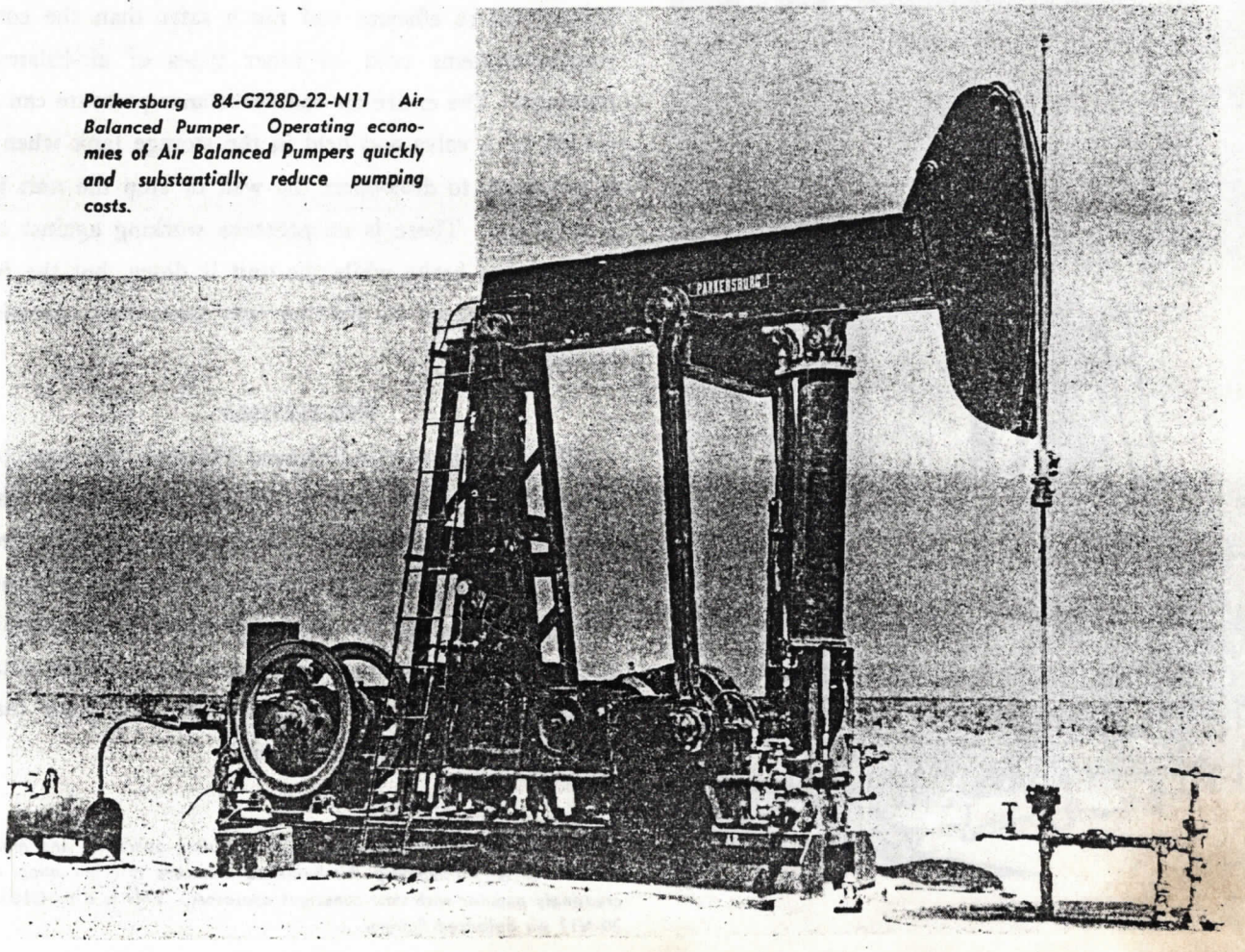
Parkersburg pumpers have been proved under every known condition in fields throughout the world. They have established records for trouble-free, economical, dependable performance that are unchallenged in the industry today. Servicing, operating and maintenance costs of all Parkersburg Pumpers are at a very minimum.

SIZES TO MEET EVERY PUMPING CONDITION

From the three types of Parkersburg Units available you can choose exactly the unit required to give you maximum efficiency for any well depth, load or production volume.

Sizes range from 28" to 11' stroke with peak torque ratings varying from 25,000 inch pounds to 912,000 inch pounds for pumping the deepest and heaviest wells in production today.

To better serve the industry through continuous improvements and developments of Parkersburg Pumpers, their design and production has been concentrated in our Coffeyville, Kansas plant.



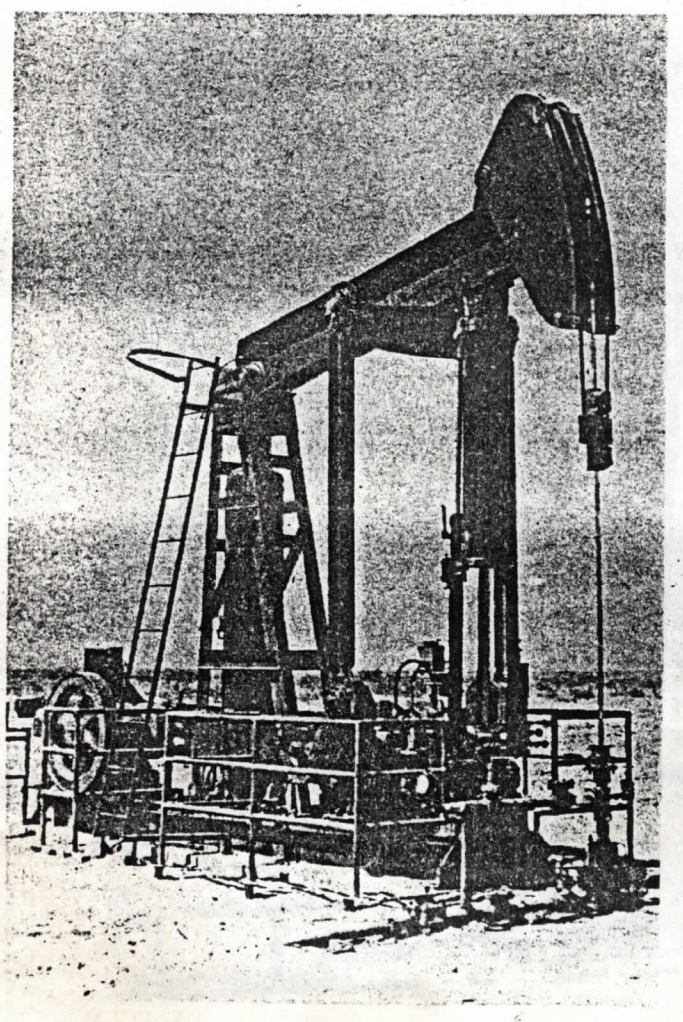
Parkersburg 84-G228D-22-N11 Air Balanced Pumper. Operating economies of Air Balanced Pumpers quickly and substantially reduce pumping costs.

PARKERSBURG PUMPING UNITS—Cont'd

AIR-BALANCED PUMPERS

These units provide the most economical, efficient and trouble-free method of pumping ever offered. Their wide range of sizes provides for every pumping need. They are available with 54", 64", 74", 84", 100" and 120" strokes with beam load capacities ranging from 16,000 lbs. to 40,000 lbs.

These Air-Balanced Pumpers develop lower polish rod loads than conventional types of units, which is reflected throughout the entire unit in lower strains, less wear and tear. On a one year test against conventional type pumpers and gas lifts, the Air-Balanced Pumper saved as much as $5000.00 per year on a single well in maintenance costs alone.



LIGHTER FOUNDATIONS REQUIRED

Because of the light loads, reduced vibrations, reduced shock and impact loading, Air-Balanced Pumpers require much lighter foundations than conventional pumping units. For instance, foundations for the Air-Balanced Pumpers require only about 60% of the amount of concrete necessary for foundations for conventional pumpers of comparable size.

AUTOMATIC COUNTERBALANCE

Setting or changing the counterbalance on an Air-Balanced Pumper is as easy and simple as turning a valve. The Counterbalance adjusts itself automatically to any setting.

AIR PUMPING SYSTEM

The Parkersburg air pumping system used to build up air pressure in the counterbalance cylinder is much simpler, more efficient and much safer than the compressor systems used on other types of air-balanced pumpers. The entire air counterbalance pressure can be cut off by a valve and held in the storage tank when it is necessary to disconnect the well or stop the unit for any reason. There is no pressure working against the beam or the brake while the unit is down, but the full pressure is there to put the unit back into operation immediately.

PRE-TESTING

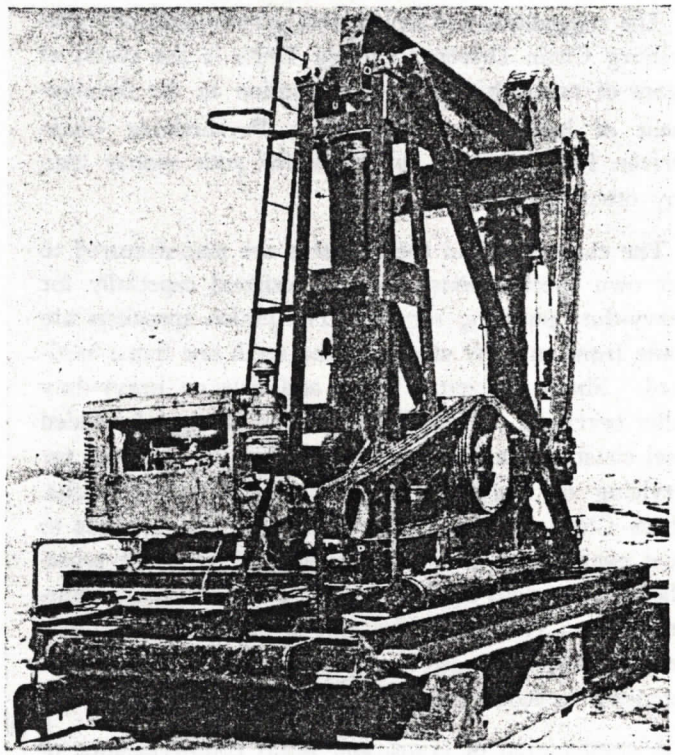
All Parkersburg Air-Balanced Pumpers are inspected and tested before leaving the plant. This assures perfect operating condition of the unit when put into service on your well. These pumpers are designed and manufactured throughout to meet the highest standard of quality and performance . . . not a price. This extra quality pays dividends over the years that more than offset the slightly higher first cost.

Because of their many economies in installation, operating and maintenance costs, Parkersburg Air-Balanced Pumpers are becoming increasingly popular with cost-conscious operators. This is a 64-G160D-20-N11 Air Balanced Pumper.

PORTABLE AIR BALANCED PUMPERS

These Portable Units are widely used for well testing prior to selecting the proper unit for the permanent installation. On medium depth wells, the unit can be set up on timbers and put into operation without tie-downs. On deeper wells it is recommended that the back end be tied down. Field tests have shown that these units can be taken from one well and put into service on another in a matter of hours.

These Portable Air-Balanced Pumping Units have a special 8′ wide base, and low center of gravity. Base ends are skid formed with pipe cross braces to facilitate loading and unloading. Cranks are floor clearing. Their weight, complete with counterbalance, is approximately 70% of a conventional unit, and the overall length is considerably less. All features of the Portable Air-Balanced Pumper are designed to make it the ideal unit for testing purposes.



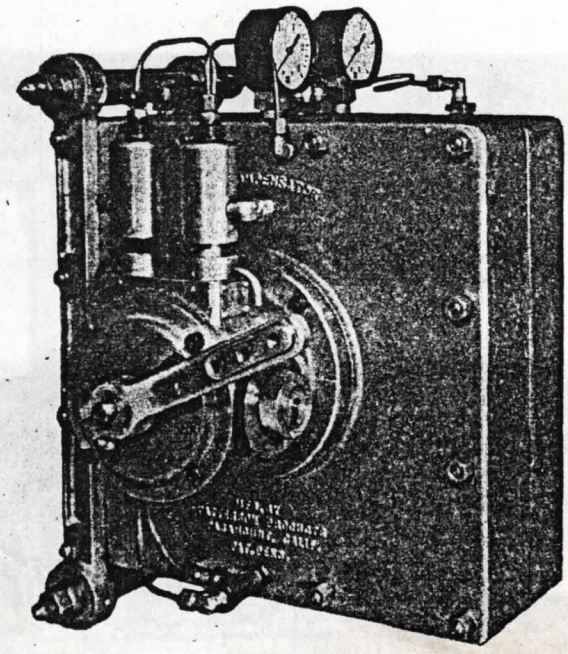
This is a 74-G320D-27-N11 Portable Air Balanced Pumper. Note the wide base and ease of mounting on timbers for testing pumping conditions

PARKERSBURG PNEUMATIC TIME COMPENSATOR

The Pneumatic Time Compensator automatically equalizes the torque on the upstroke and downstroke, thus preventing overloading and saving wear and tear on the prime mover, belts, bearings and rod string. Where well conditions and loads fluctuate, the Time Compensator keeps the pumping unit in perfect balance and eliminates any possibility of serious damage to the unit and the rod string.

The Time Compensator measures the time required to complete both the upstroke and the downstroke of the walking beam on an Air Balanced Pumper. When the time required for the two strokes is the same, the unit is in balance. A difference in the time indicates that the unit is out of balance. A slower upstroke indicates lack of counterbalance and a slower downstroke indicates that the unit has too much counterbalance. In either case, the Compensator automatically adjusts the counterbalance so that the time required for each stroke is equalized and the pumping unit is in accurate balance.

The Pneumatic Time Compensator is completely weather and corrosion proof. It requires no lubrication.



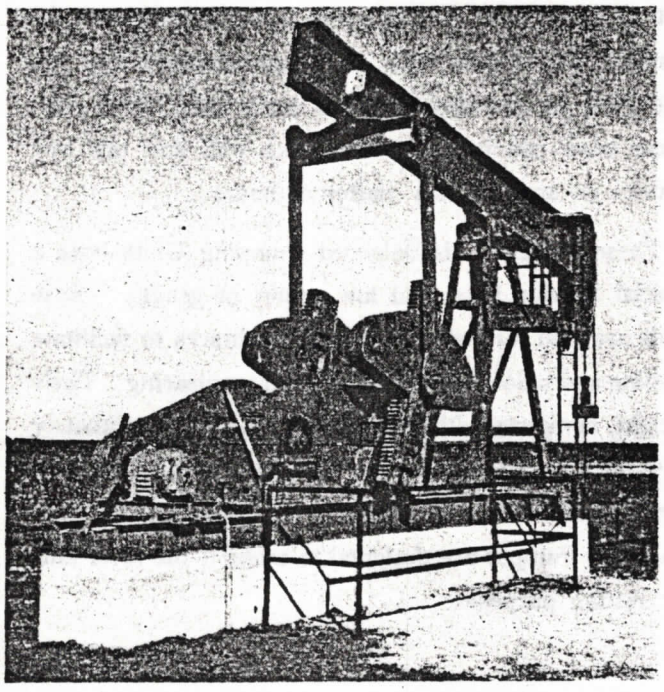
Once it has been set, it requires no further attention and its operation is not effected by changes in length of stroke, strokes per minute or the type of prime mover used.

CHAIN DRIVEN PUMPERS

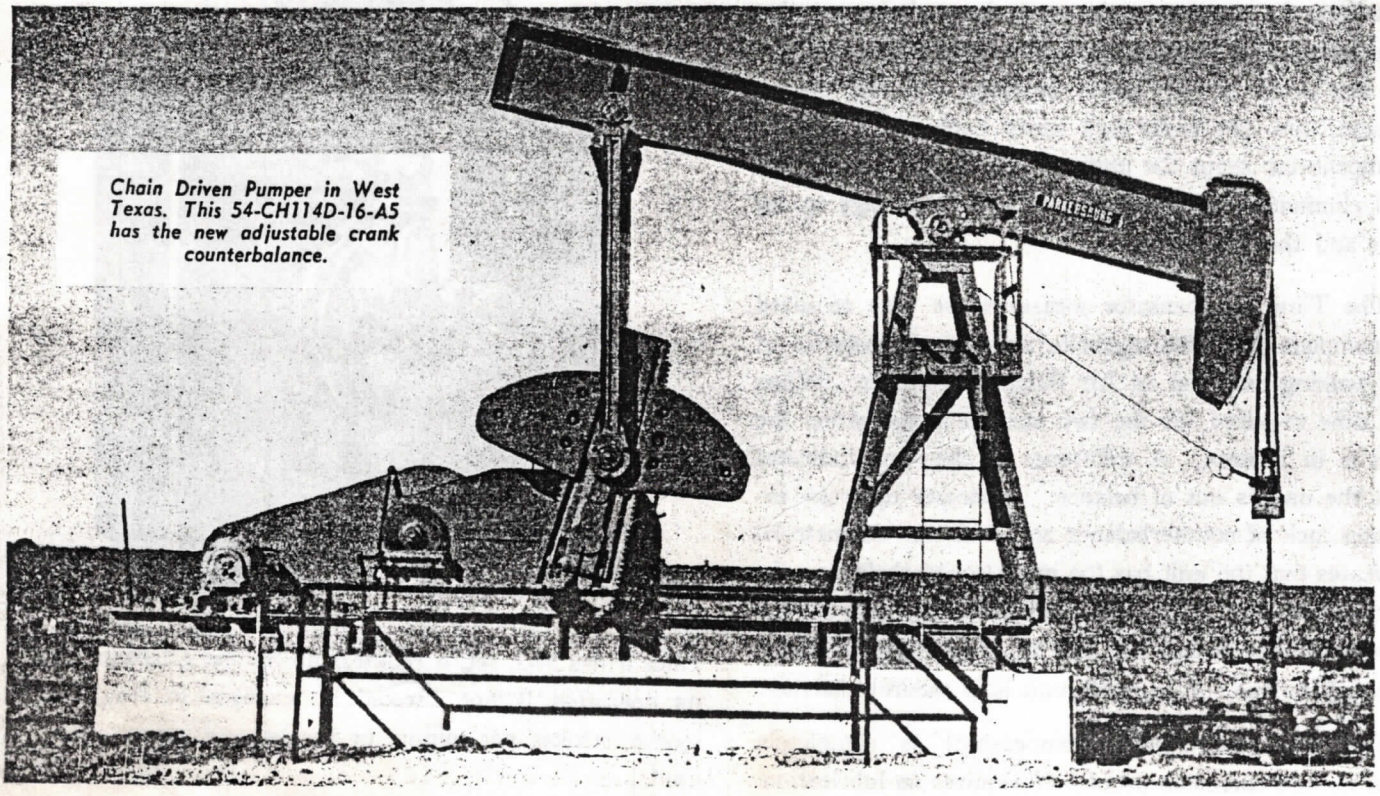
The ruggedness and dependable performance of Parkersburg Chain Driven Pumping Units is the result of years of research and experimentation in the development of better pumping units. Parkersburg Chain Driven Pumpers give you more for your money than any other pumper.

The chains used in the reducers are manufactured to our own specifications and are designed especially for heavy-duty pumping service. The pinion sprockets are made from an alloy steel and the teeth are flame-hardened. Shafts are extra heavy and ride on heavy-duty roller bearings. The reducer housing is rugged, welded steel construction with a cover that can be removed for servicing or inspection by loosening only two bolts. These Chain Driven Pumpers are available in sizes to meet every need in both portable and standard types. They have various combinations of crank and beam counterbalance. The 28" stroke unit is provided with beam weights only, which can be adjusted on the walking beam extension to economically counterbalance the unit.

A combination of crank and beam counterbalance is available on units having 34" and longer stroke. We recommend that one-third of the counterbalance be placed on the beam and the two-thirds on the cranks. With this arrangement, the final counterbalance adjustment can be made on the crank weights. Two types of crank weights are available, one being the type where leaf weights are added, or deducted as needed; the other being our crank counterbalance as described on page 4100.



Latest type Chain Driven Pumper on a West Texas location. It is the 54-CH114D-16-A5 with the new adjustable crank counterbalance and #1 weights



Chain Driven Pumper in West Texas. This 54-CH114D-16-A5 has the new adjustable crank counterbalance.

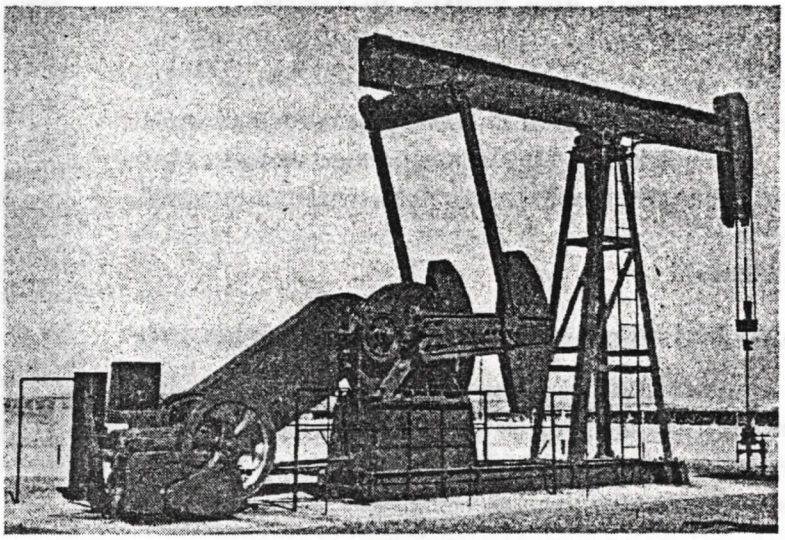
GEAR DRIVEN PUMPERS

Like all Parkersburg Pumpers, these herringbone Gear Driven Pumpers give years of trouble-free, economical, dependable performance. They are available in sizes and types to suit every pumping condition.

Gear Driven Pumpers are available with either single or double reduction gear reducers. Reducers having a peak torque of more than 57,000 inch pounds have the gears located symmetrically rather than offset or staggered. This arrangement permits using two standard bearings of the same size on each shaft with the loading from the gearing acting equally on the bearings of each shaft.

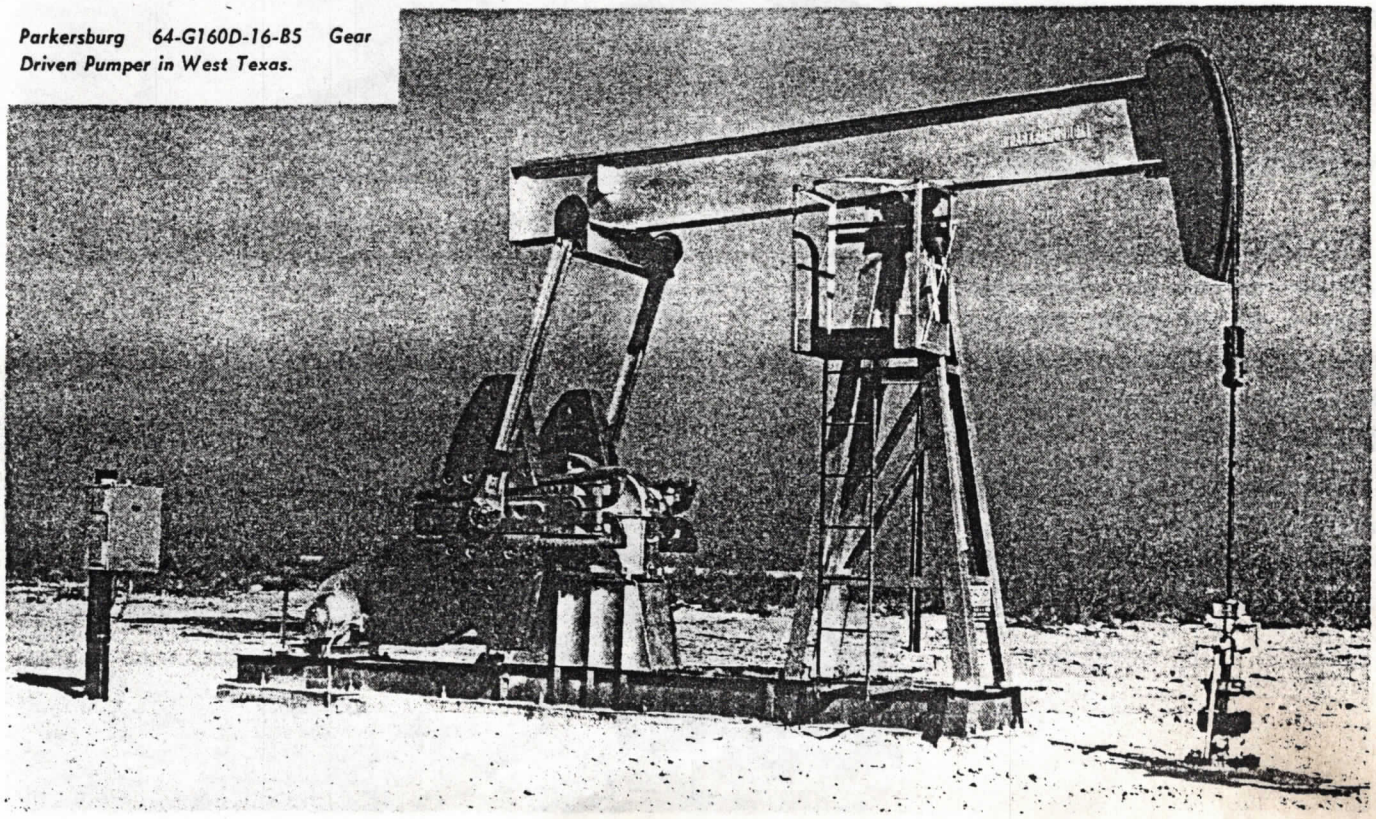
Suitable pitches and faces on all gear teeth provide maximum load carrying capacity and smooth rolling engagement in each train. Gear teeth are herringbone, of the continuous tooth type, generated on modern Sykes gear cutting machines. Pinions for both single and double reducers are made from chrome nickel alloy steel integral with their respective shafts. High speed gears are carbon steel forgings; low speed are alloy steel castings.

High and intermediate speed shafts are equipped with roller bearings. Low speed shafts have bronze bushings. All Gear Driven Pumpers having 34" and longer stroke can be furnished with the new Parkersburg adjustable crank counterbalance, see page 4100.



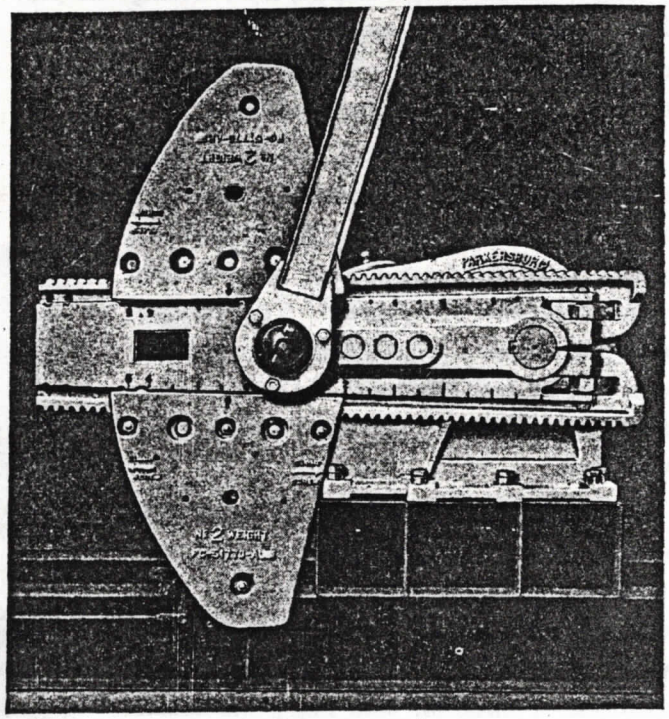
Parkersburg 84-G320S-25-B5 Gear Driven Pumper in West Texas.

Parkersburg 64-G160D-16-B5 Gear Driven Pumper in West Texas.



ADJUSTABLE CRANK COUNTERBALANCE

Field tested for more than four years, the Parkersburg Adjustable Crank Counterbalance has proved the simplest and most effective means of maintaining perfect counterbalance to assure peak performance and longer life from your pumping units.



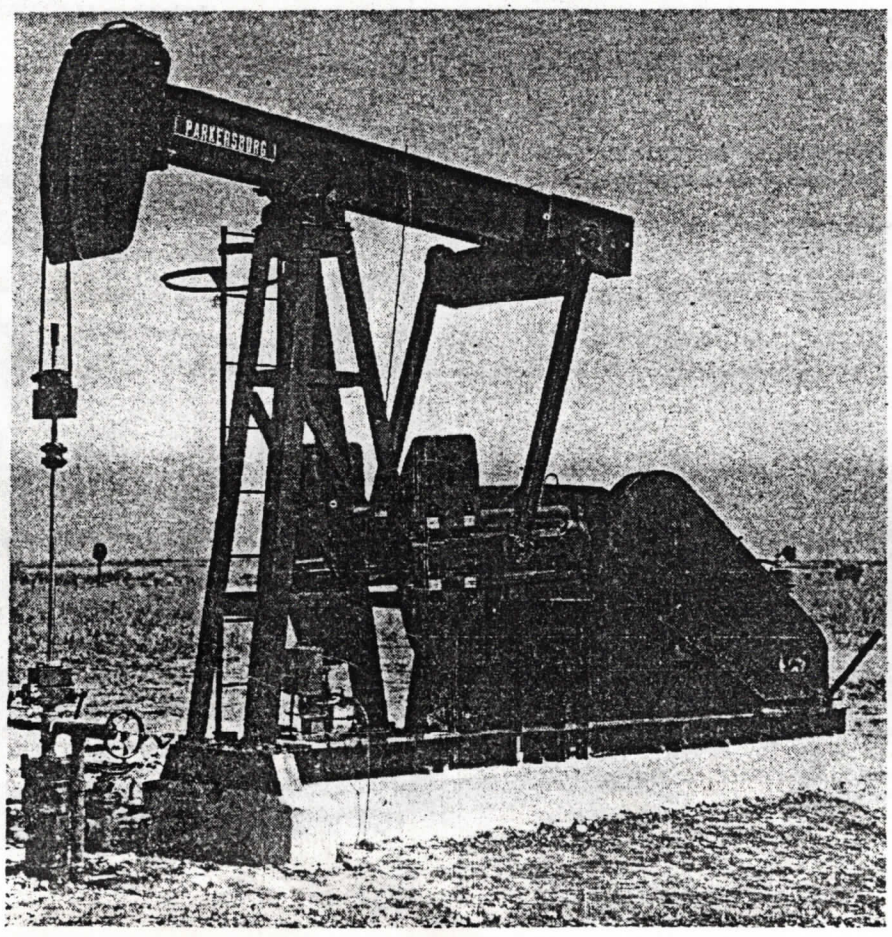
RACK AND PINION MOVEMENT

Weights ride on pinion gears which mesh with gear teeth on the crank. Weights are easily "cranked" into position with a wrench to obtain precise counterbalance.

One man loosens the clamping screws and then rotates the pinion gear in the direction the weight is to be moved. When the weight is in position, the clamping screw is tightened.

WEIGHTS POSITIVELY LOCKED IN ANY POSITION

A double locking arrangement of gears on rack and pinion positively prevents any movement of the weight. When clamping screw is tightened, the pinion gear shaft is moved upward into an elongated slot until one or more gear teeth engage root of rack teeth and shaft bears against side of the slot. Additional tightening of clamping screw effects tight wedging and clamping action between dovetailed tapered surfaces of weight and crank.



INTERCHANGEAGLE, ADJUSTABLE WEIGHTS

Five different sizes of weights are available. All can be interchanged on any of the five cranks available, thereby permitting the most economical combination of counterbalance for any stroke.

When required, and unit height permits, the weights can be extended 3" beyond the crank for additional counterbalance.

PARKERSBURG PUMPING UNIT DESIGNATIONS

To simplify the designations of various types of pumpers, and so that each designation conveys definite information concerning the unit to which it applies, we have adopted the following method of identifying Parkersburg Pumpers:

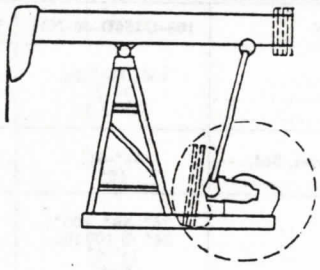
For example, we take the 54-G114D-16-N11 Pumper.

The first two figures indicate the maximum length of stroke, 54" in this example. In the second series, the first letter indicates the type of drive . . . "G" for gear, "CH" for chain. The figures following this letter indicate the API peak torque rating in thousands of inch pounds . . . in this case, 114,000 inch pounds. The zeros are dropped to simplify the designation. Where two figures are used the meaning is the same.

The letter following the peak torque rating indicates the type of speed reducer . . . "D" for double, "S" for single.

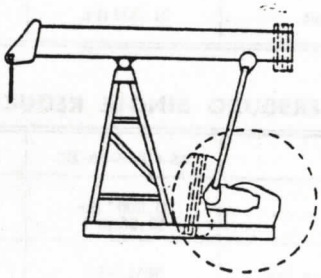
The figure or figures in the third part of the designation represent the API beam load rating in thousands of pounds . . . in this case 16,000 pounds. Again, the zeros are dropped to simplify the designation.

The letter and figure in the fourth part of the designation indicate the type and style of pumper structure.



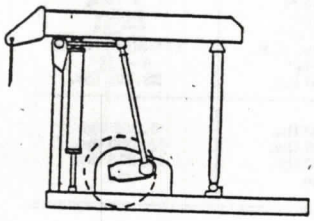
TYPE A-5
NON-FLOOR CLEARING COUNTERBALANCE

TYPE B-5
FLOOR CLEARING COUNTERBALANCE

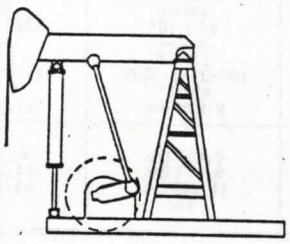


TYPE A-6
NON-FLOOR CLEARING COUNTERBALANCE

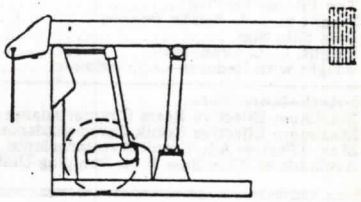
TYPE B-6
FLOOR CLEARING COUNTERBALANCE



TYPE N-10
PNEUMATIC UNIT



TYPE N-11
PNEUMATIC UNIT



TYPE-10
LONG STROKE UNIT

PARKERSBURG AIR BALANCED PUMPING UNITS

UNIT DESIGNATION	54-G114D-16-N11	64-G160D-20-N11	74-G228D-25-N11	74-G320D-27-N11	84-G228D-22-N11	100-G320D-28-N11
Reducer Data:						
API Peak Torque @ 20 SPM	114,000" lbs.	160,000" lbs.	228,000" lbs.	320,000" lbs.	228,000" lbs.	320,000" lbs.
Horsepower Rating @ 20 SPM	23.05	32.3	46.1	64.7	46.1	64.7
Ratio in Reducer	29.97	30.13 to 1	29.89 to 1	29.95 to 1	29.89 to 1	29.95 to 1
Sheave Data:						
Pitch Dia. and No. of Grooves, Std.	24"-4C	27¼"-5C	36"-5C	36"-7C	36"-5C	36"-7C
Maximum Outside Diameter	35½"	37¼"	46¼"	50½"	45¼"	50½"
Pumping Structure Data:						
Length of Stroke, Inches	44", 54"	44", 54", 64"	54", 64", 74"	54", 64", 74"	64", 74", 84"	76", 88", 100"
Walking Beam, Size	14" @ 53 lbs.	21" @ 62 lbs.	24" @ 76 lbs.	24" @ 76 lbs.	64" @ 76 lbs.	24" @ 100 lbs.
Working Centers, Well End	10'-0"	12'-0"	12'-6"	12'-6"	12'-6"	14'-6"
Working Center, Pitman End	5'-0¾"	6'-9"	6'-7"	6'-7"	6'-7"	7'-6"
API Beam Load Rating	16,000 lbs.	20,000 lbs.	25,000 lbs.	27,000 lbs.	22,130 lbs.	27,500 lbs.
Rod Hanger	Wire Line	Wire Line	Wire Line	Wire Line	Wire Line	Wire Line
Wrist Pin Bearing	Roller	Roller	Roller	Roller	Roller	Roller
Saddle Bearing	Roller	Roller	Roller	Roller	Roller	Roller
Top Pitman Bearing	Roller	Roller	Roller	Roller	Roller	Roller
Height to C. L. Saddle Bearing	10'-11"	12'-2"	12'-11⅜"	12'-11⅜"	12'-11⅜"	15'-4½"
Base Sills, Size	10" @ 21 lbs.	12" @ 27 lbs.	16" @ 36 lbs.	16" @ 36 lbs.	16" @ 36 lbs.	16" @ 36 lbs.
Weight with Reducer	10,615 lbs.	12,185 lbs.	17,775 lbs.	20,165 lbs.	17,775 lbs.	24,000 lbs.
Counterbalance Data:						
Max. Effective Counterbalance	12,000 lbs.	15,000 lbs.	19,000 lbs.	19,000 lbs.	167,000 lbs.	21,000 lbs.

PARKERSBURG AIR BALANCED PUMPING UNIT SPECIFICATIONS—Contd.

UNIT DESIGNATION	100-G456D-30-N11	120-G456D-33-N11	120-G640D-33-N11	120-G456D-40-N10	120-G640D-40-N10
Reducer Data:					
API Peak Torque @ 20 SPM	456,000" lbs.	456,000" lbs.	640,000" lbs.	456,000" lbs.	640,000" lbs.
Horsepower Rating @ 20 SPM	92.2	92.2	129.4	92.2	129.4
Ratio in Reducer	30 to 1	30 to 1	29.97	29.7 to 1	29.97
Sheave Data:					
Pitch Diameter and No. of Grooves, Std.	44"–8C	44"–8C	56"–10C	43⅛"–5D	56"–10C
Maximum Outside Diameter	56"	56"	60"	60"	60"
Pumping Structure Data:					
Length of Stroke, Inches	76", 88", 100"	96", 120"	96", 120"	96", 120"	96", 120"
Walking Beam, Size	24" @ 100 lbs.	24" @ 100 lbs.	24" @ 100 lbs.	24" @ 100 lbs.	24" @ 100 lbs.
Working Centers, Well End	14'–6"	16'–0"	16'–0"	16'–4"	16'–4"
Working Center, Pitman End	8'–4"	8'–7"	8'–7"	6'–11½"	6'–11½"
API Beam Load Rating	30,000 lbs.	32,600 lbs.	32,600 lbs.	40,000 lbs.	40,000 lbs.
Rod Hanger	Wire Line	Wire Line	Wire Line	Bearing	Bearing
Wrist Pin Bearing	Roller	Roller	Roller	5½" x 12"	5¼" x 12"
Saddle Bearing	Roller	Roller	Roller	6" x 20"	6" x 20"
Top Pitman Bearing	Roller	Roller	Roller	14'–6"	14'–6"
Height to C. L. Saddle Bearing	15'–4½"	17'–0"	17'–0"	14" @ 43 lbs.	14" @ 43 lbs.
Base Sills, Size	16" @ 36 lbs.	16" @ 36 lbs.	16" @ 36 lbs.	33,832 lbs.	34,913 lbs.
Weight with Reducer	26,460 lbs.	27,316 lbs.	29,056 lbs.		
Counterbalance Data:					
Maximum Effective Counterbalance	21,000 lbs.	22,000 lbs.	22,000 lbs.	29,000 lbs.	29,000 lbs.

PARKERSBURG SINGLE REDUCTION GEAR DRIVEN PUMPING UNITS

UNIT DESIGNATION	48-G80S-13-B5	54-G114S-16-B5	64-G160S-21-B5	74-G228S-26-B5	84-G320S-25-B5
Reducer Data:					
API Peak Torque, 20 SPM	80,000" lbs.	114,000" lbs.	160,000" lbs.	228,000" lbs.	320,000" lbs.
Ratio in Reducer	10.25 to 1	10.25 to 1	10.5 to 1	10.2 to 1	10.2 to 1
Sheave Data:					
Pitch Diameter and No. of Grooves, Std.	30¼"–5C	30"–4D	30"–5D	30"–6D	36"–7D
Maximum Pitch Diameter	30¼"	30"	30"	33"	37"
Pumping Structure Data:					
Length of Stroke, Inches	28, 38, 48	34, 44, 54	44, 54, 64	44, 54, 64, 74	54, 67, 74, 84
Walking Beam, Size	14"–61 lb. C.B.	21"–68 lb. C.B.	24"–94 lb. C.B.	24"–130 lb. C.B.	24"–130 lb. M. T.
Working Centers, Well End	6'–0"	6'–9"	8'–0"	10'–0"	12'–4"
Working Center, Pitman End	6'–0"	6'–9"	8'–0"	10'–0"	12'–6"
API Beam Load Rating	12,800 lbs.	16,000 lbs.	20,709 lbs.	26,650 lbs.	25,067 lbs.
Rod Hanger	Wire Line	Wire Line	Wire Line	Wire Line	Wire Line*
Wrist Pin Bearing	Roller	Roller	Roller	Roller	Roller
Saddle Bearing	5" x 9⅛"	6" x 10"	6½" x 11¾"	7" x 12¾"	7" x 12¾"
Top Pitman Bearing	Roller	Roller	Roller	Roller	Roller
Height to C. L. Saddle Bearing	11'–0"	11'–5"	13'–6"	15'–7½"	17'–0"
Base Sills, Size	10"–21 lb. C.B.	10"–21 lb. C.B.	14"–30 lb. C.B.	14"–30 lb. C.B.	14"–30 lb. C. B.
Height, C. L. Crankshaft	4'–9"	4'–11"	5'–8⅜"	6'–5⅛"	6'–7¼"
Weight with Reducer—Approximate	9,000 lbs.	9,920 lbs.	13,000 lbs.	20,400 lbs.	23,700 lbs.
Counterbalance Data:					
Maximum Effective Beam Counterbalance	6,875 lbs.	9,490 lbs.	9,035 lbs.	8,950 lbs.	8,255 lbs.
Maximum Effective Crank Counterbalance	6,485 lbs.	8,970 lbs.	11,950 lbs.	13,325 lbs.	13,000 lbs.
Max. Effective Adj. Crank Counterbalance	11,450 lbs.	11,240 lbs.	14,920 lbs.	16,950 lbs.	15,270 lbs.
Available as Wide Base Port. Pumping Units.	Yes	Yes	Yes	No	No

*Available with Rein Type Hanger.

PARKERSBURG SINGLE REDUCTION CHAIN DRIVEN PUMPING UNITS

UNIT DESIGNATION	42-CH70S-10-A5 Split Base	48-CH80S-13-B5 Split Base	54-CH142S-16-B5 Split Base	54-CH142S-16-B5	54-CH160S-16-B5 Split Base	64-CH160S-21-B5 Split Base	74-CH228S-26-B5 Split Base
Reducer Data:							
Peak Torque, 20 SPM	75,000" lbs.	89,000" lbs.	163,000" lbs.	163,000" lbs.	190,000" lbs.	190,000" lbs.	265,000" lbs.
Ratio in Reducer	7.46 to 1	7.8 to 1	7.8 to 1	7.8 to 1	7.45 to 1	7.45 to 1	6.4 to 1
Sheave Data:							
Pitch Dia. No. Grooves, Std.	44"-3C	42"-3D	42"-4D	42"-4D	52"-5D	52"-5D	49"-6D
Maximum Pitch Diameter	44"	42"	42"	42"	52"	52"	56"
Pumping Structure Data:							
Length of Stroke, Inches	27, 34, 42	28, 38, 48	34, 44, 54	34, 44, 54	34, 44, 54	44, 54, 64	44, 54, 64, 74
Walking Beam, Size	14"-43 lb.	14"-61 lb.	21"-68 lb.	24"-76 lb. C. B.	21"-68 lb.	24"-94 lb.	24"-130 lb.
Working Centers, Well End	5'-0"	6'-0"	6'9"-	8'-0"	6'-9"	8'-0"	10'-0"
Working Centers, Pitman End	5'-0"	6'-0"	6'-9"	8'-0"	6'-9"	8'-0"	10'-0"
API Beam Load Rating	10,450 lbs.	12,800 lbs.	16,000 lbs.	16,350 lbs.	16,000 lbs.	21,000 lbs.	26,650 lbs.
Rod Hanger	Wire Line	Wire Line	Wire Line	Wire Line†	Wire Line	Wire Line	Wire Line
Wrist Pin Bearing	Roller	Roller	Roller	Roller	Roller	Roller	Roller
Saddle Bearing	4½" x 8⅛"	5" x 9⅛"	6" x 10"	6" x 10"	6" x 10"	6½" x 11¾"	7" x 12¾"
Top Pitman Bearing	Roller	Roller	Roller	Roller	Roller	Roller	Roller
Height to C. L. Saddle Bearing	8'-3"	11'-0"	11'-6"	12'-3"	11'-5"	13'-6"	15'-7½"
Base Sills, Size	8"-17 lb. C. B.	10"-21 lb. C. B.	10"-21 lb. C. B.	12" x 27 lbs.	10"-21 lb. C. B.	14"-30 lb. C. B.	14"-30 lb. C. B.
Height C. L. Crankshaft	2'-5¾"	4'-9"	4'-11"	4'-11¾"	4'-11"	5'-8¾"	6'-5¼"
Weight with Reducer—Approximate	6,540 lbs.	8,225 lbs.	11,445 lbs.	13,320 lbs.	13,000 lbs.	7,250 lbs.	20,500 lbs.
Counterbalance Data:							
Maximum Effective Beam Cbl.	6,740 lbs.	6,875 lbs.	9,490 lbs.	9,000 lbs.	9,490 lbs.	9,035 lbs.	8,950 lbs.
Maximum Effective Crank Cbl.	6,300 lbs.	6,300 lbs.	8,270 lbs.*	7,300 lbs.	8,270 lbs.*	11,450 lbs.*	13,325 lbs.
Maximum Effective Adj. Crank Cbl.	6,500 lbs.	10,300 lbs.	11,900 lbs.	11,900 lbs.	11,900 lbs.	15,720 lbs.	17,660 lbs.
Available as Wide Base Portable Pumping Units	Yes	Yes	Yes	No	No	Yes	No

*Max. C'bal with Wts. Clearing Floor.
†Also available with Rein Type Hanger.

PARKERSBURG DOUBLE REDUCTION GEAR DRIVEN PUMPING UNITS

UNIT DESIGNATION	28-G25D-7-B5 Long Base	34-G40D-9-B5 Long Base	42-G57D-10-B5 Split Type	48-G80D-13-B5 Split Type	54-G114D-16-B5 Split Type	54-G114D-16-B5 Split Type
Reducer Data:						
API Peak Torque, 20 SPM	25,000" lbs.	40,000" lbs.	57,000" lbs.	80,000" lbs.	114,000" lbs.	114,000" lbs.
Ratio in Reducer	30.08 to 1	31.62 to 1	30.17 to 1	30.17 to 1	29.97 to 1	29.97 to 1
Sheave Data:						
Pitch Diameter and No. of Grooves, Std.	18"-3A or B	18"-2C	22"-2C	22"-3C	22"-4C	22"-4C
Maximum Pitch Diameter	18"	19"	24"	27"	35"	35"
Pumping Structure Data:						
Length of Stroke, Inches	18, 28	16, 25, 34	26, 34, 42	28, 38, 48	34, 44, 54	34, 44, 54
Walking Beam, Size	12"-27 lb. C.B.	14"-30 lb. C.B.	14"-43 lb. C.B.	14"-61 lb. C.B.	21"-68 lb. C.B.	24"-76 lb. C.B.
Working Centers, Well End	3'-6"	4'-0"	5'-0"	6'-0"	6'-9"	7'-10½"
Working Center, Pitman End	3'-6"	4'-0"	5'-0"	6'-0"	6'-9"	8'-0"
API Beam Load Rating	7,360 lbs.	8,700 lbs.	10,450 lbs.	12,800 lbs.	16,000 lbs.	16,350 lbs.
Rod Hanger	Wire Line	Wire Line	Wire Line	Wire Line	Wire Line	Wire Line*
Wrist Pin Bearing	Roller	Roller	Roller	Roller	Roller	Roller
Saddle Bearing	4" x 7"	4½" x 8⅛"	4½" x 8⅛"	5" x 9⅛"	6" x 10"	6" x 10"
Top Pitman Bearing	Roller	Roller	Roller	Roller	Roller	Roller
Height to C.L. Saddle Bearing	7'-1"	8'-0"	10'-0"	11'-0"	11'-5"	12'-3"
Base Sills, Size	8"-17 lb. C.B.	8"-17 lb. C.B.	8"-17 lb. C.B.	10"-21 lb. C.B.	10"-21 lb. C.B.	12"-27 lb. C.B.
Height, C.L. Crankshaft	21⅛"	3'-2⅛"	4'-0½"	4'-8⅛"	4'-10⅞"	5'-1"
Weight with Reducer—Approximate	2,500 lbs.	4,750 lbs.	5,740 lbs.	9,000 lbs.	9,920 lbs.	10,460 lbs.
Counterbalance Data:						
Max. Effective Beam Counterbalance	5,700 lbs.	6,720 lbs.	6,740 lbs.	6,875 lbs.	9,490 lbs.	9,000 lbs.
Max. Effective Crank Counterbalance	None	3,610 lbs.	6,485 lbs.	6,485 lbs.	8,970 lbs.	8,970 lbs.
Max. Effective Adj. Crank Counterbalance	None	3,900 lbs.	6,700 lbs.	11,450 lbs.	11,240 lbs.	11,240 lbs.
Available as Wide Base Portable Pumping Units	Yes	Yes	Yes	Yes	Yes	No

*Available with Rein Type Hanger.

UNIT DESIGNATION	54-G160D-16-B5 Split Type	54-G160D-16-B5 Split Type	64-G160D-21-B5 Split Type	64-G160D-21-B5 Split Type	64-G228D-21-B5 Split Type	64-G228D-21-B5 Split Type
Reducer Data:						
API Peak Torque, 20 SPM	160,000" lbs.	160,000" lbs.	160,000" lbs.	160,000" lbs.	228,000" lbs.	228,000" lbs.
Ratio in Reducer	30.13 to 1	30.13 to 1	30.13 to 1	30.13 to 1	29.89 to 1	29.89 to 1
Sheave Data:						
Pitch Diameter and No. of Grooves, Std.	22"-5C	22"-5C	22"-5C	22"-5C	30"-6C	30"-6C
Maximum Pitch Diameter	36½"	36½"	36½"	36½"	45"	45"
Pumping Structure Data:						
Length of Stroke, Inches	34, 44, 54	34, 44, 54	44, 54, 64	44, 54, 64	44, 54, 64	44, 54, 64
Walking Beam, Size	21"-68 lb. C.B.	24"-76 lb. C.B.	24"-94 lb. C.B.	27"-114 lb.	24"-94 lb.	27"-114 lb.
Working Centers, Well End	6'-9"	7'-10½"	8'-0"	9'-10½"	8'-0"	9'-10½"
Working Center, Pitman End	6'-9"	8'-0"	8'-0"	10'-0"	8'-0"	10'-0"
API Beam Load Rating	16,000 lbs.	16,350 lbs.	20,709 lbs.	21,290 lbs.	20,790 lbs.	21,290 lbs.
Rod Hanger	Wire Line	Wire Line*	Wire Line	Wire Line*	Wire Line	Wire Line*
Wrist Pin Bearing	Roller	Roller	Roller	Roller	Roller	Roller
Saddle Bearing	6" x 10"	6" x 10"	6½" x 11¾"	6½" x 11¾"	6½" x 11¾"	6½" x 11¾"
Top Pitman Bearing	Roller	Roller	Roller	Roller	Roller	Roller
Height to C.L. Saddle Bearing	11'-5"	12'-3"	13'-10"	14'-2"	13'-6"	13'-6"
Base Sills, Size	10"-21 lb. C.B.	12"-27 lb. C.B.	14"-30 lb. C.B.	14"-30 lb. C.B.	14"-30 lb. C.B.	14"-30 lb. C.B.
Height, C.L. Crankshaft	4'-10⅞"	5'-1"	5'-11⅜"	5'-8¼"	5'-8¼"	5'-8¼"
Weight with Reducer—Approximate	10,160 lbs.	10,700 lbs.	13,000 lbs.	14,220 lbs.	15,000 lbs.	16,200 lbs.
Counterbalance Data:						
Max. Effective Beam Counterbalance	9,490 lbs.	9,000 lbs.	9,035 lbs.	8,950 lbs.	9,035 lbs.	8,950 lbs.
Max. Effective Crank Counterbalance	8,970 lbs.	8,970 lbs.	11,950 lbs.	9,000 lbs.	9,000 lbs.	9,000 lbs.
Max. Effective Adj. Crank Counterbalance	11,240 lbs.	11,240 lbs.	14,920 lbs.	15,000 lbs.	15,000 lbs.	15,000 lbs.
Available as Wide Base Portable Pumping Units	No	No	Yes	No	No	No

*Also Available with Rein Type Hanger.

UNIT DESIGNATION	74-G228D-26-B5 Split Type	74-G228D-25-B5 Split Type	74-G320D-26-B5 Split Type	74-G320D-25-B5 Split Type	84-G320D-25-B5 Split Type	132-G640D-30-10 Split Type
Reducer Data:						
API Peak Torque, 20 SPM	228,000" lbs.	228,000" lbs.	320,000" lbs.	320,000" lbs.	320,000" lbs.	640,000" lbs.
Ratio in Reducer	29.89 to 1	29.89 to 1	29.95 to 1	29.95 to 1	29.95 to 1	29.97 to 1
Sheave Data:						
Pitch Dia. and No. of Grooves, Std.	30"-6C	30"-6C	30"-8C	30"-8C	30"-8C	50" PD-10C
Maximum Pitch Diameter	45"	45"	51"	51"	51"	60" PD
Pumping Structure Data:						
Length of Stroke, Inches	44, 54, 64, 74	44, 54, 64, 74	44, 54, 64, 74	44, 54, 64, 74	54, 64, 74, 84	60, 84, 108, 132
Walking Beam, Size	24"-130 lb. C.B.	24"-130 lb. M.T.	24"-130 lb. C.B.	24"-130 lb. M.T.	24"-130 lb. M.T.	24"@ 100 lb. M.T.
Working Centers, Well End	10'-0"	12'-4"	10'-0"	12'-4"	12'-4"	13'-6¾"
Working Center, Pitman End	10'-0"	12'-6"	10'-0"	12'-6"	12'-6"	14'-5¼"
API Beam Load Rating	26,650 lbs.	25,067 lbs.	26,650 lbs.	25,067 lbs.	25,067 lbs.	30,000 lbs.
Rod Hanger	Wire Line	Wire Line*	Wire Line	Wire Line*	Wire Line	Roller Bearing
Wrist Pin Bearing	Roller	Roller	Roller	Roller	Roller	Roller Bearing
Saddle Bearing	7" x 12¾"	7" x 12¾"	7" x 12¾"	7" x 12¾"	7" x 12¾"	8" x 13¾"
Top Pitman Bearing	Roller	Roller	Roller	Roller	Roller	6" x 20"
Height to C.L. Saddle Bearing	15'-7½"	15'-7½"	15'-7½"	17'-0"	17'-0"	12'-2"
Base Sills, Size	14"-30 lb. C.B.	14"-30 lb. C.B.	14"-30 lb. C.B.	14"-30 lb. C.B.	14"-30 lb. C.B.	16"-36 lb. C.B.
Height, C.L. Crankshaft	6'-5⅝"	6'-5⅝"	6'-5⅝"	6'-7⅛"	6'-7⅛"	38⅛"
Weight with Reducer—Approximate	20,500 lbs.	21,500 lbs.	21,200 lbs.	22,320 lbs.	22,700 lbs.	30,150 lbs.
Counterbalance Data:						
Max. Effective Beam Counterbalance	10,675 lbs.	8,255 lbs.	7,825 lbs.	8,255 lbs.	8,255 lbs.	16,600 lbs.
Max. Effective Crank Counterbalance	13,325 lbs.	13,325 lbs.	13,325 lbs.	13,325 lbs.	13,000 lbs.	None
Max. Effective Adj. Crank Counterbalance	16,950 lbs.	16,950 lbs.	16,950 lbs.	16,950 lbs.	15,270 lbs.	None
Available as Wide Base Portable Pumping Units	No	No	No	No	No	No

*Also Available with Rein Type Hanger.

PARKERSBURG DOUBLE REDUCTION CHAIN DRIVEN PUMPING UNITS

UNIT DESIGNATION	28-CH25D-7-B5 Polly, Long Base	34-CH25D-9-B5 Polly, Long Base	34-CH40D-9-B5 Polly, Long Base	42-CH57D-10-B5 Polly, Split Type	48-CH80D-13-B5 Polly, Portable
Reducer Data:					
API Peak Torque, 20 SPM	25,000" lbs.	25,000" lbs.	40,000" lbs.	70,000" lbs.	89,000" lbs.
Ratio in Reducer	21.85 to 1	21.85 to 1	21.1 to 1	19.86 to 1	22.24 to 1
Sheave Data:					
Pitch Diameter and No. of Grooves, Std.	25"-4B	25"-4B	28"-2C	30.5"-2C	26"-3C
Maximum Pitch Diameter	34"	34"	46"	40"	50"
Pumping Structure Data:					
Length of Stroke, Inches	18"-28"	16"-25"-34"	16"-25"-34"	26, 34, 52	28, 38, 48
Walking Beam, Size	12"-27 lb. C.B.	14"-30 lb. C.B.	14"-30 lb. C.B.	14"-43 lb. C.B.	14"-61 lb. C.B.
Working Centers, Well End	3'-6"	4'-0"	4'-0"	5'-0"	6'-0"
Working Center, Pitman End	3'-6"	4'-0"	4'-0"	5'-0"	6'-0"
API Beam Load Rating	7,360 lbs.	8,708 lbs.	8,708 lbs.	10,450 lbs.	12,800 lbs.
Rod Hanger	Wire Line	Wire Line	Wire Line	Wire Line	Wire Line
Wrist Pin Bearing	Roller	Roller	Roller	Roller	Roller
Saddle Bearing	4" x 7"	4½" x 8⅞"	4½" x 8⅞"	4½" x 8¼"	5" x 9⅛"
Top Pitman Bearing	Roller	Roller	Roller	Roller	Roller
Height to C. L. Saddle Bearing	6'-10¼"	8'-0"	8'-0"	10'-0"	11'-0"
Base Sills, Size	8"-17 lb. C.B.	8"-17 lb. C.B.	8"-17 lb. C.B.	8"-17 lb. C.B.	10"-21 lb. C.B.
Height, C. L. Crankshaft	18-⅜"	3'-5"	3'-4¾"	4'-2⅜"	4'-7⅞"
Weight with Reducer—Approximate	.....	.....	.....	6,200 lbs.	9,000 lbs.
Counterbalance Data:					
Max. Effective Beam Counterbalance	5,700 lbs.	6,720 lbs.	6,720 lbs.	6,740 lbs.	6,875 lbs.
Max. Effective Crank Counterbalance	None	4,290 lbs.	4,290 lbs.	6,300 lbs.	6,300 lbs.
Max. Effective Adj. Crank Counterbalance	None	3,900 lbs.	3,900 lbs.	6,700 lbs.	10,300 lbs.
Available as Wide Base Portable Pumping Units	No	Yes	Yes	Yes	Yes

*Available with Rein Type Hanger.

UNIT DESIGNATION	54-CH114D-16-B5 Polly, Split Type	54-CH114D-16-B5 Polly, Split Type	54-CH160D-16-B5 Polly, Split Type	54-CH160D-16-B5 Polly, Split Type	64-CH160D-21-B5 Polly, Split Type
Reducer Data:					
API Peak Torque, 20 SPM	142,000" lbs.	142,000" lbs.	190,000" lbs.	190,000" lbs.	190,000" lbs.
Ratio in Reducer	23.75 to 1	23.75 to 1	25.3 to 1	25.3 to 1	25.3 to 1
Sheave Data:					
Pitch Diameter and No. of Grooves, Std.	24"-4C	24"-4C	24"-6C	24"-6C	24"-6C
Maximum Pitch Diameter	52"	52"	52"	52"	52"
Pumping Structure Data:					
Length of Stroke, Inches	34, 44, 54	34, 44, 54	34, 44, 54	34, 44, 54	44, 54, 64
Walking Beam, Size	21"-68 lb. C.B.	24"-76 lb. C.B.	21"-68 lb. C.B.	24"-76 lb. C.B.	24"-94 lb. C.B.
Working Centers, Well End	6'-9"	8'-0"	6'-9"	7'-10½"	8'-0"
Working Center, Pitman End	6'-9"	8'-0"	6'-9"	8'-0"	8'-0"
API Beam Load Rating	16,000 lbs.	16,350 lbs.	16,000 lbs.	16,350 lbs.	21,000 lbs.
Rod Hanger	Wire Line	Wire Line*	Wire Line	Wire Line*	Wire Line
Wrist Pin Bearing	Roller	Roller	Roller	Roller	Roller
Saddle Bearing	6" x 10"	6" x 10"	6" x 10"	6" x 10"	6½" x 11¾"
Top Pitman Bearing	Roller	Roller	Roller	Roller	Roller
Height to C. L. Saddle Bearing	11'-5"	12'-3"	11'-5"	12'-3"	13'-6"
Base Sills, Size	10"-21 lb. C.B.	12"-27 lb. C.B.	10"-21 lb. C.B.	12"-27 lb. C.B.	14"-30 lb. C.B.
Height, C. L. Crankshaft	4'-11"	4'-11⅜"	4'-11"	5'-0⅜"	5'-8¾"
Weight with Reducer—Approximate	10,250 lbs.	11,720 lbs.	12,000 lbs.	12,550 lbs.	17,250 lbs.
Counterbalance Data:					
Max. Effective Beam Counterbalance	9,490 lbs.	9,000 lbs.	9,490 lbs.	9,000 lbs.	9,035 lbs.
Max. Effective Crank Counterbalance	8,270 lbs.	8,270 lbs.	8,270 lbs.	8,270 lbs.	11,450 lbs.
Max. Effective Adj. Crank Counterbalance	11,900 lbs.	11,900 lbs.	11,900 lbs.	11,900 lbs.	15,720 lbs.
Available as Wide Base Portable Pumping Units	Yes (Duck)	No	No	No	Yes (Drake)

*Available with Rod Type Hanger.

UNIT DESIGNATION	64-CH160D-21-B5 Polly, Split Type	64-CH228D-21-B5 Polly, Split Type	74-CH228D-21-B5 Polly, Split Type	74-CH228D-26-B5 Polly, Split Type	74-CH228D-25-B5 Polly, Split Type
Reducer Data:					
API Peak Torque, 20 SPM	190,000" lbs.	230,000" lbs.	230,000" lbs.	230,000" lbs.	230,000" lbs.
Ratio in Reducer	25.3 to 1	19.1 to 1	19.1 to 1	19.1 to 1	19.1 to 1
Sheave Data:					
Pitch Diameter and No. of Grooves, Std.	24"-6C	38"-6D	38"-6D	38"-6D	38"-6D
Maximum Pitch Diameter	52"	60"	60"	60"	60"
Pumping Structure Data:					
Length of Stroke, Inches	44, 54, 64	44, 54, 64	44, 54, 64, 74	44, 54, 64, 74	44, 54, 64, 74
Walking Beam, Size	27"-114 lb. C.B.	27"-114 lb. C.B.	27"-114 lb. C.B.	24"-130 lb. C.B.	24"-130 lb. M.T.
Working Centers, Well End	9'-10½"	9'-10½"	9'-10½"	10'-0"	12'-4"
Working Center, Pitman End	10'-0"	10'-0"	10'-0"	10'-0"	12'-6"
API Beam Load Rating	21,000 lbs.	21,290 lbs.	21,290 lbs.	26,650 lbs.	25,067 lbs.
Rod Hanger	Wire Line*	Wire Line*	Wire Line	Wire Line	Wire Line*
Wrist Pin Bearing	Roller	Roller	Roller	Roller	Roller
Saddle Bearing	6½" x 11¾"	6½" x 11¾"	6½" x 11¾"	7" x 12¾"	7" x 12¾"
Top Pitman Bearing	Roller	Roller	Roller	Roller	Roller
Height to C. L. Saddle Bearing	14'-2"	15'-7"	15'-7"	15'-7⅛"	15'-7⅛"
Base Sills, Size	14"-30 lb. C.B.	14"-30 lb. C.B.	14"-30 lb. C.B.	14"-30 lb. C.B.	14"-30 lb. C.B.
Height, C. L. Crankshaft	5'-8¾"	6'-5¼"	6'-5¼"	6'-5¼"	6' 5¼"
Weight with Reducer—Approximate	18,470 lbs.	19,050 lbs.	19,250 lbs.	20,400 lbs.	26,375 lbs.
Counterbalance Data:					
Max. Effective Beam Counterbalance	8,950 lbs.	8,950 lbs.	8,950 lbs.	10,675 lbs.	8,255 lbs.
Max. Effective Crank Counterbalance	11,450 lbs.	15,720 lbs.	13,400 lbs.	13,400 lbs.	13,400 lbs.
Max. Effective Adj. Crank Counterbalance	15,720 lbs.	15,720 lbs.	17,660 lbs.	17,660 lbs.	17,660 lbs.
Available as Wide Base Portable Pumping Units	No	No	No	No	No

*Available with Rein Type Hanger.

PARKERSBURG DOUBLE-REDUCTION GEAR-DRIVEN PUMPING UNITS

UNIT DESIGNATION	28-G25D-7-B5*	36-G25D-6-B5	34-G40D-9-B5*	42-G40D-7-B5	34-G57D-9-B5	42-G57D-10-B5†*
Reducer Data:						
API Peak Torque, In.-Lbs.	25,000	25,000	40,000	40,000	57,000	57,000
Reduction Ratio	30.08 to 1	30.08 to 1	31.62 to 1	31.62 to 1	30.17 to 1	30.17 to 1
Type Gears	Herringbone Steel					
P.D. Sheave & No. Grooves, Std.	18"-3B	18"-3B	18"-2C	18"-2C	24"-2C	24"-2C
Pitch Diameter, Maximum	18"	18"	18"	18"	24"	24"
Structure Data:						
Stroke Length, Inches	18-28	23-36	16-25-34	20-31-42	16-25-34	26-34-42
Walking Beam, Size	12"-27# C.B.	12"-27# C.B.	14"-30# C.B.	14"-30# C.B.	14"-30# C.B.	14"-43# C.B.
Structure Capacity, Pounds	7,000	6,315	8,708	6,967	8,708	10,450
Working Centers						
Well End, Ft.-In.	3'-6"	4'-6"	4'-0"	5'-0"	4'-0"	5'-0"
Pitman End, Ft.-In.	3'-6"	3'-6"	4'-0"	4'-0"	4'-0"	5'-0"
Rod Hanger	Wire-Line Type					
Saddle Bearing	4" Dia. x 7"	4" Dia. x 7"	4½" Dia. x 8⅞"	4½" Dia. x 8⅞"	4½" Dia. x 8⅞"	4½" Dia. x 8⅞"
Pitman Bearing	Self-Aligning Roller Bearings					
Wrist Pin Bearing	Self-Aligning Roller Bearings					
Approximate Weight Less C/B Weights						
Counterbalance Data:						
Max. Effective Crank Counterbalance	None	None	3585	2868	3585	8530
Max. Effective Beam Counterbalance	5180	4430	6720	2705	6720	None

* Available in wide base portable unit—"WB5."
† Available in elevated unit—"EB5."

UNIT DESIGNATION	48-G57D-9-B5*	42-G80D-10-B5†	48-G80D-9-B5†	48-G80D-14-B5†	54-G80D-13-B5*	54-G80D-14-B5
Reducer Data:						
API Peak Torque, In.-Lbs.	57,000	80,000	80,000	80,000	80,000	80,000
Reduction Ratio	30.17 to 1	30.17 to 1	30.17 to 1	30.17 to 1	30.17 to 1	30.17 to 1
Type Gears	Herringbone Steel					
P.D. Sheave & No. Grooves, Std.	24"-2C	24"-3C	24"-3C	24"-3C	24"-3C	24"-3C
Pitch Diameter, Maximum	24"	27"	27"	27"	27"	27"
Structure Data:						
Stroke Length, Inches	30-39-48	26-34-42	29½-40-48	24-36-48	27-40½-54	34-44-54
Walking Beam, Size	14"-43# C.B.	14"-43# C.B.	14"-43# C.B.	14"-68# C.B.	14"-68#	14"-68# C.B.
Structure Capacity, Pounds	9,086	10,450	9,086	14,000	12,716	14,000
Working Centers:						
Well End, Ft.-In.	5'-9"	5'-0"	5'-9"	6'-0"	6'-9"	6'-0"
Pitman End, Ft.-In.	5'-0"	5'-0"	5'-0"	6'-0"	8'-0"	6'-0"
Rod Hanger	Wire-Line Type					
Saddle Bearing	4½" Dia. x 8⅞"	4½" Dia. x 8⅞"	4½" Dia. x 8⅞"	5" Dia. x 9⅛"	5" Dia. x 9⅛"	5" Dia. x 9⅛"
Pitman Bearing	Self-Aligning Roller Bearings					
Wrist Pin Bearing	Self-Aligning Roller Bearings					
Approximate Weight Less C/B Weights						
Counterbalance Data:						
Max. Effective Crank Counterbalance	7420	8530	7420	7530	8760	14,600
Max. Effective Beam Counterbalance	None	None	None	None	None	None

* Available in wide base portable unit—"WB5."
† Available in elevated unit—"EB5."

UNIT DESIGNATION	48-G114D-14-B5†	54-G114D-14-B5†	64-G114D-10.9-B5	54-G114D-16-B5*	64-G114D-16-B5*	64-G114D-14-B5*
Reducer Data:						
API Peak Torque, In.-Lbs.	114,000	114,000	114,000	114,000	114,000	114,000
Reduction Ratio	29.97 to 1	29.97 to 1	29.97 to 1	29.97 to 1	29.97 to 1	29.97 to 1
Type Gears	Herringbone Steel					
P. D. Sheave & No. Grooves, Std.	24"-4C	24"-4C	24"-4C	24"-4C	24"-4C	24"-4C
Pitch Diameter, Maximum	34"	34"	34"	34"	34"	34"
Structure Data:						
Stroke Length, Inches	24-36-48	34-44-54	40-52-64	34-44-54	34-44-54-64	40-52-64
Walking Beam, Size	14"-68# C.B.	14"-68# C.B.	14"-68# C.B.	21"-68# C.B.	21"-68# C.B.	21"-68# C.B.
Structure Capacity, Pounds	14,000	14,000	11,000	16,607	16,607	13,550
Working Centers:						
Well End, Ft.-In.	6'-0"	6'-0"	7'-0"	6'-9"	6'-9"	8'-0"
Pitman End, Ft.-In.	6'-0"	6'-0"	6'-0"	6'-9"	6'-9"	6'-9"
Rod Hanger	Wire-Line Type					
Saddle Bearing	5" Dia. x 9⅛"	5" Dia. x 9⅛"	5" Dia. x 9⅛"	6" Dia. x 10"	6" Dia. x 10"	6" Dia. x 10"
Pitman Bearing	Self-Aligning Roller Bearings					
Wrist Pin Bearing	Self-Aligning Roller Bearings					
Approximate Weight Less C/B Weights						
Counterbalance Data:						
Max. Effective Crank Counterbalance	7530	7400	12,640	14,600	11,430	14,600
Max. Effective Beam Counterbalance	None	None	2985	None	None	4075

* Available in wide base portable anit—"WB5."
† Available in elevated unit—"EB5."

PARKERSBURG Pumping Unit Division Offices: P.O. Box 573, Coffeyville, Kan.

PARKERSBURG DOUBLE-REDUCTION GEAR-DRIVEN PUMPING UNITS

UNIT DESIGNATION	54-G160D-16-B5	64-G160D-16-B5†	74-G160D-16-B5*	64-G160D-21-B5†	74-G160D-21-B5*	64-G228D-21-B5†
Reducer Data:						
API Peak Torque, In.-Lbs.	160,000	160,000	160,000	160,000	160,000	228,000
Reduction Ratio	30.13 to 1	30.13 to 1	30.13 to 1	30.13 to 1	30.13 to 1	29.89 to 1
Type Gears	Herringbone Steel					
P.D. Sheave & No. Grooves, Std.	24″-5C	24″-5C	24″-5C	24″-5C	24″-5C	30″-6C
Pitch Diameter, Maximum	36″	36″	36″	36″	36″	44″
Structure Data:						
Stroke Length, Inches	34-44-54	34-44-54-64	44-54-64-74	34-44-54-64	44-54-64-74	34-44-54-64
Walking Beam, Size	21″-68# C.B.	21″-68# C.B.	24″-76# C.B.	24″-94# C.B.	24″-94# C.B.	24″-94# C.B.
Structure Capacity, Pounds	16,607	16,607	16,988	21,448	21,448	21,448
Working Centers:						
Well End, Ft.-In.	6′-9″	6′-9″	8′-0″	8′-0″	8′-0″	8′-0″
Pitman End, Ft.-In.	6′-9″	6′-9″	8′-0″	8′-0″	8′-0″	8′-0″
Rod Hanger	Wire-Line Type					
Saddle Bearing	6″ Dia. x 10″	6″ Dia. x 10″	6″ Dia. x 10″	6½″ Dia. x 11¾″	6½″ Dia. x 11¾″	6½″ Dia. x 11¾″
Pitman Bearing	Self-Aligning Roller Bearings					
Wrist Pin Bearing	Self-Aligning Roller Bearings					
Approximate Weight Less C/B Weights						
Counterbalance Data:						
Max. Effective Crank Counterbalance	14,600	15,430	16,940	15,430	16,940	15,430
Max. Effective Beam Counterbalance	None	None	8100	9040	9040	8135

* Available in wide base portable unit—"WB5." † Available in elevated unit—"EB5."

UNIT DESIGNATION	74-G228D-21-B5†	84-G228D-21-B5	74-G228D-26-B5	74-G320DL-26-B5	84-G320DL-26-B5†	100-G320DL-25-B5
Reducer Data:						
API Peak Torque, In.-Lbs.	228,000	228,000	228,000	320,000	320,000	320,000
Reduction Ratio	29.89 to 1	29.89 to 1	29.89 to 1	29.95 to 1	29.95 to 1	29.95 to 1
Type Gears	Herringbone Steel					
P.D. Sheave & No. Grooves, Std.	30″-6C	30″-6C	30″-6C	30″-8C	30″-8C	30″-8C
Pitch Diameter, Maximum	44″	44″	44″	48″	48″	48″
Structure Data:						
Stroke Length, Inches	44-54-64-74	54-64-74-84	44-54-64-74	44-54-64-74	54-64-74-84	64-76-88-100
Walking Beam, Size	24″-94# C.B.	27″-114# C.B.	27″-114# C.B.	27″-114# C.B.	24″-130# C.B.	24″-130# C.B.
Structure Capacity, Pounds	21,448	22,542	30,050	30,050	27,192	26,059
Working Centers:						
Well End, Ft.-In.	8′-0″	9′-10½″	8′-0″	8′-0″	10′-0″	12′-6″
Pitman End, Ft.-In.	8′-0″	10′-0″	8′-0″	8′-0″	10′-0″	12′-10″
Rod Hanger	Wire-Line Type					
Saddle Bearing	6½″ Dia. x 11¾″	6½″ Dia. x 11¾″	7″ Dia. x 12¾″	7″ Dia. x 12¾″	7″ Dia. x 12¾″	7″ Dia. x 12¾″
Pitman Bearing	Self-Aligning Roller Bearings					
Wrist Pin Bearing	Self-Aligning Roller Bearings					
Approximate Weight Less C/B Weights						
Counterbalance Data:						
Max. Effective Crank Counterbalance	16,940	17,150	16,940	16,940	17,150	23,070
Max. Effective Beam Counterbalance	9040	8950	7500	7500	None	8480

* Available in wide base portable unit—"WB5." † Available in elevated unit—"EB5."

UNIT DESIGNATION	120-G320DL-26-B5†	120-G456DNL-32-B5†	120-G640DL-32-B5†	144-G456DNL-32-B5†	144-G640DL 32-B5†	168-G640DL 32-B5
Reducer Data:						
API Peak Torque, In.-Lbs.	320,000	456,000	640,000	456,000	640,000	640,000
Reduction Ratio	29.95 to 1	30.0 to 1	29.97 to 1	30.0 to 1	29.97 to 1	29.97 to 1
Type Gears	Herringbone Steel					
P.D. Sheave & No. Grooves, Std.	30″-8C	44″-8C	50″-10C	44″-8C	50″-10C	50″-10C
Pitch Diameter, Maximum	48″	50″	58″	50″	58″	58″
Structure Data:						
Stroke Length, Inches	84-96-108-120	84-96-108-120	84-96-108-120	101-115-130-144	101-115-130-144	117-134-151-168
Walking Beam, Size	24″-130# C.B.	30″-172# C.B.	30″-172# C.B.	30″-210# C.B.	30″-210# C.B.	33″-220# C.B.
Structure Capacity, Pounds	26,059	33,403	33,403	33,159	33,159	33,367
Working Centers:						
Well End, Ft.-In.	12′-6″	12′-6″	12′-6″	15′-0″	15′-0″	16′-11″
Pitman End, Ft.-In.	12′-10″	12′-10″	12′-10″	12′-10″	12′-10″	12′-5″
Rod Hanger	Wire-Line Type					
Saddle Bearing	7″ Dia. x 12¾″	7½″ Dia. x 18″	7½″ Dia. x 18″	7½″ Dia. x 18″	7½″ Dia. x 18″	7½″ Dia. x 18″
Pitman Bearing	Self-Aligning Roller Bearings					
Wrist Pin Bearing	Self-Aligning Roller Bearings					
Approximate Weight Less C/B Weights						
Counterbalance Data:						
Max. Effective Crank Counterbalance	25,900	25,900	25,900	25,210	25,900	19,035
Max. Effective Beam Counterbalance	None	6020	6020	4625	4625	5100

*** Available in wide base portable unit—"WB5." † Available in elevated unit—"EB5."**

HOW PARKERSBURG UNITS ARE DESIGNATED

54 - G 114 D - 16 - B5 (-WB5) (-EB5)

54	G	114	D	16	B5	WB5	EB5
Maximum stroke	"G" for Gear, or "CH" for Chain	Peak Torque in thousands of Inch-Pounds — A.P.I.	"D" for Double Reduction	Beam Capacity in thousand lbs. — A.P.I.	"B" indicates floor-clearing cranks. "5" wire-line-type hanger	Same as B5 except wide-base type	Same as B5 except elevated base for electric motor

PARKERSBURG...THE FULL LINE IN CHAIN-DRIVEN PUMPING UNITS

Today, more than 15,000 Parkersburg Chain-Driven Units are giving unexcelled service in fields the world over. Many have been in operation for more than 20 years, with minimum maintenance and maximum "pay-out."

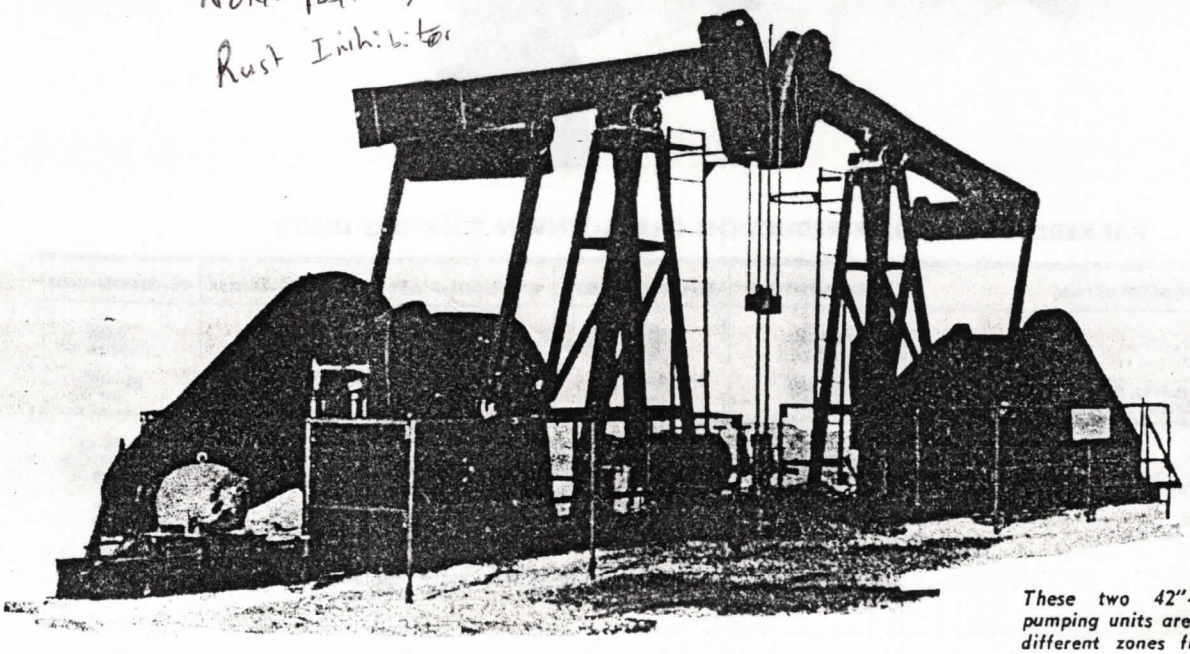
THE CHAIN REDUCER

The transmission incorporates high-efficiency roller chains and tapered roller bearings throughout, operating in a totally enclosed steel case, all designed for heavy-duty oil-well pumping service. The chains operate in an oil bath, with a system of wipers and oil-carrying channels to distribute lubricant to the bearings. A lightweight oil is recommended for year-round service, and this is a distinct advantage in cold climates, as starting torque and frictional power losses are minimized. Oil men can appreciate the oil slinger rings (replacing the usual oil seals) which eliminate oil leaks.

SAE 20
Non-Detergent Oil
Rust Inhibitor

Chains are multiple-strand with extra-heavy side plates. Pinion shafts and sprockets are machined from alloy steel, with flame-hardened sprocket teeth. Slow-speed sprockets are precision-made of special high-strength cast iron.

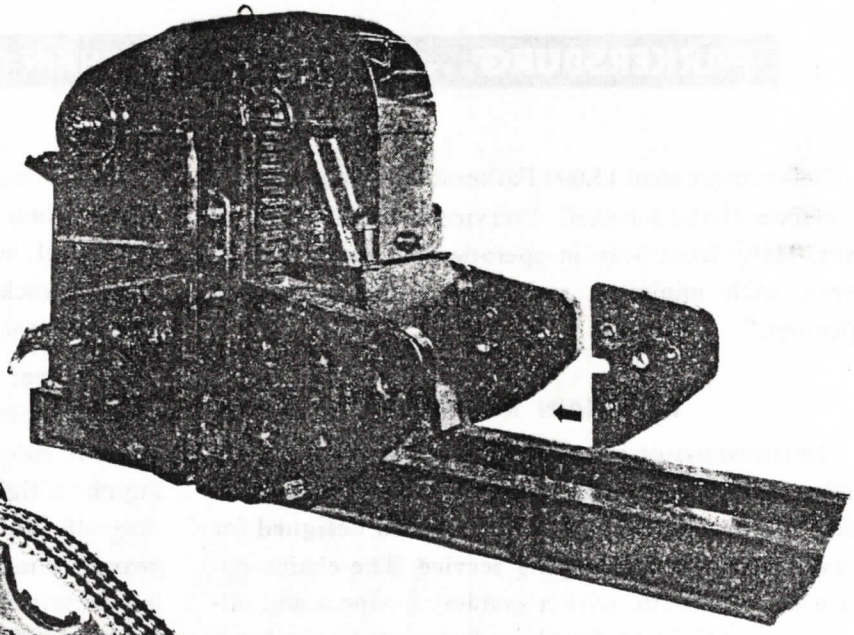
The cover of the all-welded steel housing is lightweight and is easily removed after loosening only two bolts. A simple adjustment is provided for maintaining chain tightness. Chains are set at the factory and normally do not require any adjustment for several years. Oil men appreciate their quiet operation, which is maintained for the life of the unit. They also value the knowledge that when repairs are needed, any part can be individually and promptly replaced in the field. Double-reduction ratios of approximately 23 to 1, plus an extremely wide range of V-Belt sheave sizes, make these units suited for use with "slow speed" engines or "high speed" electric motors, at any pumping speed.



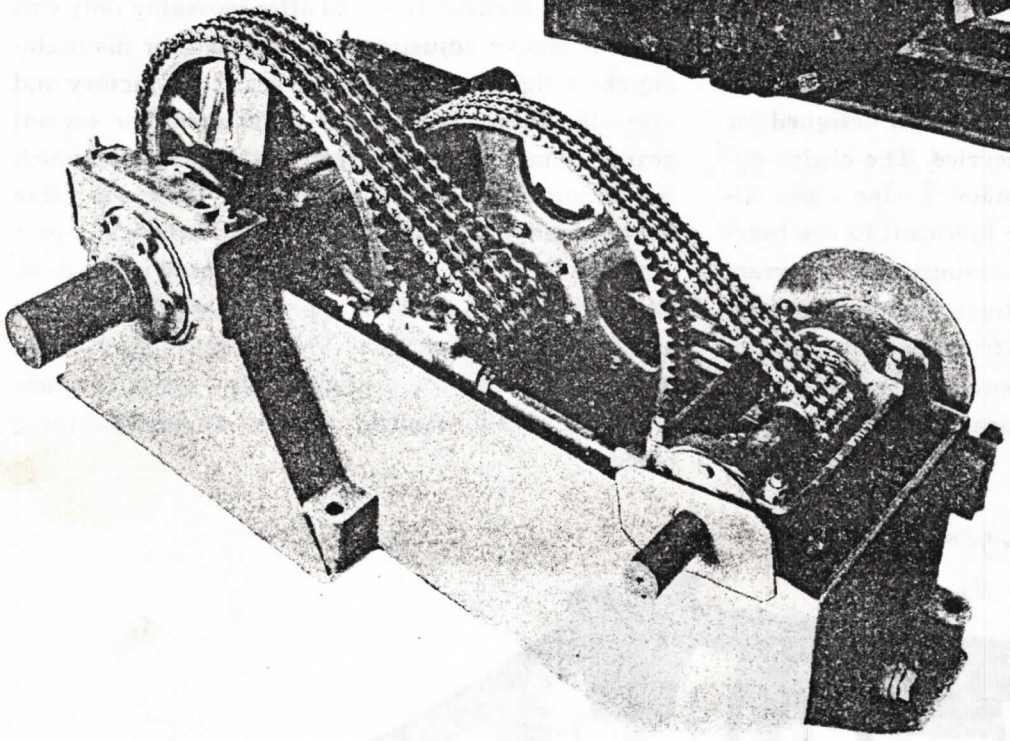
These two 42"-stroke Parkersburg pumping units are producing from two different zones from the same well.

PARKERSBURG Pumping Unit Division Offices: P.O. Box 573, Coffeyville, Kan.

PARKERSBURG CHAIN-DRIVEN PUMPING UNITS



Chain reducer and sub-base, showing adjustable crank weights with removable auxiliary weights.



Chain reducer with cover removed. Cover is removed by loosening two bolts.

PARKERSBURG DOUBLE-REDUCTION CHAIN-DRIVEN PUMPING UNITS

UNIT DESIGNATION	28-CH25D-7-B5*	34-CH25D-9-B5*	42-CH25D-7-B5*	42-CH57D-10-B5*	48-CH57D-9-B5*
Reducer Data:					
Peak Torque, In.-Lbs.	25,000	25,000	25,000	70,000	70,000
Reduction Ratio	21.85 to 1	21.85 to 1	21.85 to 1	19.86 to 1	19.86 to 1
Type Chain	Diamond Roller				
P.D. Sheave & No. Grooves, Std.	25″–4B	25″–4B	25″–4B	30″–2C	30″–2C
Pitch Diameter, Maximum	34″	34″	34″	40″	40″
Structure Data:					
Stroke Length, Inches	18–28	16–25–34	20–31–42	26–34–42	30–39–48
Walking Beam, Size	12″–27# C.B.	14″–30# C.B.	14″–30# C.B.	14″–43# C.B.	14″–43# C.B.
Structure Capacity, Pounds	8,119	8,708	6,967	10,450	9,086
Working Centers:					
Well End, Ft.–In.	3′–6″	4′–0″	5′–0″	5′–0″	5′–9″
Pitman End, Ft.–In.	3′–6″	4′–0″	4′–0″	5′–0″	5′–0″
Rod Hanger	Wire-Line Type				
Saddle Bearing	4″ Dia. x 7″	4½″ Dia. x 8¼″	4½″ Dia. x 8⅛″	4½″ Dia. x 8⅛″	4½″ Dia. x 8⅛″
Pitman Bearing	Self-Aligning Roller Bearings				
Wrist Pin Bearing	Self-Aligning Roller Bearings				
Approximate Weight Less C/B Weights					
Counterbalance Data:					
Max. Effective Crank Counterbalance	None	3585	2868	8530	7420
Max. Effective Beam Counterbalance	5700	6720	2705	None	None

* Available in wide base portable unit—"WB5"

PARKERSBURG DOUBLE-REDUCTION CHAIN-DRIVEN PUMPING UNITS

UNIT DESIGNATION	42-CH80D-10-B5*	48-CH80D-10-B5	54-CH57D-10-B5*	48-CH80D-14-B5*	54-CH80D-14-B5*
Reducer Data:					
Peak Torque, In.-Lbs.	89,000	89,000	70,000	89,000	89,000
Reduction Ratio	22.24 to 1	22.24 to 1	19.86 to 1	22.24 to 1	22.24 to 1
Type Chain			Diamond Roller		
P.D. Sheave & No. Grooves, Std.	24"-3C	24"-3C	30"-2C	24"-3C	24"-3C
Pitch Diameter, Maximum	56"	56"	40"	56"	56"
Structure Data:					
Stroke Length, Inches	26-34-42	24-36-48	28-41-54	24-36-48	34-44-54
Walking Beam, Size	14"-43# C.B.	14"-43# C.B.	14"-68# C.B.	14"-68# C.B.	14"-68# C.B.
Structure Capacity, Pounds	10,450	10,450	10,400	14,305	14,305
Working Centers:					
Well End, Ft.-In.	5'-0"	5'-0"	6'-5"	6'-0"	6'-0"
Pitman End, Ft.-In.	5'-0"	5'-0"	5'-0"	6'-0"	6'-0"
Rod Hanger			Wire-Line Type		
Saddle Bearing	4½" Dia. x 8⅞"	4½" Dia. x 8⅞"	4½" Dia. x 8⅞"	5" Dia. x 9⅛"	5" Dia. x 9⅛"
Pitman Bearing			Self-Aligning Roller Bearings		
Wrist Pin Bearing			Self-Aligning Roller Bearings		
Approximate Weight Less C/B Weights					
Counterbalance Data:					
Max. Effective Crank Counterbalance	8530	11,210	6585	11,210	14,600
Max. Effective Beam Counterbalance	None	6740	None	6875	6875

* Available in wide base portable unit—"WB5."

UNIT DESIGNATION	54-CH80D-13-B5*	48-CH114D-14-B5*	54-CH114D-14-B5*	54-CH114D-16-B5*	64-CH114D-16-B5*
Reducer Data:					
Peak Torque, In.-Lbs.	89,000	142,000	142,000	142,000	142,000
Reduction Ratio	22.24 to 1	23.75 to 1	23.75 to 1	23.75 to 1	23.75 to 1
Type Chain			Diamond Roller		
P.D. Sheave & No. Grooves, Std.	24"-3C	24"-4C	24"-4C	24"-4C	24"-4C
Pitch Diameter, Maximum	56"	52"	52"	52"	52"
Structure Data:					
Stroke Length, Inches	27-40.5-54	24-36-48	34-44-54	34-44-54	34-44-54-64
Walking Beam, Size	14"-68# C.B.	14"-68# C.B.	14"-68# C.B.	21"-68# C.B.	21"-68# C.B.
Structure Capacity, Pounds	12,716	14,305	14,305	16,607	16,607
Working Centers:					
Well End, Ft.-In.	6'-9"	6'-0"	6'-0"	6'-9"	6'-9"
Pitman End, Ft.-In.	6'-0"	6'-0"	6'-0"	6'-9"	6'-9"
Rod Hanger			Wire-Line Type		
Saddle Bearing	5" Dia. x 9⅛"	5" Dia. x 9⅛"	5" Dia. x 9⅛"	6" Dia. x 10"	6" Dia. x 10"
Pitman Bearing			Self-Aligning Roller Bearings		
Wrist Pin Bearing			Self-Aligning Roller Bearings		
Approximate Weight Less C/B Weights					
Counterbalance Data:					
Max. Effective Crank Counterbalance	9745	11,210	14,600	14,600	15,430
Max. Effective Beam Counterbalance	None	1930	None	None	None

* Available in wide base portable unit—"WB5."

UNIT DESIGNATION	64-CH114D-14-B5	54-CH160D-16-B5*	64-CH160D-16-B5*	74-CH160D-16-B5	64-CH160D-21-B5*	74-CH160D-21-B5*
Reducer Data:						
Peak Torque, In.-Lbs.	142,000	190,000	190,000	190,000	190,000	190,000
Reduction Ratio	23.75 to 1	25.3 to 1	25.3 to 1	25.3 to 1	25.3 to 1	25.3 to 1
Type Chain			Diamond Roller			
P.D. Sheave & No. Grooves, Std.	24"-4C	24"-6C	24"-6C	24"-6C	24"-6C	24"-6C
Pitch Diameter, Maximum	52"	52"	52"	52"	52"	52"
Structure Data:						
Stroke Length, Inches	40-52-64	34-44-54	34-44-54-64	44-54-64-74	34-44-54-64	44-54-64-74
Walking Beam, Size	21"-68# C.B.	21"-68# C.B.	21"-68# C.B.	24"-76# C.B.	24"-94# C.B.	24"-94# C.B.
Structure Capacity, Pounds	13,550	16,607	16,607	16,988	21,448	21,448
Working Centers:						
Well End, Ft.-In.	8'-0"	6'-9"	6'-9"	8'-0"	8'-0"	8'-0"
Pitman End, Ft.-In.	6'-9"	6'-9"	6'-9"	8'-0"	8'-0"	8'-0"
Rod Hanger			Wire-Line Type			
Saddle Bearing	6" Dia. x 10"	6" Dia. x 10"	6" Dia. x 10"	6" Dia. x 10"	6½" Dia. x 11¼"	6½" Dia. x 11¼"
Pitman Bearing			Self-Aligning Roller Bearings			
Wrist Pin Bearing			Self-Aligning Roller Bearings			
Approx. Wt. Less C/B Wts.						
Counterbalance Data:						
Max. Eff. Crank Counterbalance	12,480	14,600	15,430	16,940	15,430	16,940
Max. Eff. Beam Counterbalance	4075	None	None	8100	9040	9040

* Available in wide base portable unit—"WB5".

PARKERSBURG Pumping Unit Division Offices: P.O. Box 573, Coffeyville, Kan.

ADJUSTABLE CRANK COUNTERBALANCE

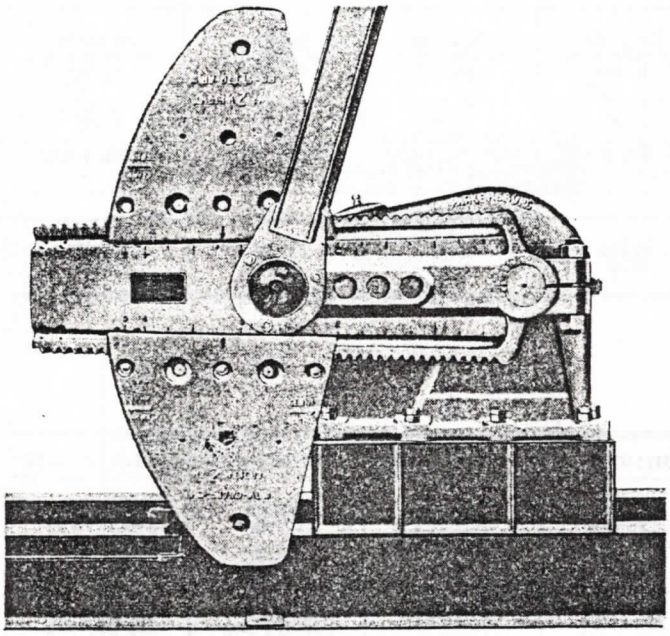
SMALL UNITS

A simple adjustable counterbalance is provided for 34"-stroke units.

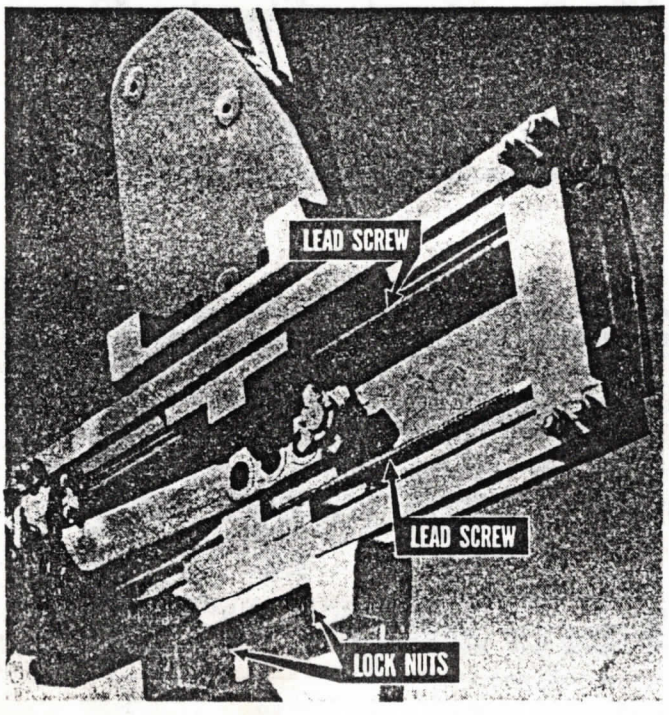
Each one-piece weight is locked to the crank by means of two bolts which, in turn, operate to tighten two "quick release" wedges. These wedges are friction-locked against the tapered sides of the crank. In addition, they force each weight outwardly to bring the lip on the inside of each weight into friction contact with the crank side-rails.

Thus, a positive lock is quickly secured. After loosening the two bolts, the weight can be moved quickly by the use of a small bar which is included as a part of the wrench furnished with each unit for the counter-weight bolts.

A series of lugs on the crank and the three lugs on each weight are so spaced that the bar can be used alternately on each crank lug to move the weight. As maximum movement is obtained with one combination of lugs, a second combination is brought into position for additional movement. The operator can move one of these small weights from one end of the crank to the other in a matter of seconds.



Counterbalance for 42"- to 84"-stroke pumping units.



Counterbalance for 100" to 168" conventional long-stroke pumping units.

RACK AND PINION MOVEMENT

(For Units with 42" Stroke Through 84" Stroke)

Weights ride on pinion gears which mesh with gear teeth on the crank. Weights are easily "cranked" into position with a wrench to obtain precise counterbalance.

One man loosens the clamping screws and then rotates the pinion gear in the direction the weight is to be moved. When the weight is in position, the clamping screws are tightened.

WEIGHTS POSITIVELY LOCKED IN ANY POSITION

A double-locking arrangement of gears on rack and pinion positively prevents any movement of the weight. When clamping screw is tightened, the pinion gear shaft is moved upward into an elongated slot, until one or more gear teeth engage root of rack teeth and shaft bears against side of the slot. Additional tightening of clamping screw effects tight wedging and clamping action between dovetailed tapered surfaces of weight and crank.

INTERCHANGEABLE ADJUSTABLE WEIGHTS

Five different sizes of weights are available. All can be interchanged on any of the five cranks available, thereby permitting the most economical combination of counterbalance for any stroke. Removable auxiliary weights are also provided on the three largest size weights.

When required, and unit height permits, the weights can be extended 3" beyond the crank for additional counterbalance.

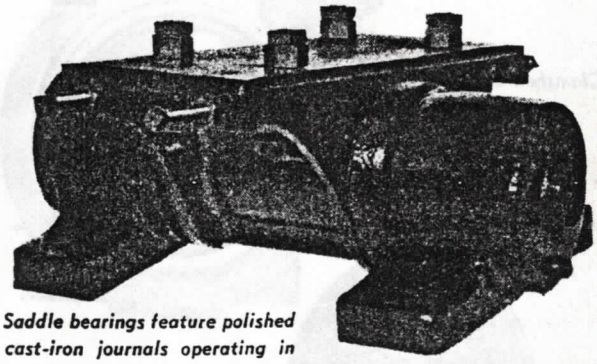
LONG-STROKE PUMP COUNTERBALANCE

Parkersburg long-stroke conventional pumping units, 100" through 168", are also provided with a simple adjustable counterbalance. One man makes adjustments by loosening the lock nuts and turning the lead screws which move the weights. Crank and weights are calibrated for accurate balancing.

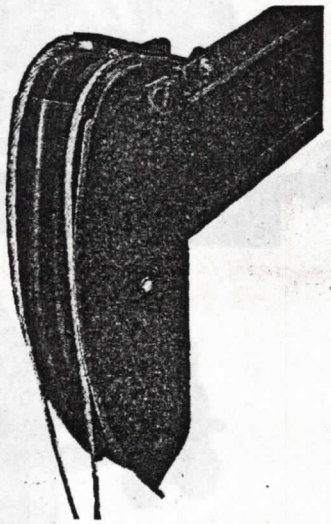
The Parkersburg Adjustable Crank Counterbalance has proved the simplest and most effective means of maintaining perfect counterbalance to assure peak performance and longer life from your pumping units.

SADDLE BEARINGS

Over 20 years' life is not infrequent with Parkersburg's rugged saddle bearings, featuring polished cast-iron journals operating in cast-iron bearings. Bearings are completely enclosed—dust sealed out and lubrication sealed in. A large lubricant reservoir is provided in the hollow shaft. Alemite fittings and relief valves are furnished. Errors in setting the unit can be compensated for by shifting the walking beam (3" adjustment) by means of an independent plate and four adjusting screws.



Saddle bearings feature polished cast-iron journals operating in cast-iron bearings.



Adjustable horsehead permits three- to six-inch adjustments over-all, corrects for misalignments. Adjustments are easily made from one side of the horsehead.

ADJUSTABLE HORSEHEAD

Hangers are quickly removed for maximum safety for well servicing, and allow a minimum of 15" clearance beyond the end of the beam. A feature is the one-piece wire-line which is threaded through the polish-rod carrier bar, and the two ends are then attached to the head by means of wedges and holders. The heavier the load, the tighter these wedges hold. No socketing of the ends with hot metal is required, which often leads to burning and early failure of the line.

The Parkersburg adjustable horsehead allows you to adjust three to six inches over-all, corrects for misalignments. The release bolt of the horsehead is located at a point where it may be reached from the top of the walking beam. It can be released from the ground and automatically seats itself during installation. Adjustments are easily made from one side of the horsehead. A thinline carrier and non-rotating wire are available for dual pumping.

WALKING BEAM

All Parkersburg Beams are wide-flange CB section beams. A heavy plate is welded to the front end. No welding is done at critical sections on the beam. The horsehead is supported by two "U"-shaped blocks of steel on the top flange at the front of the beam, and is locked in place by a single bolt through the bottom of the front plate.

SAMSON POST

A "derrick-type" post, with four heavy angle-iron legs, is used, rigidly braced with channel-iron cross-bracing and side plates. Posts bolt to main base, except on smallest units where they are welded to base. All posts are set up and welded in special jigs to insure accuracy and interchangeability. An all-welded ladder and backrest is standard equipment on all units, except the G25D size.

UNIT BASES

Short bases are standard equipment on all except the smaller units, as is a reducer sub-base to let the swing of the cranks clear the foundation. Short-base units can have any type of engine or motor base applied to them. Main base is constructed of heavy CB-beam with flat flanges for anchor bolts. A wide cross-beam is used at the front. Steel-plate sub-base is welded on.

Cast-iron slide rails are standard equipment for engine mounting. Special bases for heavy single-cylinder engines for big units are optional. These bases feature direct mounting of engine on heavy beams, with slots and adjusting screws for belt tightening.

Wide-base or portable-type pumping units are extensively used in areas where soil conditions make it possible to set the unit on timber and gravel foundations, thus eliminating the expense of installing concrete. These units were pioneered by Parkersburg in the Kansas fields. Wide-base units can be set and moved by truck quickly, thus making an ideal test unit. A volume tank is "built in" at the back skid of the unit.

Wide-base units are also available with engine-base side extensions for mounting a Parkersburg 10'8" x 10'8" x 8' steel engine house, and with the base covered with non-skid floor plate. Cast-iron engine rails are standard equipment. Wide-base units are designated by the letter "W" added to the structural symbols.

Units built with electric motor bases raised to the height of the gear sub-base are available in many sizes. Raising the motor keeps it out of snow and dirt. This base also reduces the amount of concrete required for the foundation, and shortens the belt centers and cover.

PARKERSBURG Pumping Unit Division Offices: P.O. Box 573, Coffeyville, Kan.

BELT COVERS

Parkersburg covers are constructed of heavy-gauge steel with ample bracing. Many are designed with an adjustable feature which permits their use with several types of engines and electric motors.

EXTENDED BEAM UNITS

In addition to the regular line of units presented here, many of the regular units are also offered with the front end of the walking beam extended for longer stroke. These units are widely used for water flood operations.

REDUCER HOLDING BRAKE

A sturdy clamshell brake is furnished, mounted separately from the V-Belt sheave for maximum flexibility. The brake of the clamshell type is used on all geared units. The brake of the disc type is used on chain units. Once applied, an "over-center" locking cam holds the brake safety set, until released by the operator. Brake-control lever is normally mounted at the back of the unit, to work parallel with the engine clutch lever, so that one man can operate both simultaneously for well-spacing and counterbalancing adjustments.

ROLLER-BEARING WRIST-PIN ASSEMBLY

Pins are of high-strength steel, carefully machined to close tolerances. A Woodruff key in the tapered shank mates with a keyway in the crank as an additional locking feature. Bearings are self-aligning double-roller type. On small- and medium-size units, bearing ends of pins are drilled and tapped for a Parkersburg wrist-pin puller. Pins on long-stroke units have provision for removal by hydraulic pressure applied with a grease gun.

"BANJO" PITMAN HEADS

An often-copied Parkersburg original design transfers the load directly from pitmans to wrist pins. A circular machined tapered surface in the pitman head fits metal to metal on a similar surface on the wrist-pin housing. Holding bolts take only the load required to hold these mating pieces together. A second important design feature is that the bearing cannot possibly be pinched out of round, or cramped by external clamping.

UPPER PITMAN BEARINGS

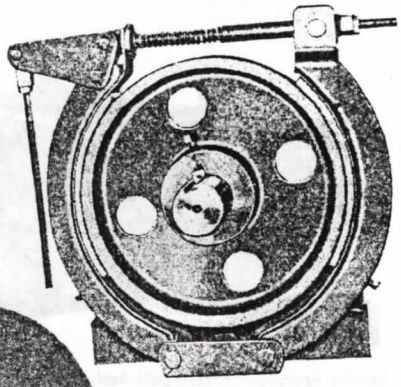
Parkersburg has pioneered the use of a different upper pitman bearing design which has been highly successful. Two bearings are used at the ends of heavy H-Beam cross yoke. Pins welded into the end of this yoke take the same bearings and housings as are used in wrist-pin assemblies. The yoke is strengthened with a heavy top plate and bolted to the walking beam with eight bolts. Four bolts of the size used would normally carry the specified load; however, eight are used to assure a life-time trouble-free connection. Lubrication of the upper bearings is simplified by grease lines attached to the pitman stems for ground-level servicing as standard equipment. Operators have commented favorably on the ease with which this pitman construction is assembled in the field.

FOUNDATION BOLTS

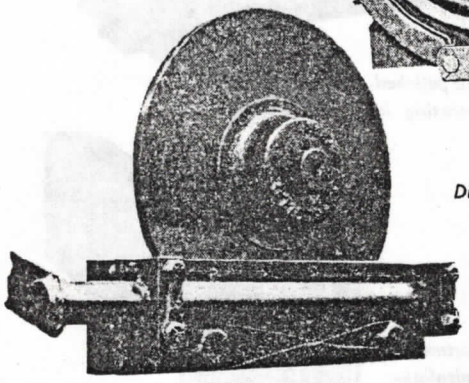
Standard anchor bolts are usually furnished. Center-line clamp-type anchors are available as optional equipment.

OTHER ACCESSORIES

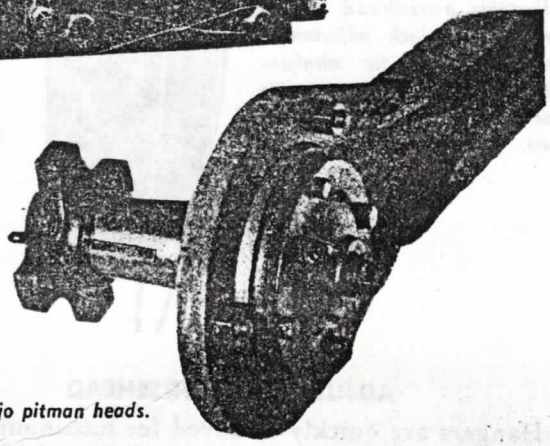
Parkersburg has always catered to the producer's every wish in offering specialty items such as Crank Guardrails, Samson Post Inspection Platforms, Volume Tanks, Sheaves, V-Belts, Engines and Motors. These items are available for delivery with any pumping unit.



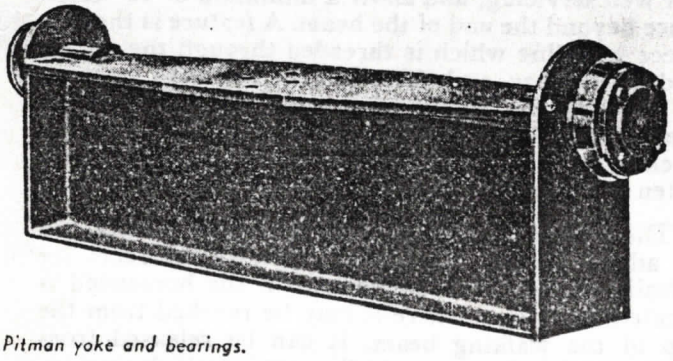
Clamshell brake.



Disc brake.



Banjo pitman heads.



Pitman yoke and bearings.

PARKERSBURG... THE FULL LINE IN PNEUMATIC PUMPING UNITS

These units are the most economical, efficient and trouble-free method of deep pumping ever offered. Their wide range of sizes provides for every pumping need. They are available with 100", 120" and 144" strokes, with beam load capacities ranging from 28,000 lbs. to 40,000 lbs.

These Pneumatic Pumping Units develop lower polish-rod loads than conventional types of units, which is reflected throughout the entire unit in lower strains, less wear and tear.

LESS FOUNDATION REQUIRED

Because of reduced size, less vibration, reduced shock and impact loading, Pneumatic Pumping Units require much lighter foundations than conventional pumping units. Foundations for the Pneumatic Units require only about 60% of the amount of concrete necessary for foundations for conventional units of comparable size.

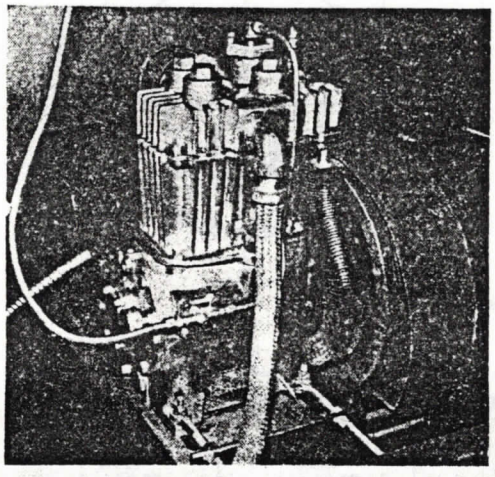
COUNTERBALANCE

Setting or changing the counterbalance on a Pneumatic Pumping Unit is as easy and simple as turning a valve. The counterbalance then adjusts itself automatically to the required pressure.

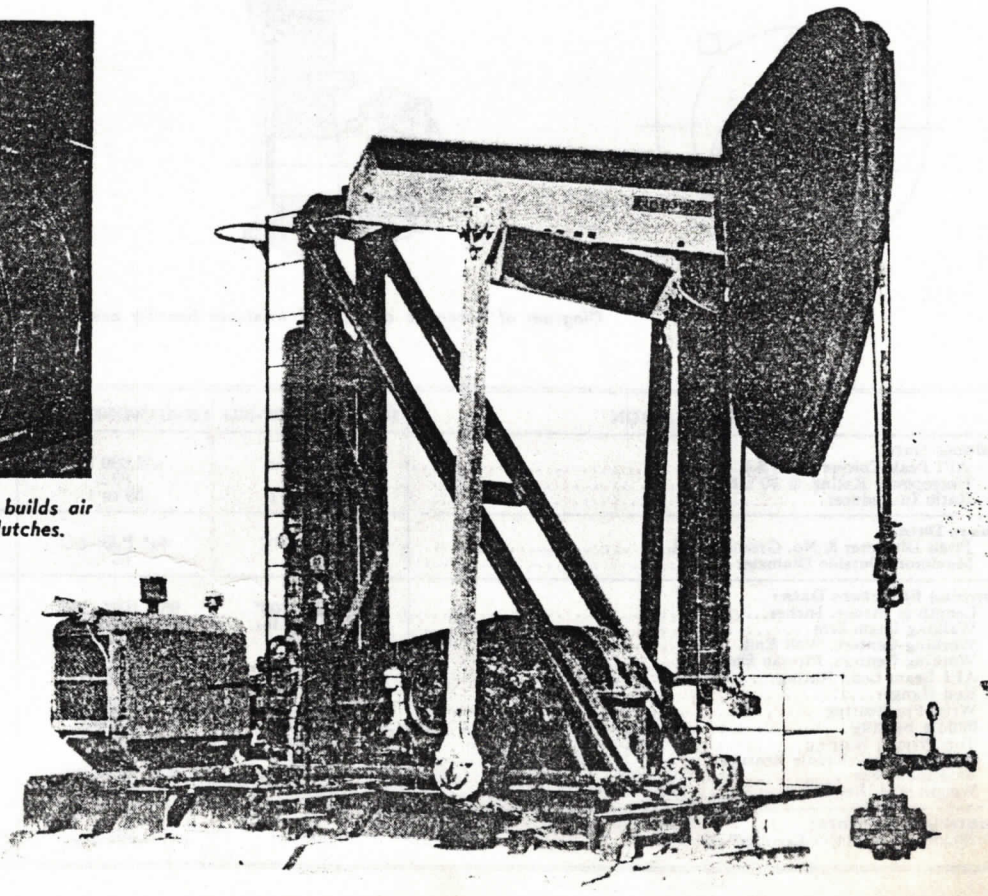
AIR-PUMPING SYSTEM

The Parkersburg air-pumping system used to build up air pressure in the counterbalance cylinder is much simpler, more efficient and much safer than the compressor systems used on other types of air-balanced pumping units. The entire air counterbalance pressure can be cut off by a valve and held in the storage tank when it is necessary to disconnect the well, or stop the unit for any reason. There is no pressure working against the beam or the brake while the unit is down, but the full pressure is there to put the unit back into operation immediately.

Parkersburg utilizes the Quincy two-stage heavy-duty rotary make-up compressor with by-pass system. This unit has an exclusive dehydrator for cold-weather operation. Electric motor-driven units utilize a V-Belt drive to a small separate electric motor. Gas engine-driven units utilize a V-Belt drive to a floating sheave. The by-pass system on the Quincy compressor eliminates the clutch.



Two-stage rotary-type Quincy compressor builds air pressure faster, eliminates the need for clutches.



PNEUMATIC PUMPING UNITS

PORTABLE PNEUMATIC PUMPING UNITS

These portable units are widely used for well-testing prior to selecting the proper unit for the permanent installation. On medium-depth wells, the unit can be set on timbers and put into operation without tie-downs. On deeper wells, the back end should be tied down.

Portable Pneumatic Pumping Units have a special 8'-wide base and low center of gravity. Base ends are skid-formed with pipe cross-braces to facilitate loading and unloading. Their weight, complete with counterbalance, is approximately 30% less than a conventional unit, and the over-all length is considerably less.

ECCENTRIC CRANK AND WRIST-PIN BEARING ASSEMBLY

Standard equipment on all Pneumatic Units, the exclusive Parkersburg eccentric crank eliminates having to pull the wrist pins to change the stroke, it eliminates having to remove the well load from the unit, and it eliminates having to remove pitmans in making adjustments to the units.

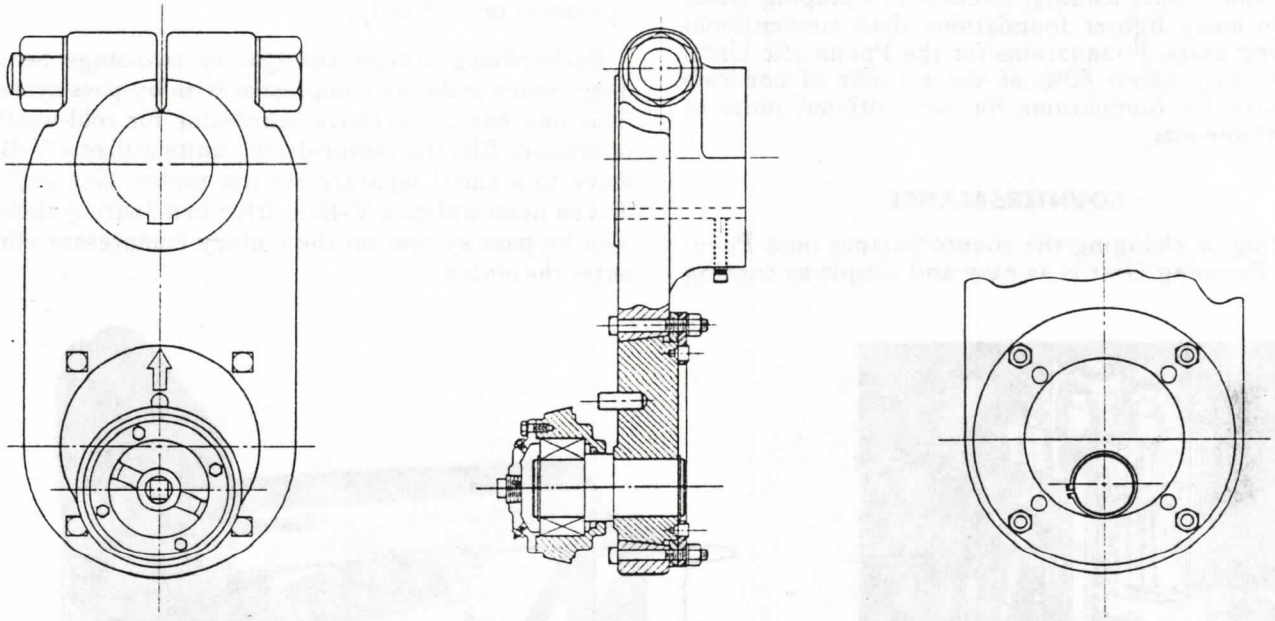


Diagram of eccentric crank and wrist-pin bearing assembly.

UNIT DESIGNATION	100-G320DL-28-N11	120-G456DNL-33-N11	120-G640DL-33-N11	144-G640DL-40-N11
Reducer Data:				
API Peak Torque @ 20 S.P.M.	320,000 lbs.	456,000 lbs.	640,000 lbs.	640,000 lbs.
Horsepower Rating @ 20 S.P.M.	64.7	92.2	129.4	129.4
Ratio In Reducer	29.95 to 1	30 to 1	29.97 to 1	29.97 to 1
Sheave Data:				
Pitch Diameter & No. Grooves, Std.	40" P.D.-7C	44" P.D.-8C	50" P.D.-10C	44" P.D.-10C
Maximum Outside Diameter	50"	56"	60"	60"
Pumping Structure Data:				
Length of Stroke, Inches	76", 88", 100"	96", 108", 120"	96", 108", 120"	115", 130", 144"
Walking Beam Size	24" @ 100 lbs.	24" @ 100 lbs.	24" @ 100 lbs.	24" @ 160 lbs.
Working Centers, Well End	14'-6"	16'-0"	16'-0"	16'-8"
Working Centers, Pitman End	7'-3"	8'-2"	8'-2"	7'-2"
API Beam Load Rating	28,000 lbs.	33,000 lbs.	33,000 lbs.	40,000 lbs.
Rod Hanger	Wire Line	Wire Line	Wire Line	Wire Line
Wrist-Pin Bearing	Roller	Roller	Roller	Roller
Saddle Bearing	Roller	Roller	Roller	Cast Iron
Top Pitman Bearing	Roller	Roller	Roller	Roller
Height to C.L. Saddle Bearing	14'-9¾"	16'-10½"	16'-10½"	18'-6"
Base Sills, Size	14" @ 30 lbs.	14" @ 30 lbs.	14" @ 30 lbs.	16" @ 40 lbs.
Weight with Reducer	24,000	27,316	29,056	36,000
Counterbalance Data:				
Maximum Effective Counterbalance	21,500 lbs.	25,500 lbs.	22,500 lbs.	32,500 lbs.