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CABOT SHOPS, INC.

P. O. Box 1101

PAMPA, TEXAS Mohaw Ph. 4-3277

OILFIELD PUMPING EQUIPMENT

Distributed Exclusively By

JONES & LAUGHLIN SUPPLY COMPANY, Tulsa, Okla. & Branches
Export Sales Office: 405 Lexington Avenue, New York, N. Y.



COMPLETE SERVICE AND A COMPLETE LINE OF PUMPING UNITS

CABOT TRUCKS DELIVER DIRECT TO LEASE—Cabot trucks deliver Cabot Units from the factory direct to the purchaser's lease—at a substantial saving in time and cost of freight and handling for the operator.

The service men who deliver Cabot Units are thoroughly trained in service and assembly work, and can handle setup, ordinary repairs, and replacements expertly and with a minimum of expense. A request made to any Jones & Laughlin store or representative will bring the service of these trained men to any Cabot customer.

CABOT OFFERS A VERSATILE LINE OF PUMPING UNITS- With 12 basic sizes, ranging from 4.000 to 32,000 pound Beam Rating, and Reducer sizes from 10,000 inch-pounds to 456,000 inch-pounds; over 40 different combinations of structures

- I reducers are available. This allows the purchaser to select the correct size of unit for any well condition, as well as to provide for his future needs of

interchanging reducers at a later date, if needed.

Universal Structural assemblies accommodate several different sizes of reducers, and allow the use of any common power unit—single or multiple cylinder engine or electric motor.

CABOT UNITS ARE BEAM, CRANK, OR COMBINATION BALANCE—Two series of Cabot Units are offered—BEAM BALANCED, with provision for limited crank balancing, and CRANK BALANCED, also having provision for beam balance as optional extra equipment.

With this selection, the user is assured of having the best combination of balancing for his particular well condition.

Jones & Laughlin Steel Corporation, Supply Division, distributor of Cabot Pumping Units, is an old, reliable, well-established oil field supply company with complete representation and with stores in all the major fields.



CABOT SHOPS, INC. PAMPA, TEXAS

Adjustable-Crank Series

The Cabot Adjustable Crank Series is complete, ranging from 9,000 to 32,000 pounds maximum polish rod load. Every detail of the A-C Series has been engineered for simplicity of design, stability and strength and the complete unit has undergone years of tests in the field. All walking beams are large, wide-flange sections rated according to API standards with ample capacity for the unit rating. Samson posts are of the four-legged derrick type with heavy angle legs, well designed girts and diagonal bracing, and are solidly boxed in at the top with steel plates. On all Adjustable Crank Units bolt-on type samson posts and floor clearing sub-bases are furnished as standard equipment. Three, four or five-hole cranks are used on all units in this series. Vee belts, belt guards and adjustable slide rails are furnished as standard equipment on all Cabot Units.





The design and operation of the Cabot Adjustable-Crank is amazingly simple. The adjustment can be done by one man standing on the ground and with the cranks in only one position. No heavy lifting or complicated tools are required. The crank arm isstopped in an approximately horizontal position and the crank adjusted in these three simple steps: 1) Loosen the two lock bolts on each of the weights. 2) Move the weights to the desired position by turning the adjuster bolt, 3) Tighten the lock bolts. Complete assembly and disassembly can be accomplished in the field without the aid of special tools or instructions.



INNER WEIGHTS

Inner half weights are available for all size
A-C units giving
a wide variation in counterweight

effect at minimum cost. The inner half weight is a single casting occupying half the space in the master weight and secured with three bolts. Two half weights are used for maximum counterweighting. Inner half weights may be ordered with the unit or separately as needed. D type, extra heavy master and inner half weights are available where full counterweighting is required.

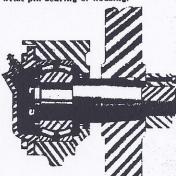
WRIST PIN AND BEARING

Wrist pin bearings are self-aligning, double-row roller bearings adjusted by

steel shims under the housing cover. The inner race is spherical, with misalignment taken within the bearing. Bearings are enclosed in sealed, dust tight housing with a large oil reservoir. On all units, wrist pins have a taper fit in the crank and on larger units, are keyed to prevent turning.

keyed to prevent turning.

The wrist pin may be shifted to change stroke lengths without disturbing the wrist pin bearing or housing.

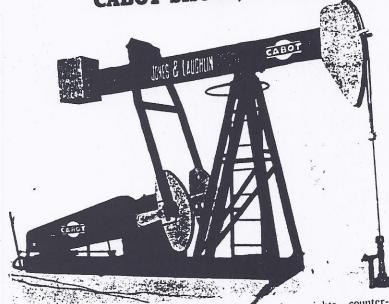


ADJUSTABLE-CRANK SERIES SPECIFICATIONS

AC 9-46D to AC 16-166D		AC 9-40D	AC 9-57D	AC 11-57D	AC 11-80D	AC 13-800	AC 13-114D	AC 15-114D	AC 16-160D
Manufacturers Rated Polish Rod Load-Pounds Maximum.		9,000	9,000	11,000	11,000	13.000	13,000	15,000	16 000
A.P.I. Walking Beam Rating-Pounds Maximum		9,970	9.970	11,030	11.030	14.040	14.040	16.550	16.550
Walking Beam Section-Wide Flange		14 = 6% @ 35 B	14 a 6% @ 3h fb	14 = 8 @ 4K fb	14 s K 60 4 Pb	: 16 t #14 @ 64 fb		14 - 44 @ 27 B	. Is . will A ??
Stroke Length-Inches		20-28-36	20-28-36	26-34-42	26 - 34 - 42	24-34-4H	2H-3H-4H	34-44 54	14-44-54
Working Centers-Well End		4'-6"	4'-6-	5'-3"	5'.3"	6'.0"	6'-0"	6'.4"	6.4.
Working Centern-Pitman End		4'-5"	4'-6"	5'.3"	5'.3"	6.0-	6.0-	6.9.	
Samson Post Height-Foundation to Bearing Center		8'-2%	N'-256"	9'-734	9'.742	10,-44	10'-85		6.4.
Overall Gear Ratio.		30.1	30.2	30.2	30.2	30.2	29.9	111-056	11'-6%"
A.P.I. Peak Torque-20 S.P.MInch-Pounds		40.00U	57.000	57,000	×0.000	40.00n		29 9	29 M
Manufacturers Nominal Horsepower Rating	102.50	8	11.5	11.5			114,000	114.000	160.000
Type of Gearing - Hardened Steel		Herringbune	Herringtone		. 16	16	23	23	32
Slow Speed Shalt Diameter at Crank		Herringbone	Herringtane	Herringbuse	Herringham	Herringbuie	Herringbone	Herringham	Herringbure
		323			114.	1 44	5.	5-	545
Reducer Sheave—Pitch Diameter and Number Belts.		IN" P.D38	14. b.D. 18	18" P.D. 48	22. 1. 1) W	22" P.D 30	22" P.D. 30"	22" P.D K	24" P () -50
Counterweights Effect-Standard Weights:									
Master Counterweights Weight per Set-Pounds.	4.			1.800	! MUU	2.090	2,090	2.090	
Inner Counterweights - Weight per Set-Pounds .				635	635	360	860	460	
Counterweights Effect- Maximum Stroke-Master Weights - Only				3,900	(.901)	5.050	5,050	5.340	
Counterweights Effect - Maximum Stroke-One Set Inner Waights		!		4.850	4.450	6.405	6.405	6.610	
Counterweights Effect - Manuscon Stroke-Time Sat. Lane Weight-				5.795	5.795	7.760	7.760	7.399	
Counterweights Lifect—"I)" Type Weights:		i .		5.156		; 7.700	7.700	1.567	
Master Counterweights Weight the Set Pounds		2.880	2,880	2 1000	2,4003	4.090		******	
Inner Counterweights - Weight per Set Pounds.		845	845	N45	14.		4.090	1.780	3,780
Counterweight Effect-Maximum Stroke-Master Weights- (left		5.355	3,355	4.960	4 4660	1.200	1.260	1,180	1.1100
Counterweight Effect-Manimum Stroke-One Set Inner Weights		6.550	6.550	6.065	es ches	7.400	7,400	7,515	7,510
Counterweight Effect-Musimum Stroke-Two Sets Inner Weights		7.735	7.735	7,160	7 1991	9.150	9,150	9.165	9.175
			2.50					10.785	10,400
NAME OF TAXABLE PARTY O									
AC-18-160D to AC 32-456D.		AC 18-160D	AC 14-236D	AC 21-160D	VC 31-338D	AC 21-320D	AC 25-228D	4C 25-120D	AC 32-456D
AC-18-160D to AC 32-456D. Annufacturers Rated Polish Rod Load - Provide Massinger			AC 18-228D	AC 21-160D	AC 21-228D	AC 21-320D	AC 25-228D	AC 25-320D	
AC-18-160D to AC 32-456D. Annufacturers Rated Polish Rod Load - Provide Massinger		AC 18-160D	in (AA)	AC 21-160D	4C 2t - 228D	AG 21-320D 21 000	AC 25-228D 25 000	AC 25-320D 25,000	12 (88)
AC-16-160D to AC-32-456D. Annufacturers Rated Polish Rod Load—Pounds Maximum. LP.I. Walking Beam Rating—Pounds Maximum Valking Beam Section—Wide Flange.		AC 18-160D 18.000 18.510	(n (nn) (= 510	21.000 21.200	4C 2t-228D	AC 21-320D	AC 25-228D	AC 25-320D	12 (68)
AC-16-160D to AC-32-456D. Annufacturers Rated Polish Rod Load—Pounds Maximum. LP.I. Walking Beam Rating—Pounds Maximum Valking Beam Section—Wide Flange.		AC 18-160D 18.510 21 x 9 @ 966	15 (88) (4 51) 21 5 7 @ 56 fb	21,000 21,200 24 x 12 @ 100 fb	4C 2t-228D 21 091 21 20 21 50 24 5 12 66 100 ff	AC 21-320D 21 000 21 200 21 x 12 40 100 m	AC 25-228D 25 000 25.020 (24 x 14 (6 100 fb	4C 25-320D 25,020 25,020 24 x 14 @ 1.00 R	12 (68) .CI 1621
AC-18-160D to AC-32-456D. Annufacturers Rated Foliah Rod Lood—Frunds Massmum 1.1. Walking Beum Rating—Pounds Massmum Valking Beum Section—Wide Flange troke Length—Inches.		AC 18-166D 18.000 18.510 21 x 9 60 96% 34-44-54-64	15 (88) 14 510 21 5 7 68 96 Rd 14 14 54 64	21.000 21.200 21.200 24 × 12 @ 100 m 14 44 54-64-74	4C 21-228D 21 000 21 200 24 x 12 @ 100 m - 34 44 54 64 74	AC 24-320D 21 000 21 200 24 4 12 6 100 m 14 41-54 64 74	AC 25-2280 25 000 25 020 25 020 24 a 14 (8 130 fb 44 54 64 74 a4	4C 25-320D 25-920 25-920 24 x 14 (d) 1-91 R 41 54 64 74 84	12 (18) .t1 (8) 7 .t1 x 15° (6) 87 ×0 93 (0)
AC-18-180D to AC-32-456D. Annulartures Rated Folish Rod Load—Promis Maximum LPT. Walking Beam Rating—Founds Maximum (LPT Walking Beam Rating—Founds Maximum (toke Length—Inches. Volking Centers—Well End.		18.000 18.510 21 x 9 @ 5985 14-44-54-64 8'-0"	15 (88) 21 x 7 60 90 fb 14 14 54 64 5' 0"	AC 21-160D 21,200 24 x 12 @ 100 m 14 44 54-64 74 953*	21 000 21 000 21 200 24 4 12 6 100 0 24 4 52 64 74 95.37	AC 24-320D 21 000 21 200 24 x 12 d 100 m 34 44 54 64 74 9°.3°	25 000 25 000 25 000 25 000 24 4 14 60 130 fb 14 54 64 74 64 101-67	25,020 25,020 25,020 24 x 14 @ 1.00 R 11 54 64 74 84 105-6*	12 (0.0) , 13 (60) 7 , 15 4 15 4 (0) 67 40 93 (0) 15'-0"
AC-18-160D to AC-32-456D. Annulartures Rated Foliah Rod Lood—Francis Massmum. 1.1. Walking Beam Rating—Pounda Massmum Valking Beam Section—Wide Flange. Volking Centers—Well End. Vorking Centers—Pathan End.		AC 18-166D 18.510 21 x 9 @ 96B 34-44-54-64 81-0"	15 (88) 21 x 1 60 90 fb 14 510 15 (88)	AC 21-160D 21.000 21.200 24 x 12 @ 100 m 14 44 54-64 74 953*	21 (97) 21 (97) 21 (97) 21 (97) 24 × 12 (6 100 ft 1 (6 4 5) 64 74 9' 17' 9' 17'	AG 24-320D 21 000 21 200 24 x 12 (0 100 fb 44 54 64 74 95.37 97.37	AC 25-2280 25 000 25 020 24 4 14 (6 130 fb 14 54 64 74 44 101-61 101-61	4C 25-320D 25,020 24 € 14 @ 1.00 R 41 54 64 74 84 107-6*	12 (88) .ci 160 67 -61 x 15 ⁴ (10 67 -40 93 107 15 ⁷⁻⁰⁷ 137 67
AC-18-180D to AC-32-456D: danulacturers Rated Folish Rod Load—Prinnis Maximum L-1. Walking Beam Rating—Pounds Maximum Valking Beam Section—Wide Flange Trobe Length—Tockes Garage Valking Centers—Pittman Rod Maximum Centers—Pittman Rod Maximu		AC 18-160D 18.510 21 = 9 = 9 90 16 31-44-54-54 81-0" - 81-0" 111-514"	18 (88) 18 510 21 4 7 60 90 fb 14 14 54 64 8 07 8 77 11 75 64	AC 21-160D 21:200 24 x 12 @ 100 m 14 44 54-64 74 91:3* 91:3* 15*654	21 (93) 21 (23) 21 (23) 24 × 12 (8 (10) 7) 34 44 54 64 74 97 37 157 64	21 000 21 200 21 200 21 4 12 40 100 m 44 54 64 74 95.37 95.35 157 454 7	AC 25-228D 25-000 25-020 (24 x 14 @ 130 fb 14 54-64-74 x4 10'-67 10'-67 17'-10'4	25,000 25,000 25,000 24 x 14 @ 1,00 m 41.54 64,74 84 105-67 107-105,7	12 (188) (11 169) (1 1 15°4) (8 (67 × 40 × 41 10) (15'-6" (13'-6" (12'-60)
AC-18-160D to AC-32-456D. Annufacturers Rated Polish Rod Lood—Prunds Maximum 1.1.1. Walking Beum Rating—Pounda Maximum Valking Beum Section—Wide Flange Vorking Centers—Well End. Vorking Centers—Pitman Rod amond Post Height. Foundation to Bearing Center Verall Cear Ratio		AG 18-160D 18.000 21 × 9 990B 34-44-54-64 8*-0" **-0" 11-514" 28.8	18 (88) 18 510 21 6 9 60 96 85 14 54 54 64 8 07 8 07 1 (7.5) 29 4	AC 21-160B 21.00B 21.20B 24 × 12 @ 100 m 14 44 54-64-74 91.3° 91.3° 15-654 1 29 8	AC 24-220D 21 (00) 21 (00) 224 x 12 (6) (00) m -34 45 64 74 -9" 12" -15" 654 -29 4 4	ACI 24-320D 21 000 21 200 24 x 12 @ 100 m 14 45 54 48 74 97:37 97:37 157:4847 25:95	25 000 25 000 25 020 25 020 24 4 14 68 130 fb 14 54 64 -74 64 10 -6* 10 -6* 17*-1054 29 4	4C 25-320D 25-320 25-320 24 x 14 49 1-90 R 10'-6' 10'-6' 10'-6' 17'-10'4' 25 95	12 (18) 13 (18) 13 (18) 15 (18) 15 (18) 15 (18) 17 (18) 17 (18) 18
AC-18-160D to AC-32-456D. danulacturers Rated Folish Rod Load—Pounds Masimum. LP.1. Walking Beam Rating—Pounds Masimum. Valting Beam Section—Wide Flange Tokking Centers—Well End Tokking Centers—Well End Sorking Centers—Well End Verall Cear Ratio. Pur J. Peak Douge 20-8P.M.—In h-Pounds.		AG 18-160D 18.000 18.510 21 = 9 @ 5685 34-44-54-64 8'-0" 8'-0" 11'-514'" 28.8	18 (88) 18 510 21 4 7 60 90 fb 14 14 54 64 8 07 8 77 11 75 64	AC 21-1600 21,000 21,200 24 x 12 @ 100 m 14 44 54-64-74 91,3" 91,3" 151-65a 29 x 160,000	21 (93) 21 (23) 21 (23) 24 × 12 (8 (10) 7) 34 44 54 64 74 97 37 157 64	AC 24-320D 21 000 21 200 21 4 12 6 100 m 14 44 54 44 74 97-07 157-644 25 95 24 000	AC 25-228D 25 00H 25,02H 25,02H 24 51-84-74 84 101-6* 101-6* 171-1054 2914 2250,000	4G 25-320D 25-920 25-920 24 x 14 @ 1.00 m 11 54 64-74 84 107-67 107-67 17-108 ₄ 25-95 120-920	12 (188) (11 169) (1 1 15°4) (8 (67 × 40 × 41 10) (15'-6" (13'-6" (12'-60)
AC-18-180D to AC 32-456D. Annulatures Rated Folish Rod Load — Promis Maximum. J.T. Walking Beam Rating — Founds Maximum. J.T. Walking Beam Rating — Founds Maximum. Article Length — Inches. Vorking Centres — Well Rod. Advanced Centres — Well Rod. Adva		AG 18-160D 18.000 21 x 9 9 900 36-44-54-64 8'-0" 10'-54'' 29.8 180.000 32	1% (RR) 1% 510 21 4 % 69 90 Rs 14 14 54 64 % 07 07 11 11 12 14 22 4 729 (RR)	AC 21-160B 21,000 21,200 24 x 12 00 100 to 14 44 54-64 74 91,37 91,37 151-614 29 8 100,000 42	4C 2t - 22tD 21 0.00 21 0.00 21 0.00 21 0.00 24 4 12 6 100 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	AC 24-320D 21 000 21 000 22 x 12 @ 100 m 64 45 54 46 74 97:07 157:05c 25:05 150:000	25 000 25 000 25 020 25 020 24 4 14 68 130 fb 14 54 64 -74 64 10 -6* 10 -6* 17*-1054 29 4	4C 25-320D 25-320 25-320 24 x 14 49 1-90 R 10'-6' 10'-6' 10'-6' 17'-10'4' 25 95	12 (18) 1 (18) 67 (0) 91 (18) 15'-0" 13' 6" 22'-04s' .30 1
AC-18-160D to AC-32-456D. Annufacturers Rated Foliah Rod Load—Prunds Mastmum. LP.1. Walking Beam Rating—Pounds Mastmum. Valking Beam Section—Wide Flange Yorking Centers—Well Rind Yorking Centers—Well Rind Yorking Centers—Pirman Rind. Formal Centers—Well Rind Yorking Centers—Pirman Rind. Perall Cent Ratio. Perall Cent Ratio. Perall Cent Ratio. Perall Center South Into Pounds Annufacturers Nominal Horsepower Rating Year of Centers—Hardened Need		AC 18-160D 18.000 21 x 9 g sons 34-44-54-64 x'-0" x'-0" 18'-54' 29.8 180.000 32 Herringbone	18 (88) 18 510 21 6 9 60 96 85 14 54 54 64 8 07 8 07 1 (7.5) 29 4	AC 21-160B 21,000 21,200 24 × 12 @ 100 m 14 44 54-64-74 91,37 151-644 29 8 160,000 42 Herringbone	AC 24-220D 21 (00) 21 (00) 224 x 12 (6) (00) m -34 45 64 74 -9" 12" -15" 654 -29 4 4	AC 24-320D 21 000 21 200 21 4 12 6 100 m 14 44 54 44 74 97-07 157-644 25 95 24 000	AC 25-228D 25 00H 25,02H 25,02H 24 51-84-74 84 101-6* 101-6* 171-1054 2914 2250,000	4G 25-320D 25-920 25-920 24 x 14 @ 1.00 m 11 54 64-74 84 107-67 107-67 17-108 ₄ 25-95 120-920	12 (68) (C) (69) (C) (69) (C) (69) (C) (67) (C) (67) (C) (67) (C) (67) (C) (67) (C)
AC-18-160D to AC-32-456D. Annulacturers Rated Folish Rol Load—Pounds Maximum. P.J. Walking Beam Rating—Pounds Maximum. Johning Beam Section—Wide Flange. Johning Centers—Pottman Rod. Johning Centers—Well Ro		AG 18-160D 18.000 18.510 21 = 9 = 9 sun 36-44-54-64 8'-0" 8'-0" 16'-54'" 28.8 180.000 180.000 5'-5"	18 (18) 11 × 16 % 96 fb. 14 14 54 64 × 07 × 17 1 1 1 54 64 20 4 20 4 (10 14) 46 Herringhore	AC 21-160B 21,000 21,000 24 × 12 @ 100 m 14 44 54-64 74 91,37 151654 29 8 160,000 160,000 55 5	20 24 - 128D 21 000 21 000 22 3 4 12 (6 100 m - 34 14 54 64 74 9 17 15 64 29 14 22 000 46 Hermithone	AC 24-320D 21 000 21 000 22 x 12 @ 100 m 64 45 54 46 74 97:07 157:05c 25:05 150:000	AC 25-228D 25 00H 25 02H	4C 25-280 25-020 25-020 24-14-6 1-0 n 41-54-64-74-84 107-6* 107-6* 171-104 25-95 120-030 65	12 (68) (C) (69) (C) (69) (C) (69) (C) (67) (C) (67) (C) (67) (C) (67) (C) (67) (C)
AC-16-160D to AC 33-456D. Annularturers Rated Polish Rod Load—Prinnis Maximum. L.T. Walking Beam Rating—Pounda Maximum. Annular Research Planne Annular Research Planne Vorking Centers—Well End. Vorking Ce		AC 18-160D 18.000 21 x 9 g sons 34-44-54-64 x'-0" x'-0" 18'-54' 29.8 180.000 32 Herringbone	1% (RR) 1% 510 21 4 % 69 90 Rs 14 14 54 64 % 07 07 11 11 12 14 22 4 729 (RR)	AC 21-160B 21,000 21,200 24 × 12 @ 100 m 14 44 54-64-74 91,37 151-644 29 8 160,000 42 Herringbone	4C 2t - 22tD 21 0.00 21 0.00 21 0.00 21 0.00 24 4 12 6 100 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	AC 24-320D 21 000 21 000 22 x 12 @ 100 m 64 45 54 46 74 97:07 157:05c 25:05 150:000	AC 25-228D 25 00H 25 02H	4C 25-280 25-020 25-020 24-14-6 1-0 n 41-54-64-74-84 107-6* 107-6* 171-104 25-95 120-030 65	12 (ta) 13 (4) 15 (4) (4) 15 (4) 15 (4) 15 (4) 15 (4) 13 (6) 22 (4)(4) 30 (1) 456 (4)(4) 16 (4)(4) 17 (4)(4)(4) 18 (4)(4)(4)
AC-18-160D to AC-32-456D. Annulacturers Rated Folish Rod Load—Pounds Maximum P.J. Walking Beam Rating—Pounds Maximum Valtoing Beam Section—Wide Flange— Totole Lengil—Tockers— Totole Lengil—Tockers— Totole Lengil—Tockers— Tockers—Putman Rod Morking Centers—Putman Rod Morking Centers— Totole Centers		AC 18-166D 18.000 18.510 21 x 9 gb sont 18-44-56 18-45-66 18-55-67 18-55-67 180.0000 180.000 180.000 180.000 180.000 180.000 180.000 180.0000 180.000 180.000 180.000 180.000 180.000 180.000 180.0000 180.000 180.000 180.000 180.000 180.0000 180.000 180.0000 180.0000 180.0000 180.0000 180.0000 180.0000 180.0000	18 (18) 11 × 16 % 96 fb. 14 14 54 64 × 07 × 17 1 1 1 54 64 20 4 20 4 (10 14) 46 Herringhore	AC 21-160B 21,000 21,000 24 × 12 @ 100 m 14 44 54-64 74 91,37 151654 29 8 160,000 160,000 55 5	20 24 - 128D 21 000 21 000 22 3 4 12 (6 100 m - 34 14 54 64 74 9 17 15 64 29 14 22 000 46 Hermithone	AC 24-320D 21 000 21 200 21 4 12 4 100 ms m 64 45 54 64 74 97-37 157-6847 25 95 120 000 15 11 errangbane	AC 25-228D 25 00H 25 02H 25 02H 25 02H 124 a 14 of 130 m 44 54 -64 -74 a4 107-6 107-6 177-1054 29-4 29-4 29-4 Herringbone	25.000 25.000 25.000 24 v 14 g 100 R 10 56 64 74 84 10 76 17 104 25 95 (20 00) 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10	12 (88) (C) 44 15*4 (8) 87 80 91 10* 15*0* 15*0* 10*0 30 1 456:48) 92 Hermidson
AC-18-160D to AC 32-456D. Accordant trees Rated Polish Rod Load—Pounds Magamum. P.J. Walking Beam Rating—Pounds Masamum. P.J. Walking Beam Rating—Pounds Masamum. P.J. Walking Beam Rating—Pounds Masamum. Property of the Plants—Pounds of the Plants—Pounds—Po		AG 18-160D 18.000 18.510 21 = 9 = 9 sun 36-44-54-64 8'-0" 8'-0" 16'-54'" 28.8 180.000 180.000 5'-5"	18 (18) 11 × 16 % 96 fb. 14 14 54 64 × 07 × 17 1 1 1 54 64 20 4 20 4 (10 14) 46 Herringhore	AC 21-160B 21,000 21,200 24 × 12 @ tours 14 44 54-64 74 97.37 97.37 15'-65a 29 8 160,000 52 Herringbone 5-5 5-5 24' P.D. 54 4,000	20 24 - 128D 21 000 21 000 22 3 4 12 (6 100 m - 34 14 54 64 74 9 17 15 64 29 14 22 000 46 Hermithone	AC 24-320D 21 000 21 200 21 4 12 4 100 ms m 64 45 54 64 74 97-37 157-6847 25 95 120 000 15 11 errangbane	AC 25-228D 25 00H 25 02H 25 02H 25 02H 124 a 14 of 130 m 44 54 -64 -74 a4 107-6 107-6 177-1054 29-4 29-4 29-4 Herringbone	4C 25-328D 25-000 25-000 24 v 14 v8 10 0 11 54 81 74 v4 10 6 17 10 4 25 95 25 95 120 900 85 Herringtone	12 (88) (C) 160 (C) 160 (C) 161 (C) 167 (C) 16
AC-18-160D to AC-32-456D. Annulacturers Rated Foliah Rod Load—Pounds Maximum. LP.1. Walking Beam Rating—Pounds Maximum without Ream Section—Wide Flange. Torking Fenni Section—Wide Flange. Torking Centres—Well End. Torking Centres Torking		AC 18-166D 18.000 18.510 21 x 9 gb sont 18-44-56 18-45-66 18-55-67 18-55-67 180.0000 180.000 180.000 180.000 180.000 180.000 180.000 180.0000 180.000 180.000 180.000 180.000 180.000 180.000 180.0000 180.000 180.000 180.000 180.000 180.0000 180.000 180.0000 180.0000 180.0000 180.0000 180.0000 180.0000 180.0000	18 (18) 18 (18) 21 (4) (6) 96 (6) 14 14 54 64 (7) 7 17 (17) 17 (18) 29 (4) 29 (4) 18 (18) 16 (18) 16 (18) 17 (18) 18 (18) 18 (18) 18 (18) 18 (18) 18 (18)	AC 21-16013 21-200 21-200 24 x 12 @ 100 m 14 44 54-64 74 9'.3" 15'-65a 29 a 100,000 32 32 32 32 32 32 32 32 32 32 32 32 32	4C 24 - 228D 21 0.91 21 0.91 21 0.91 22 0.91 22 0.91 0.91 22 4 12 68 10.9 11 15 16 16 17 17 15 16 16 16 17 17 15 16 16 16 17 17 17 16 16 16 17 17 17 17 17 17 18 18 18 18 18 18 18 18 18 18 18 18 18	AC 24-320D 21 000 21 000 22 00 10 00 64 52 44 74 474 973* 973* 974* 15'-646* 25 95 120 000 65 Herringbure 24" P.D. st	AC 25-22819 25-0031 25-0031 25-0031 25-0031 25-0031 25-103-103-103-103-103-103-103-103-103-103	4C 25-320D 25-320 25-320 24 14 60 100 R 10-46 100-	12 (88) (C) (48) (C) (48) (C) (48) (C) (49) (C) (37) (C) (37) (C) (38) (C) (49) (C)
AC-18-18-01 to AC-32-456D: Annulacturers Rated Polish Rod Load—Promis Magimum. L-1. Walking Beam Rating—Pounds Masimum Valking Beam Section—Wide Plange. Valking Beam Section—Wide Plange. Vorking Centers—Pett Bind. Vorking Centers—Well Bind. Vorkin		AC 18-160D 18.000 21 8.9 99 50th 34-44-54-94 81-07 81-07 11-154 228-1 100.000 24 11-154 25 11-154 25 11-154 25 11-154 25 11-154 25 11-154 25 11-154 25 11-154 25 11-155 26 11-155 26 11-155 27 11-155 28 11-1	15 (88) 15 (18) 21 5 7 69 90 B 44 45 54 64 57 07 57 11 11 15 54 12 12 15 (18) 46 11 11 11 11 11 11 11 11 11 11 11 11 11	AC 21-160B 21,000 21,200 24 × 12 @ tours 14 44 54-64 74 97.37 97.37 15'-65a 29 8 160,000 52 Herringbone 5-5 5-5 24' P.D. 54 4,000	4C 24-728D 21 099 21 290 22 3 12 60 00 m 34 44 56 64 74 97 15 167 64 29 4 22 000 46 Hermitals one 67 24 17 ft 56	AC 24-320D 21 000 21 200 24 x 12 00 000 0 34 55-64 74 9-37 15-64g 25 05 16 1000 65 1000 67 11 st 1 4 540	AC 25-220D 25 000 25 000 25 000 25 000 26 4 4 60 130 to 44 54-04-74 e4 10'-6' 10'-6' 10'-6' 12'-1044 224,000 46 Herringbone 4,440 4,440 1,760	4C 25-920D 25-000 25-000 24 x 14 x 8 10 x 10 x 14 x 8 10 x 6 10	12 (88) 10 (41 (87
AC-16-160D to AC 32-456D. Annularturers Rated Folish Rod Load—Prantis Magamum. LPI. Walking Beam Rating—Founds Masamum stroke Length—Inches. Vorking Centers—Well End. Vorking Centers—Well End. Vorking Centers—Well End. Vorking Centers—Well End. Load Common Foot Height Foundation to Beating Center misson Foot Height Foundation to Beating Center Misson Foot Height Foundation to Beating Center Annual Livers—Normal Horse-power Rating yie of Grating—Hardeard Stret loss Speed Malt Damoter at Cental Normer Livers Master Counterweights Weight per Set Pounds Inner Counterweights Weight per Set Master Weights Only		AC 18-166D 18.000 18.510 21 a 9 ap some 14-44-464 14-54-464 14-54-464 14-55-47 18-55-47 180.0000 180.00000 180.00	18 (88) 18 (19) 21 (4 (6) 96 (6) 14 (4 (5) 64 (6) 4 (7) 21 (4 (5) 64 22 (4) 23 (4) 46 Hermitehne 6 24 (7) 10 (6) 4 (19) 4 (19) 4 (19) 4 (19) 4 (19) 4 (19) 4 (19) 4 (19) 4 (19) 4 (19)	AC 21-160B 21-200 21-200 24 x 12 @ 100 m 14 44 54-64 74 9'.3" 15'-65a 29 a 100,000 32 Herringbone 24' P D - 8 4,050 1,375	4C 21 - 228D 21 0.00 21 0.00 21 0.00 21 0.00 22 0.00 2	AC 24-3200 21 000 21 200 24 x 12 60 000 0 34 x 54 -64 74 9-37 15'-684 25 95 120 000 64 17' D x 17 d0 1 7 d0 1 7 d0 1 7 d0 1 7 d0 1 7 d0	AC 25-22819 25-0031 25-0031 25-0031 25-0031 26-4-14-6-13-0-6-107-6-107-6-107-6-107-6-107-10-6-107-10-6-107-10-6-107-10-6-107-10-6-107-10-6-10-6	AC 25-328D 25-020 24 x 14 (8) 100 R 11 5-4 64 74 84 107-6 17-103 25-95 12-103 12-103 12-103 12-103 12-103 12-103 12-103 13-103 14-103 17-103	12 (18) 1.01 (18) 1.01 (18) 1.01 (18) 1.07 (18
AC-18-160D to AC-32-456D. Annulacturers Rated Polish Rod Load—Pounds Maximum L-1. Walking Beam Rating—Pounds Maximum Valking Beam Section—Wide Flange—Totole Maximum Valking Beam Section—Wide Flange—Totole Longle—Totole Totole Longle—Totole Rod Control Longle—Totole Value Courters—Pittman Rod Morking Centers—Pittman Rod Pit Peak Totole Pit Peak Totole Pit Peak Totole Pit Peak Totole Vertal Coat Ratio Pit Peak Totole Walter Coatterweights Weight per Set Peands Counterweights Effect—Maximum Stroke—Maaret Weights Only Counterweights Effect—Maximum Stroke—Maaret Weights		AC 18-166D 18.500 18.510 18.510 34-44-54-94 8'-07 8'-07 18.515 19.515	18 (18) 18 (19) 21 (27) (8) 90 (10) 14 (4) 54 (54) 21 (27) 21 (4) 22 (4) 23 (4) 11 (14) 24 (4) 12 (18) 14 (18) 14 (18) 14 (18) 14 (18) 14 (18) 14 (18) 14 (18) 14 (18) 14 (18) 14 (18) 15 (18) 16 (18) 17 (18) 18 (18)	AC 21-140B 21-000 21-200 21-200 14-44-54-54-74 67-37-74 15-64a 129-8 109-080 52-1 Herringbone 5-1-3 4-08B 1-37-5 4-08B 1-37-5 8-20-5	4C 21-228D 21 099 21 299 21 299 22 4 12 68 000 m 23 4 45 64 74 47 65 21 4 22 090 46 Herringhore 67 24 17 66 4 189 1 175 6 4 189 1 175 6 2 175 6	AC 21-320D 21 980 21 200 22 4 12 00 981 to 45 54 64 74 97.37 45 64 74 157 64 7 157 6	AC 25-22819 25-0031 25-0031 25-0031 25-0031 24-4-4-4-4-4-4 44-54-4-4-4-4 20-4 20	AC 25-328D 25-020 25-020 24 x 4	12 (b) (C) 147 (c)
AC-18-18-01 to AC-32-45-02. Annulacturers Rated Folish Rod Load—Pounds Maximum Valking Beam Rating—Pounds Maximum Valking Beam Section—Wide Flange—Tourde Maximum Valking Centers—Partman Rod More Marine Maximum Centers—Tourde Maximum Verfall Geat Ratio P1. Peak Tourge—20 S.P.M.—In http://doi.org/10. P2. Peak Tourge—20 S.P.M.—In http://doi.org/10. P3. Pack Tourge—Valking Maximum Valking Valking Section—Valking Maximum Valking Section—Valking Section—Valking Section—Valking Section—Valking Section—Valking Valking		AC 18-160D 18.000 21 k 9 90 some 34-44-54-64 84-07 84-07 11-154 28-k 160.000 24-4-17-154 28-160.000 11-155-16 11-155-16 11-155-16 11-155-16 11-155-16 11-155-16 11-155-16 11-155-16 11-155-16 11-155-16 11-155-16 11-155-16	18 (18) 15 (18) 21 x 1 69 50 fb 14 14 54 64 15 (17) 22 4 25 (18) 46 Hermiteliane 6 24 P D 56 4 (18) 4 (18) 4 (18) 4 (18) 4 (18) 4 (18) 4 (18) 4 (18) 4 (18) 4 (18) 4 (18) 4 (18) 4 (18) 4 (18) 4 (18) 4 (18)	AC 21-1603 21:200 21:200 24 × 12 @ 100 m 14 44 54-64 74 9':3" 9':3" 15':65q 29 x 169:000 160:0	4C 21-228D 21-02D 21-02D 22-02B 22-4-12-68-100 m 23-14-12-68-78-73-73-73-73-73-73-73-73-73-73-73-73-73-	AC 24-3200 21 000 21 200 24 x 12 60 000 0 34 x 54 -64 74 9-37 15'-684 25 95 120 000 64 17' D x 17 d0 1 7 d0 1 7 d0 1 7 d0 1 7 d0 1 000	AC 25-22819 25-0031 25-0031 25-0031 25-0031 25-0031 26-4-14-6-130-6- 10'-6- 10'-6- 17'-10-4- 29-4- 29-4- 29-4- 29-4- 11	AC 25-328D 25-020 24 x 14 (8) 100 R 11 5-4 64 74 84 107-6 17-103 25-95 12-103 12-103 12-103 12-103 12-103 12-103 12-103 13-103 14-103 17-103	12 tass (C. 140) (C. 140) (G. 40) 93 (10), (G. 40) 93 (10), (
AC-18-160D to AC 32-456D. Annulartures Rated Folish Rod Load—Promots Magamum. J.P.I. Walking Beam Rating—Founds Masamum. J.P.I. Walking Beam Rating—Founds Masamum. Article Length—Inches. Vorking Centres—Well Raid. Annual Autres—Well Raid Raid. Vorking Centres—Well Raid. Vorking Centres—Well Dameter and Wellther. Master Countreweights Weight per Set Pounds. Inner Countreweights Weight per Set Pounds. Countreweights Effect—Maximum Strake Master Weights. Countreweights Effect—Maximum Strake One Set Inner Weights. Countreweights Effect—Maximum Strake One Set Inner Weights. Countreweights Effect—Maximum Strake One Set Inner Weights.		AC 18-160D 18.000 21.8.500 31.8.500 34-54-54-64 8*-00* 8*-00* 10.354 10.354 10.354 20.1000 10.354 10.354 20.1000 10.354 10.35	18 (88) 19 (19) 21 8 7 (8) 90 (0) 14 15 (30) 24 15 (30) 25 (30) 15 (30) 27 (30	AC 21-14049 21.2003 24 s, 12 g6 100 m m 24 s, 12 g6 100 m 32 100.0000 32 100.00000 32 100.00000 32 100.00000 32 100.00000 32 100.00000 3	CC 24-7280 21 02	AC 21-330D 21 000 21 120 21 22 200 15 21 200 16 41 54 48 74 91-37 91-37 91-38 15-38 120 000 120 000 121 000 1 7 d0 1 7 d0 1 1 (100) 1 1 (100)	AC 15-12819 25 081 25 081 26 4 55.021 30 05 26 4 56.02 130 05 27 10 15 27 1	4-C 25-120D 25-020 21 - 14 - 26 - 10 - 10 - 10 - 10 - 10 - 10 - 10 - 1	12 081 12 184 07 40 93 107 13 16 13 16 107 14 15 107 107 15 17 17 17 17 17 17 17 17 17 17 17 17 17
AC-16-160D to AC 33-456D. Acutacturers Rated Poinh Rod Load—Promis Maximum. LP.I. Walking Beem Rating—Pounds Maximum. Acutacturers Rated Poinh Rod Load—Promis Maximum. Acutacturers—Perman Rod. Goding Centers—Well End. De Part Control Centers—Well End. De Part Control Centers—Well End. Goding Centers—Well Department of the Control Centers Noted Centers—Well Department of the Control Center Season—Plan Diameter and Number tests control Center Season—Plan Diameter and Number Lecture Season—Control Center Season—Plan Diameter Season—Plan Diameter Control Center Season—State Maximum Strake Deservation Control Center Season—State Center S		AC 18-164D 18.000 18.500 18.500 38-46-54-64 84-65-54-64 84-70* 10.554* 29.8* 160.000 32 Herroglone 4.090 4.090 1.7554* 29.8* 160.000 32 1.7554* 29.8* 160.000 32 1.7554* 29.8* 160.000 32 1.7554* 29.8* 160.000 32 1.7554* 29.8* 160.000 32 1.7554* 3.7550 3.7550 3.7550 3.7550 3.7550 3.7550 3.7550	18 (88) (18 (19) 10 (18) (18 (18) 54 (64) (19) 17 (18) (19) 18 (18) (19) 19 (18) (19)	AC 2f-14683 21.00m 21.00m 21.00m 21.00m 21.00m 24.00m 24.00m 25.00m 25.00m 25.00m 26.00m 26.	CC 24-7280 21 299 21 299 22 24 27 26 200 m 24 24 26 26 200 m 24 25 26 26 200 m 25 24 22 28 28 28 28 28 28 28 28 28 28 28 28	AC 24-1400 21 930 21 930 22 9 17 26 1017 31 20 1017 31 27 28 112 6 1017 31 45 5 46 74 31 45 5 46 74 31 45 5 46 74 31 45 5 46 74 31 45 5 46 74 31 46 74 31 46 74 31 76 76 31 76 31 76 31 76 76 31 76 31 76	AC 15-2280 25 001 25 001 25 001 25 120 24 x 14 x 15 120 10 124 10	4.C 25-326D 25.020 24 x 14 db 10 m 10	12 (88) (C. 14) (C. 14
AC-18-160D to AC-32-456D. Annulacturers Rated Polish Rod Load—Pounds Magamum. J.J. Walking Beam Rating—Pounds Masamum. Johney Boson Section—Wide Plange. Johney Boson Section—Wide Plange. Johney Boson Section—Wide Plange. Johney Boson Section—Wide Rod. Johney Boson Section—Wide Rod. Johney Boson Section—Wide Rod. Johney Boson Section—Wide Rod. Johney Boson Section Sectio		AC 18-164D 18.000 18.000 18.44-54-64 14.4-54-64 16.500	18 (18) 18 (2) 9 500 ft 14 14 56 04 25 (2) 15 (2) 15 (2) 17 (3) 15 (2) 18 (3) 16 (3) 18 (3) 16 (3) 18 (3) 17 (4) 18 (4) 1	AC 21-14693 21.00m 22.00m 22.00m 24.02m 14.44.54-04.74 97.37 157.68, 98.00m 16.40m 16.10m 16.	CC 24 - 220 C 24 - 220 C 24 - 220 C 24 C 25	AC 24-1400 21 1900 21 1900 21 1900 34 41 52-44 74 35 44 52-44 74 35 45 52-54 74 35 53 54 35 54 54 35 55 55 35 55 35 55 55 35 55 35 55 55 3	AC 15-12819 25 001 25 0	4C 25-320D 25-320 25-320 11-34-35-31-90 m 11-34-35-31-90 m 11-34-35-31-90 m 11-34-31-34-31-90 m 12-31-31-31-90 m 12-31-31-31-31-90 m 12-31-31-31-31-31-31-31-31-31-31-31-31-31-	12 (b) (C) 147 (c)
AC-10-160D to AC 32-456D. Annulartures Rated Polish Rod Load—Promis Magimum. J.T. Walking Beam Rating—Founds Masimum. J.T. Walking Beam Rating—Founds Masimum. Action of the Company o		AC 18-164D 18.4311 18.4311 18.44-54-64 18.40-7 18.40	18 (m) 21 (4 (100 m) 14 (100 m) 15 (100 m) 16 (100 m)	AC 21-14693 AC 21-14693 24 N 12 69 100 00 14 44 54-04-74 97.37 97.37 97.37 159.48 169.000 149.000 149.000 149.000 149.000 149.000 149.000 149.000 119.000 119.000 119.000 119.000 119.000 119.000	CC 24 - 2281) 22 - 12 - 228 - 228 -	AC 24-3490 1 1930 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	AC 15-22819 25 001 25 0	4C 25-280 25-92 25-92 24 - 21-90 m 11 54 81-74 84 10-6	12 (b) (C) 147 (c)
AC-18-180D to AC-32-456D. Annulacturers Rated Polish Rod Load—Pounds Maximum. Lell Walking Beam Rating—Pounds Maximum. Lells beam Beam Sating—Pounds Maximum. Lells beam Beam Sating—Pounds Maximum. Lells beam Seating—Will End. Vorking Centers—Well End. Vorking Centers—Well End. Vorking Centers—Well End. Lells beam Seating—Level End. Level Leve		AC 18-164D 18.000 18.000 18.44-54-64 14.4-54-64 16.500	18 (18) 18 (2) 9 500 ft 14 14 56 04 25 (2) 15 (2) 15 (2) 17 (3) 15 (2) 18 (3) 16 (3) 18 (3) 16 (3) 18 (3) 17 (4) 18 (4) 1	AC 21-14693 21.00m 22.00m 22.00m 24.02m 14.44.54-04.74 97.37 157.68, 98.00m 16.40m 16.10m 16.	CC 24 - 220 C 24 - 220 C 24 - 220 C 24 C 25	AC 24-1400 21 1900 21 1900 21 1900 34 41 52-44 74 35 44 52-44 74 35 45 52-54 74 35 53 54 35 54 54 35 55 55 35 55 35 55 55 35 55 35 55 55 3	AC 15-12819 25 001 25 0	4C 25-320D 25-320 25-320 11-34-35-31-90 m 11-34-35-31-90 m 11-34-35-31-90 m 11-34-31-34-31-90 m 12-31-31-31-90 m 12-31-31-31-31-90 m 12-31-31-31-31-31-31-31-31-31-31-31-31-31-	12 that (12 that (13 that (14 that (15

CABOT SHOPS, INC. PAMPA, TEXAS





REAM WEIGHTS

Beam counterweights are furnished as standard equipment on all BEAM BAL-ANCED units.

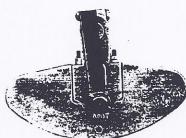
The beam weights are made in halves with large cored holes for handling. Safety rails are welded on either side of the walking beam with a retainer plate at the end. This prevents the weights from falling off before being clamped in position by a single retainer holt. Weights may be installed at any point along the beam without moving any other weights.

CRANK WEIGHTS

On the BEAM BALANCED units, limited crank counterbalance is offered as optional extra equip-

These crank weights counterbalance approximately 15% of the rated polish rod load. The "flywheel effect" results in smoother operation and better balancing of the unit than when beam weights alone are used.

The counterweight is a single casting that fits the crank on a ball-and-socket type joint. It is easily installed and is held in place by two heavy bolts.



Beam Balanced Series

All units of the Cabot Beam Balanced Series are furnished with full beam counterweighting, with 15% crank counterweighting as an optional extra.

Interchangeable reducers, structures, bearings and accessories permit a wide variety of combinations. A well-planned manufacturing program makes possible the quick assembly of the combination you choose.

The structures on these units are of exceptionally sturdy design with large walking beams, heavy four-legged samson posts, and deep, wide-flanged steel base members.

All Cabot pumping units are equipped with floor clearing sub-bases eliminating the construction of an expensive foundation in the field.

In comparing pumping unit prices it should be noted that Cabot's basic prices include many items that are available only at extra cost on most other units. These include vee belts, belt guard, slide rails, holts and clamps, reducer filled with correct grade of lubricant, normal counterweights required and others. There is an allowance on these items when not required. Particularly important is the fact that Cahot prices are F.O.B. well location with the unit assembled in place if foundation is ready. This saves the usual trucking charge from store or freight yard to the well, as well as truck time for setting up the unit.

The Cabot "Equalastic" Bearing is provided on the pitmans of all units from the B5 up, along with self-aligning roller bearing wrist pins, oil bath center bearings, and a one-bolt, quickly detachable horsehead.

All reducers have Sykes-cut herringhone gears, with sturdy one-piece housings. Shafts and bearings are extra large, carried on large roller bearings, and automatically flood-lubricated.

R5-16S

B5-16D

BEAM BALANCE SERIES SPECIFICATIONS

DEAM			B5-16S	Darton	
	B4-10S	B4-10D	:	5,000	7,000
The state of the s		4,000	5,000 5,735	5.735	7,580 12 x 6½ @ 27
	4.000	3 935	10 x 5 4 @ 21 lb	10 + 5% (4 21 10	18-24-30
nufacturers Rated Polish Rod Load—Pounds Maximum	3.935	2 4 4 @ 15 m	20-25	20-25	3'-9"
nufacturers Rated Polish Rod Load—Pounds Maximum L. Walking Beam Rating—Pounds Maximum Light Beam Section—Wide Flange Beam	8 x 4 @ 15 lb	12-16-20	3'-11/3"	3'-11/5"	3'-9"
	12-16-20	110 00		3'-134"	7'-5"
iking Beam Section—Wide Flange Beam oke Length—Inches	2'-6"	3'-614" to 1'-1114"	7'0%	7'-014"	28.9
oke Lenkin i Last and Inches.	3'-614" to 1'-1114"	5'-10	10.6	29.9	25,000
oke Lengths—Well End —Feet and Inches riking Centers—Well End —Feet and Inches riking Centers—Pitman End—Feet and Inches riking Centers—Feet a	11.0	30.0	16.000	16.000	5
	10.000	10,000	3		Herringhor
uson Post Height -Foundation	1(1,188)	2	Herringhone	Herringbone	3
		Herringbone	21/2	21/2	18"-3B
	Herringbone	21/2	197 28	16"2H	3 - 250
nufacturers Nominal Horsepower Rating nufacturers Nominal Horsepower Rating pe of Gearing—Hardened Alloy Steel. pe of Gearing—Hardened Alloy Steel.	15.5"—2B	16"—2B	3 - 250	3250	680
	15.5 -25	0190	280	280	6745
mutacutiers per of Gearing—Hardened Alloy Steel. pe of Gearing—Hardened Alloy Steel. pe Speed Shaft Diameter at Crank—Inches per of Belts per Chich Diameter and Number of Belts was Speed Shaft Diameter and Number of Belts was Speed Shaft Diameter.	280	. 280	1115	4445	
ow Speed Shaft Diameter at Crank—Inches of Belts ducer Sheave—Pitch Diameter and Number of Belts ducer Sheave—Sets Furnished and Weight per Set.	2760	2760		B11-57D	R11-801
	2700		B9-57D	B11-372	_'
ank Counterweights - (Extra Equipment) aximum Counterweight Effect at Maximum Stroke		B9-40D		11,000	11,000
aximum Counterweight tareet		9,000	9,000	11.030	11,030
		9,970	9,970		14 x 8 @ 4
Pounds Maximum		14 x 61/4 @ 36 f	b 14 x 6 1/4 @ 3x 11	26-34 42	
Lanufacturers Rated Polish Rod Load - Pounds Maximum P.I. Walking Beam RatingPounds Maximum Wide Flange Beam		20 28 36	20-28-36	5'-3"	5'-3"
P. I. Walking Beam Rating - Pounds State	40404	4'.6"	4'-6"	5'-3"	5'-3"
		4'-6"	10.	8'-1114"	8'-114
real a length littles and laches		7'-81/4"	7' 8!5"	30.2	30.2
troke length Inches. Corking Centers Well End—Feet and Inches Corking Centers Well End—Feet and Inches	es	30.1	30.2	57.(XX)	80,000
Orking Centers Well End—Feet and Inches. Orking Centers Pitman End Feet and Inches. Feet and Inches. Feet and Inches.		10.000	57,000	11.5	16
ment l'ost fiergot		8	11.5	Herringhone	Herringh
Kerall Gear Ratio		Herringbone	Herringhone	4	22 3
rverall Gear Ratio. A.P.L. Peak Torque at 20 S.P.MInch-Pounds A.P.L. Peak Torque at 20 S.P.MInch-Pounds		31/2		18" 48	6 32
AP I. Peak Torque at 20 S.F.M. Manutacturers Nominal Horsepower Rating Hardened Alloy Steel	V	18%-3B	18" -4B	6 - 320	1130
Manufacturers Nominal triols for Expe of Gearing Hardened Alloy Steel Expe of Gearing Hardened Alloy Steel		5320	5 320	1130	×315
		1130	1130	8315	8310
Reducer Sheaty Diameter at Crank Inches Slow Speed Shatt Diameter and Number of Belts. Reducer Sheave Pitch Diameter and Number of Belts. Beam Counterweights Sets Furnished and Weight per Set. Beam Counterweights (Extra Equipment)—Weight per Set.		7745	7745		
Reducer Sheave Beam Counterweights Sets Furnished and Weight per Set. Crank Counterweights (Extra Equipment) Weight per Set. Crank Counterweight Effect at Maximum Stroke		:			
Crark Counterweights (Extra Equipment) Crark Counterweight Effect at Maximum Stroke				*	



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PUMPINGMEQUIPM

CABOT SHOPS, INC.

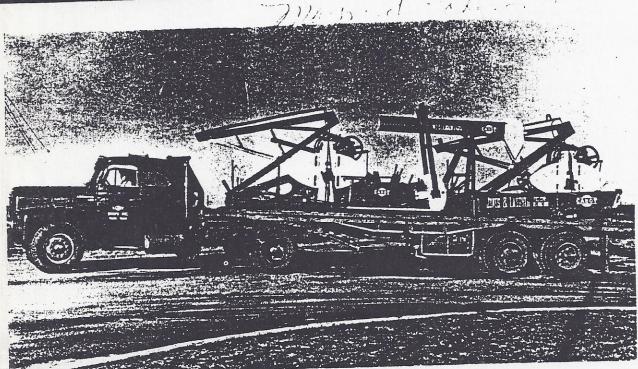
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PAMPA, TEXAS Mohaw Ph. 4-3277

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CABOT TRUCKS DELIVER DIRECT TO LEASE—Cabot trucks deliver Cabot Units from the factory direct to the purchaser's lease—at a substantial saving in time and cost of freight and handling for the operator.

The service men who deliver Cabot Units are thoroughly trained in service and assembly work, and can handle setup, ordinary repairs, and replacements expertly and with a minimum of expense. A request made to any Jones & Laughlin store or representative will bring the service of these trained men to any Cabot customer.

CABOT OFFERS A VERSATILE LINE OF PUMPING UNITS—With 12 basic sizes, ranging from 4,000 to 32,000 pound Beam Rating, and Reducer sizes from 10,000 inch-pounds to 456,000 inch-pounds; over 40 different combinations of structures are available. This allows the purchaser select the correct size of unit for any well condition, as well as to provide for his future needs of

interchanging reducers at a later date, if needed.

Universal Structural assemblies accommodate several different sizes of reducers, and allow the use of any common power unit—single or multiple cylinder engine or electric motor.

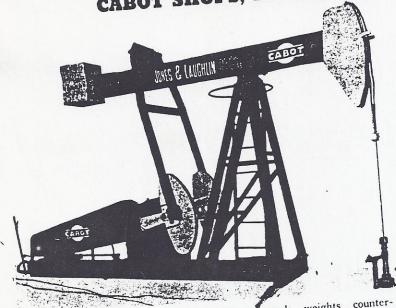
CABOT UNITS ARE BEAM, CRANK, OR COMBINATION BALANCE—Two series of Cabot Units are offered—BEAM BALANCED, with provision for limited crank balancing, and CRANK BALANCED, also having provision for beam balance as optional extra equipment.

With this selection, the user is assured of having the best combination of balancing for his particular well condition.

Jones & Laughlin Steel Corporation, Supply Division, distributor of Cabot Pumping Units, is an old, reliable, well-established oil field supply company with complete representation and with stores in all the major fields.

CABOT SHOPS, INC. PAMPA, TEXAS





BEAM WEIGHTS

Beam counterweights are furnished as standard equipment on all BEAM BAL-ANCED units.

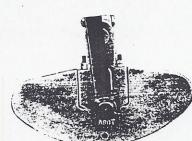
The beam weights are made in halves with large cored holes for handling. Safety rails are welded on either side of the walking beam with a retainer plate at the end.
This prevents the weights from falling off before being clamped in position by a single retainer both. Weights may be installed at holt. Weights may be installed at any point along the beam without moving any other weights.

CRANK WEIGHTS

On the BEAM BALANCED units, limited crank counterbalance is offered as optional extra equipment.

These crank weights counterbalance approximately 15% of the rated polish rod load. The "flywheel effect" results in smoother operation and better balancing of the unit than when beam weights alone are used.

The counterweight is a single casting that fits the crank on a ball-and-socket type joint. It is easily installed and is held in place by two heavy bolts.



Beam Balanced Series

All units of the Cabot Beam Balanced Series are furnished with full beam counterweighting, with 15% crank counterweighting as an optional extra.

Interchangeable reducers, structures, bearings and accessories permit a wide variety of combinations. A well-planned manufacturing program makes possible the quick assembly of the combination you choose.

The structures on these units are of exceptionally sturdy design with large walking beams, heavy four-legged samson posts, and deep, wide-flanged steel base members.

All Cabot pumping units are equipped with floor clearing sub-bases eliminating the construction of an expensive foundation in the field.

In comparing pumping unit prices it should be noted that Cabot's basic prices include many items that are available only at extra cost on most other units. These include vee belts, belt guard, slide rails, bolts and clamps, reducer filled with correct grade of lubricant, normal counterweights required and others. There is an allowance on these items when not required. Particularly important is the fact that Cahot prices are F.O.B. well location with the unit assembled in place if foundation is ready. This saves the usual trucking charge from store or freight yard to the well, as well as truck time for setting up the unit.

The Cabot "Equalastic" Bearing is provided on the pitmans of all units from the B5 up, along with self-aligning roller bearing wrist pins, oil bath center bearings, and a one-bolt, quickly detach-

All reducers have Sykes-cut herringbone gears. able horsehead. with sturdy one-piece housings. Shafts and bearings are extra large, carried on large roller bearings, and automatically flood-lubricated.

B5-16S

B5-16D

B7-25D

BEAM BALANCE SERIES SPECIFICATIONS

III.	BEAM DALA			B5-16S	D3-100	
		B4-10S	B4-10D		5.000	7.000 7,580
			4,000	5.000	5 735	12 x 61/2 @ 27 1h
CONTRACTOR OF THE PARTY OF THE		4.000	4,000	5.735	10 x 5% @ 21 16	12 x 092 (32)
		3,935	3.935	10 x 5% @ 21 lb	20-25	18-2410
not post Load—Pour	nds Maximum	8 x 4 @ 15 tb	N X 4 (a) 10	20-20	3'-11/2"	3'-9"
unufacturers Rated Polish Rod Load—Pour	num	8 X 4 W 10 10	12-10-40	3'-11/2"	3'-134"	3'-9"
At Walking Beam Rating Pounds Ream.		12-16-20	2'-6"	3'-136"	7'-014"	7′-5″
unifacturers Rated Polish Rod Load—Four P.I. Walking Beam Rating—Pounds Maxin alking Beam Section—Wide Flange Beam oke Length—Inches.——Well End—Feet and Inches.————————————————————————————————————		2'-6"	3'-614" to 1'-1114"	7' 01/4"	29.9	28.9
liking bear.		3'-61/2" to 1'-111/4"	5'-10"	10.6	29.9	25,000
oke Length Well End -Feet and Inch	ches	5'-10"	30.0	16.000	16.000	5
oke Length—Inches, well End—Feet and Inches Centers—Well End—Feet and Inches Centers—Pitman End—Feet and Inches Centers—Pitman End—Feet and Inches Ratio	Center -Ft. and Ins	11.0	10.000		3	Herringbone
		10,000	2	3	Herringbone	3
mson Post Height -Foundation to Delivership Post Height -Foundation to Delivership Post Height -Foundation to Delivership Height -Foundation t)		Herringbone	214	18"-3B
mison Post Height — John S.P.M. —Inch-Pour erall Gear Ratio P.I. Peak Torque at 20 S.P.M. —Inch-Pour P. S. Peak Torque at Horsepower Rating	nds	Herringbone	Herringbone	21/2	16"28	18 31
erall Gear Ratio P.I. Peak Torque at 20 S.P.M.—Inch-Poul anufacturers Nominal Horsepower Rating anufacturers Nominal Horsepower Rating.		219	21/2	19" -2B	3250	3 - 250
authorners Nominal Horsepower		1	16"-2B	3 - 250	280	680
and Genring-Hardened Alloy ste-Inche	·s	15.5"—2B	0190	280	4445	6745
P.I. Peak Torque at 25 anufacturers Nominal Horsepower Rating, anufacturers Nominal Horsepower Rating, type of Gearing—Hardened Alloy Steel	per of Belts	0-190	280	1445	444.)	
anufacturers Noffman and Alloy Steel. Spe of Gearing—Hardened Alloy Steel. Sw Speed Shaft Diameter at Crank—Inche ow Speed Shaft Diameter and Numl educer Sheave—Pitch Diameter and Numl earn Counterweights—Sets Furnished and V earn Counterweights—(Extra Equipment)	Weight per Set	280	2760		B11-57D	R11-801)
educer shear - Sets Furnished and	_Weight per Set	2760	The second secon	B9-57D	B11-378	
eam Counterweights - (Extra Equipment)	m Stroke		B9-40D	*	(VOV)	11,000
educer Sheave - Pitch Diantees eam Counterweights - Sets Furnished and Y rank Counterweights - (Extra Equipment) laximum Counterweight Effect at Maximu	III COLO			9,000	11.000	11.030
laximum Counterweight			9.000	0.070	11,030	14 x 8 @ 48
			9,970	10/ @ 38 11	14 x 8 @ 48 th	26-34-42
, p.	unds Maximum		14 x 6 4 @ 36 fb	20-28-36	26-34-42	5'-3"
Manufacturers Rated Polish Rod Load Per V.P.I. Walking Beam Rating—Pounds Man V.P.I. Wagne Section—Wide Flange Bean	inum m		20-28-36	20-28-10	5'-3"	5'-3"
Manufacturers Rated Paring-Pounds Man	111111111111111111111111111111111111111		4'-6"	4'-6"	5'-3"	8'-1114"
P.I. Walking Beam Rule Flange Beam	1		4'-6"	4'-6"	8'-11%"	30.2
			4 -0	7'-8'4"	30.2	80,000
			7'-81/2"	30.2	57 (000)	
Stroke Length Inches. Working Centers Well End—Feet and Inches	Inches. Limit and Inch	res	30.1	57.(XX)	11.5	16
Working Centers Well End—Feet and Ind Working Centers Pitman End Feet and Working Centers Poundation to Beari	ng Center Tect		40.000	11.5	Herringbone	Herringbor
			S	Herringbone	Herringon	415
Overall Gear Ratio 20 S.P.MInch-Po	ounds		Herringbone	11111111	18" 48	22 30
			31/2	18" 4B	6 - 320	6320
Manufacturers Nominal Horsepower Ratin Manufacturers Nominal Horsepower Ratin	ik.		18%-3B	5 320		1130
Manufactures and a super Steel.			5-320	1130	1130	8315
Type of Genting Time	C Belts		1130	7745	8315	
Slow Speed Shart Commeter and Su	miles to our Set.		7745	11+1	==========	Septimental Control of the Control o
Ispe of Gearing Hardened Crank Ins Slow Speed Shart Diameter at Crank Ins Reducer Sheave Pitch Diameter and Nu Beam Counterweights Sets Furnished an Crank Counterweights (Extra Equipmer Grank Counterweight Effect at Maxi	d Weight per Set.					
Beam Counterweights Sets Engineer	it)					
Beam Counterweights (Extra Equipmer Crank Counterweights (Extra Equipmer Maximum Counterweight Effect at Maxir	num Stroke					

CABOT SHOPS, INC. PAMPA, TEXAS

Adjustable-Crank Series

The Cabot Adjustable Crank Series is complete, ranging from 9,000 to 32,000 pounds maximum polish rod load. Every detail of the A-C Series has been engineered for simplicity of design, stability and strength and the complete unit has undergone years of tests in the field. All walking beams are large, wide-flange sections rated according to API standards with ample capacity for the unit rating. Samson posts are of the four-legged derrick type with heavy angle legs, well designed girts and diagonal bracing, and are solidly boxed in at the top with steel plates. On all Adjustable Crank Units bolt-on type samson posts and floor clearing sub-bases are furnished as standard equipment. Three, four or five-hole cranks are used on all units in this series. Vee belts, belt guards and adjustable slide rails are furnished as standard equipment on all Cabot Units.





The design and operation of the Cabot Adjustable-Crank is amazingly simple. The adjustment can be done by one man standing on the ground and with the cranks in only one position. No heavy lifting or complicated tools are required. The crank arm is stopped in an approximately horizontal position and the crank adjusted in these three simple steps: 1) Loosen the two lock bolts on each of the weights. 2) Move the weights to the desired position by turning the adjuster bolt. 3) Tighten the lock bolts. Complete assembly and disassembly can be accomplished in the field without the aid of special tools or instructions.



INNER WEIGHTS

Inner half weights are available for all size A-C units giving a wide variation in counterweight

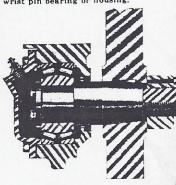
effect at minimum cost. The inner half weight is a single casting occupying half the space in the master weight and secured with three bolts. Two half weights are used for maximum counterweighting. Inner half weights may be ordered with the unit or separately as needed. D type, extra heavy mas-ter and inner half weights are available where full counterweighting is required.

WRIST PIN AND BEARING

Wrist pin bearings are self-aligning, double-row roller bearings adjusted by

steel shims under the housing cover. The inner race is spherical, with misalignment taken within the bearing. Bearings are enclosed in sealed, dust tight housing with a large oil reservoir. On all units, wrist pins have a taper it in the crank and on larger units, are keyed to prevent turning.

The wrist pin may be shifted to change stroke lengths without disturbing the wrist pin bearing or housing.



ADJUSTABLE-CRANK SERIES SPECIFICATIONS

AC 9-49D to AC 16-169D		AC 9-40D	AC 9-57D	AC 11-57D	AC 11-80D	AC 13-80D	AC 13-114D	AC 15-114D	AC 16-160D
The state of the s		9 000	9,000	11.000	11.000	13.000	13.000	15,000	18,000
Manufacturers Rated Polish Rod Load-Pounds Maximum		9.970	9.970	11.030	11.030	14.040	14,040	16.550	16.550
A.P.I. Walking Beam Rating—Pounds Maximum	1.4	x 634 € 38 fb	14 # 6% @ 3× 10	14 x 8 60 48 fb	14 x N @ 4* fb	16 + 214 @ 64 fb	16 : 8% @ 61 1b	14 4 44 @ 77 th	14 + NH @ 77
Walking Beam Section-Wide Flange		20-28-36	20-28-36	26-34-42	26-34-42	24-34-48	28-38-48	34-44 54	34-44-34
Stroke Length-Inches		4'-6"	4'-6"	5'-3"	5'.3"	6'-0"	6'-0"	6'.9"	9.4.
Working Centers-Well End		4'-6"	4'-6"	5'-3"	5'.3"	6'-0"	6'-0"	6'.9"	6.4.
Working Centers—Pitman End		8'-2%	N'-2%	9'-714	9.74	10, 4,	10'-8%	11'-6%	11'-6%
Samson Post Height-Foundation to Bearing Center		30.1	30.2	30.2	30.2	30.2	29.9	29 9	29 A
Overall Gear Ratio.		40.000	57.000	57.000	SO.000	90.00x)	114,000	114.000	160.000
A.P.I. Peak Torque—20 S.P.M.—Inch-Pounds		10.000	11.5	11.5	16	16	23	23	32
Manufacturers Nominal Horsepower Rating		Herringbone	Herringtone	Herringbuse	Herringlesse	Herringbone	Herringbone	Herringbane	Herringbuir
Type of Gearing- Hardened Steel	1 .	314	Terri ing own		114.	415.	5.	5*	54
Slow Speed Shaft Diameter at Crank		H" P.D3H	DET P D AR	18" P.D. 48	22" P.D. R	22" P.D 3C	22" P.D3C	22" P.D 10	74 . b. D -20
Reducer Sheave—Pitch Diameter and Number Belts.	1 1 7	H P.17 -3B	10 1 17 10	10 1.17 11		-			
Counterweights Effect—Standard Weights:				1.800	1 800	2.090	2.090	2,090	
Master Counterweights - Weight per Set - Pounds.				635	635	460	860	460	
Inner Counterweights - Weight per Set-Pounds				3.900	1,900	5.050	5.050	5.340	
Counterweights Effect - Maximum Stroke Master Weights Only				4.850	4 830	6.405	6.405	6.610	
Counterweights Effect-Maximum Stroke-One Set Inner Weights				5.795	5.795	7.760	7.760	7.880	
Counterweights Effect - Maximum Stroke-Two Sets Inner Weights.				3.193	5.1.55				
Counterweights Effect—"D" Type Weights:			th second	2.880	2.990	4.090	4.090	1.780	3.790
Master Counterweights-Weight per Set-Pounds		2,880	2,890	845	34.5	1.260	1.260	1.180	1,190
Inner Counterweights - Weight per Set Pounds		845	845	4,960	1,460	7.400	7.400	7,515	7.530
									9.175
Counterweight Effect-Maximum Stroke-Master Weights-Only .		5.355	5.355		at that "		9 150	9.165	
Counterweight Effect—Maximum Stroke—Master Weights - Only Counterweight Effect—Maximum Stroke—One Set Inner Weights	-1	6.550	6.550	6.065	ej ()ej.j	9,150	9,150	9.165	10,400
Counterweight Effect—Maximum Stroke—Master Weights—Only Counterweight Effect—Maximum Stroke—One Set Inner Weights Counterweight Effect—Maximum Stroke—Two Sets Inner Weights	-!	6.550 7.735	6,550 7,735	6.065 7.160	7 160		10,860	10,785	
Counterweight Effect—Maximum Stroke—Master Weights - Only Counterweight Effect—Maximum Stroke—One Set Inner Weights		6.550 7.735	6,550 7,735	6.065 7.160	7 160	9.150 10.860	10,860	10,785	10,900 AC 32-456D
Counterweight Effect—Maximum Stroke—Masser Weights—Only Counterweight Effect—Maximum Stroke—One Set Inner Weights Counterweight Effect—Maximum Stroke—Two Sety Inner Weight—AC:18-160D to AC 32-456D.		6,550 7,735 AC 18-160D	6,550 7,735 AC 18-228D	6.065 7.160 AC 21-160D	7 160	9.150 10.960	AC 25-228D 25 000	10.785 AC 25-320D 25.000	AC 32-4560
Counterweight Effect—Maximum Stroke—Maxier Weights—Only Counterweight Effect—Maximum Stroke—One Set Inner Weights Counterweight Effect—Maximum Stroke—Two Sety Inner Weight AC-18-166D to AC 32-456D. AC-18-166D to AC 32-456D. Advantage turers Rated Polish Rod Load—Pounds Maximum.		6.550 7.735 AC 18-160D	6,550 7,735 AC 18-228D	6.065 7.160 AC 21-1600 21.000	7 160 AC 21-228D	9,150 10,860 AC 21-3290 21 000 21 200	AC 25-228D 25 000 25 020	10.785 AC 25-320D 25.000 25.020	10,800 AC 32-4560 (2 08) CL 191
Counterweight Effect—Maximum Stroke—Masser Weights—Only Counterweight Effect—Maximum Stroke—One Set Inner Weights Counterweight Effect—Maximum Stroke—Two Sets Inner Weight—AC-(8-1601) to AC-32-456D. Manufacturers Rated Polish Rud Load—Pround-Maximum A-PT Walking Beam Rating—Pounds Maximum		6.550 7.735 AC 18-160D 18.000 18.510	6,550 7,735 AC 18-228D	6.065 7.160 AC 21-160D 21.000 21.200	7 160 AC 21-228D 21 000 21 200	9,150 10,860 AC 21-320D 21,000 21,200	10,860 AC 25-228D 25,000 25,020	10,785 AC 25-320D 25,080 25,020	10,800 AC 32-456D (2 0.8) (1 10)
Counterweight Effect—Maximum Stroke—Maxier Weights—Only Counterweight Effect—Maximum Stroke—One Set Inner Weights Counterweight Effect—Maximum Stroke—Two Setz Inner Weight AC-18-166D to AC 32-456D. AC-18-166D to AC 32-456D. A P.I. Wiking Beam Rating—Pounds Maximum Maximum A P.I. Wiking Beam Rating—Pounds Maximum Walking Beam Section—Wide Plange.	- A	6,550 7,735 AC 18-160D 18,000 18,510 E 9 @ 9610	6.550 7.735 4C 18-228D 18 (88) 18 510 21 x 7 64 96 fb	6.065 7.160 AC 21-160D 21.000 21.200	7 160 AC 21-228D 21 000 21 200	9,150 10,860 AC 21-320D 21,000 21,200	25 000 25 020 25 020 24 x 14 64 130 fb	25,000 25,000 25,000 24 14 @ 1.00 fb	10,800 AC 32-456D (2 0.8) (1 10)
Counterweight Effect—Maximum Stroke—Maxier Weights—Only Counterweight Effect—Maximum Stroke—One Set Inner Weights Counterweight Effect—Maximum Stroke—Two Sets Inner Weight—AC-18-160D to AC-32-456D. Manufacturers Rated Polish Rod Load—Pounds Maximum A-P.1 Walking Beam Rating—Pounds Maximum Walking Beam Section—Wide Flange	- A	6.550 7.735 AC 18-160D 18,000 18,510 18,510 18,540 18,540	6,550 7,735 AC 18-228D 18 (88) 18 510 21 a 9 6 10 14 14 54 64	6.065 7.160 AC 21-160D 21.000 21.200 24 x 12 @ 100 fb	7 160 AC 21-228D 21 000 21 200	9,150 10,860 AC 21-3290 21 000 21 200	10,860 AC 25-228D 25,000 25,020	25,080 25,080 25,020 24 14 (8 1.00 th 14 54 61 74 84 107-6	10,900 AC 32-4560 12 000 CI 192 1 CI x 15 ⁴ 2 49 67 40 93 107 157-0
Counterweight Effect—Maximum Stroke—Masser Weights—Only Counterweight Effect—Maximum Stroke—One Set Inner Weights Counterweight Effect—Maximum Stroke—Two Sets Inner Weight AC-18-160D to AC 32-454D. AC-18-160D to AC 32-454D. Annulacturers Rated Polish Rud Load—Pounds Maximum Ac 18-18 Walking Beam Rating—Pounds Maximum Stroke—Two Sets Inner Weight Ac 18-18 Walking Beam Rating—Pounds Maximum Stroke—Sets Inner Weight Accounts of the Pounds Maximum Stroke Plange.	- A	6.550 7.735 AC 18-160D 18.000 18.510 18.9 69 96 10 134-44-54-64 8'-0"	6.550 7.745 AC 18-228D 18 000 18 510 21 x 9 49 90 fb 14 54 64 8' 0"	6.065 7.160 AC 21-1600 21.000 21.200 24 x 12 @ 100 m 14 44 54-64 74 9'.3"	7 160 AC 21-228D 21 200 21 200 24 4 12 6 104 H	9,150 10,860 21,320 21,000 21,200 24, 12, 3,100 fs 11,41,54,64,74	25 000 25 020 25 020 25 020 24 x 14 g 130 fb 44 54 64 74 84 10'-6"	25,000 25,000 25,000 24 44 @ 1.00 th 45 4 64 74 84 10'-6"	10,800 AC 32-4560 12 080 C1 160 1.01 x 15% 48 67 40 93 107 157.0*
Counterweight Effect—Maximum Stroke—Maxier Weights—Only Counterweight Effect—Maximum Stroke—One Set Inner Weights Counterweight Effect—Maximum Stroke—Two Sety Inner Weight AC-IB-160D to AC 32-455D. AC-IB-160D to AC 32-455D. API Wilking Beam Rating—Pounds Maximum Walking Beam Section—Wide Plange—Stroke—Inches Section—Wide Plange—Stroke—Inches Counter Effect Maximum Walking Beam Section—Wide Plange—Stroke—Inches Counter Effect Maximum Walking Beam Section—Wide Plange—Stroke—Inches Counter Effect Maximum Red Counter Plange—Stroke—Inches Counter Plange—Stroke—Maximum Red Counter Plange—Stroke	- A	6.550 7.735 AC 18-160D 18.000 18.510 19.66 9610 34-44-54-64 8'-0"	6,550 7,735 AC 18-228D 18 500 21 4 9 6 90 70 14 14 54 64 81 07 81 07	6.085 7.160 AC 21-160D 21.008 21.200 24 x 12 @ 100 fb 14 44 54-64 74 41.31 91.31	7 160 AC 21 - 228D 21 000 21 200 24 x 12 @ 100 ff 34 34 54 64 74 9'-3'	9,150 10,860 21,320 21,000 21,200 24 x 12 @ 100 fb 11,41-54-64 74 96.3*	10,480 AC 25-2280 25,020 25,020 124 x 14 (§ 130 tb 10'-6" 10'-6" 10'-6"	10.785 AC 25-329D 25.000 24 v 14 (8) 1.00 fb 14 54 61 74 84 107.67 107.67	10,800 AC 32-49-0 12 (0.0) (3 1 15) () 1 15/4 (6 67 00 93 (0) 15/-0 13/-6 22/-05/-
Counterweight Effect—Maximum Stroke—Masser Weights—Only Counterweight Effect—Maximum Stroke—One Set Inner Weights Counterweight Effect—Maximum Stroke—Two Sets Inner Weights—AC-18-140D to AC 32-454D. Manufacturers Rated Polish Rud Load—Pounds Maximum Azimum Azimum Fear Maximum—Walking Beam Settion—Wide Plaune Stroke Length—Incom—Wide Plaune Stroke Length—Incom—Wide Plaune Stroke Length—Incom—Wide Effect Stroke Stroke Length—Incom—Wide End Austing Centers—Striman Rud Samon Post Height Foundation to Beating Center Stroke Length St	- A	6,550 7,715 AC 18-160D 18,000 18,510 1,9 6,960 34-44-54-64 81.0" 81.0" 13-51/4"	6,550 7,735 AC 18-228D 18 (000) 18 510 21 x 9 68 96 fb 14 54 64 8 07 1 C 55y	6.085 7.180 21.000 21.200 24 x 12 @ 100 fb 14 44 54-64 74 9137 9137 151684	7 169) AC 21 - 2281) 21 000 21 200 22 4 12 6 166 # 34 14 54 64 74 91 31 157 614	9,150 10,860 21,000 21,000 21,200 24 x 12 @ 100 fb 11,41-54-64-74 95.37 95.37	25 000 25 020 25 020 25 020 24 x 14 g 130 fb 44 54 64 74 84 10'-6"	25,000 25,000 25,000 24, 14, 61,000 1056 1056 175,004 25,000	10,800 AC 32-4560 12,001 CI 163 1.01 x 15-4 46 67 80 93 10 13' 6' 22'-045 30 1
Counterweight Effect—Maximum Stroke—Maxier Weights—Only Counterweight Effect—Maximum Stroke—One Set Inner Weights Counterweight Effect—Maximum Stroke—Two Sets Inner Weight AC-18-166D to AC 32-456D. AC-18-166D to AC 32-456D. A P.I. Wiking Beam Rating—Pounds Maximum. A P.I. Wiking Beam Rating—Pounds Maximum. Waking Beam Section—Wide Plange. Working Centers—Will End. Working Centers—Will End. Working Centers—Will End. Vorall Gear Ratio.	- A	6.550 7.735 AC 18-160D 18.000 18.510 18.9 @ 960 34-44-54-64 8'-0" 5'-0" 13'-5'-5' 29.8"	6,550 7,735 AC 18-228D 18-500 21 x 7-69 96 fb 14-14-54-64 8-67 8-67 8-67 1-0,554 229-4	6.085 7.180 21.000 21.200 24 x 12 @ 100 m 14 44 54-64 74 97.37 97.37 157.694 29.9	7 160 AG 21-228D 21 000 22 000 24 x 12 @ 100 ft 34 x 54 64 74 97 37 157 61 ₄ 29 4	9,150 10,860 21,000 21,000 21,200 24,412,6100,76 14,41,54,64,74 97,37 97,37	10,480 AC 25-2280 25,020 25,020 124 x 14 (§ 130 tb 10'-6" 10'-6" 10'-6"	10,785 AC 25-329D 25,000 24 14 (8 1.00 th 107.67 107.67 171.104 25.95 120.000	10,800 AC 32-4560 12 (18) (1.61 x 15*4 667 80 93 10; 15*0* 15*0* 13*6* 22*-04; 30 1 455,001
Counterweight Effect—Maximum Stroke—Masser Weights—Only Counterweight Effect—Maximum Stroke—One Set Inner Weights Counterweight Effect—Maximum Stroke—Two Sets Inner Weights—Counterweight Effect—Maximum Stroke—Two Sets Inner Weights—AC-18-160P to AC 32-454D. Manufacturers Rated Polish Rod Load—Pounds Maximum A.P.1. Walking Beam Rating—Pounds Maximum Walking Beam Section—Wide Plange—Stroke Leights—Inches Working Centers—Well End. Morking Centers—Stroke Ind. Morking Cent	- A	6.550 7.735 AC 18-160D 18.000 18.510 18.9 69.960 34-44-54-64 8'-0" 8'-0" 13'-534" 28.8" 180.000	6,550 7,735 AC 18-228D 18-50 18-50 21-8-9-68-96-70 14-54-64 8-07 10-55y 28-4 28-000	6,055 7,160 21,000 21,000 21,200 24 × 12 @ 100 fb 14 44 54-64 74 97,37 97,37 157,64 29,8 100,080	7 189 AC 21-228D 21 000 21 000 22 00 23 12 64 64 74 23 37 27 37 27 37 27 4 28 4 28 4 74 28 4 74	9,150 10,860 21,000 21,000 21,200 24,12,20,00 14,54,64,74 9,37 15,84 25,95 22,000	25 000 25 000 25 000 24 x 14 64 190 rb 10°-6" 10°-6" 17'-104 29 4	25,000 25,000 25,000 24, 14, 61,000 1056 1056 175,004 25,000	10,800 AC 32-456D 12 (0.0) (CI x 15% 48 67 90 93 (0) 15'-0' 13' 6' 22'-0% 30 1 456 (0)
Counterweight Effect—Maximum Stroke—Maxier Weights—Only Counterweight Effect—Maximum Stroke—One Set Inner Weights Counterweight Effect—Maximum Stroke—Two Setz Inner Weights—AC-18-166D to AC 32-656D. AC-18-166D	21 3	6,550 7,735 AC 18-160D 18,000 18,510 18,510 18,510 14-44-54-64 18,000 81,000 131-514 29,20 180,000 32	6,550 7,735 AC 18-228D 18 080 19 500 21 4 9 69 90 fb 14 14 54 64 8 07 10 707 10 708 22 4 22 4 28 000	6.055 7.160 AC 21-166D 21.000 21.000 31.44 54-64 74 97.37 157-654 29.8 169.000	7 189 AC 21-228D 21 030 21 030 22 030 24 0 12 60 00 34 14 54 64 74 37 17 127 67 29 1 20 030 16 66	9,150 10,860 21,000 21,000 21,200 22,4,12,20,100 to 13,41,54,64,74 9,37 15,644 25,95 22,000 65	10,980 AC 25-2280 25,020 24, 14, 68, 190, 16, 107, 67, 107, 67, 107, 67, 107, 67, 107, 67, 107, 67, 107, 67, 107, 67, 107, 107, 107, 107, 107, 107, 107, 10	10,785 AC 25-329D 25,000 24 14 (8 1.00 th 107.67 107.67 171.104 25.95 120.000	10,800 AC 32-456D 12 (0.0) (CI x 15% 48 67 90 93 (0) 15'-0' 13' 6' 22'-0% 30 1 456 (0)
Counterweight Effect—Maximum Stroke—Maxier Weights—Only Counterweight Effect—Maximum Stroke—One Set Inner Weights Counterweight Effect—Maximum Stroke—Two Setz Inner Weights—AC-18-166D to AC 32-656D. AC-18-166D	21 3	6,550 7,735 AC 18-160D 18,510 18,510 18,9 69 960 34-44-54-64 8'-0" 8'-0" 8'-0" 11'-514' 28,9 180,000 32 Herringhous	6,550 7,735 4C 18-128D 18-509 18-509 14-50-69-96-70 14-54-64 28-900 10-554 28-4 18-9000 46-118-118-118-118-118-118-118-118-118-11	6.085 7.180 21.1601 21.000 21.000 21.000 24.02 @ 100.00 14.44.54-64.74 97.37 157.844 29.8 100.000 32 Herringbone	7 199 AC 21-228D 21 000 21 000 21 000 32 4 52 64 64 74 9 37 157 64 29 4 20 000 16 4 18 20 000 16 4 17 64 18 000 18 18 18 18 18 18 18 18 18 18 18 18 18 1	9,150 10,860 21,000 21,000 21,200 24,12,20,00 14,54,64,74 9,37 15,84 25,95 22,000	10,980 AC 25-2280 25,020 25,020 124 x, 14 & 84,130 ft 10'-6' 10'	10,785 AC 25-3200 25,182) 24, 1,50,20,00 to 15,00,00 to 10,00 t	10,800 AC 32-4560 (2,08) (3,18) (4,15) (67,80,93,10) (37,6) (22,04) (30,11) (456,01) (92,11) (92,11)
Counterweight Effect—Maximum Stroke—Maxier Weights—Only Counterweight Effect—Maximum Stroke—One Set Inner Weights Counterweight Effect—Maximum Stroke—Two Sety Inner Weights—AC-IB-160D to AC 32-455D. AC-IB-160D to AC 32-455D. API Wilking Beam Rating—Pounds Maximum Walking Beam Section—Wide Plange Walking Beam Section—Wide Plange Versile Length—Inches. Acking Centres—Priman End. Samson Post Height Foundation to Bearing Center Service Counter Servic	21	6,550 7,735 AC 18-160D 18,000 18,510 8 9 69 960 8*-0" 8*-0" 15'-55' 29.8" 180,000 32 Herringbone 55's"	6,550 7,735 AC 18-228D 18 (88) 19 5(0) 21 8 96 Bb 14 14 54 64 8 07 10 70 10 70	6.055 7.160 21.040 21.040 21.020 24.4 (2.6) 100 to 10.4 44.54-54.74 97.37 157.654 29.8 160.000 32 Herringbore 5.55	7 189 AC 21-228D 21 080 21 080 24 5 12 6 100 m 34 14 54 64 74 9° 3° 12° 6°4 28 12° 080 46 Hermighenic	9,150 10,860 21,080 21,080 21,080 21,080 11,080 14,54,64,74 9,37 9,37 15,64,5 20,55 16,75 16,75 16,75 17,75 18,7	10.000 AC 25-2200 25.020 25.020 24. \$4.50.74 84 10'-6' 10'-16' 10' 10' 10' 10' 10' 10' 10	10,786 AC 25-320D 25,020 24 v 14 & 81,00 fb 11,54,61,74 ×4 101-65 17,10 v ₄ 25,95 101-65 17,10 v ₄ 25,95 120,90 65	10,800 AC 32-456D (2 08) (3 10) (5 1 10) (6 1 10) (7 10) 93 10) 13 6 22 08) 30 1 456 (0) 92 1ertuschen 24 1 1 1
Counterweight Effect—Maximum Stroke—Masser Weights—Only Counterweight Effect—Maximum Stroke—One Set Inner Weights Counterweight Effect—Maximum Stroke—Two Sets Inner Weights—AC-18-160D to AC 32-456D. Manufacturers Rated Polish Rod Load—Pounds Maximum. Advanced Rated Polish Rod Load—Pounds Maximum. Advanced Rated Robot Research Rated Polish Rod Load—Stroke Length—Inches. Working Genters—Will End. Working Centers—Will End. Working Centers—Will End. Verall Gear Ratio Verall Gear Ratio Ver Line Sommed Bloomer Rating Manufacturers Sommed Bloomer Rating Manufacturers Sommed Bloomer Rating Som Sowel Shaft Dameter at Crank	21	6,550 7,735 AC 18-160D 18,510 18,510 18,9 69 960 34-44-54-64 8'-0" 8'-0" 8'-0" 11'-514' 28,9 180,000 32 Herringhous	6,550 7,735 4C 18-128D 18-509 18-509 14-50-69-96-70 14-54-64 28-900 10-554 28-4 18-9000 46-118-118-118-118-118-118-118-118-118-11	6.085 7.180 21.1601 21.000 21.000 21.000 24.02 @ 100.00 14.44.54-64.74 97.37 157.844 29.8 100.000 32 Herringbone	7 199 AC 21-228D 21 000 21 000 21 000 32 4 52 64 64 74 9 37 157 64 29 4 20 000 16 4 18 20 000 16 4 17 64 18 000 18 18 18 18 18 18 18 18 18 18 18 18 18 1	9,150 10,860 21,000 21,000 21,200 22,4,12,20,100 to 13,41,54,64,74 9,37 15,644 25,95 22,000 65	10,980 AC 25-2280 25,020 25,020 124 x, 14 & 84,130 ft 10'-6' 10'	10,785 AC 25-3200 25,332) 24,34,66,74,84 11,56,74,84 11,66,74,84 11,66,74,84 11,66,74,84 11,66,74 11,6	10,000 AC 32-450D 12,010 (C1 a) 554 (9 a) 67 (0 93 10) 137 65 (22 0) 65 (
Counterweight Effect—Maximum Stroke—Maxier Weights—Only Counterweight Effect—Maximum Stroke—One Set Inner Weights Counterweight Effect—Maximum Stroke—Two Sets Inner Weights—AC-18-166D to AC 32-455D. AC-18-166D to AC 32-455D. APT Wiking Beam Rating—Pounds Maximum Waking Beam Section—Wide Flange—Stroke Length—Inches —William Flam Section—Wide Flange—Stroke Length—Inches —William Seam Section—Wide Flange—View Maximi Generics—Will End Mocking Centers—Will End Mocking C	21	6.550 7.735 7.735 18.500 18.500 18.500 18.50 18.50 18.70° 8'.0° 8'.0° 8'.0° 10'.554° 29.8° 160.080 32 Herringbone 552 4-1° 15 56	6.550 7.735 AC 18-228D 18 (00) 21 a 2 68 90 fb 44 54 64 8 0 7 21 4 54 64 8 0 7 21 4 54 64 10 54 64 11 54 64 11 54 64 11 54 64 12	6.085 7.160 21.000 21.000 21.000 24.12 @ 100 m 14.44.54-54.74 97.37 97.37 15.644 100.000 Herringbore 24.1 P.13. 36	7 (90) AC 21-228D 21 (92) 23 (22) 24 (22) 24 (23) 25 (20) 34 (44) 25 (24) 27 (27) 27 (4) 28 (93) 48 (28) 48	9,150 10,860 AC 21-330D 21,000 21,000 21,000 21,000 11,000 14,54,64,74 9,37 9,37 15,64 25,96 16,000 66 16,000	10,980 AC 25-228D 25,000 24, 14, 46, 150 ib 44, 54, 54, 54, 54, 74, 84 10, 67 17, 10, 47 228, (0,0) 46 Herringbone 48 24, P.D. 66	10,785 AC 25-3200 25,182) 24, 1,50,20,00 to 15,00,00 to 10,00 t	10,900 AC 12,4540 (2,08) (3,19) (3,19) (3,19) (4
Counterweight Effect—Maximum Stroke—Maxier Weights—Only Counterweight Effect—Maximum Stroke—One Set Inner Weights Counterweight Effect—Maximum Stroke—Two Sety Inner Weights—AC-IB-160D to AC 32-456D. AC-IB-160D to AC 32-456D. APT. Walking Beam Ratting—Pounds Maximum Walking Beam Section—Wide Plange APT. Walking Section—Wide Plange Article Inner Section—Wide Plang	21	6.550 7.735 7.735 18.680 18.510 18.510 18.510 18.96 96tb 34-44-54-64 8'-0" 18'-0" 18'-54' 18'-0" 18'-54' 18'-0" 18'-54' 18'-0" 18'-54' 18'-0"	6.550 7.755 18 (88) 18 (88) 18 (18) 18	6.085 7.180 21.080 21.080 21.000 24.12.81 (10.18) 14.45.74 74 7.37 15.64 74 29.38 169.080 11.200 11.	7 199 **C 21 - 228D 21 099 22 09 000 24 4 12 68 100 3 32 00 34 4 35 64 44 74 74 3 37 157 64 29 42 20 199 18 18 18 18 18 18 18 18 18 18 18 18 18 1	9.150 10.860 21.080 21.080 21.000 21.200 21.	10,980 AC 25-228D 25,000 25,020 24 x 14 x 8 130 x 44 54-84-74 x 4 10'-6'	10,785 AC 25-3200 25,332) 24,34,66,74,84 11,56,74,84 11,56,74,84 11,56,74,84 11,56,74,84 11,56,74,84 11,56,74 1	10,000 AC 32,456D (2,00) (3,10) (4,10) (5,10) (5,10) (6,10) (7,10) (1
Counterweight Effect—Maximum Stroke—Maxier Weights—Only Counterweight Effect—Maximum Stroke—One Set Inner Weights Counterweight Effect—Maximum Stroke—Two Setz Inner Weights—AC-18-166D to AC 32-456D. AC-18-166D	21	6.550 7.735 AC 18-160D 18.510 18.960 18.510 14.44-54-64 8'-0' 8'-0' 8'-0' 11'-554 29.8 110'-554 29.8 11'-554 29.8 10'-554 20.8 10'-554 20.8 10'-554 20.8 10'-554 20.8 10'-554 20.8 10'-554 20.8 10'-554 20.8 10'-554 20.8 10'-554 20.8 10'-554 20.8 10'-554 20.8 10'-554 20.8 10'-554 20.8 10'-554 20.8 10'-554	6.550 7.755 AC 18-228D 18-39 18-39 21 a 7-66 31 45-46 31 45-46 31 15-56 3	6.085 7.180 21.000 22.000 24.12.60 24.12.60 24.12.60 24.12.60 24.12.60 24.12.60 24.12.60 24.12.60 24.12.60 24.12.60 24.12.60 24.12.60 25.164 2	7 199 AC 21 - 228D 21 099 21 099 22 099 23 099 24 12 68 099 24 14 56 44 74 25 (99) 46 Hermigleone 67 24 199 4 199 4 199 4 199 1 175	9.150 10.860 10.860 21.020 24.020 24.020 24.020 24.020 24.020 24.020 25.020 26.	10,980 AC 25-228D 25 000 25 020 224 14 64 130 ft 10-6-7 17-104 294 225,000 46 Herringbone 85 24 12D of 1,760 1,760	10,785 AC 25-329D 25,000 25,000 24, 14 66 10 to 10 t	10,9600 AC 32-456D (C1 a 15% of (C1 a 15% of (C2 a 15% of (C2 a 15% of (C2 a 15% of (C3 a 15% of
Counterweight Effect—Maximum Stroke—Maxier Weights—Only Counterweight Effect—Maximum Stroke—One Set Inner Weights Counterweight Effect—Maximum Stroke—Two Sety Inner Weights—AC-IB-166D to AC 32-455D. AC-IB-166D to AC 32-455D. API Wilking Beam Rating—Pounds Maximum Walking Beam Section—Wide Plange Stroke Length—Inches. Stroke Plange Stroke Stroke Length Sowing Counter Length Sowing Date Household Stroke Length Samon Post Height Foundation to Beating Center Deveal Gear Ratio API Lenkt Longue — Dr. D. In the Pounds Manufactures Naminal Biosephorer Rating Slow Speed Shafe Dameter at Crank Cediurer Sheave—Pitts I Dameter and Number Belts- Sounterweights Effect—Standard Weights: Master Counterweights.	21	6.550 7.733 AC 18-160D 18.000 18.510 2.9 © 190D 13-44-54-64 8'-07 18'-514' 29.9' 190,089 32 Herringlone 5'4' 4'17 5 4'4' P.15 5 4'4' P.15 5 4'4' P.15 5 7.590	6.559 7.735 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	6.085 7.160 AC 21-160D 21.030 24 \ 12.60 \ 103.05 14 44.54-54.74 9.54 15/64\ 12.80 16.030 16.12 16.12 16.12 16.13 16.1	7 190 CC 11 - 228D 22 10 99 22 20 20 23 20 24 3 12 36 104 7 34 34 54 64 74 9 37 15 64 29 4 20 99 16 10 10 10 10 10 10 10 10 10 10 10 10 10	9.150 (0.890) AC 21-320 21.000 224 x 12 @ 100 ps 14 x 54 64 74 95 45 15 x 64 25 95 (25.000) 65 1berringbore 24 * P D Sci	10,989 AC 25-2280 25,000 24, 54, 94, 74, 94, 100 44, 54, 94, 74, 94, 100 10°-6° 10°-6° 10°-6° 10°-10° 10°-6° 10°-10° 10°-6° 10°-10° 10°-6	0.785 AC 25-3290 25 (63) 25 (63) 24 (14 & 10 ft) 13 46 1.74 84 10 76 17 (10 4) 25 (25) 65 17 (10 4) 17 (10 4) 18 (10 76) 18 (10 76) 19 (10 76) 19 (10 76) 19 (10 76) 19 (10 76) 19 (10 76) 19 (10 76) 19 (10 76) 19 (10 76)	10,000 AC 32,456D (2,00) (2,00) (3,10) (4,10) (57,40) (57,40) (57,40) (57,40) (57,40) (57,40) (57,40) (57,40) (57,40) (57,40) (57,40) (57,40) (57,40) (57,40) (57,40) (57,40)
Counterweight Effect—Maximum Stroke—Masser Weights—Only Counterweight Effect—Maximum Stroke—One Set Inner Weights Counterweight Effect—Maximum Stroke—Two Setz Inner Weights—AC-18-166D to AC 32-456D. AC-18-166D to AC 32-456D. Accounterweight Effect—Maximum Stroke—Two Setz Inner Weights—AC-18-166D to AC 32-456D. Accounterweight Effect—Maximum Stroke—Two Setz Inner Weights—AC-18-166D to AC 32-456D. Accounterweights—Accounter Setz Inner	21	6.550 7.735 AC 18-160D 18.510 18.9 (6.96tb) 14.44-54-64 8'-0' 8'-0' 8'-0' 11'-554 29.8 160.000 5.55 21 Herroglone 5.55 4.091 4.090 4.090 4.090 4.090 4.090 4.090 4.090 4.090 4.090 4.090 4.090 4.090 4.090 4.090 4.090 4.090	6.550 17735 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	6.085 7.160 AC 21-1601 21.000 22.00 24.02 24.00 14.45-54-64-74 25.55 10.000 14.000 15.000 16.0000 16.0000 16.0000 16.0000 16.0000 16.0000 16.0000 16.0000 16.0000 16.0000 16.0000 16.0000 16.0	7 190 7 21 - 22819 21 020 22 1 020 23 120 24 12 2 100 24 12 2 100 34 14 54 54 74 25 100 46 12 200 16 12 200 17 15 66 17 15 66 17 15 66 18 15 15 66 19 15 66 10 15 15 66 10	9 150 10 899 AC 21-3290 21 030 24 12 6 100 24 12 6 100 24 4 54 64 74 9:37 15 684 25 00 12 00 12 00 13 00 14 15 4 64 74 15 684 15 00 16 00 17 00 1	10,980 AC 25-2281) 25 000 25 020 24 14 64 100 67 44 54-94-74 84 290,000 46 Herringbore 8 24 171) 66 1,769	0.785 AC 25-3200 25,020 24 v 14 48 100 10 154 61-72 84 107-62 107-63 10	10,9600 AC 32-456D (C1 a 15% of (C1 a 15% of (C2 a 15% of (C2 a 15% of (C2 a 15% of (C3 a 15% of
Counterweight Effect—Maximum Stroke—Maxier Weights—Only Counterweight Effect—Maximum Stroke—One Set Inner Weights Counterweight Effect—Maximum Stroke—Two Sets Inner Weights—AC-18-166D to AC 32-455D. AC-18-166D to AC 32-455D. April Wilking Beam Rating—Pounds Maximum. April Wilking Beam Rating—Pounds Maximum Walking Beam Section—Wild Pilange. Wilking Beam Section—Wild End. Working Centers—Will End. Working Counters—Will End. Will End.	21	6.550 7.733 AC 18-160D 18.000 18.510 2.9 © 190D 13-44-54-64 8'-07 18'-514' 29.9' 190,089 32 Herringlone 5'4' 4'17 5 4'4' P.15 5 4'4' P.15 5 4'4' P.15 5 7.590	6.559 7.735 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	6.085 7.160 AC 21-160D 21.030 24 \ 12.60 \ 103.05 14 44.54-54.74 9.54 15/64\ 12.80 16.030 16.12 16.12 16.12 16.13 16.1	7 190 CC 11 - 228D 22 10 99 22 20 20 23 20 24 3 12 36 104 7 34 34 54 64 74 9 37 15 64 29 4 20 99 16 10 10 10 10 10 10 10 10 10 10 10 10 10	9.150 (0.890) AC 21-320 21.000 224 x 12 @ 100 ps 14 x 54 64 74 95 45 15 x 64 25 95 (25.000) 65 1berringbore 24 * P D Sci	10,989 AC 25-2280 25,000 24, 54, 94, 74, 94, 100 44, 54, 94, 74, 94, 100 10°-6° 10°-6° 10°-6° 10°-10° 10°-6° 10°-10° 10°-6° 10°-10° 10°-6	0.785 AC 25-3290 25 (63) 25 (63) 24 (14 & 10 ft) 13 46 1.74 84 10 76 17 (10 4) 25 (25) 65 17 (10 4) 17 (10 4) 18 (10 76) 18 (10 76) 19 (10 76) 19 (10 76) 19 (10 76) 19 (10 76) 19 (10 76) 19 (10 76) 19 (10 76) 19 (10 76)	10,900 AC 32,4560 12,981 12,981 13,152,66 67,93,10 13,16 13,16 13,16 13,16 13,16 13,16 13,16 14,16 1
Counterweight Effect—Maximum Stroke—Maxier Weights—Only Counterweight Effect—Maximum Stroke—One Set Inner Weights Counterweight Effect—Maximum Stroke—Two Sety Inner Weights—AC-18-160D to AC 32-456D. AC-18-160D	21	6.550 7.733 AC 18-160D 18.500 18.500 18.500 18.500 18.6000 18.600 18.600 18.600 18.600 18.600 18.600 18.600 18.600 18.6000 18.600 18.600 18.600 18.600 18.600 18.600 18.600 18.600 18.6000 18.600 18.60	6.559 7.755	6.085 7.180 AC 21-180D 21.00n 21.00n 21.20 100 in 44.12 @ 100 in 14.45 A-04 74 40.47 -20 x 100.00n Herongboar 57.64 21.71 1 5.46 4.70 1 4.45 21.71 1 5.46 21.7	7 1990 XC 21 - 2280 XC 21 - 2280 22 x 12 28 1981 m 23 x 12 28 1981 m 23 x 12 28 1981 m 24 x 12 28 1981 m 25 x 12 28 1981 m 25 x 12 1981 m 26 x 12 1981 m 27 x 12 1981 m 28 x 12 198	9 150 10 899 4C 21-390 21 000 21 000	(0.860 AC 25-2280 25-920 25-920 24-54-54-74-74-84 10'-6-77-90-44 1	AC 25-3280 AC 25-3280 24 54 58 1 74 84 10 76 10 75 1	10,900 AC 32-4560 12 min 12 min 13 min 16 min 17 min 18
Counterweight Effect—Maximum Stroke—Maxier Weights—Only Counterweight Effect—Maximum Stroke—One Set Inner Weights Counterweight Effect—Maximum Stroke—Two Sets Inner Weights—AC-18-166D to AC 32-456D. AC-18-166D	21	6.550 7.733 AC 18-160D 18.500 18.500 18.500 18.9000 18.900 18.900 18.900 18.900 18.900 18.900 18.900 18.900 18.9000 18.900 18.900 18.900 18.900 18.900 18.900 18.900 18.900 18.9000 18.9	6.550 7.755 VC 18-28B 1 (19) 1 (19) 21 (19) 21 (19) 21 (19) 21 (19) 21 (19) 21 (19) 21 (19) 21 (19) 21 (19) 22 (19) 23 (19) 24 (19) 25 (19) 26 (19) 27 (19) 2	6.085 7.160 AC 21-1601) 21.080 24 x 12 @ 100 h 14 44 54-04 74 85-3 55-3 55-3 55-3 100.080 1.175-3 4.980 1.175-3 4	AC 21-228D AC 21-228D C 21-228D 22 x 12 89 1081 m -18 44 54 64 74 87 1082 m -18 45 54 64 74 87 1082 m -18 45 54 64 74 87 1082 m -18 45 54 64 74 87 1082 m -18 54 54 64 74 87 10	9 150 10 899 AC 21-3290 21 030 21 1 300 21 1 300 21 4 1 54 64 74 9 32 10 34 54 64 74 9 32 10 34 54 64 74 9 32 10 34 54 64 74 10 34 54 74 10 34 74 10 3	10,869 AC 15-2281 25.900 25.900 24.54.64.74.74.84 10.65 17.10.45 25.000 124.54.64.74.84 10.65 17.10.45 26.000 46.000 46.000 47.10.45 47.10	10,785 AC 25-3290 25,000 25,000 24,14,46,100 ft 13-6,61,74,84 100-6 27,100-4 20,100 24,100 25,95	10,900 AC 32-4560 12 min 12 min 13 min 16 min 17 min 18
Counterweight Effect—Maximum Stroke—Maxier Weights—Only Counterweight Effect—Maximum Stroke—One Set Inner Weights Counterweight Effect—Maximum Stroke—Two Sety Inner Weights—AC-18-160D to AC 32-456D. AC-18-160D	21	6.550 7.735 AC 18-166D 18.000 18.510 18.510 18.510 18.610	6.559 7.755 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	6.085 7.180 AC 21-160D 21,200 21,000 22 s, 12 & 10 10 44,54-04,74 47-17 23 s 100,000 32 s, 12 & 10 10 47-17 24 s 10 10 47-17 25 s 100,000 31	7 1900 **C 21 - 22819 21 1000 22 1 1000 23 1 1000 24 1 1000 25 1 1000 26 1 1000 27 1 1000	9 150 10 899 AC 21-390 21 900 21 900 21 900 21 900 21 900 21 900 21 900 21 900 21 900 41 96 47 74 25 95 (20 00) 65 11 900 65 11 900 65 11 900 65 11 900 65 11 900 65 11 900 65 11 900 66 700 67 700 67 900 67	(0.869) AC 25-2280 25 900 25 900 25 900 24 54 54 64 74 84 10 -6 17 -10 44 29 44 29 40 10 -6 17 -10 4 29 40 10 -6 17 -10 4 29 40 10 -6 17 -10 4 29 40 10 -6 17 -10 4 29 40 10 -6 17 -10 4 29 40 10 -6 17 -10 4 29 40 10 -6 17 -10 4 29 40 10 -6 17 -10 4 29 40 10 -6 17 -10 4 10 -6 17 -10 4 29 40 10 -10 4 1	AC 25-3280 AC 25-3280 25-029 24 25-029 11 54 84-74 84 10'-67 10'-10'-10'-10'-10'-10'-10'-10'-10'-10'-	10,900 AC 32-4560 12 min 12 min 13 min 16 min 17 min 18
Counterweight Effect—Maximum Stroke—Maxier Weights—Only Counterweight Effect—Maximum Stroke—One Set Inner Weights Counterweight Effect—Maximum Stroke—Two Sety Inner Weights—AC-IB-160D to AC-J3-456D. AC-IB-160D	21	6.550 7.733 AC 18-160D 18.500 18.500 18.500 18.9000 18.900 18.900 18.900 18.900 18.900 18.900 18.900 18.900 18.9000 18.900 18.900 18.900 18.900 18.900 18.900 18.900 18.900 18.9000 18.9	6.559 7.755	6.085 7.180 AC 21-1801 21.03n 21.230 24 x (2 6) 10 n 44 x (2 6) 10 n 45 x (2	7 1900 AC 21 - 228D AC 21 - 228D AC 21 - 228D 22 x 12 28 10x 10 10x	9 1501 10 1409 4C 21-1390 21 030 21 030 21 100 21 100 2	C 25-2280 AC 25-2280 AC 25-2280 224 × 14 × 60 × 100 · 6	10,785	10,900 AC 32-4560 12 min 12 min 13 min 16 min 17 min 18
Counterweight Effect—Maximum Stroke—Maxier Weights—Only Counterweight Effect—Maximum Stroke—One Set Inner Weights Counterweight Effect—Maximum Stroke—Two Sets Inner Weights—AC-18-166D to AC 32-455D. AC-18-166D to AC 32-455D. April Wilking Beam Rating—Pounds Maximum. April Wilking Beam Rating—Pounds Maximum Walking Beam Section—Wild Pilange. Working Centers—Will End. Working Centers—Will End. Working Centers—Will End. Working Centers—Will End. April Wilking Beam Ratio April Peak Torque—20 S.P.M.—Inch-Pounds Manufacturers—Summa Binderpower Rating Type of Gearing—Hardened Street Manufacturers—Summa Hinterpower Rating Type of Gearing—Hardened Street More Speed Shale Pitch Dominerer and Number Helts- lounterweights—Pitch Dominerer and Number Helts- lounterweights—Pitch Dominerer and Number Helts- lounterweights—Weight per Set—Pounds Inner Counterweights—Weight per Set—Pounds Counterweights Effect—Maximum Stroke—One Set Inner Weights—Only Counterweights Effect—Maximum Stroke—Des Set Inner Weights—Only Counterweights Effect—Maximum Stroke—Des Set Inner Weights—Only Maxer Counterweights—Weight per Set—Pounds— Counterweights Effect—Maximum Stroke—Maxer Weights—Only Maxer Counterweights—Weight per Set—Pounds— Counterweights—Effect—Maximum Stroke—Maxer Weights—Only Counterweights—Effect—Maximum Stroke—Maxer Weights—Only Counterweights—Effect—Maximum Stroke—Maxer Weights—Only	21	6.550 7.733 7.733 7.733 7.735	6.550 7.755 VC 18-228D [1.15] 12.14 12.10 21.47 22.930 46 22.930 46 47.50 47.	6.085 7.180 AC 21-1601) 21.200 22.x 12.601 14.454-04.74 97.31 15.64 129.008 129.x 120.008 120	AC 21-225D AC 21-225D AC 21-225D 22 x 12 x 20 x 12 x 12	9-150 10 899 ACC 21-3290 21 1000 21 1000 21 1 200 21 4 154 64 74 973 14 154 64 74 973 15 95 12 900 15 1000 17 700 17 700 17 700 17 700 17 700 17 700 18 700 18 700 18 700 18 700 18 700 20 700	10,869 AC 25-2281 25 000 25 000 25 000 44 36 46 100 76 44 36 46 100 76 47 100 76 29 40 100 67 17 100 4 29 40 100 67 17 100 4 29 40 100 67 17 100 67 17 100 67 17 100 67 17 100 67 17 100 67 17 100 67 17 100 67 17 100 67 18 10 70 70 70 18 10 70 18 1	10,785 AC 25-3290 25,000 25,000 24 14 68 10 76 11 56 64 72 84 10 66 17 10 84 10 67 17 10 84 10 67 17 10 84 17 1	10,900 AC 32-4560 12 min 12 min 13 min 16 min 17 min 18
Counterweight Effect—Maximum Stroke—Maxier Weights—Only Counterweight Effect—Maximum Stroke—One Set Inner Weights Counterweight Effect—Maximum Stroke—Two Sety Inner Weights—AC-IB-160D to AC-J3-456D. AC-IB-160D	21	6.550 7.735 AC 18-166D 18.000 18.510 18.510 18.510 18.610	6.559 7.755	6.085 7.180 AC 21-1801 21.03n 21.230 24 x (2 6) 10 n 44 x (2 6) 10 n 45 x (2	7 1900 AC 21 - 228D AC 21 - 228D AC 21 - 228D 22 x 12 28 10x 10 10x	9 1501 10 1409 4C 21-1390 21 030 21 030 21 100 21 100 2	C 25-2280 AC 25-2280 AC 25-2280 224 × 14 × 60 × 100 · 6	10,785	10,900 AC 32,4560 12,981 12,981 13,152,66 67,93,10 13,16 13,16 13,16 13,16 13,16 13,16 13,16 14,16 1

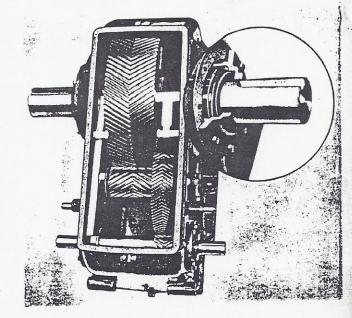


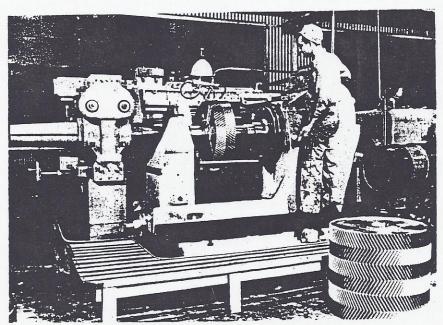
REDUCERS

All reducers have Sykes-cut, herringbone gears. A complete battery of Sykes gear generators installed at Cabot Shops assures complete control of quality and delivery of herringbone gears.

Reducer housings are one piece castings, with no split at the center line of the shafts. Pinions and gears are heat treated alloy steel forgings with integrally cut teeth. Slow speed shafts are heat treated high carbon steel and are extra large so that deflection is reduced to a minimum. Slow speed shafts are mounted on Timken roller bearings and intermediate and high speed shafts on Hyatt roller bearings, to allow the herringbone gears to center on slow speed gear. Gears are cut with a minimum backlash, and the reducer tested under full load on a Prony brake. The flood oiling system is fully automatic, and self-contained in the reducer housing.

An outstanding feature of Cabot reducers is the elimination of oil seals on all reducer shafts. Oil slingers and labyrinth grooving, with no parts to wear, are used on both high and slow speed shafts.





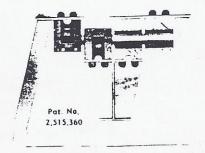
Pictured above is the Cabot Reducer. Note the easily accessible, seamless housing and the elimination of oil seals (inset) on reducer shaft.

Pictured at left is one of four Sykes gear generators now in operation at Cabot Shops. The gear generators are of the latest type and are operated by Cabot's highly skilled machinists.

RUBBER BEARINGS

An outstanding patented development found only on Cabot Pumping Units is the "EQUALASTIC" BEARING. In this bearing, the conventional shaft, bearings, evener beam, and fittings are climinated, and in their place a single alloy steel shaft is provided, with four heavy rubber bushings vulcanized to it. On the outside of each rubber bushing, two steel half-shells are vulcanized, with space between to allow for clamping.

Each bushing is clamped in a heavy split housing. The two inner housings (and bushings) are then secured to the walking beam by eight bolts and the two outer ones fastened to the pitman in the same manner. In operation, the



ascillating movement of the pitman relative to the walking beam is taken entirely by the torsional deflection of the rubber within the bushings This EQUALASTIC BEARING requires no hibrication and is resistant to salt water, sand, grease, grit and weather. It absorbs most vibrations, including high frequency vibration from prime movers, and well shocks. Dynagraph tests show a substantial reduction in maximum polish rod load when this bearing is used.



FROM TEN A MONTH TO TEN A DAY

From a little shop and a big idea in 1938 to one of the "Big Five" leaders in the business in 1954, has been the history of Cabot Shops, Inc., for the last sixteen years. This business is making and selling oil well pumping equipment, but the Shops have made other history of their own in that time.

In 1938 most oil wells were pumped with a "standard rig" weighing about fifteen tons and costing four or five thousand dollars, even then. The central power, with pumping jacks and miles of steel rod lines, cost less per well, but interfered with farming the land, and required lots of attention. Some pumping units were made, but were heavy and

At this time Cabot Shops broke into the market with the first high quality, light weight unit in the field, and proved that a three thousand foot well could be pumped with an eight-horsepower unit weighing two tons. It was "all muscle and no fat", but it had plenty of strength where it counted, and it changed the whole course of design in the businof the price of a standard rig.

To back their play the Shops made the first five year service guarantee in the business, and started direct delivery from the factory to the user's lease by Cabot truck.

Attracting the attention of a national sales organization was not too difficult, and in 1939 an exclusive distributor's agreement was made with Frick-Reid Supply Company, who later became the Supply Division of Jones & Laughlin Steel Corporation with over seventy stores in all of the oil fields of the country. From "ten a month to ten a day" has been the sales record of this fine organization since.

The Shops haven't exactly been dragging their feet along other lines either. From 1942 through 1945 the Ordnance Division built and operated a new plant, and delivered thousands of gun barrel forgings to the Army and Navy. This plant was taken over for the enlarged machine shop in 1946, but when Korea made headlines, Army Ordnance wanted more gun tubes quickly, and re-equipped the Ordnance Plant with a complete new setup of machine tools and equipment costing several million dollars. This is a completely integrated forging plant, ready for shipment to the finishing arsenal.

To keep up with pumping unit sales, a new machine shop, a hundred feet wide and a block long, was built in 1951, and was equipped with the latest in machinery, including five herringbone gear generators, new lathes, radial drills, milling machines and cranes by the

A new line of API Monogrammed pumping units of the latest floor clearing design, all in accordance with API standards, was put into production during 1952-53. Sales features included the famous "Equalastic" rubber evener bearing, adjustable crank counterweights, floor clearing bases requiring only a flat floor foundation with little or no forming, and a new thirty-two thousand pound rated unit with a ninety-five-horsepower gear box and a ten-foot stroke

A national sales campaign is now in progress with the Jones & Laughlin Steel Corporation Supply Division. A four day sales meeting is held in each Jones & Laughlin district during the year with sales engineers from each manufacturer presenting sales and service data. To date these meetings have ranged from Edmonton, Alberta, Canada to Pittsburgh, Pennsylvania to New Orleans, Louisiana, and really mean "hustling for business" in a well organized way. Results to date have been excellent, and Cabot Shops, Inc. fully expect to keep their share of a highly competitive business.

NEW UNIT LINES

UNIT		
	BEAM COUNTERWEIGHT	MAXIMUM STROKE
B3-6.4D		
B4-10D		20"
B5-16D or 16S		20"
B7-25D		25"
B9-40D or 57D		30"
B11-57 or 80D		36"
ADJUS	TABLE CRANK COUNTERWEIGHT	42"
AC9-40D or 57D	THE WEIGHT	
AC11-57D or 80D		36"
AC13-80D or 114D		42"
AC15-114D		48"
AC16-160D		54"
AC18-160D or 228D		54"
AC21-160D or 228D		64"
AC25-228D or 320D		74"
AC32-456D		84"
The type and size of the		120"

The type and size of the new Cabot units is indicated by their designations.

The first group of digits designates the unit structure, and begins with one or more letters indicating the method of counterbalancing. "B" means "Beam Balanced", "AC" means "Adjustable Crank Balanced", "ACD" means "Adjustable Crank Balanced using "D" style weights". The numbers in the first group indicate the rated polish

The second group of digits designates the speed reducer, and begins with a number indicating reducer torque capacity in thousands of inch-pounds. The final letter, "S" or "D", indicates whether the reducer is "Single" or "Double" reduction.

For example:

B5-16S indicates a beam balanced unit of 5, 000-lb. load capacity with a 6,000 inch-pound single-reduction reducer

OUTLINE OF PRESENTATION

THE NEW CABOT PUMPING UNITS

Entire line API monogrammed - Unit and Reducers.

A universal base is used. An engine extension to fit the prime mover desired is

All units are floor clearing (except AC-32).

4-way spread Samson post bolts onto base.

Adjustable crank counterweights (on AC series) provide easy, quick one-man adjustment. Standard weights provide up to 60% counterbalance; "D"

Height is increased on all units to allow minimum ground clearance below the

Beam centers are equal (except on AC-32, B-3 and B-4).

Wide horsehead allows exceptional well-servicing clearance beyond end of walk-

CABOT SHOPS, INC., PAMPA, TEXAS

L to R - Ordnance Plant and Cooling Shed Shop Office and Engineering Machine Shop and Reducer Assembly Storage and Welding Shed Erecting Floor Fabricating Shop Stores Building Sheet Metal Shop Steel Storage and Gantry Parts and Finished Goods Storage

3. AC SERIES UNITS

All units are floor clearing (except AC-32).

Ratchet type universal brake may be assembled either L or R hand (see Para-

High Samson post - 3'-10" minimum clearance below rod hanger.

Equal center distances between beam loads.

Wide horsehead - adequate well clearance for servicing without removing beam.

Equalastic tail bearings throughout (except AC-32). Four-way spread, four-legged Samson post, bolts to base. Assembled in a jig and welded throughout for Reducer sheave assembled either side as ordered.

Stroke adjustment is made by moving wrist pins to different holes in cranks.

B SERIES UNITS (BEAM BALANCED)

All units floor clearing.

Ratchet type universal brake may be assembled either R or L hand. (B-7 and smaller units have simple hand brake unless ratchet brake is ordered.)

High Samson post - 3'-10" minimum clearance below hanger at bottom of maximum Equal beam centers.

Wide horsehead - adequate well clearance for servicing without removing walking

Equalastic tail bearings throughout (except B-3 and B-4).

4-way spread, 4-legged Samson post. Walded to

5. THE CABOT UNIVERSAL BASE (See universal base drawing)

A. Stub bases - All AC units of 11,000-1b. or greater capacity are made with stub bases. Provision for different prime movers is made by furnishing different but interchangeable engine extensions.

Base, forward of engine extension, is always the same.

With straight engine extension and outrigger on left side, fits all multicylinder engines. (This layout is standard.)

With same extension but outrigger moved to right side (easily done in field) fits Continental & Witte engines.

With same extensions and no outrigger, fits electric motors & Fairbanks-Morse sub-base engines.

With different extensions (offset to the near side) fits Ajax engines and F-M engines with no sub-base.

B. Full length base - Smaller units are made with full length bases. Provision for different prime movers is made by relocating or removing an outrigger as above. No engine applicable to units of these sizes requires an offset extension.

6. UNIVERSAL RATCHET BRAKE (See brake drawing)

Operating lever at back of unit has locking ratchet.

Brake shoe bears against inside of reducer sheave.

Brake shoe & lever are independent of each other, and either may be assembled on either R or L side. Rearrangement easily done in field.

Cross shaft below reducer is square. Arms may be moved to any desired position on shaft & held in place with set screws.

A frame plate, for support of operating lever is provided on each and of engine

Only difference between brakes of different size units is in linkage at shoe and length of vertical and horizontal rods.

7. WIDE CLEARANCE MULEHEAD

6" or more additional servicing clearance.

One-bolt fastening.

Fully adjustable - pivots around fastening bolt to attain vertical position, locks in place after adjustment. Load not supported by bolt.

Side clips keep loose wire lines in place.

One piece wire line.

Curved top sheave.

6" minimum clearance between bottom of mulehead and top of rod hanger.

8. PLAIN CENTER BEARING (See drawing)

Used on all B units and on AC-9 and AC-11.

Bearing surface is Gatke molded plastic, pressed into a machined housing.

Beam plate welded to shaft, machined afterward.

Beam plate holes are slotted, allowing 1-1/2" total beam movement forward and

Alemite pressure and relief fittings.

Oil capacity for one month or more.

No squeak.

9. NEEDLE BEARING CENTER BEARING (See drawing)

Used on Units AC-13 through AC-32. Completely enclosed - dust sealed out, oil sealed in. Oversized needle bearings in oil bath. Both bearings seated in same housing - no initial misalignment. Beam plate holes are slotted allowing 2" total beam movement forward & back. Beam moved by adjuster screws. Two screws on larger sizes. Shaft, inner races, thrust bearings, and end housings are pulled up tight by end bolts; act as a solid unit, prevent misalignment. Set screws prevent shaft rotation.

10. ROLLER WRIST PIN BEARING (See drawings)

Standard on all B and AC units except B-3. Bearing is an ample sized, double row, self aligning roller bearing and is fully adjustable for wear by shimming. New oil enters between the outer two races. Operators to be cautioned not to overgrease. Wrist pins are all tapered and the larger sizes are keyed. Wrist pins are fastened in place with lock nuts on small sizes - large sizes have a heavy plain nut with a separate lock. Wrist pin nut wrenches are provided for all sizes - large sizes being equipped with slug wrenches.

11. EQUALASTIC BEARING (See bulletin)

Patented exclusive with Cabot. All the rubber is kept in shear or compression - no tension. Bearing is shock absorbing and requires no oiling. No knocking or looseness is possible. Bearing has been in service in field eight years and on over 11,000 units. (Jan. '55) The rubber bearing and pitman eliminates many parts and much maintenance. It costs more and is worth more.

12. B TYPE CRANK WEIGHTS

Optional extra on all B units. Ball socket joint between weight and crank. Two large bolts hold each weight. Easy to align, and weights are large enough to give good flywheel effect.

13. CABOTSAFETY BEAM WEIGHTS

Handling holes on centerline of each weight allow weight to hang straight, and gives

Each half hooks on and stays on until bolted up tight with one bolt for each pair of

End weights cannot fall off.

Any pair of weights may be removed or installed without interfering with other pairs of weights that are already in place.

14. & 15. CABOT ADJUSTABLE COUNTERWEIGHT CRANKS (See drawing)

To adjust counterweights place cranks in horizontal or nearly horizontal position. Loosen the two clamp bolts on each master weight with a 24" crescent wrench, then, using special box wrench furnished, turn adjuster screw for each master weight to move weight along crank to desired position. Tighten two clamp bolts on each master weight, and

Adjusting screw is cadmium plated and operated through a bronze adjuster nut bolted to the master weight. There will be no rusting to cause trouble. Sliding surface on master weight is ground, and sliding

surface on crank is milled to make smooth contact and easy adjustment. Inner weights can be installed or removed without disturbing master weights.

Inner weights in no way interfere with crank weight sliding adjustment. Counterweights can be set for lead and lag counterbalance if operator so

14. & 15. "D" TYPE WEIGHTS

Standard type adjustable crank counterbalance with two sets of inner weights will furnish approximately 60% counterbalance. This is the maximum recommended by API and by good practice.

"D" weights give more counterbalance, and have been provided because several major companies requested maximum counterbalance equal to the beam rating minus pitman pull. For example: AC9-40D Unit:

Beam rating

Pitman pull Peak Torque = 40,000 in. -1bs. 2, 222#

18-inch

Counterbalance required

This gives approximately 80% counterbalance. This is not recommended by Cabot Shops, Inc., because if this much counterbalance is necessary, the unit will be overloaded in service. Poor balancing (over or under) always increases load.

"D" weights are completely interchangeable with standard weights. If a change is made in the field from one type to the other, full credit

16. CABOT HERRINGBONE REDUCERS

Added strength and rigidity of gear teeth through use of herringbone gears. Slow speed shaft is mounted on Timken tapered roller bearings, locking it

Intermediate and high speed shafts are mounted on Hyatt straight roller bearings, allowing these shafts to float and the gear train to align itself with the slow speed gear.

Case manufactured in one piece to get maximum.

CABOT HERRINGBONE REDUCERS - Cont'd.

Sheave and brake can be mounted on either side.

Bearings are mounted in machined quills and either bearing or quill is fully interchangeable on either side.

All shafts, gears and bearings are oversize.

No old style oil seals anywhere in reducer.

17. REDUCER OILING SYSTEM (See vertical cross section of reducer)

Knife edge wipers remove oil from each side of slow speed gear and carry it in channel troughs to vee passages cast in each side of the case. There it is divided proportionately between slow speed,

Oil is taken to the inner face of the bearings, works its way through the rollers and the excess is drained off by deflectors.

The slow speed and high speed shafts are equipped with labyrinth seals to trap any oil attempting to leak out along the shaft and return it to the oil sump by means of a drip return.

Positive oiling in either direction of rotation of the cranks.

18. GEAR GENERATORS

The Cabot factory is equipped to machine its own herringbone gears in all sizes, insuring that all the elements in a Cabot reducer comply with Cabot's exacting standards of quality.

19. CABOT SERVICE AND DELIVERY POLICY

Cabot delivers unit direct to lease. There is no railroad-to-lease haul.

A competent, factory-trained service man, with years of experience in our factory and on the road, will deliver the unit.

Cabot service can be powerful sales help.

Service man is direct factory representative to the user; user's representative to us.

20. SERVICE REPORT RESUME

Complete resume of all complaint reports received by Cabot Shops, Inc. during the year 1953 on all units both old and new, ever produced by Cabot Shops, Inc. Oldest of these units was put in service in 1938. Observe the excellent service record indicated by this report.

21. PUMPING UNIT PARTS (See nomenclature drawings)

Nomenclature drawings show appearance and names of major parts, not parts numbers.

To order parts, determine name of major parts, not

PUMPING UNIT PARTS - Cont'd.

Component parts of assemblies are listed below the assembly in the parts lists. Find the assembly name from the nomenclature drawing (if necessary); consult the parts list immediately following the assembly listing, and select the name and part number of the part required.

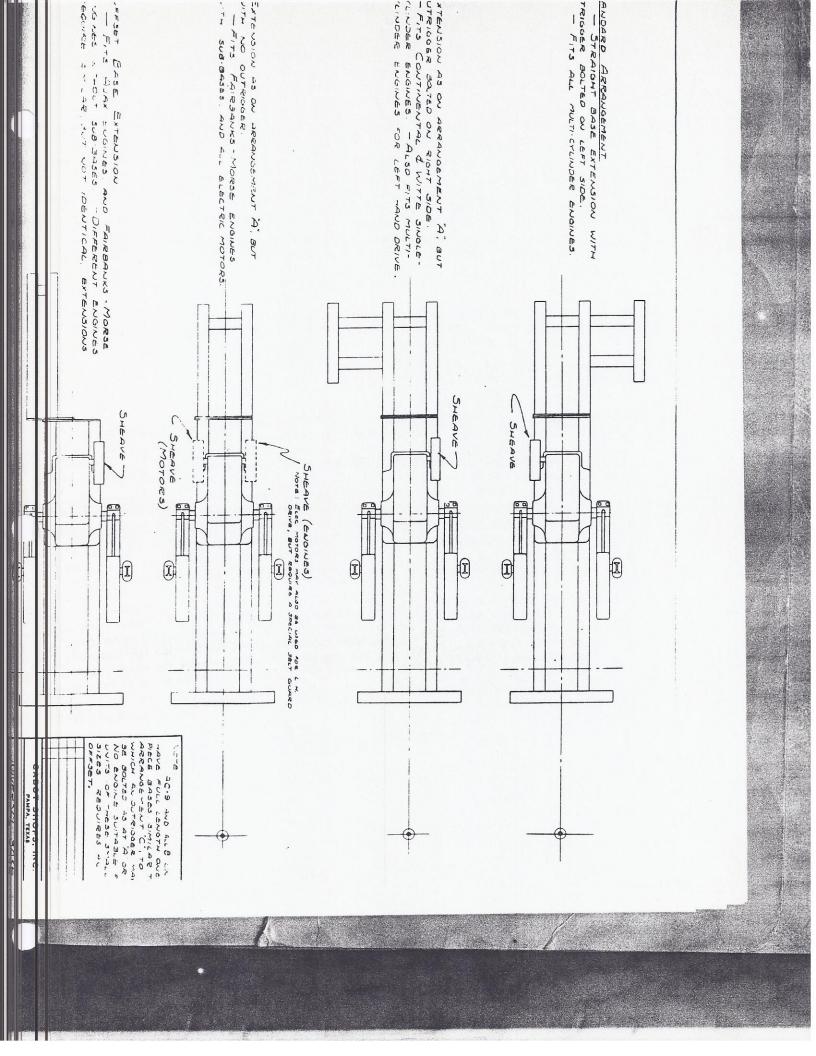
Note that nomenclature drawings for the brake linkage, wrist pin assemblies and center bearing assemblies are provided separately.

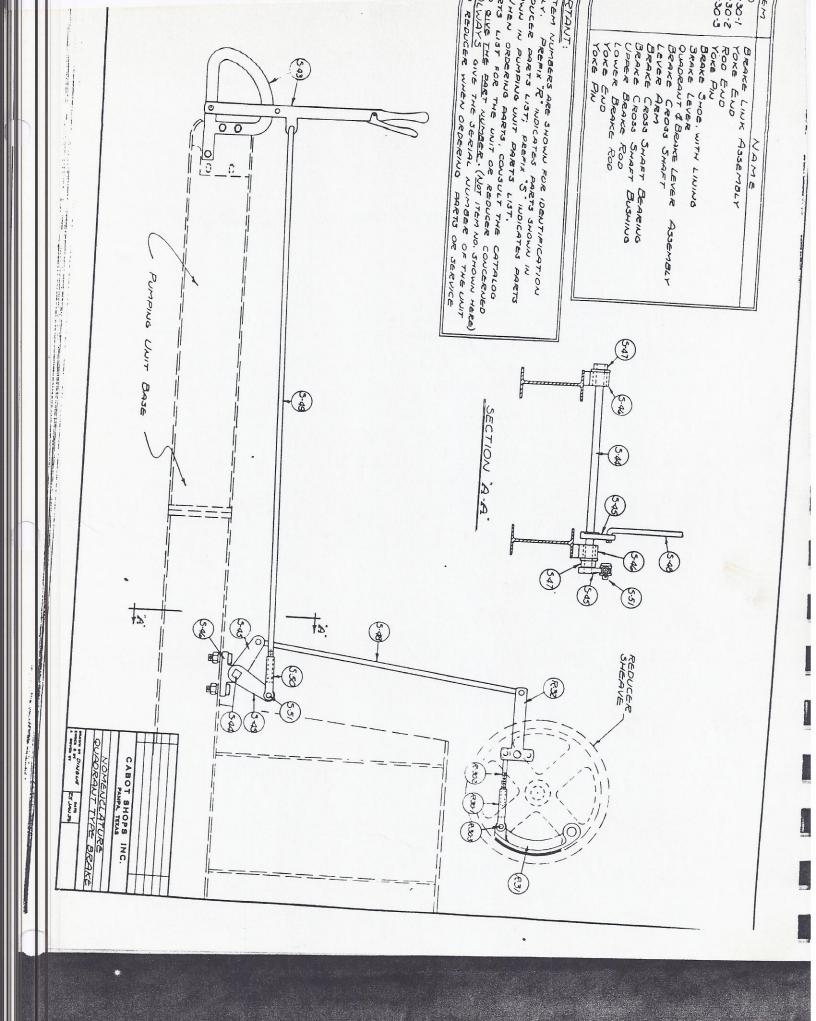
Always give the unit and reducer serial numbers when ordering parts. Advances in design have made changes in most units. Parts lists are for recent production and older units sometime require different parts. The serial number will enable the factory to be sure that the part shipped will fit.

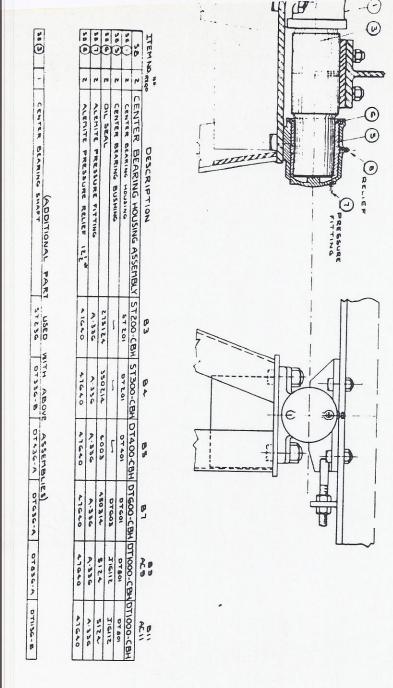
22. REDUCER PARTS (See nomenclature drawing)

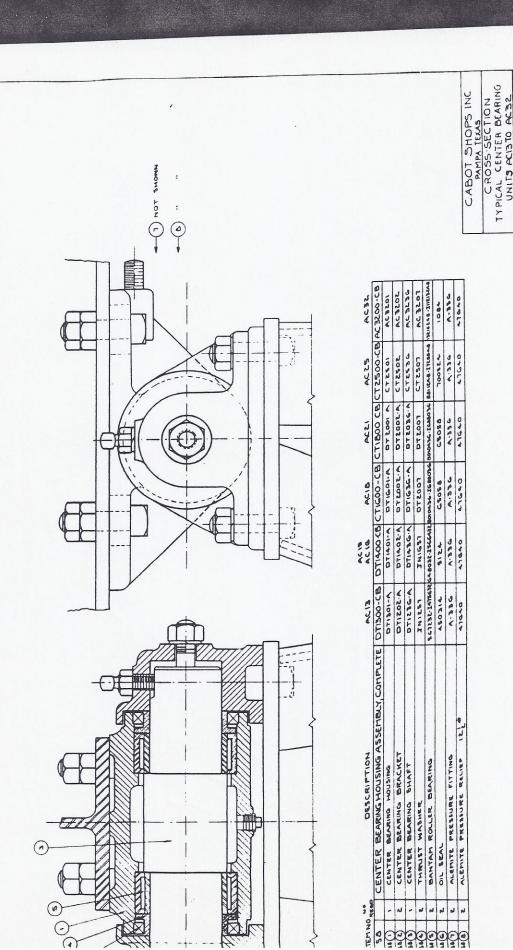
The procedure for ordering reducer parts is similar to that outlined in

Be careful to use the correct reducer parts list for the reducer in question, and give the reducer serial number.

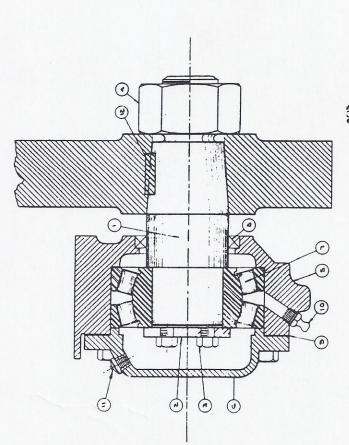




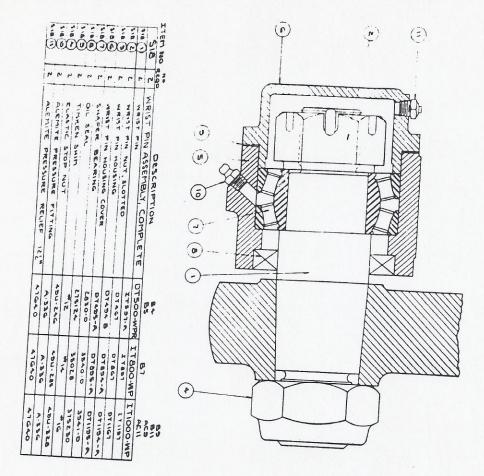




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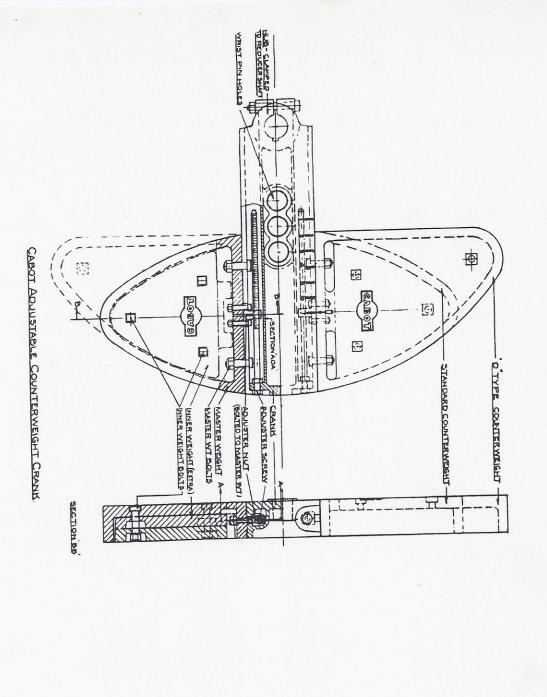
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18	2	WRIST PIN ASSEMBLY, COMPLETE	AC 1300-WP	AC1300-WP AC2100-WP AC2500-WP AC3200-WP	AC 2500-WP	AC3200-WP
0 015	2	WRIST PIN	DT1497	LESITO	CTESST	AC BEBT
5.18(2)	2	WRIST PIN CAP PLATE	DT1458	DTIGOS	DT1638	AC 32.90
\$18(3)	2	DRILLED CAP SCREW	E . I WER. MC.	214 BW	WB 41E	MBAIL
818	2	WRIST PIN NUT	AC 2512G	ACLSIZE	ACESIEG	AC32126
(\$)	~	WRIST PIN BEARING HOUSING	DT1654-A	OTTOBA.A	DTESIE-A	AC3EB4
S.18(C)	2	WRIST PIN BEARING HOUSING COVER	DT1688.8	OTLONG.A	DTREIS.A	AC3235
0	2	SHAFER BEARING	8122.0	G-0005	7472.0	0.0040
(8)	~	OIL SEAL	2124	8124	5124	2000
(6)	2	BMIN	8.400140	*2*	024	484
(0)	2	ALEMITE PRESSURE FITTING	A-856	A-236	A-BG	988.8



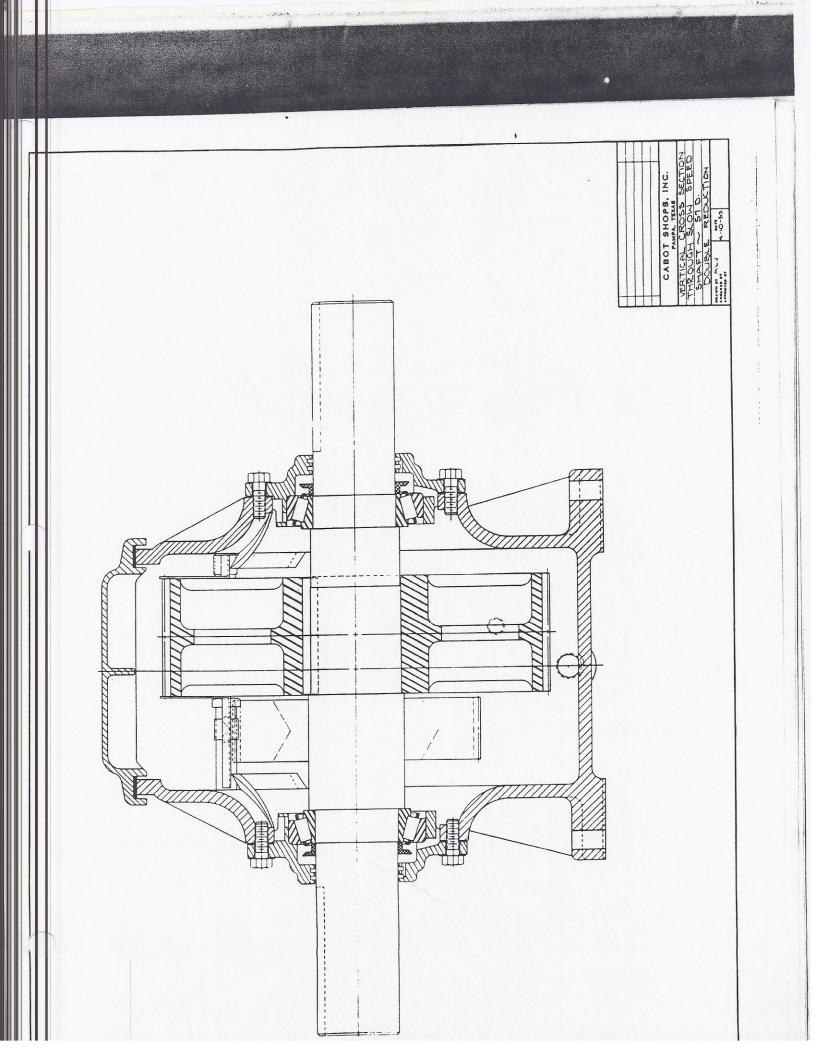
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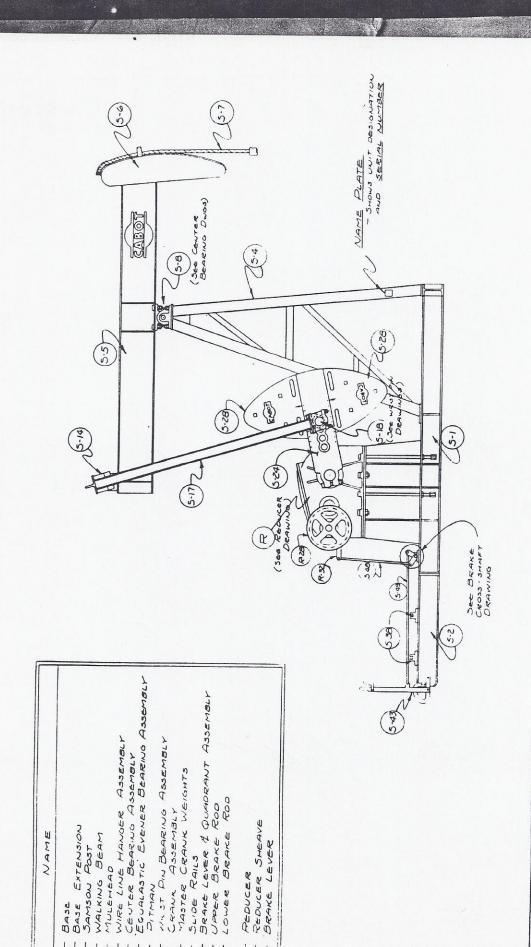
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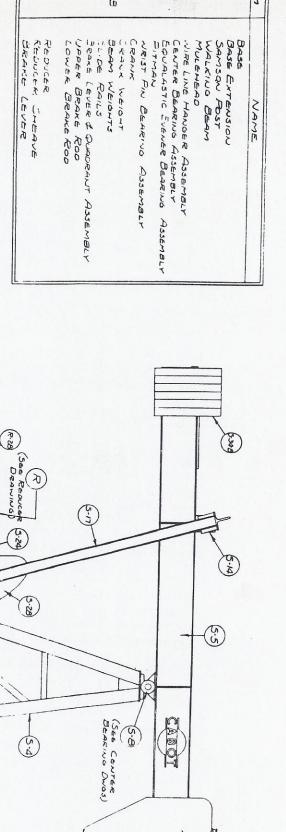


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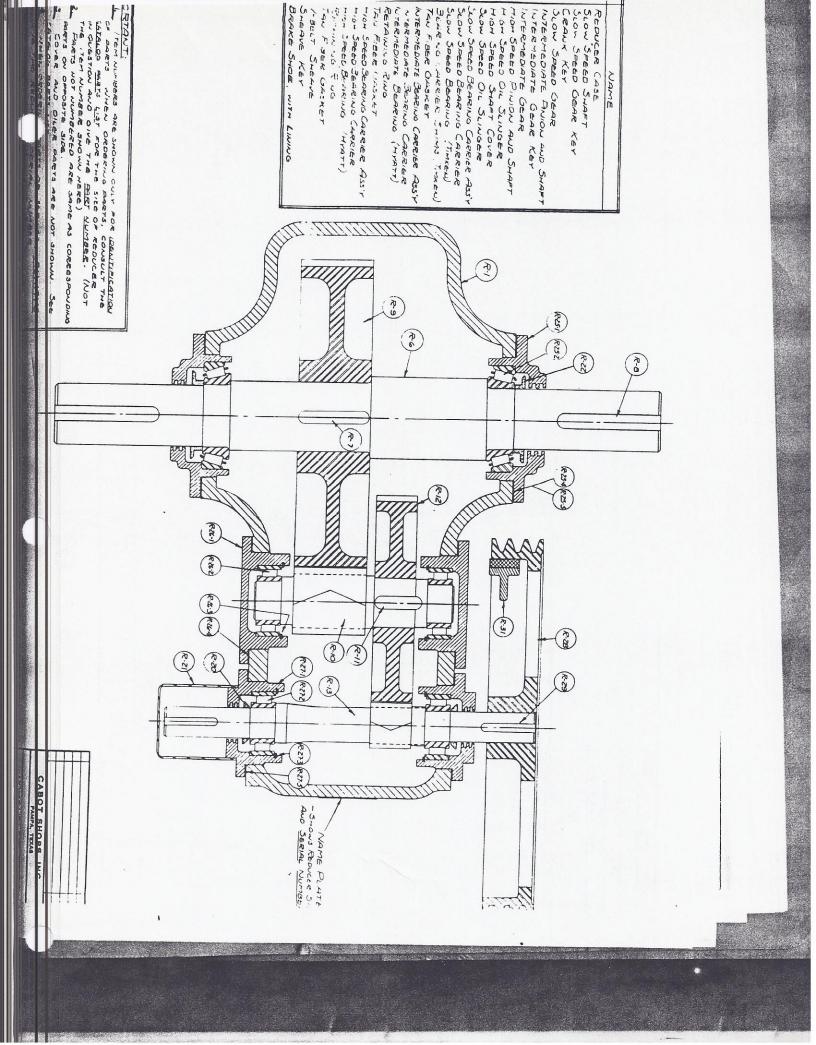
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1091 B 302125 CABOT SHOPS, INC.

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COMMON SALES QUESTIONS CABOT PUMPING UNITS

Are Cabot units API monogrammed? Why?

The new line of Cabot units, both AC and B Series, are designed in API sizes for standardization. In this way, they are directly comparable with units of other manufacturers. All Cabot units have always been designed to exceed API specifications.

Different types of prime movers are used in the oil fields to power pumping units, and each has its own mounting requirements. The Cabot Universal Base permits arrangement of the bases to fit any prime mover, and conversions can be made using ordinary wrenches only.

What is a floor-clearing unit? Why is it desirable?

Floor-clearing means no moving part of the unit extends below the bottom of the unit base. Concrete foundations can be flush with ground level at a savings in costs.

Do Cabot units have ample clearance for well servicing?

With the mulehead removed and walking beam at top of the stroke, servicing clearance is up to 33" on the largest units. In every case, it is more than ample to clear suitable size well-servicing equipment.

How often should bearings be lubricated?

Follow the recommendations shown on the "Lubrication Instructions" accompanying each unit delivered. Avoid over-lubrication.

What types of lubricants are recommended?

Follow the recommendations shown on the "Lubrication Instructions" accompanying each unit delivered.

Page No. 2 - Common Sales Questions
Cabot Pumping Units

What are the advantages of Cabot's "Equalastic" evener bearing?

The "Equalastic" evener bearing is made of rubber and has no moving parts to wear or get loose. It insulates the gear box from shock loads and vibration and is not affected by sand, salt water, grease or other foreign matter. It eliminates costly wear and maintenance, and requires no oiling.

Does any other manufacturer use this bearing on pumping units?

No, because it is a patented feature, developed by Cabot Shops, Inc., and manufactured by U. S. Rubber Company under a license for exclusive use on Cabot Pumping Units.

Why is the "Equalastic" bearing not used as a center bearing?

The added advantages gained by using the "Equalastic" bearing as a center bearing do not justify the additional cost and construction modifications. The center bearing on all pumping units must have twice the capacity of the evener or tail bearing.

Why are the crank-balanced series equipped with adjustable counterweights?

Because the counterbalance requirements of any oil well cannot be exactly predicted and will change with different well conditions. Cabot Adjustable Crank gives crank balancing at its best, simply constructed and easily operated. There are few moving parts, completely rust proof, requiring little maintenance time and cost, yet it offers complete safety, accuracy and flexibility.

How may the counterbalance be adjusted on beam-balanced units?

By adding or removing pairs of beam weights, or, for closer balancing, by relocating the weights along the beam.

Why does Cabot use a one-piece gear reducer case?

A one-piece case is both lighter and stronger than a split case. There is no joint in the highly loaded part of the case to develop misalignment or leakage, and no heavy, bolted flanges are required.

Page No. 3 - Common Sales Questions
Cabot Pumping Units

Why are herringbone gears used?

Because of their great strength, quietness, and smoothness of operation, and because they produce no side thrust on their bearings. They are self-centered and will adjust themselves to equalize wear and load along the whole length of each tooth.

Their superiority for pumping unit gears is obvious, and only one or two major manufacturers remain who have not changed over from a spur-gear or helical-gear system.

How long will a Cabot Pumping Unit last?

Cabot Pumping Units are designed for 100,000 hours average life. Every unit is guaranteed against defects of design, material, or workmanship, and further backed by a five-year service guarantee on the reducer.

What kind of bearings are used in the reducer?

Timken tapered roller bearings are used on the slow speed shaft to prevent end-wise movement. They are adjustable for wear by removing shims. Intermediate and high speed shafts are mounted on Hyatt straight roller wide series bearings, which allow the gears to float into and maintain alignment.

When repair parts are needed, are they shipped promptly, priced reasonably and will they fit on arrival?

Cabot maintains a stock or can produce any part required for any unit ever placed in service. Shipment of parts is made by the most direct method available and prompt, competent servicemen are available where required.

Unit Size	Max.	Beam Size	Price	Walking	Max.	No. Weights
	Stroke		Extra	Beam	Counter	
				Rating	Balance	
B3L	25"	8 x 4 at 13#	\$ 12.00	2451	1390	6 Sets Beam
B4L	25**	8 x 4 at 15#	12.00	3056	1933	6 Sets Beam
B4LS	25"	$8 \times 5 - 1/4$ at 20#	22.50	4517	1933	6 Sets Beam
B4LL	30"	$8 \times 5 - 1/4$ at 17#	28.50	3133	1631	6 Sets Beam
B5L	30"	10 x 5-3/4 at 21#	20.00	4778	3405	10 Sets Beam
B5LS	30"	$10 \times 5 - 3/4$ at $25 \#$	35.00	5867	3405	10 Sets Beam
B7L	36"	$12 \times 6 - 1/2$ at $27 \#$	42.00	6290	4920	10 Sets Beam
B9L	4211	$14 \times 6 - 3/4$ at $38#$	44.00	8356	5620	10 Sets Beam
B9LS	42"	14 x 8 at 48#	80.00	11143	5620	10 Sets Beam
BllL	48"	14 x 8 at 48#	47.00	9480	6155	12 Sets Beam
ACD7L	34"	12 x 6-1/2 at 27#	21.00	6686	4555	2 Sets D Crank
AC7SL	42"	14 x 6-3/4 at 30#	42.00	6393	6630	2 Sets D Crank
AC9L	. 42"	14 x 6-3/4 at 38#	44.00	8356	5430	2 Sets Light Cran
AC9LS	42"	14 x 8 at 48#	61.00	10743	5430	2 Sets Light Cran
		1 1 11 0 20 20	01.00	10115	6630	2 Sets D Crank
ACIIL	48"	14 x 8 at 48#	47.00	9480	5072	2 Sets Light Cran
ACIILS	48"	16 x 8-1/2 at 64#	89.00	12482	6250	2 Sets D Crank
AC13L	54"	16 x 8-1/2 at 64#	54.00	12265	6900	2 Sets Light Cran
			31.00	12203	9630	2 Sets D Crank
AC13LS	54"	18 x 8-3/4 at 64#	60.00	13874	6900	
		20 11 0 0, 1 00 0 1 1	00.00	13014	9630	2 Sets Light Crank 2 Sets D Crank
CI5L	64"	18 x 8-3/4 at 64#	65.00	11171	6648	
C15L	64"	18 x 8-3/4 at 77#	104.00	13529	6648	2 Sets Light Crank
CISLS	64"	18 x 8-3/4 at 85#	130.00	14893	9100	2 Sets Light Crant
C16L	64"	18 x 8-3/4 at 77#	104.00	13529		2 Sets D Crank
C17L	64"	18 x 8-3/4 at 85#	106.00	14893		2 Sets Light Crank2 Sets D Crank
C18L	74"	21 x 9 at 96#	131.00	15507		
C20L	74"	24 x 12 at 100#	132.00	21648		2 Sets Light Crank2 Sets D Crank
C21L	84"	24 x 12 at 100#	169.50	18265		
				10205		2 Sets Light Crank
C24L	84"	24 x 14 at 130#	190.00	25472		2 Sets D Crank
		A 1 1 GC 1 JUT		63416		2 Sets Light Crank
.C25L	94"	24 x 14 at 130#	196.00	21950		2 Sets D Crank
C29L	9411	24 x 14 at 160#	243.00	26742		2 Sets Light Crank
C32L	144"	33 x 15-3/4 at 200#		29335		2 Sets D Crank
				2,333		l Set Light Weight
					40370	2 Sets Light Weigh

(For Standard Reducer Sheave and Engine Sheave for 20 SPM)

UNIT	201122		3	20 SPM)	
	POWER USED	BELTS REQUIRE	D UNIT	POWER USED	
ACD9-40D	Standard			10 WER OSED	BELTS REQUIRED
ACD9E-40D	Electric	4 - 210B	ACD16-160D	Standard	
ACD9 X-40D	ZC-118	4 - 210B	ACD16E-160D	Electric	5 - 210C
ACD9 Y-40D		4 - 195B	ACDI6FM-160D		5 - 210C
ACD9FM-40D	ZC-208	4 - 195B	ACD16C-160D	ZC-346 & ZC-503	5 - 240C
ACD9C-40D	ZC-346 & ZC-503	4 - 225B	ACDIGA-160D	Cont. C-96	5 - 210C
ACD9C-40D	Cont. C-66 & Witte "B"		ACDIGATION .	Ajax 6-1/2 x 8 & 7-1/4 x	8 5 - 225C
	Cont. C-46 & Witte "C"		160D		
	Witte "98RC"	4 - 195B		Ajax 7-1/2 x 10 & 8-1/2	x 10 5 - 225C
ACD9-57D	Standard	4 - 210B	ACD16Z7-160D	ZC-739	5 - 240C
ACD9E-57D	Electric	4 - 210B	AC17-160D	same as above	
4 CD9X-57D	ZC-118	4 - 195B			
ACD9 Y-57D	ZC-208	4 - 195B	AC18-160D	Standard	5 - 225C
ACD9FM-57D	ZC-346 & ZC-503		AC18E-160D	Electric	5 - 225C
ACD9C-57D	Cont. C-66 & Witte "B"	4 - 225B	AC18FM-160D	ZC-503	5 - 240C
	Cont. C-46 & Witte "C"		AC18C-160D	Cont. C-96	
	Witte "98RC"		AC18A-160D	Ajax 6-1/2 x 8 & 7-1/4 x	5 - 225C
	Witte 70KC"	4 - 195B	AC18A10-160D	Ain 7 1/2 10 0 0 1/4 x	8 5 - 240C
AC11-57D	Standard		AC18Z7-160D	Ajax 7-1/2 x 10 & 8-1/2 x ZC-739	
AC11E-57D	Electric	4 - 210B	AC18-228D		5 - 240C
ACIIFM-57D		4 - 210B	AC18E-228D	Standard	6 - 225C
AC11C-57D	ZC-346 & ZC-503	4 - 225B	AC18FM-228D	Electric	6 - 225C
A PILC-SID	Cont. C-46 & Witte "B"		AC18C-228D	ZC-503	6 - 240C
	Cont. C-66 & Witte "C"		AC18A-228D	Cont. C-96	6 - 225C
AC11Y-57D	Witte "98RC"	4 - 195B	AC18A10-	Ajax 6-1/2 x 8 & 7-1/4 x 8	8 6 - 240C
	ZC-208	4 - 195B	228D		
AC11A-57D	Ajax 6-1/2 x 8 & 7-1/4 x 8	4 - 195B		Ajax 7-1/2x10 & 8-1/2x 1	10 6 - 2400
AC11-80D	Standard	3 - 210C	AC18Z7-		2.00
AdllE-80D	Electric		228D	ZC-739	6 - 240C
ACIIFM-80D	ZC-346 & ZC-503	3 - 210C	AC20-160D &	228D - same as above	0 - 2400
VG11C-80D	Cont. C-46 & Witte "B"	3 - 240C		same as above	
	Cont. C-66 & Witte "C"		AC21-160D	Standard	
	Witte "98RC"		AC21E-160D	Electric	5 - 240C
4C11Y-80D	ZC-208	3 - 210C	AC21FM-160D	ZC-503	5 - 270C
4C 1A-80D	Ajax 6-1/2 x 8 & 7-1/4 x 8	3 - 210C	AC21A-160D		5 - 270C
	J 0-1/2 X 8 & /-1/4 X 8	3 - 210C	AC21Z7-160D	Ajax 7-1/2 x 10 & 8-1/2 x ZC-739	
AC.3-80D	Standard		AC21-228D	Standard	5 - 270C
-114D	Standard	3 - 225C	AC21E-228D		6 - 240C
AC 3E-80D	Electric	4 - 225C	AC21FM-228D	Electric	6 - 270C
-114D	Frectic	3 - 225C	AC21A-228D	ZC-503	6 - 270C
ACI3FM-80D	~~	4 - 225C	AC21 Z7-228D	Ajax 7-1/2 x 10 & 8-1/2 x 10	6 - 270C
-114D	ZC-346 & ZC-503	3 - 240C	AC21-320D	20-139	6 - 270C
AC13C-80D		4 - 240C		Standard	8 - 240C
-114D	Cont. C-66	3 - 225C	AC21E-320D	Electric	8 - 270C
		4 - 225C	AC21FM-320D	ZC-503	8 - 270C
A713C-80D	Witte C	3 - 210C	AC21 Z7-320D	ZC-739	8 - 270C
-114D		4 - 210C	AC24-160D thr	ough 320D - same as above	0 - 2/00
AC13Y-80D	ZC-208			same as above	
-114D		3 - 210C			
ACI A-80D	Ajax 6-1/2 x 8 & 7-1/4 x 8	4 - 210C			
-114D	-1 1-1/4 X 8	3 - 225C	AC25-228D	Standard	
AG1 C9-80D	Cont. C-96	4 - 225C	AC25E-228D	Electric	6 - 240C
-114D	0-70	3 - 210C	AC25A-228D		6 - 270C
		4 - 195C	AC25Z7-228D	Ajax 7-1/2 x 10 & 8-1/2 x 10 ZC-739	
AC15-114D	Standard		AC25-320D		6 - 270C
ACISE-114D	Electric	4 - 225C	AC25E-320D	Standard	8 - 240C
ACISEM-114D		4 - 225C	AC25Z7-320D	Electric	8 - 270C
AC15C-114D	ZC-346 & ZC-503	4 - 240C		ZC-739	8 - 270C
AC 5C-114D	Witte "C"	4	AC32-456D		
AC 509-114D	Cont. C-66	4 2255	AC32A-456D	Standard	7-330D Super
AC 5A-114D	Cont. C-96	4 - 210C	ACJ6A-430D	Ajax 11 x 14	7-330D Super
34-1140	Ajax 6-1/2 x 8 & 7-1/4 x 8	4 - 225C		(longer	for separate base
					setting)
			AC20-2200 1		

AC29-228D and 320D - same as above

Note: These belt lengths change: if reducer sheave is changed from standard, or undersize prime mover sheave is used for slow speed pumping, or 900 or 1800 RPM motors are used.

AC8-30-25D AC8-30-40D

WITH "D" TYPE WEIGHTS

CRANK WEIGHT COUNTER-BALANCE EFFECT

MASTER WEIGHTS ONLY

MASTER WEIGH	ITS O	NLY		
DESCRIPTION				•
			STROKES	
D. C.		18"	24"	30"
PITMAN, W. PINS, BEAM & CRANKS ONLY				
WEIGHTS-POSITION		1,533	1,156	918
	1	3, 343	2,503	2,002
	2	3,642	2,726	2, 181
	3	3,943	2,951	2, 361
	4	4, 245	3, 178	2, 542
	5	4,547	3,404	2,723
	6	4,850	3,630	2,904
	7	5, 150	3, 855	3, 084
	8	5, 453	4,081	3, 265
MASTER WEIGHTS AND (1) G	3.00			3, 203
MASTER WEIGHTS AND (1) SE	T. IN	NER WEIGH	ITS	
WEIGHTS-POSITION				
	1	4,076	3,051	2,441
	2	4,496	3, 365	2,692
	3	4,920	3,683	2,946
	4	5, 344	4,000	3, 200
	5	5,767	4,316	3, 453
	6	6, 191	4,634	3, 707
	7	6,615	4,951	3, 961
	8	7,039	5, 269	4, 215
MASTER WEIGHTS AND (2) SET	rc trtr	מכון		-, 215
WEIGING -	D HAL	AFK MEIGH	TS	
WEIGHTS-POSITION	1	4 010		
	2	4,810	3,600	2,880
	3	5, 349	4,004	3, 203
	4	5, 895	4,413	3, 530
	5	6, 441	4,821	3, 857
	6	6,987	5,230	4, 184
		7,533	5,639	4, 511
	7	8,079		4 838

AC8L-36-25D AC8L-36-40D WITH "D" TYPE WEIGHTS LONG STROKE

CRANK WEIGHT COUNTER-BALANCE EFFECT

MASTER WEIGHTS ONLY

DESCRIPTI	ON		2215	STROKES 29"	36"
PITMANS, W. PINS, BEAWEIGHTS-POSITION		1 2 3 4 5 6 7 8	1, 300 2, 835 3, 089 3, 344 3, 600 3, 856 4, 111 4, 369 4, 624	3, 427	765 1,668 1,817 1,967 2,117 2,268 2,419 2,570 2,720
MASTER	WEIGHTS AND (1) SE	T INNE	R WEIGH	ITS	
WEIGHTS-POSITION		1 2 3 4 5 6 7 8	3, 458 3, 814 4, 174 4, 533 4, 894 5, 253 5, 613 5, 972	2, 563 2, 828 3, 094 3, 360 3, 626 3, 894 4, 160 3, 954	2,879
MASTER	WEIGHTS AND (2) SE	TS INN	ER WEIG	HTS	
WEIGHTS-POSITION		1 2 3 4 5 6 7 8	4,078 4,536 4,998 5,461 5,924 6,387 6,851 7,313	3,022 3,362 3,704 4,049 4,391 4,733 5,077 5,417	2,400 2,668 2,940 3,213 3,485 3,757 4,030 4,300

ACD9-40D OR 57D WITH "D" TYPE WEIGHTS

CRANK WEIGHT COUNTER-BALANCE EFFECT

MASTER WEIGHTS ONLY

DESCRIPTION		2011	STROKES 28 m	36n
PITMAN, W. PINS, BEAM & CRANKS ONLY WEIGHTS-POSITION	1 2 3 4 5	2,015 5,830 6,690 7,555 8,415 9,280	1,570 4,290 4,910 5,525 6,140 6,755	1,320 3,440 3,915 4,395 4,875 5,355
MASTER WEIGHTS AND	(1)	SET INNER	WEIGHTS	
WEIGHTS-POSITION	12345	6,950 8,070 9,190 10,310 11,430	5,095 5,895 6,695 7,495 8,295	4,060 4,685 5,305 5,930 6,550
MASTER WEIGHTS AND	(2)	SETS INNER	WEIGHTS	
WEIGHTS-POSITION	1 2 3 4 5	8,065 9,435 10,810 12,185 13,560	5,890 6,870 7,850 8,835 9,815	4,680 5,445 6,205 6,970 7,735

AC10-36-40D AC10-36-57D

WITH "D" TYPE WEIGHTS

CRANK WEIGHT COUNTER-BALANCE EFFECT

MASTER WEIGHTS ONLY

	DESCRIPTIO	ON			STRO	KFS
	PITMAN, W. PINS, MEIGHTS-POSITION	BEAM & CRANKS	ONLY 1 2 3 4 5	20" 2,015 5,830 6,690 7,555 8,415 9,280	28" 1,570 4,290 4,910 5,525 6,140 6,755	36" 1,320 3,440 3,915 4,395 4,875 5,355
			MASTER	WEIGHTS AND	(1) SET INNER	WEIGHTS
1	ÆIGHTS-POSITION		1 2 3 4 5	6,950 8,070 9,190 10,310 11,430	5,095 5,895 6,695 7,495 8,295	4,060 4,685 5,305 5,930 6,550
		MASTER	R WEIGHTS	AND (2) SETS	INNER WEIGHTS	
h	EIGHTS-POSITION		1 2 3 4 5	8,065 9,435 10,810 12,185 13,560	5,890 6,870 7,850 8,835 9,815	4,680 5,445 6,205 6,970 7,735

AC10L-42-40D AC10L-42-57D

WITH "D" TYPE WEIGHTS

LONG STROKE

CRANK WEIGHT COUNTER-BALANCE EFFECT

п						
	ום	ESCRIPTION		23"	STROKES 33"	42°
	PITMAN, W. PINS,	BEAM & CRANK ONLY		1,725	1,345	1,130
MASTER WEIGHTS ONLY						
	WEIGHTS-POSITION		1 2 3 4 5	4,995 5,735 6,470 7,205 7,945	3,675 4,205 4,740 5,270 5,800	2,860 3,355 3,850 4,340 4,835
MASTER WEIGHTS AND (1) SET INNER WEIGHTS						
	WEIGHTS-POSITION		1 2 3 4 5	5,955 6,915 7,875 8,835 9,795	4,365 5,050 5,735 6,420 7,105	3,480 4,015 4,550 5,085 5,625
		MASTER WEIGHTS AND (2) SETS INNER W	VEIGHTS		
-	VEIGHTS-POSITION		1 2 3 4 5	6,910 8,085 9,260 10,435 11,610	5,045 5,885 6,725 7,565 8,405	4,010 4,665 5,320 5,975 6,630

AC11-57D & 80D UNITS WITH STANDARD TYPE WEIGHTS

CRANK WEIGHT COUNTER-BALANCE EFFECT

DESCRIPTION		26°	STROKES 34"	42"
PITMAN, W. PIN & CRANKS ONLY WEIGHTS - POSITION	1 2 3 4 5 6	1,689 3,973 4,388 4,802 5,220 5,635 6,051	1,388 3,135 3,452 3,768 4,088 4,406 4,723	1,201 2,615 2,872 3,128 3,387 3,644 3,901
MASTER WEIG	HTS & (1) SET INNER	WEIGHTS	
WEIGHTS-POSITION	1 2 3 4 5 6	4,775 5,336 5,895 6,460 7,020 7,582	3,748 4,177 4,604 5,036 5,465 5,894	3,111 3,459 3,805 4,154 4,502 4,849
MASTER WEIGH	TS AND	(2) SETS INNE	R WEIGHTS	
WEIGHTS - POSITION	1 2 3 4 5 6	5,577 6,284 6,989 7,700 8,405 9,114	4,362 4,902 5,441 5,984 6,525 7,065	3,608 4,046 4,482 4,922 5,359 5,797

AC12-42-57D AC12-42-80D

WITH "D" TYPE WEIGHTS

CRANK WEIGHT COUNTER-BALANCE EFFECT

DESCRIPTION		26 n	STROKES 34"	42"
PITMAN, W. PINS & CRANK WEIGHTS-POSITION	1 2 3 4 5 6	1,715 4,425 5,090 5,750 6,415 7,080 7,745	1,415 3,485 3,995 4,500 5,010 5,515 6,025	1,225 2,905 3,315 3,725 4,135 4,550 4,960
	MASTER WEIGHTS	AND (1) SET 1	NNER WEIGHT	S
WEIGHTS—POSITION	1 2 3 4 5 6	5,225 6,085 6,945 7,805 8,670 9,530	4,095 4,755 5,415 6,075 6,730 7,390	3,400 3,930 4,465 5,000 5,530 6,065
	MASTER WEIGHTS &	(2) SETS INN	ER WEICHTS	
WEIGHTS-POSITION	1 2 3 4 5 6	6,015 7,070 8,130 9,185 10,245 11,300	4,705 5,510 6,320 7,125 7,935 8,745	3,890 4,540 5,195 5,850 6,505 7,160

AC12-48-57D AC12-48-80D

WITH "D" TYPE WEIGHTS

CRANK WEIGHT COUNTER-BALANCE EFFECT

DESCRIPTION		28"	STROKES 38"	4811	
PITMAN, W. PINS & CRANKS ONLY WEIGHTS-POSITION	1 2 3 4 5 6 7	2,660 7,085 7,955 8,825 9,695 10,570 11,440 12,310	2,095 5,360 6,000 6,640 7,285 7,925 8,565 9,210	1,770 4,350 4,860 5,365 5,875 6,385 6,890 7,400	
MASTER WEIGHTS & (1) SET INNER WEIGHTS					
WEIGHTS-POSITION	1 2 3 4 5 6 7	8,445 9,585 10,730 11,870 13,010 14,150 15,290	6,360 7,205 8,045 8,885 9,725 10,565 11,410	5,145 5,810 6,475 7,140 7,810 8,475 9,150	
MASTER WEIGHTS &	(2)	SETS INNER	WEIGHTS		
WEIGHTS-POSITION	1 2 3 4 5 6 7	9,935 11,370 12,805 14,240 15,680 17,110 18,240	7,455 8,515 9,575 10,630 11,690 12,750 13,580	6,015 6,850 7,690 8,525 9,365 10,200 10,860	

AC12L-54-114D UNITS WITH "D" TYPE WEIGHTS LONG STROKE

CRANK WEIGHT COUNTER-BALANCE EFFECT

DESCRIPTION		32"	STROKES 43"	54"
PITMAN, W. PINS & CRANKS ONLY WEIGHTS-POSITION	1 2 3 4 5 6 7	2,430 6,365 7,140 7,910 8,685 9,460 10,235 11,010	1,870 4,770 5,340 5,910 6,480 7,050 7,620 8,190	1,550 3,845 4,295 4,745 5,200 5,650 6,080 6,555
MASTER WEIGHTS AND (1) SET	INNER '	WEIGHTS		
WEIGHTS-POSITION	1 2 3 4 5 6 7	7,575 8,590 9,605 10,615 11,630 12,645 13,660	5,660 6,410 7,155 7,905 8,650 9,400 10,145	4,550 5,140 5,735 6,325 6,915 7,490 8,100
MASTER WEIGHTS AND (2) SETS	INNER	WEIGHTS		
WEIGHTS-POSITION	1 2 3 4 5 6 7	8,770 10,025 11,275 12,525 13,780 15,030 16,280	6,545 7,465 8,390 9,310 10,230 11,155 12,075	5,250 5,980 6,710 7,440 8,170 8,880 9,630

AC13-80D & 114D UNITS WITH STANDARD TYPE WEIGHTS

CRANK WEIGHT COUNTER-BALANCE EFFECT

DESCRIPTION		28"	STROKES 38"	48**
PITMAN, W. PIN & CRANKS ONLY WEIGHTS-POSITION	1 2 3 4 5 6 7	2,633 5,614 6,062 6,509 6,956 7,406 7,853 8,300	2,072 4,269 4,598 4,928 5,258 5,589 5,918 6,248	1,744 3,483 3,744 4,005 4,266 4,528 4,789 5,050
MASTER W	EIGHTS & (1) set inner	WEIGHTS	
WEIGHTS-POSITION	1 2 3 4 5 6 7	6,837 7,468 8,098 8,729 9,363 9,994 10,624	5,170 5,634 6,099 6,564 7,031 7,495 7,960	4,196 4,564 4,932 5,300 5,670 6,038 6,406
MASTER WE	IGHTS AND (2) sets inn	er weights	
WEIGHTS-POSITION	1 2 3 4 5 6 7	8,059 8,873 9,687 10,501 11,320 12,134 12,947	6,070 6,670 7,270 7,870 8,473 9,072 9,672	4,909 5,384 5,859 6,334 6,811 7,286 7,761

ACD13-80D & 114D UNITS WITH "D" TYPE WEIGHTS

CRANK WEIGHT COUNTER-BALANCE EFFECT

DESCRIPTION		28 ¹¹	STROKES 3811	48"
PITMAN, W. PINS & CRANKS ONLY WEIGHTS-POSITION	1234567	2,660 7,085 7,955 8,825 9,695 10,570 11,440 12,310	2,095 5,360 6,000 6,640 7,285 7,925 8,565 9,210	1,770 4,350 4,860 5,365 5,875 6,385 6,890 7,400
MASTER WEIGHTS &	(1)	SET INNER W	EIGHTS	
WEIGHTS-POSITION	1 2 3 4 5 6 7	8,445 9,585 10,730 11,870 13,010 14,150 15,290	6,360 7,205 8,045 8,885 9,725 10,565 11,410	5,145 5,810 6,475 7,140 7,810 8,475 9,150
MASTER WEIGHTS &	(2)	SETS INNER	WEIGHTS	
WEIGHTS-POSITION	1234567	9,935 11,370 12,805 14,240 15,680 17,110 18,240	7,455 8,515 9,575 10,630 11,690 12,750 13,580	6,015 6,850 7,690 8,525 9,365 10,200 10,860

AC14-48-80D AC14-48-114D

WITH "D" TYPE WEIGHTS

CRANK WEIGHT COUNTER-BALANCE EFFECT

DESCRIPTION		28"	STROKES 38"	48"
PITMAN, W. PINS & CRANKS ONLY WEIGHTS-POSITION	1 2 3 4 5 6 7	2,660 7,085 7,955 8,825 9,695 10,570 11,440 12,310	2,095 5,360 6,000 6,640 7,285 7,925 8,565 9,210	1,770 4,350 4,860 5,365 5,875 6,385 6,890 7,400
MASTER WEIGHTS	& (1)	SET INNER	WEIGHTS	
WEIGHTS-POSITION	1 2 3 4 5 6 7	8,445 9,585 10,730 11,870 13,010 14,150 15,290	6,360 7,205 8,045 8,885 9,725 10,565 11,410	5,145 5,810 6,475 7,140 7,810 8,475 9,150
MASTER WEIGHTS	& (2)	SETS INNER	WEIGHTS	
WEIGHTS-POSITION	1 2 3 4 5 6 7	9,935 11,370 12,805 14,240 15,680 17,110 18,240	7,455 8,515 9,575 10,630 11,690 12,750 13,580	6,015 6,850 7,690 8,525 9,365 10,200 10,860

AC14-54-80D AC14-54-114D

WITH "D" TYPE WEIGHTS

CRANK WEIGHT COUNTER-BALANCE EFFECT

DESCRIPTION			STR	OKES
2234123 3341		34n	fiftu	54"
PITMAN, W. PINS & CRANKS WEIGHTS-POSITION	ONLY 1 2 3 4 5 6 7 8	3,085 6,680 7,355 8,035 8,700 9,375 10,050 10,725 11,395	2,595 5,370 5,890 6,415 6,935 7,455 7,975 8,495 9,015	2,285 4,545 4,970 5,400 5,820 6,245 6,670 7,095 7,515
MASTER	Weights & (1)	set inner w	eights	
WEIGHTS-POSITION	1 2 3 4 5 6 7 8	7,835 8,715 9,605 10,480 11,360 12,245 12,680 14,010	6,260 6,945 7,630 8,310 8,990 9,670 10,355 11,035	5,275 5,830 6,390 6,940 7,495 8,050 8,610 9,165
MASTER	weights & (2)	sets inner i	WEIGHTS	
WEIGHTS-POSITION	1 2 3 4 5 6 7	8,975 10,065 11,155 12,240 13,325 14,410 15,050 16,590	7,145 7,985 8,830 9,665 10,505 11,345 12,190 13,030	5,990 6,675 7,365 8,045 8,730 9,415 10,100 10,785

AC14L-64-114D

WITH "D" TYPE WEIGHTS LONG STROKE

CRANK WEIGHT COUNTER-BALANCE EFFECT

DESCRIPTION		40"	52"	64 n
PITMAN, W. PIN & CRANKS ONLY		2,615	2,200	1,940
	,			
MASTER WEIGHTS ONLY				. 0 -
WEIGHTS - POSITION	12345678	5,650 6,220 6,785 7,354 7,920 8,490 9,060 9,630	4,545 4,985 5,420 5,860 6,300 6,740 7,180 7,620	3,850 4,205 4,570 4,925 5,285 5,635 5,995 6,355
MASTER WEIGHTS & (1) SET INN	er we	IGHTS		
WEIGHTS - POSITION	12345678	6,625 7,370 8,115 8,860 9,605 10,350 13,145 11,835	5,295 5,870 6,445 7,025 7,600 8,175 8,750 9,325	4,465 4,930 5,405 5,870 6,335 6,805 7,275 7,740
MASTER WEIGHTS & (2) SETS IN	NER W	EIGHTS		
WEIGHTS - POSITION	12345678	7,585 8,505 9,420 10,340 11,260 12,175 13,095 14,015	6,035 6,750 7,460 8,170 8,880 9,590 10,300 11,010	5,070 5,650 6,225 6,805 7,380 7,960 8,549 9,115

AC15-114D WITH STANDARD TYPE WEIGHTS

CRANK WEIGHT COUNTER-BALANCE EFFECT

DESCRIPTION		34**	STROKES 44"	54 ^m
PITMAN, W. PIN & CRANKS ONLY WEIGHTS-POSITION	1 2 3 4 5 6 7 8	3,050 5,383 5,752 6,120 6,489 6,857 7,225 7,594 7,962	2,558 4,361 4,646 4,930 5,215 5,500 5,784 6,069 6,354	2,249 3,718 3,950 4,182 4,414 4,646 4,878 5,110 5,342
MASTER WEIGHT	S AND (1) SET INNER	WEIGHTS	
WEIGHTS-POSITION	1 2 3 4 5 6 7 8	6,340 6,860 7,379 7,899 8,418 8,937 9,457 9,976	5,101 5,502 5,903 6,304 6,706 7,107 7,509 7,910	4,321 4,648 4,975 5,302 5,634 5,956 6,283 6,610
MASTER WEIGHTS	AND (2)	SETS INNER	WEIGHTS:	
WEIGHTS-POSITION	7	7,297 7,968 8,637 9,308 9,978 10,649 11,320 11,990	5,840 6,358 6,875 7,393 7,912 8,430 8,948 9,466	4,923 5,345 5,767 6,189 6,611 7,034 7,456 7,878

ACD15-114D WITH "D" TYPE WEIGHTS

CRANK WEIGHT COUNTER-BALANCE EFFECT

DESCRIPTION PITMAN, W. PINS & CRANKS ONLY WEIGHTS-POSITION	1234567	3,085 6,680 7,355 8,035 8,700 9,375 10,050 10,725	2,595 5,370 5,890 6,415 6,935 7,455 7,975 8,495	54 ⁿ 2,285 4,545 4,970 5,400 5,820 6,245 6,670 7,095 7,515		
	8	11,395	9,015	1,010		
MASTER WEIGHTS & (1) SET INNER WEIGHTS						
WEIGHTS-POSITION	1 2 3 4 5 6 7 8	7,835 8,715 9,605 10,480 11,360 12,245 12,680 14,010	6,260 6,945 7,630 8,310 8,990 9,670 10,355 11,035	5,275 5,830 6,390 6,940 7,495 8,050 8,610 9,165		
MASTER WEIGHTS	& (2)	SETS INNER	WEIGHTS			
WEIGHTS-POSITION	1 2 3 4 5 6 7 8	8,975 10,065 11,155 12,240 13,325 14,410 15,050 16,590	7,145 7,985 8,830 9,665 10,505 11,345 12,190 13,030	5,990 6,675 7,365 8,045 8,730 9,415 10,100 10,785		

ACD16-160D UNITS WITH "D" TYPE WEIGHTS

CRANK WEIGHT COUNTER-BALANCE EFFECT

DESCRIPTION		34 P.	STROKES 44"	54ª
PITMAN, W. PIN & CRANKS ONLY WEIGHTS-POSITION	12345678	3,100 6,695 7,365 8,050 8,715 9,390 10,060 10,735 11,410	2,605 5,385 5,905 6,430 6,945 7,465 7,985 8,510 9,030	2,300 4,560 4,985 5,415 5,835 6,260 6,680 7,105 7,530
MASTER WEIGHTS &	ė (1)	SET INVER W	EIGHTS	
WEIGHTS-POSITION	12345678	7,850 8,730 9,620 10,495 11,375 12,260 13,145 14,025	6,275 6,960 7,645 8,325 9,005 9,685 10,370 11,050	5,290 5,845 6,405 6,955 7,510 8,065 8,620 9,175
MASTER WEIGHTS &	(2)	SETS INNER	weights	
WEIGHTS-POSITION	12345678	8,990 10,075 11,170 12,250 13,340 14,425 15,515 16,605	7,155 8,000 8,845 9,680 10,520 11,360 12,200 13,045	6,005 6,690 7,380 8,060 8,745 9,430 10,115 10,800

AC17-54-114D AC17-54-160D

WITH "D" TYPE WEIGHTS

CRANK WEIGHT COUNTER-BALANCE EFFECT

DESCRIPTION		34"	STROKES 44"	54 ¹¹
PITMAN, W. PIN & CRANKS ONLY WEIGHTS-POSITION	1 2 3 4 5 6 7 8	3,100 6,695 7,365 8,050 8,715 9,390 10,060 10,735 11,410	2,605 5,385 5,905 6,430 6,945 7,465 7,985 8,510 9,030	2,300 4,560 4,985 5,415 5,835 6,260 6,680 7,105 7,530
MASTER WEIGHTS &	ė (l)	SET INNER W	EIGHTS	
WEIGHTS-POSITION	1 2 3 4 5 6 7 8	7,850 8,730 9,620 10,495 11,375 12,260 13,145 14,025	6,275 6,960 7,645 8,325 9,005 9,685 10,370 11,050	5,290 5,845 6,405 6,955 7,510 8,065 8,620 9,175
MASTER WEIGHTS &	½ (2)	SETS INNER	WEIGHTS	
WEIGHTS-POSITION	1 2 3 4 5 6 7 8	8,990 10,075 11,170 12,250 13,340 14,425 15,515 16,605	7,155 8,000 8,845 9,680 10,520 11,360 12,200 13,045	6,005 6,690 7,380 8,060 8,745 9,430 10,115 10,800

ACG17-64-114D ACG17-64-160D WITH "D" TYPE WEIGHTS

CRANK WEIGHT COUNTER-BALANCE EFFECT

DESCRIPTION			34"	STROKES 44"	54"	64 n
PITMANS, W. PINS & WEIGHTS-POSITION	CRANKS ON	LY 1 2 3 4 5 6 7 8 9	4,040 8,930 9,890 10,855 11,815 12,780 13,740 14,705 15,665 16,625	3,345 7,120 7,865 8,610 9,350 10,095 10,840 11,585 12,325 13,070	2,905 5,985 6,590 7,195 7,800 8,405 9,010 9,620 10,225 10,830	2,605 5,200 5,710 6,225 6,735 7,245 7,755 8,270 8,780 9,290
	MASTER W	EIGHTS &	(1) SET IN	NER WEIGHTS		
WEIGHTS-POSITION		1 2 3 4 5 6 7 8 9	10,540 11,830 13,120 14,410 15,700 16,990 18,280 19,570 20,860	8,365 9,365 10,360 11,355 12,355 13,350 14,345 15,345 16,340	7,000 7,810 8,620 9,435 10,245 11,060 11,870 12,680 13,495	6,055 6,740 7,425 8,110 8,800 9,485 10,170 10,855 11,540
	MASTER	WEIGHTS &	(2) SETS I	nner weight:	3	
WEIGHTS-POSITION		1 2 3 4 5 6 7 8 9	12,125 13,735 15,350 16,960 18,575 20,190 21,800 23,410 25,025	9,590 10,835 12,085 13,330 14,575 15,820 17,335 18,315 19,560	7,995 9,010 10,025 11,040 12,055 13,070 14,085 15,100 16,115	6,700 7,755 8,610 9,470 10,325 11,180 12,040 12,895 13,750

ACG17L-74-114D ACG17L-74-160D

LONG STROKE

WITH STANDARD TYPE WEIGHTS

CRANK WEIGHT COUNTER-BALANCE EFFECT

	GHTS ONLY		STROKES		
DESCRIPTION		39"	51"	62"	74"
PITMAN, W. PINS & CRANKS ONLY WEIGHTS-POSITION	123456789	3,463 7,307 7,931 8,505 9,125 9,744 10,364 10,984 11,604 12,224	2,861 5,832 6,314 6,795 7,277 7,758 8,240 8,722 9,204 9,685	2,482 4,902 5,295 5,428 6,080 6,472 6,865 7,257 7,650 8,042	2,221 4,264 4,595 4,926 5,257 5,588 5,920 6,250 6,582 6,913
MASTER WEI	CHTS & (1)	SET INNER	WEIGHTS		
WEIGHTS-POSITION	123456789	8,591 9,423 10,255 11,087 11,917 12,749 13,581 14,413 15,245	6,824 7,467 8,110 8,752 9,394 10,037 10,679 11,322 11,965	5,711 6,234 6,758 7,282 7,805 8,329 8,852 9,377 9,899	4,946 5,388 5,830 6,271 6,712 7,154 7,596 8,038 8,480
MASTER WEI	GHTS & (2)	SETS INNER	WEIGHTS		
WEIGHTS-POSITION	1 2 3 4 5 6 7 8 9	9,875 10,915 11,956 12,995 14,034 15,074 16,113 17,154 18,194	7,816 8,620 9,424 10,226 11,030 11,833 12,636 13,440 14,244	6,519 7,173 7,829 8,483 9,137 9,793 10,447 11,102	5,628 6,180 6,733 7,285 7,837 8,390 8,942 9,494 10,047

AC18-160D & 228D UNITS WITH STANDARD TYPE WEIGHTS

CRANK WEIGHT COUNTER-BALANCE EFFECT

- 1							
	DESCRIPTION			34"	4411	STROKES	64 n
	PITMANS, W. PINS & CRANKS WEIGHTS-POSITION	ONLY	1 2 3 4 5 6 7 8 9	4,004 8,448 9,169 9,890 10,611 11,330 12,051 12,772 13,493 14,214	3,308 6,742 7,299 7,856 8,413 8,969 9,526 10,083 10,640 11,197	2,869 5,667 6,121 6,575 7,029 7,482 7,936 8,390 8,844 9,297	2,568 4,929 5,312 5,695 6,078 6,460 6,843 7,226 7,609 7,992
		MASTER WE	IGHTS	& (1) SET	innar Weich	TS	
in the second	EIGHTS-POSITION		123456789	9,932 10,894 11,856 12,817 13,777 14,739 15,700 16,662 17,624	7,889 8,632 9,376 10,118 10,860 11,603 12,346 13,089 13,832	6,602 7,207 7,813 8,418 9,023 9,629 10,234 10,840 11,444	5,718 6,229 6,740 7,250 7,760 8,271 8,782 9,293 9,804
	MA.	STER WEIG	& RTH	(2) SETS I	NER METCHT	S	
WE	EIGHTS-POSITION		2 3 5 5 5 5 6 5 7 3 3	11,416 12,619 13,822 15,023 16,224 17,427 8,628 9,831 1,034	9,036 9,965 10,895 11,822 12,751 13,680 14,608 15,537 16,467	7,536 8,293 9,051 9,807 10,563 11,321 12,077 12,835 13,591	6,506 7,145 7,784 8,422 9,060 9,699 10,337 10,976 11,615

ACD18-160D & 228D UNITS WITH "D" TYPE WEIGHTS

CRANK WEIGHT COUNTER-BALANCE EFFECT

DESCRIPTION 34" 44" 54" 64" PITMANS, W. PINS & CRANKS ONLY 1 8,930 7,120 5,985 5,200 2 9,890 7,865 6,590 5,710 3 10,855 8,610 7,195 6,225 4 11,815 9,350 7,800 6,735 5 12,780 10,095 8,405 7,245 6 13,740 10,840 9,010 7,755 7 14,705 11,585 9,620 8,270 8 15,665 12,325 10,225 8,780 9 16,625 13,070 10,830 9,290 MASTER WEIGHTS & (1) SET INNER WEIGHTS WEIGHTS-POSITION 1 10,540 8,365 7,000 6,055 2 11,830 9,365 7,810 6,740 3 13,120 10,360 8,620 7,425 4 14,410 11,355 9,435 8,110 5 15,700 12,355 10,245 8,800 6 16,990 13,350 11,060 9,485 7 18,280 14,345 11,870 10,170 8 19,570 15,345 12,680 10,855 9 20,860 16,340 13,495 11,540
WEIGHTS-POSITION 1 8,930 7,120 5,985 5,200 2 9,890 7,865 6,590 5,710 3 10,855 8,610 7,195 6,225 4 11,815 9,350 7,800 6,735 5 12,780 10,095 8,405 7,245 6 13,740 10,840 9,010 7,755 7 14,705 11,585 9,620 8,270 8 15,665 12,325 10,225 8,780 9 16,625 13,070 10,830 9,290 MASTER WEIGHTS & (1) SET INNER WEIGHTS WEIGHTS-POSITION 1 10,540 8,365 7,000 6,055 2 11,830 9,365 7,810 6,740 3 13,120 10,360 8,620 7,425 4 14,410 11,355 9,435 8,110 5 15,700 12,355 10,245 8,800 6 16,990 13,350 11,060 9,485 7 18,280 14,345 11,870 10,170 8 19,570 15,345 12,680 10,855
Page 12
7 14,705 11,585 9,620 8,270 8 15,665 12,325 10,225 8,780 9 16,625 13,070 10,830 9,290 MASTER WEIGHTS & (1) SET INNER WEIGHTS WEIGHTS-POSITION 1 10,540 8,365 7,000 6,055 2 11,830 9,365 7,810 6,740 3 13,120 10,360 8,620 7,425 4 14,410 11,355 9,435 8,110 5 15,700 12,355 10,245 8,800 6 16,990 13,350 11,060 9,485 7 18,280 14,345 11,870 10,170 8 19,570 15,345 12,680 10,855
7 14,705 11,585 9,620 8,270 8 15,665 12,325 10,225 8,780 9 16,625 13,070 10,830 9,290 MASTER WEIGHTS & (1) SET INNER WEIGHTS WEIGHTS-POSITION 1 10,540 8,365 7,000 6,055 2 11,830 9,365 7,810 6,740 3 13,120 10,360 8,620 7,425 4 14,410 11,355 9,435 8,110 5 15,700 12,355 10,245 8,800 6 16,990 13,350 11,060 9,485 7 18,280 14,345 11,870 10,170 8 19,570 15,345 12,680 10,855
7 14,705 11,585 9,620 8,270 8 15,665 12,325 10,225 8,780 9 16,625 13,070 10,830 9,290 MASTER WEIGHTS & (1) SET INNER WEIGHTS WEIGHTS-POSITION 1 10,540 8,365 7,000 6,055 2 11,830 9,365 7,810 6,740 3 13,120 10,360 8,620 7,425 4 14,410 11,355 9,435 8,110 5 15,700 12,355 10,245 8,800 6 16,990 13,350 11,060 9,485 7 18,280 14,345 11,870 10,170 8 19,570 15,345 12,680 10,855
8 15,665 12,325 10,225 8,780 9 16,625 13,070 10,830 9,290 MASTER WEIGHTS & (1) SET INNER WEIGHTS WEIGHTS-POSITION 1 10,540 8,365 7,000 6,055 2 11,830 9,365 7,810 6,740 3 13,120 10,360 8,620 7,425 4 14,410 11,355 9,435 8,110 5 15,700 12,355 10,245 8,800 6 16,990 13,350 11,060 9,485 7 18,280 14,345 11,870 10,170 8 19,570 15,345 12,680 10,855
MASTER WEIGHTS & (1) SET INNER WEIGHTS WEIGHTS-POSITION 1 10,540 8,365 7,000 6,055 2 11,830 9,365 7,810 6,740 3 13,120 10,360 8,620 7,425 4 14,410 11,355 9,435 8,110 5 15,700 12,355 10,245 8,800 6 16,990 13,350 11,060 9,485 7 18,280 14,345 11,870 10,170 8 19,570 15,345 12,680 10,855
WEIGHTS-POSITION 1 10,540 8,365 7,000 6,055 2 11,830 9,365 7,810 6,740 3 13,120 10,360 8,620 7,425 4 14,410 11,355 9,435 8,110 5 15,700 12,355 10,245 8,800 6 16,990 13,350 11,060 9,485 7 18,280 14,345 11,870 10,170 8 19,570 15,345 12,680 10,855
WEIGHTS-POSITION 1 10,540 8,365 7,000 6,055 2 11,830 9,365 7,810 6,740 3 13,120 10,360 8,620 7,425 4 14,410 11,355 9,435 8,110 5 15,700 12,355 10,245 8,800 6 16,990 13,350 11,060 9,485 7 18,280 14,345 11,870 10,170 8 19,570 15,345 12,680 10,855
2 11,830 9,365 7,810 6,740 3 13,120 10,360 8,620 7,425 4 14,410 11,355 9,435 8,110 5 15,700 12,355 10,245 8,800 6 16,990 13,350 11,060 9,485 7 18,280 14,345 11,870 10,170 8 19,570 15,345 12,680 10,855
2 11,830 9,365 7,810 6,740 3 13,120 10,360 8,620 7,425 4 14,410 11,355 9,435 8,110 5 15,700 12,355 10,245 8,800 6 16,990 13,350 11,060 9,485 7 18,280 14,345 11,870 10,170 8 19,570 15,345 12,680 10,855
8 19,570 15,345 12,680 10,855
8 19,570 15,345 12,680 10,855
8 19,570 15,345 12,680 10,855
MASTER WEIGHTS & (2) SETS INNER WEIGHTS
WEIGHTS-POSITION 1 12,125 9,590 7,995 6,700
2 13,735 10,835 9,010 7,755 3 15,350 12,085 10,025 8,610
4 16,960 13,330 11,040 9,470
6 20,190 15,820 13,070 11,180
7 21,800 17,335 14,085 12,040 8 23,410 18,315 15,100 12,895
9 25,025 19,560 16,115 13,750

AC20-64-160D AC20-64-228D WITH "D" TYPE WEIGHTS

CRANK WEIGHT COUNTER-BALANCE EFFECT

DOG OD TIMITON		34"	STROKES	54 ⁿ	64 n
DESCRIPTION PITMANS, W. PINS & CRANKS ONLY WEIGHTS-POSITION	123456789	4,040 8,930 9,890 10,855 11,815 12,780 13,740 14,705 15,665 16,625	3,345 7,120 7,865 8,610 9,350 10,095 10,840 11,585 12,325 13,670	2,905 5,985 6,590 7,195 7,800 8,405 9,010 9,620 10,225 10,830	2,605 5,200 5,710 6,225 6,735 7,245 7,755 8,270 8,780 9,290
MASTER WEIGH	ITS &	(1) SET INN	er weights		
WEIGHTS-POSITION	1 2 3 4 5 6 7 8 9	10,540 11,830 13,120 14,410 15,700 16,990 18,280 19,570 20,860	8,365 9,365 10,360 11,355 12,355 13,350 14,345 15,345 16,340	7,000 7,810 8,620 9,435 10,245 11,060 11,870 12,680 13,495	6,055 6,740 7,425 8,110 8,800 9,485 10,170 10,855 11,540
MASTER WEIG	HTS 8	& (2) SETS I	NNER WEIGHT	S	
WEIGHTS-POSITION	123456789	12,125 13,735 15,350 16,960 18,575 20,190 21,800 23,410 25,025	9,590 10,835 12,085 13,330 14,575 15,820 17,335 18,315 19,560	7,995 9,010 10,025 11,040 12,055 13,070 14,085 15,100 16,115	6,700 7,755 8,610 9,470 10,325 11,180 12,040 12,895 13,750

AC20-74-160D AC20-74-228D

WITH "D" TYPE WEIGHTS

CRANK WEIGHT COUNTER-BALANCE EFFECT

DESCRIPTION	34"	44 n	STROKES 54"	6411	74"
PITMAN, W. PINS & CRANKS ONLY WEIGHTS-POSITION 1 2 3 4 5 6 7 8 9 10 11	5,025	4,085	3,495	3,085	2,790
	11,795	9,315	7,755	6,685	5,900
	12,990	10,240	8,510	7,320	6,450
	14,185	11,165	9,260	7,955	7,000
	15,380	12,085	10,015	8,585	7,545
	16,555	13,010	10,765	9,225	8,095
	17,770	13,935	11,520	9,860	8,645
	18,965	14,860	12,270	10,495	9,195
	20,160	15,780	13,025	11,130	9,745
	21,355	16,705	13,775	11,765	10,295
	22,550	17,630	14,530	12,395	10,840
	23,350	18,245	15,030	12,820	11,210
MASTER WEIGH	ITS & (1)	SET INNER WE	IGHTS		
WEIGHTS-POSITION 1 2 3 4 5 6 7 8 9 10 11	13,765	10,840	8,995	7,730	6,805
	15,315	12,035	9,975	8,555	7,515
	16,865	13,235	10,950	9,375	8,230
	18,410	14,425	11,920	10,195	8,940
	19,940	15,625	12,895	11,020	9,650
	21,505	16,820	13,870	11,840	10,360
	23,055	18,015	14,845	12,665	11,075
	24,600	19,210	15,820	13,485	11,785
	26,150	20,410	16,795	14,310	12,495
	27,700	21,605	17,770	15,130	13,205
	28,730	22,400	18,420	15,680	13,680
MASTER WEIGH	TS & (2)	SETS INNER W	EIGHTS		
TEIGHTS-POSITION 1 2 3 4 5 6 7 8 8 9 10	15,700	12,335	10,215	8,755	7,695
	17,595	13,800	11,410	9,765	8,565
	19,490	15,265	12,600	10,770	9,435
	21,385	16,725	13,790	11,775	10,305
	23,260	18,190	14,990	12,785	11,175
	25,175	19,655	16,180	13,790	12,045
	27,070	21,120	17,375	14,800	12,920
	28,965	22,580	18,565	15,805	13,790
	30,855	24,045	19,760	16,810	14,660
	32,750	25,510	20,950	17,815	15,530

AC21-160D & 228D UNITS WITH STANDARD TYPE WEIGHTS

CRANK WEIGHT COUNTER-BALANCE EFFECT

DESCRIPTION		34 n	44 n.	STROKES 54"	6418.	74**
FTTMAN, W. PINS & CRANKS ONLY WEIGHTS-POSITION	1 2 3 4 5 6 7 8 9 10 11	4,928 10,097 10,811 11,540 12,256 12,972 13,699 14,415 15,138 15,858 16,579 17,060	3,988 7,982 8,534 9,097 9,651 10,204 10,766 11,319 11,877 12,434 12,991 13,362	3,397 6,652 7,101 7,560 8,011 8,462 8,920 9,370 9,825 10,279 10,733 11,035	2,990 5,736 6,115 6,503 6,883 7,264 7,650 8,030 8,414 8,797 9,179 9,435	2,693 5,068 5,396 5,731 6,060 6,389 6,723 7,052 7,384 7,715 8,046 8,267
M	ASTER WE	IGHTS & (1)	SET INNER	EIGHTS		
WEIGHTS-POSITION	1 2 3 4 5 6 7 8 9 10 11	11,823 12,777 13,748 14,704 15,658 16,629 17,583 18,548 19,508 20,471 21,112	9,316 10,053 10,803 11,542 12,280 13,030 13,767 14,512 15,255 15,998 16,493	7,739 8,339 8,950 9,552 10,153 10,765 11,365 11,972 12,577 13,683 13,586	6,653 7,159 7,676 8,183 8,691 9,207 9,713 10,226 10,736 11,247 11,588	5,861 6,299 6,746 7,185 7,623 8,069 8,508 8,951 9,392 9,834 10,129
MAS	TER WEI	HTS & (2)	SETS INNER	WEIGHTS		
WEIGHTS-POSITION	1234567890	13,549 14,742 15,956 17,151 18,344 19,558 20,751 21,957 23,158	10,649 11,571 12,509 13,433 14,355 15,293 16,215 17,146 18,075	8,825 9,576 10,340 11,093 11,844 12,609 13,359 14,118 14,875	7,570 8,203 8,849 9,483 10,118 10,763 11,396 12,037 12,675	6,654 7,202 7,760 8,309 8,857 9,415 9,963 10,517 11,069

ACD21-160D & 228D UNITS WITH "D" TYPE WEIGHTS

CRANK WEIGHT COUNTER-BALANCE EFFECT

	DESCRIPTION	34,11	44.11	STROKES 54 R	64#	74n
	PITMAN, W. PINS & CRANKS ONLY WEIGHTS-POSITION 1 2 3 4 5 6 7 8 9 10	4,965 11,735 12,930 14,125 15,320 16,515 17,710 18,905 20,100 21,295 22,490 23,285	4,025 9,255 10,180 11,105 12,025 12,950 13,875 14,795 15,720 16,645 17,565 18,180	3,430 7,695 8,450 9,200 9,950 10,705 11,460 12,210 12,965 13,715 14,470 14,970	3,025 6,620 7,255 7,895 8,525 9,160 9,795 10,430 11,065 11,700 12,335 12,760	2,730 5,840 6,390 6,940 7,485 8,035 8,585 9,135 9,685 10,230 10,780 11,145
	MASTER WE	IGHTS & (1)	SET INNER	EIGHTS		
Ĭa	EIGHTS-POSITION 1 2 3 4 5 6 7 8 9 10 11 MASTER WEIG	13,705 15,255 16,805 18,350 19,900 21,445 23,990 24,540 26,090 27,635 28,670	10,775 11,975 13,170 14,365 15,565 16,760 17,955 19,150 20,350 21,545 22,340	8,935 9,910 10,885 11,860 12,835 13,810 14,785 15,760 16,735 17,710 18,360	7,670 8,490 9,315 10,135 10,960 11,780 12,605 13,425 14,250 15,070 15,620	6,745 7,455 8,170 8,880 9,590 10,300 11,010 11,725 12,435 13,145 13,620
V E	IGHTS-POSTTTON			ETGHIS		
	1 2 3 4 5 6 7 8 9 10	15,640 17,535 19,430 21,320 23,220 25,115 27,010 28,900 30,795 32,690 33,955	12,270 13,735 15,200 16,665 18,130 19,595 21,060 22,520 23,985 25,450 26,425	10,155 11,350 12,540 13,730 14,925 16,120 17,315 18,505 19,695 20,890 21,685	8,695 9,705 10,710 11,715 12,725 13,730 14,735 15,745 16,750 17,755 18,425	7,635 8,505 9,375 10,245 11,115 11,985 12,855 13,725 14,595 15,470 16,050

AC21-320D UNITS WITH STANDARD TYPE WEIGHTS

CRANK WEIGHT COUNTER-BALANCE EFFECT

DESCRIPTION		34 R	44,18	STROKES 54"	64.	74 "
PITMAN, W. PINS & CRANKS ONLY WIGHTS-POSITION	1 2 3 4 5 6 7 8 9 10	4,989 11,101 11,954 12,805 13,658 14,511 15,364 16,215 17,068 17,922 18,775	4,049 8,772 9,431 10,088 10,748 11,407 12,066 12,724 13,383 14,042 14,702	3,458 7,306 7,843 8,379 8,916 9,453 9,991 10,526 11,064 11,601 12,138	3,051 6,298 6,751 7,203 7,656 3,110 8,563 9,015 9,468 9,921 10,375	2,754 5,562 5,954 6,345 6,737 7,129 7,521 7,912 8,304 8,696 9,088
MAST	er we	CHTS & (1)	SET INNER	WEIGHTS		
WEIGHTS-POSITION	1 2 3 4 5 6 7 8 9 10	13,313 14,474 15,634 16,795 17,956 19,118 20,277 21,439 22,201 23,763	10,481 11,378 12,374 13,172 14,069 14,967 15,863 16,760 17,657 18,556	8,699 9,474 10,160 10,891 11,622 12,354 13,083 13,816 14,547 15,278	7,473 8,090 8,706 9,322 9,940 10,557 11,173 11,790 12,407 13,025	6,578 7,112 7,645 8,178 8,712 9,246 9,778 10,312 10,846 11,380
MASTER	WEIG	HTS AND (2)	SETS INNER	WEIGHTS		
	1234567890	15,524 16,993 18,462 19,931 21,400 22,871 24,338 25,809 27,279	12,189 13,324 14,459 15,595 16,730 17,867 19,001 20,137 21,272	10,091 11,105 11,941 12,865 13,790 14,717 15,640 16,567 17,492	8,648 9,428 10,208 10,988 11,770 12,551 13,330 14,112 14,892	7,594 8,269 8,944 9,619 10,294 10,970 11,644 12,320 12,995

ACD21-320D UNITS WITH "D" TYPE WEIGHTS

CRANK WEIGHT COUNTER-BALANCE EFFECT

	DESCRIPTION	34"	44 M	STROKES 54"	6411.	74 ⁿ
J'II WE	TMAN, W. PINS & CRANKS ONLY IGHTS-POSITION 2 3 4 5 6 7 8 9 10	5,025 11,795 12,990 14,185 15,380 16,555 17,770 18,965 20,160 21,355 22,550 23,350	4,085 9,315 10,240 11,165 12,085 13,010 13,935 14,860 15,780 16,705 17,630 18,245	3,495 7,755 8,510 9,260 10,015 10,765 11,520 12,270 13,025 13,775 14,530 15,030	3,085 6,685 7,320 7,955 8,585 9,225 9,860 10,495 11,130 11,765 12,395 12,820	2,790 5,900 6,450 7,000 7,545 8,095 8,645 9,195 9,745 10,295 10,840 11,210
	MASTER WE	IGHTS & (1)	SET INNER W	EIGHTS		
dT.	EIGHTS-POSITION 1 2 3 4 5 6 7 8 9 10	13,765 15,315 16,865 18,410 19,940 21,505 23,055 24,600 26,150 27,700 28,730	10,840 12,035 13,235 14,425 15,625 16,820 18,015 19,210 20,410 21,605 22,400	8,995 9,975 10,950 11,920 12,895 13,870 14,845 15,820 16,795 17,770 18,420	7,730 8,555 9,375 10,195 11,020 11,840 12,665 13,485 14,310 15,130 15,680	6,805 7,515 8,230 8,940 9,650 10,360 11,075 11,785 12,495 13,205 13,680
	MASTER WE	CICHTS & (2)	SETS INNER	WEIGHTS		
W	EIGHTS-POSITION 1 2 3 4 5 6 7 8 9 10	28,965 30,855 32,750	12,335 13,800 15,265 16,725 18,190 19,655 21,120 22,580 24,045 25,510 26,485	10,215 11,410 12,600 13,790 14,990 16,180 17,375 18,565 19,760 20,950 21,745	8,755 9,765 10,770 11,775 12,785 13,790 14,800 15,805 16,810 17,815 18,485	7,695 8,565 9,435 10,305 11,175 12,045 12,920 13,790 14,660 15,530 16,110

AC23-74-228D AC23-74-320D

WITH "D" TYPE WEIGHTS

CRANK WEIGHT COUNTER-BALANCE EFFECT

DESCRIPTION		34 ⁿ	44,11	STROKES 54"	6411	74 ¹¹
PITMAN, W. PINS & CRANKS WEIGHTS-POSITION	1 2 3 4 5 6 7 8 9 10	5,025 11,795 12,990 14,185 15,380 16,555 17,770 18,965 20,160 21,355 22,550 23,350	4,085 9,315 10,240 11,165 12,085 13,010 13,935 14,860 15,780 16,705 17,630 18,245	3,495 7,755 8,510 9,260 10,015 10,765 11,520 12,270 13,025 13,775 14,530 15,030	3,085 6,685 7,320 7,955 8,585 9,225 9,860 10,495 11,130 11,765 12,395 12,820	2,790 5,900 6,450 7,000 7,545 8,095 8,645 9,195 9,745 10,295 10,840 11,210
	MASTER WEIG	HTS & (1)	SET INNER WE	EIGHTS		
VEIGHTS-POSITION	1 2 3 4 5 6 7 8 9 10	13,765 15,315 16,865 18,410 19,940 21,505 23,055 24,600 26,150 27,700 28,730	10,840 12,035 13,235 14,425 15,625 16,820 18,015 19,210 20,410 21,605 22,400	8,995 9,975 10,950 11,920 12,895 13,870 14,845 15,820 16,795 17,770 18,420	7,730 8,555 9,375 10,195 11,020 11,840 12,665 13,485 14,310 15,130 15,680	6,805 7,515 8,230 8,940 9,650 10,360 11,075 11,785 12,495 13,205 13,680
	MASTER WEIG	HTS & (2)	sets inner w	EIGHTS		
WEIGHTS-POSITION	1 2 3 4 5 6 7 8 9 10 11	15,700 17,595 19,490 21,385 23,260 25,175 27,070 28,965 30,855 32,750 34,015	12,335 13,800 15,265 16,725 18,190 19,655 21,120 22,580 24,045 25,510 26,485	10,215 11,410 12,600 13,790 14,990 16,180 17,375 18,565 19,760 20,950 21,745	8,755 9,765 10,770 11,775 12,785 13,790 14,800 15,805 16,810 17,815 18,485	7,695 8,565 9,435 10,305 11,175 12,045 12,920 13,790 14,660 15,530 16,110

ACG23-86-228D ACG23-86-320D WITH "D" TYPE WEIGHTS

CRANK WEIGHT COUNTER-BALANCE EFFECT

			STR	OKES	
DESCRIPTION		51"	63"	75"	86"
		21			
		4 405	4,000	3,640	3, 365
PITMAN, W. PINS & CRANKS ONLY	,	4, 495	9,605	8, 485	7,635
WEIGHTS-POSITION	1	11, 140	10, 370	9,145	8,215
	2	12,045	11, 135	9,810	8,800
	3	12,950	11,900	10,470	9,380
	4	13, 855	12,660	11,130	9,960
	5	14,760		11,790	10, 545
	6	15,665	13, 425	12,450	11,125
	7	16, 575	14, 190	13, 115	
	8	17,480	14, 955	13, 775	12, 290
	9	18, 385	15,720	14, 435	12,875
	10	19,290	16, 485	15, 095	13, 455
	11	20, 195	17, 250	15, 095	15, 150
				CIITC	
MASTER WEIGH	TS A	ND (1) SET	INNER WEI	GHIS	
					8,995
WEIGHTS-POSITION	1	13, 255	11, 395	10,030	9,765
	2	14,450	12, 400	10,905	10,530
	3	15,645	13,410	11,775	
	4	16,840	14, 415	12,645	
	5	18,035		13, 520	12, 835
	6	19,230	16,430	14, 390	13,605
	7	20,425	17,440	15, 265	
	8	21,620	18,450	16, 135	14, 370
	9		19,455	17,005	15, 140
	10		20, 465	17,880	15, 905
	11	25, 205	21,475	18,750	16,675
MASTER WEIGH	TS A	ND (2) SET	S INNER WE	IGHTS	
WAS THE WAS					
ANICHE DOCUTION	1	15, 345	13, 155	11,555	10, 340
IGHTS-POSITION	2		14, 405	12,635	11, 290
	3	18, 305	15,655	13,715	12, 240
	4	19,785	16,900	14,795	13, 190
	5	21, 265	18, 150	15,875	14, 140
	6	22,740	19, 395	16,955	15,095
	7	24, 225	20,645	18,035	16,045
	0	25 705	21 995	19.115	16, 995

AC25-228D & 320D UNITS WITH STANDARD TYPE WEIGHTS

CRANK WEIGHT COUNTER-BALANCE EFFECT

		SI	ROKES		
DESCRIPTION	4411.	54"	6419	74 ⁿ	84n.
	5,294 1 11,115 2 11,773 3 12,432 4 13,090 5 13,749 6 14,408 7 15,066 8 15,727 9 16,385 0 17,044 1 17,703	4,506 9,249 9,785 10,322 10,859 11,395 11,932 12,469 13,007 13,543 14,080 14,617	3,964 7,966 8,419 8,871 9,324 9,777 10,230 10,683 11,137 11,590 12,042 12,495	3,568 7,029 7,420 7,812 8,203 8,595 8,986 9,378 9,771 10,162 10,554 10,946	3,267 6,316 6,661 7,006 7,351 7,696 8,041 8,386 8,732 9,077 9,422 9,767
MASTER	WEIGHTS & (1) SET INNER	WEIGHTS		
		10,965 11,695 12,426 13,158 13,888 14,619 15,350 16,182 16,813 17,544 18,275	9,414 10,030 10,646 11,263 11,881 12,497 13,114 13,732 14,349 14,970 15,582	8,281 8,813 9,347 9,880 10,414 10,946 11,480 12,015 12,548 13,081 13,615	7,419 7,889 8,359 8,829 9,299 9,768 10,238 10,709 11,179 11,649 12,119
MASTER	WEIGHTS & (2)	SETS INNER	WEIGHTS		
	0 25,545	12,680 13,604 14,530 15,456 16,380 17,305 18,231 19,157 20,082 21,007 21,933	10,861 11,641 12,421 13,202 13,984 14,763 15,545 16,327 17,108 17,887 18,668	9,533 10,206 10,882 11,557 12,233 12,906 13,582 14,259 14,934 15,608 16,284	8,522 9,116 9,711 10,306 10,901 11,495 12,090 12,686 13,281 13,875 14,470

ACD25-228D UNITS WITH "D" TYPE WEIGHTS

CRANK WEIGHT COUNTER-BALANCE EFFECT

-					STROKES		
1	DESCRIPTION		44,00	54"	644.	74**	84**
	TMAN, W. PINS & CRANKS RIGHTS-POSITION	ONLY 1 2 3 4 5 6 7 8 9 10 11	5,155 13,310 14,420 15,535 16,645 17,755 18,865 19,980 21,090 22,200 23,315 24,425	4,435 11,075 11,985 12,890 13,795 14,700 15,605 16,510 17,420 18,325 19,230 20,135	3,940 9,545 10,310 11,075 11,835 12,600 13,365 14,130 14,895 15,660 16,425 17,185	3,580 8,425 9,085 9,745 10,410 11,070 11,730 12,390 13,050 13,710 14,375 15,035	3,300 7,570 8,155 8,735 9,320 9,900 10,485 11,065 11,650 12,230 12,815 13,395
		MASTER WEIGH	HTS & (1) S	SET INNER WE	IGHTS		
10	rights-position	1 2 3 4 5 6 7 8 9 10 11	15,910 17,375 18,840 20,310 21,775 23,240 24,705 26,170 27,640 29,105 30,570	13,195 14,390 15,585 16,780 17,975 19,165 20,365 21,560 22,755 23,950 25,140	11,330 12,340 13,350 14,355 15,365 16,370 17,380 18,390 19,395 20,400 21,410	9,970 10,845 11,715 12,585 13,460 14,330 15,200 16,075 16,945 17,815 18,690	8,935 9,700 10,470 11,240 12,005 12,775 13,540 14,310 15,080 15,845 16,615
١		MASTER WEI	GHTS & (2)	SETS INNER	WEIGHTS		
III	RIGHTS—POSITION	1 2 3 4 5 6 7 8 9 10 11	18,475 20,290 22,105 23,920 25,735 27,550 29,370 31,185 33,000 34,815 36,630	15,285 16,765 18,245 19,725 21,200 22,680 24,160 25,640 27,120 28,600 30,080	13,095 14,345 15,590 16,840 18,085 19,335 20,585 21,835 23,080 24,330 25,580	11,495 12,575 13,655 14,735 15,815 16,895 17,975 19,055 20,130 21,215 22,295	10,275 11,230 12,180 13,130 14,080 15,030 15,985 16,935 17,885 18,840 19,790

ACD25-320D UNITS WITH "D" TYPE WEIGHTS

CRANK WEIGHT COUNTER-BALANCE EFFECT

	DESCRIPTION		44,14	54 [#]	STROKES 64"	74 ^{nt}	84"
PII	MAN, W. PINS & CRANKS ONLY CHTS-POSITION	1 2 3 4 5 6 7 8 9 10 11	5,220 13,370 14,480 15,595 16,705 17,815 18,925 20,040 21,150 22,260 23,375 24,485	4,495 11,140 12,045 12,950 13,855 14,760 15,665 16,575 17,480 18,385 19,290 20,195	4,000 9,605 10,370 11,135 11,900 12,660 13,425 14,190 14,955 15,720 16,485 17,250	3,640 8,485 9,145 9,810 10,470 11,130 11,790 12,450 13,115 13,775 14,435 15,095	3,365 7,635 8,215 8,800 9,380 9,960 10,545 11,125 11,710 12,290 12,875 13,455
	MAST	er wei	GHTS & (1)	SET INNER WI	EIGHTS		
TATE À	IGHTS-POSITION	1234567891011	15,970 17,435 18,900 20,370 21,835 23,300 24,765 26,235 27,700 29,165 30,630	13,255 14,450 15,645 16,840 18,035 19,230 20,425 21,620 22,815 24,010 25,205	11,395 12,400 13,410 14,415 15,425 16,430 17,440 18,450 19,455 20,465 21,475	10,030 10,905 11,775 12,645 13,520 14,390 15,265 16,135 17,005 17,880 18,750	8,995 9,765 10,530 11,300 12,065 12,835 13,605 14,370 15,140 15,905 16,675
Ш	MAST	er wei	GHTS & (2)	SETS INNER	WEIGHTS		
WE	GHTS-POSITION	1 2 3 4 5 6 7 8 9 10 11	18,535 20,350 22,165 23,980 25,795 27,610 29,430 31,245 33,060 34,875 36,695	15,345 16,825 18,305 19,785 21,265 22,740 24,225 25,705 27,180 28,665 30,140	13,155 14,405 15,655 16,900 18,150 19,395 20,645 21,895 23,145 24,390 25,640	11,555 12,635 13,715 14,795 15,875 16,955 18,035 19,115 20,195 21,275 22,355	10,340 11,290 12,240 13,190 14,140 15,095 16,045 16,995 17,945 18,900 19,850

B3-16-6.4D B3-16- 10D UNITS

COUNTERBALANCE EFFECT OF BEAM WEIGHTS

		EFFECTIVE	
SETS OF	TOTAL WEIGHT	COUNTERBALANCE	TOTAL EFFECTIVE
WEIGHTS	OF COUNTER WEIGHTS	OF EACH SET	COUNTERBALANCE
0	Wt. of Beam, Pitman, Ev	vener, Cranks	82
1	190	388	470
2	380	369	839
3	570	350	1189
4	760	331	1520
5	950	313	1833
6	1140	294	2127
	COUNTERBALANCE EFF	ECT OF CRANK WEIGH	HTS
LENGTH OF			
STROKE	811	12"	16"
2-IT312			
CRANK WE	IGHTS 543	411	338

B3L-24-6.4D STROKES B3L-24-10 D Long Stroke

EFFECTIVE

COUNTERBALANCE EFFECT OF BEAM WEIGHTS

SETS OF WEIGHTS		COUNTERBALANCE OF EACH SET	TOTAL EFFECTIVE COUNTERBALANCE
0	Wt. of Beam, Pitman, E	vener, Cranks	55
1	250	260	315
2.	500	247	562
3	750	234	796
4	1000	222	1018
5	1250	210	1228
6	1500	197	1425
	COUNTERBALANCE EFF	FECT OF CRANK WEIGH	ITS
LENGTH OF			
STROKE	12"	16"	24"
2 - IT312 CRANK WEI	GHTS 362	274	225

B4-20-10D B4-20-16D

COUNTER-BALANCE EFFECT OF BEAM WEIGHTS

SETS OF	TOTAL WEIGHT OF COUNTERWEIG	EFFECTIVE COUNTER-BALANCE OF EACH SET	TOTAL EFFECTIVE COUNTER-BALANCE
WEIGHTS		itman, Evener, Cranks	130
0		426	556
1	190	01	966
2	380	394	1360
3	570		1738
4	760	378	2100
5	950	362	
6	סיורנ	346	2146
	COUNTER	-BALANCE EFFECT OF CRANK WEIGHTS	
LENGTH OF STROKE	12"	16"	20"
RANK WEIGHTS	571	407	313

B4L-30-10D UNITS B4L-30-16D UNITS LONG STROKE

COUNTERBALANCE EFFECT OF BEAM WEIGHTS

	00011121121		
SETS OF WEIGHTS	TOTAL WEIGHT OF COUNTER WEIGHTS	EFFECTIVE COUNTERBALANCE OF EACH SET	TOTAL EFFECTIVE COUNTERBALANCE
0	Wt. of Beam, Evener, Pi	tman, etc.	85
1	190	286	371
2	380	275	646
3	570	264	910
4	760	254	1164
5	950	243	1407
6	1140	232	1639
	COUNTERBALANCE EF	FECT OF CRANK WEIG	HTS

LENGTH OF STROKE	18"	24**	30"
2 - IT312	381	271	210

B5-25-16D B5-25-25D

COUNTER-BALANCE EFFECT OF BEAM WEIGHTS

SETS OF WEIGHTS	TOTAL WEIGHT OF COUNTERWEIGHTS	EFFECTIVE COUNTER-BALANCE OF EACH SET	TOTAL EFFECTIVE COUNTER-BALANCE
0	Wt. of Beam, Pitman, E	vener, Cranks	282
1	250	475	757
2	500	460	1217
3	750	440	1657
4	1000	425	2082
5	1250	405	2487
6	1500	390	2877
7	1750	370	3247
8	2000	355	3602
9	2250	335	3937
10	2500	320	4257

COUNTER-BALANCE EFFECT OF CRANK WEIGHTS

LENGTH OF		
STROKE	20"	25"
2 - IT312		
CRANK WEIGHTS	456	365

B5L-30-16D B5L-30-25D

LONG STROKE

COUNTER-BALANCE EFFECT OF BEAM WEIGHTS

SETS OF WEIGHTS	TOTAL WEIGHT OF COUNTERWEIGHTS	EFFECTIVE COUNTER-BALANCE OF EACH SET	TOTAL EFFECTIVE COUNTER-BALANCE
0	Wt. of Beam, Pitman, Ev	vener, Cranks	235
1	250	396	631
2	500	383	1014
3	750	367	1381
4	1000	354	1735
5	1250	337	2072
6	1500	325	2397
7	1750	308	2705
8	2000	296	3001
9	2250	279	3280
10	2500	267	3547

COUNTER-BALANCE EFFECT OF CRANK WEIGHTS

LENGTH OF STROKE	24"	30"
2-IT312 CRANK WEIGHTS	380	305

B7-30-25D B7-30-40D

COUNTER-BALANCE EFFECT OF BEAM WEIGHTS

SETS OF WEIGHTS	TOTAL WEIGHT OF COUNTERWEIGHTS	EFFECTIVE COUNTER-BALANCE OF EACH SET	TOTAL EFFECTIVE COUNTER-BALANCE
0	Wt. of Beam, Pitman,	Evener, Cranks	400
1	250	535	935
2	500	520	1455
3	750	510	1965
4	1000	495	2460
5	1250	480	2940
6	1500	465	3405
7	1750	450	3855
8	2000	11/10	4295
9	2250	425	4720
10	2500	410	5130
n	2750	395	5525
12	3000	385	5910
	COUNTER-BALANC	E EFFECT OF CRANK WEIGHTS	
LENGTH OF STROKE	18*	21µ10	30°
2 - IT812 CRANK WEIGHTS	1390	1040	835

B7L-36-25D B7L-36-40D

LONG STROKE

COUNTER-BALANCE EFFECT OF BEAM WEIGHTS

SETS OF WEIGHTS	TOTAL WEIGHT OF COUNTERWEIGHTS	EFFECTIVE COUNTER-BALANCE OF EACH SET	TOTAL EFFECTIVE COUNTER-BALANCE		
0	Wt. of Beam, Pitman,	Evener, Cranks	350		
1	250	الماليا	790		
2	500	435	1225		
3	750	425	1650		
14	1000	410	2060		
5	1250	400	2460		
6	1500	385	2845		
7	1750	375	3220		
8	2000	360	3580		
9	2250	355	3935		
10	2500	340	4275		
n n	2750	330	4605		
12	3000	315	4920		
COUNTER-BALANCE EFFECT OF CRANK WEIGHTS					
LENGTH OF STROKE	22"	29"	36"		
2 - IT812 CRANK WEICHTS	1158	866	696		

B8-36-40D UNITS

COUNTERBALANCE EFFECT OF BEAM WEIGHTS

	TOTAL WEIGHT OF COUNTER WEIGHTS		TOTAL EFFECTIVE COUNTERBALANCE
0	Wt. of Beam, Pitman, Ev	vener, Cranks	645
1	250	520	1165
2	500	508	1673
3	750	495	2168
4	1000	483	2651
5	1250	471	3122
6	1500	459	3581
7	1750	447	4028
8	2000	435	4463
9	2250	422	4885
10	2500	410	5295
11	2750	398	5693
12	3000	386	6079
	COUNTERBALANCE EF	FECT OF CRANK WEIG	HTS
LENGTH OF			
STROKE	20"	28"	36"
2-IT1112 CRANK WE	IGHTS 2125	1520	1180

B8L-42-40D

LONG STROKE

COUNTERBALANCE EFFECT OF BEAM WEIGHTS

	COUNTERBALANCE EFF		
SETS OF WEIGHTS	TOTAL WEIGHT OF COUNTER WEIGHTS	EFFECTIVE COUNTERBALANCE OF EACH SET	TOTAL EFFECTIVE COUNTERBALANCE
0	Wt. of Beam, Pitman, Eve	ner, Cranks	553
1	250	447	1000
2	500	435	1435
3	750	424	1859
4	1000	414	2273
5	1250	404	2677
6	1500	393	3070
7	1750	383	3453
8	2000	373	3826
9	2250	362	4188
10	2500	351	4539
11	2750	341	4880
12	3000	331	5211
	COUNTERBALANCE EFF	ECT OF CRANK WEIC	HTS
LENGTH OF STROKE	23"	33"	42"
2-IT1112 CRANK WE	CIGHTS 1820	1300	1010

B10-36-40D B10-36-57D

1,11

COUNTER-BALANCE EFFECT OF BEAM WEIGHTS

SETS OF WEIGHTS	TOTAL WEIGHT OF COUNTERWEIGHTS	EFFECTIVE COUNTER-BALANCE OF EACH SET	TOTAL EFFECTIVE COUNTER-BALANCE
0	Wt. of Beam, Pitman, E	vener, Cranks	745
1	320	665	01بلد
2	640	645	2060
3	960	630	2685
4	1280	610	3295
5	1600	590	3890
6	1920	575	4460
7	2240	555	5015
8	2560	535	5550
9	2880	515	6070
10	3200	500	6565
LENGTH	COUNTER-BALANCE	EFFECT OF CRANK WEIGHTS	
CF STROKE	20°	28*	36#
2 - ITI112 CRANK WEIGHTS	2125	1520	1180

B10L-42-40D B10L-42-57D

LONG STROKE

COUNTER-BALANCE EFFECT OF BEAM WEIGHTS

SETS OF WEIGHTS	TOTAL WEIGHT OF COUNTERWEIGHTS	EFFECTIVE COUNTER-BALANCE OF EACH SET	TOTAL EFFECTIVE COUNTER-BALANCE
0	Wt. of Beam, Pitman,	Evener, Cranks	640
1	320	570	1210
2	640	555	1760
3	960	540	2300
4	1280	525	2820
5	1600	505	3325
6	1920	495	3815
7	22/10	475	4290
8	2560	460	4750
9	2880	المرابات	5190
10	3200	425	5620
	COUNTER-BALANCE EFFE	ect of crank weights	
Length Of Stroke	23 ⁿ	33 "	կ2"

1300

1010

2 - IT1112 CRANK WEIGHTS

1820

B12-42-57D B12-42-80D

COUNTER-BALANCE EFFECT OF BEAM WEIGHTS

SETS OF WEIGHTS	TOTAL WEIGHT OF COUNTERWEIGHTS	EFFECTIVE COUNTER-BALANCE OF EACH SET	TOTAL EFFECTIVE COUNTER-BALANCE
0	Wt. of Beam, Pitman, I	Evener, Cranks	790
1	320	615	1405
2	640	600	2005
3	960	585	2590
14	1280	570	3160
5	1600	550	3710
6	1920	535	4245
7	2240	520	4770
8	2560	505	5275
9	2880	490	5760
10	3200	475	6235
11	3520	455	6690
12	3840	गिगि	7135
	COUNTER-BALANCE	EFFECT OF CRANK WEIGHTS	
LENGTH OF			
STROKE	26°	3ħ#	42"
2 - ITII12 CRANK WEIGHTS	1910	1460	1180

B12L-48-57D B12L-48-80D

LONG STROKE

COUNTER-BALANCE EFFECT OF BEAM WEIGHTS

COOKIEK-DALIMOR ELLEGI OL DEAL METONIO					
SETS OF WEIGHTS	TOTAL WEIGHT OF COUNTERWEIGHTS	EFFECTIVE COUNTER-BALANCE OF EACH SET	TOTAL EFFECTIVE COUNTER-BALANCE		
0	Wt. of Beam, Pitman,	Evener, Cranks	605		
1	320	540	111,5		
2	640	525	1670		
3	960	510	21.80		
14	1280	495	2675		
5	1600	485	3160		
6	1920	470	3630		
7	2240	455	4085		
8	2560	7170	4525		
9	2880	430	4955		
10	3200	415	5370		
11	3520	400	5770		
12	3840	385	6155		
	COUNTER-BALANCE EFFE	CT OF CRANK WEIGHTS			
LENGTH OF STROKE	30 "	39 "	48"		
2 - IT1112 CRANK WEIGHTS	1670	1275	1035		

AC9-40D & 57D UNITS WITH STANDARD TYPE WEIGHTS

CRANK WEEGHT-COUNTER-BALANCE EFFECT

MASTER WEIGHTS ONLY

DESCRIPTION			STROKES	
		2011	2811	36 ^m
PITMAN, W. PINS, BEAM & CRANK ONLY WEIGHTS-POSITION	1 2 3 4 5	2,015 5,160 5,700 6,240 6,780 7,320	1,570 3,815 4,205 4,585 4,970 5,355	1,320 3,070 3,370 3,665 3,965 4,265
MASTER WEIGHTS AND (1)	SEC	INNER WEIG	HTS	
WEIGHTS-POSITION	1 2 3 4 5	6,290 7,025 7,760 8,490 9,225	4,625 5,150 5,670 6,195 6,720	3,695 4,105 4,510 4,915 5,325
MASTER WEIGHTS AND (2)	SETS	INNER WEIG	HTS	
Weights-Position	1 2 3 4 5	7,375 8,300 9,125 10,135 11,055	5,400 6,060 6,710 7,370 8,025	4,300 4,810 5,320 5,830 6,340

AC10-36-40D AC10-36-57D

WITH STANDARD TYPE WEIGHTS

CRANK WEIGHT-COUNTER-BALANCE EFFECT

MASTER WEIGHTS ONLY

DESCRIPTION			STROKES	
		20"	28"	361
PITMAN, W. PINS, BEAM & CRANK ONLY		2,015	1,570	1, 320
WEIGHTS-POSITION	1	5, 160	3, 815	3,070
	2	5,700	4, 205	3, 370
	3	6,240		
	4	6,780	4,970	
	5	7, 320	5, 355	4, 265
A A A A A A A A A A A A A A A A A A A	eem ini	NED WEICE	ıre	
MASTER WEIGHTS AND (1)	PET IN	NEK WEIGI	115	
WEIGHTS-POSITION	1	6, 290	4,625	3,695
	2	7,025		4,105
	3	7,760	5,670	4,510
	4	8, 490	6, 195	4,915
	5	9, 225	6,720	5, 325
		mp weich	re	
MASTER WEIGHTS & (2) SE	12 IML	VER WEIGH	13	
WEIGHTS-POSITION	1,	7, 375	5, 400	4, 300
	2	8, 300	6,060	4,810
	3	9,125	6,710	5, 320
	4	10, 135	7,370	5, 830
	5	11,055	8,025	6, 340

AC10L-42-40D AC10L-42-57D

WITH STANDARD TYPE WEIGHTS

LONG STROKE CRANK WEIGHT-COUNTER-BALANCE EFFECT

DES	CRIPTION		23"	STROKES	42"
PITMAN, W. PINS,	BEAM & CRANK ONLY		1,725	1,345	1,130
	MASTER WEIGHTS	ONLY			
WEIGHTS-POSITION		1 2 3 4 5	4,420 4,485 5,350 5,810 6,270	3,270 3,605 3,930 4,260 4,590	2,630 2,890 3,140 3,400 3,655
	MASTER WEIGHTS AND (1) SET	INNER WE	IGHTS		
WEIGHTS-POSITION		1 2 3 4 5	5,390 6,020 6,650 7,275 7,905	3,965 4,415 4,860 5,310 5,760	3,165 3,520 3,865 4,210 4,560
	MASTER WEIGHTS AND (2) SETS	INNER W	EICHTS		
WEIGHTS-POSITION		1 2 3 4 5	6,320 7,120 7,820 8,685 9,475	4,630 5,195 5,750 6,315 6,875	3,685 4,120 4,560 4,995 5,430

AC12-42-57D AC12-42-80D

WITH STANDARD TYPE WEIGHTS

CRANK WEIGHT COUNTER-BALANCE EFFECT

MASTER WEIGHTS ONLY

DESCRIPTION				
		26"	34"	STROKES 42"
PITMAN. W.PIN & CRANKS ONLY WEIGHTS - POSITION	1 2 3 4 5 6	1,689 3,973 4,388 4,802 5,220 5,635 6,051	1,388 3,135 3,452 3,768 4,088 4,406 4,723	1,201 2,615 2,872 3,128 3,387 3,644 3,901
	MASTER WE	IGHTS & (1)	SET INNER WI	TGHTS
WEIGHTS - POSITION	1 2 3 4 5 6	4,775 5,336 5,895 6,460 7,020 7,582	3,748 4,177 4,604 5,036 5,465 5,894	3,111 3,459 3,805 4,154 4,502 4,849
I Warner	MASTER WEI	GHTS AND (2)	SETS INNER	WEIGHTS
WEIGHTS - POSITION	1 2 3 4 5 6	5,577 6,284 6,989 7,700 8,405 9,114	4,362 4,902 5,441 5,984 6,525 7,065	3,608 4,046 4,482 4,922 5,359 5,797

AC12-48-57D AC12-48-80D

WITH STANDARD TYPE WEIGHTS

CRANK WEIGHT COUNTER-BALANCE EFFECT

MASTER WEIGHTS ONLY

DESCRIPTION	28"	STROKES 38"	48"
	2, 633 1 5, 614 2 6, 062 3 6, 509 4 6, 956 5 7, 406 6 7, 853 7 8, 300	4, 269 4, 598 4, 928 5, 258 5, 589 5, 918	4, 266 4, 528 4, 789
MASTER WEIGHTS &	(1) SET INNER	WEIGHTS	
	1 6,837 2 7,468 3 8,098 4 8,729 5 9,363 6 9,994 7 10,624	5, 634 6, 099 6, 564 7, 031 7, 495	4, 932 5, 300 5, 670 6, 038
MASTER WEIGHTS AN	D (2) SETS INNE	R WEIGHTS	
	4 10, 501	8, 473 9, 072	4, 909 5, 384 5, 859 6, 334 6, 811 7, 286 7, 761

AC12L-54-114D UNITS WITH STANDARD TYPE WEIGHTS LONG STROKE

CRANK WEIGHT COUNTER-BALANCE EFFECT

MASTER WEIGHTS ONLY

DESCRIPTION		32"	STROKES 43"	54"
PITMAN, W. PIN & CRANKS ONLY WEIGHTS-POSITION	1 2 3 4 5 6 7	2,340 4,990 5,388 5,786 6,183 6,583 6,583 6,980 7,378	1,842 3,795 4,087 4,380 4,674 4,968 5,260 5,554	1,550 3,096 3,328 3,560 3,792 4,025 4,257 4,489
MASTER WEIGHTS & (1) SET	INNER WE	ICHTS		
WEIGHTS-POSITION	1 2 3 4 5 6 7	6,077 6,638 7,198 7,759 8,323 8,884 9,444	4,596 5,008 5,421 5,835 6,250 6,662 7,076	3,730 4,057 4,384 4,711 5,040 5,367 5,694
MASTER WEIGHTS & (2) SETS	INNER WE	EICHTS		
WEIGHTS-POSITION	1 2 3 4 5 6 7	7,164 7,887 8,611 9,334 10,062 10,786 11,509	5,396 5,929 6,462 6,996 7,532 8,064 8,597	4,364 4,786 5,208 5,630 6,054 6,477 6,900

AC14-48-80D AC14-48-114D

WITH STANDARD TYPE WEIGHTS

CRANK WEIGHT COUNTER-BALANCE EFFECT

MASTER WEIGHTS ONLY

			STROKES	
DESCRIPTION		28"	38"	48"
PITMAN, W. PIN & CRANKS C	NII V	2, 633	2,072	1,744
WEIGHTS-POSITION	1		4, 269	
WEIGH 15-POSITION	2	6, 062	4, 598	3, 744
	3		4, 928	
	4		5, 258	
			5, 589	
	5	7, 406		4, 789
	6	7, 853		
	7	8, 300	6, 248	5, 050
MACOND WEIGHT	ve e /1\	פבית ואואובים ו	WE ICHTE	
MASTER WEIGHT	2 % (1)	DE I IMMER	WEIGHIS	
WEIGHTS-POSITION	1	6, 837	5, 170	4, 196
	2	7, 468	5, 634	4, 564
		8,098		4,932
			6, 564	
	5		7,031	
	6	9,994		6,038
	7			6, 406
MASTER WEIGHTS	AND (2) SETS INNE	R WEIGHTS	
WEIGHTS-POSITION	1	8, 059	6,070	4,909
	2	8, 873	6,670	5, 384
		9, 687		
	4			and the same of th
	5	11, 320	8, 473	6, 811
	6		9,072	

12, 947

9,672

7,761

AC14-54-80D AC14-54-114D

WITH STANDARD TYPE WEIGHTS

CRANK WEIGHT COUNTER-BALANCE EFFECT MASTER WEIGHTS ONLY

DESCRIPTION			STROKES	
		34"	44"	54"
PITMANI W DINI CRANICE COM				
PITMAN, W. PIN & CRANKS ONLY WEIGHTS-POSITION		3, 050	2, 558	2, 249
21G1113-PO31110N	1	5, 383		3, 718
	2	5, 752		3, 950
	3	6, 120	4,930	4, 182
	4	6, 489	5, 215	4, 414
	5	5, 857	5, 500	
	6	7, 225	5, 784	4,878
	7	7, 594	6,069	5, 110
	8	7, 962	6, 354	5, 342
MASTER WEIGHTS AND) (1) S	SET INNER	WEIGHTS	
WE IGHTS-POSITION	1	6, 340	5 101	4 221
	2	6, 860	5, 101 5, 502	4, 321
	3	7, 379		4, 648
	4	7, 899	5, 903 6, 304	4, 975
	5	8, 418	6, 706	5, 302
	6	3, 937	7, 107	5, 634
	7	9, 457	7, 509	5, 956
	8	9, 976		6, 283
MASTER WEIGHTS AND	(2) SE			6, 610

1

2

3

4

7, 297

7,968

8,637

9, 308

9 979

5, 840

6, 358

6,875

7, 393

4, 923

5, 345

5, 767

6, 189

WEIGHTS-POSITION

AC14L-64-114D WITH STANDARD TYPE WEIGHTS

LONG STROKE

CRANK WEIGHT COUNTER-BALANCE EFFECT

MASTER WEIGHT ONLY STROKES DESCRIPTION 40" 52" 64" FITMAN, W. PINS & CRANKS ONLY 3,420 2,227 1,966 EIGHTS - POSITION 4,634 3,762 3,215 4,946 4,001 3,411 5,258 5,570 5,882 6,199 4,245 3,608 4,489 3,805 4,001 4,728 4,972 5,211 5,455 4,198 6,511 4,395 6,823 4,591 MASTER WEIGHTS & (1) SET INNER WEIGHTS TIGHTS - POSITION 5,463 4,403 3,736 5,912 4,750 4,019 5,092 5,434 5,776 6,122 3456 6,353 4,296 4,579 7,182 4,856 5,139 5,416 5,694 7,686 7 8,131 6,438 8,576 6,810 MASTER WEIGHTS & (2) SETS INNER WEIGHTS WEIGHTS - POSITION 6,267 5,027 4,245 2 5,468 5,908 6,348 6,844 4,604 3456 7,409 4,963 7,986 5,322 8,554 6,793 5,681 9,127 7,233 6,045 9,696 7,674 8,118 6,400

10,269

6,763

AC16-160D UNITS WITH STANDARD TYPE WEIGHTS

CRANK WEIGHT COUNTER-BALANCE EFFECT

MASTER WEIGHTS ONLY

DESCRIPTION		34"	STROKES 44"	54 "
PITMAN, W. PINS & CRANKS ONI WEIGHTS - POSITION	1 2 3 4 5 6 7	4,000 5,420 5,785 6,150 6,515 6,880 7,250 7,615 7,980	2,605 4,400 4,680 4,965 5,250 5,530 5,815 6,095 6,380	2,300 3,760 3,990 4,220 4,450 4,680 4,910 5,140 5,370
Musilies 1	WEIGHTS & (1)	SET INNER WE	ICRIS	
WEIGHTS - POSITION	1 2 3 4 5 6 7 8	6,390 6,915 7,430 7,950 8,400 8,990 9,510 10,030	5,150 5,555 5,955 6,355 6,755 7,160 7,560 7,965	4,370 4,700 5,025 5,355 5,680 6,010 6,335 6,660
MASTER W	EIGHTS & (2)	sets inner we	IGHTS	
WEIGHTS - POSITION	I 2 3 4 5 6 7 8	7,330 8,005 8,665 9,340 10,005 10,675 11,340 12,010	5,880 6,395 6,910 7,425 7,945 8,460 8,975 9,495	4,965 5,385 5,805 6,225 6,645 7,070 7,485 7,910

AC17-54-114D AC17-54-160D

WITH STANDARD TYPE WEIGHTS

CRANK WEIGHT COUNTER-BALANCE EFFECT MASTER WEIGHTS ONLY

			STEED SET	
DESCRIPTION		34"	STROKES 44"	54 ⁿ
PITMAN, W. PINS & CRANKS ONLY WEIGHTS - POSITION	1 2 3 4 5 6 7 8	4,000 5,420 5,785 6,150 6,515 6,880 7,250 7,615 7,980	2,605 4,400 4,680 4,965 5,250 5,530 5,815 6,095 6,380	2,300 3,760 3,990 4,220 4,450 4,680 4,910 5,140 5,370
MASTER WEIGHT	28 & (1) &	SET INNER WEIG	HTS	
WEIGHTS - POSITION	1 2 3 4 5 6 7 8	6,390 6,915 7,430 7,950 8,400 8,990 9,510 10,030	5,150 5,555 5,955 6,355 6,755 7,160 7,560 7,965	4,370 4,700 5,025 5,355 5,680 6,010 6,335 6,660
MASTER WEIGHT	S & (2) S	ets inner weig	HTS	
WEIGHTS - POSITION	1 2 3 4 5 6 7 8	7,330 8,005 8,665 9,340 10,005 10,675 11,340 12,010	5,880 6,395 6,910 7,425 7,945 8,460 8,975 9,495	4,965 5,385 5,805 6,225 6,645 7,070 7,485 7,910

ACG17-64-114D ACG17-64-160D

WITH STANDARD TYPE WEIGHTS

CRANK WEIGHT COUNTER-BALANCE EFFECT MASTER WEIGHTS ONLY

10,976

12,835

DESCRIPTION					
		2.411		TROKES	
		34"	44"	54"	64**
PITMANS, W. PINS & CRANE	SONLY	4,004	3, 308	2 060	2 5/0
WEIGHTS-POSITION	1	8, 448	6,742	2, 869	2, 568
	2	9, 169	7, 299	5, 667	4, 929
	3	9, 890	7, 856	6, 121	5, 312
	4	10, 611	8, 413	6, 575	5, 695
	5	11, 330		7, 029	6,078
	6	12,051	8, 969	7,482	6,460
	7	12,772	9, 526	7,936	6, 843
	8		10,083	8, 390	7, 226
	9	13, 493	10,640	8, 844	7,609
	7	14, 214	11, 197	9, 297	7,992
MAS	STER WE	CHTS & ()) SET INNE	D (!!=:====	
		10111D & (1	OFI IMME	R WEIGHTS	
WEIGH TS-POSITION	1	9, 932	7,889	6,602	5 510
	2	10,894	8, 632	7, 207	5,718
	3	11,856	9, 376	7, 813	6, 229
	4	12, 817	10, 118	8, 418	6,740
	5	13,777	10, 860	9, 023	7, 250
	6	14,739	11,603	9, 629	7,760
	7	15,700	12, 346		8, 271
	8	16,662	13, 089	10, 234	8,782
	9	17,624	13, 832	10, 840	9, 293
		1.,021	13, 632	11, 444	9,804
MAST	ER WEIG	HTS & (2)	SETS INNER	WEIGHTS	
VEIGHTS-POSITION	1	11,416	9,036	7,536	6, 506
	2	12,619	9,965	8, 293	7, 145
	3	13,822	10.895	9, 051	7,784
	4	15, 023	11,822	9, 807	8, 422
	5	16, 224	12,751	10, 563	9,060
	6	17,427	13,680	11, 321	9,699
	7	18, 628	14, 608	12,077	10, 337
		10, 020	15,000	12 025	10 976

19, 831

15, 537

ACG17L-74-114D ACG17L-74-160D WITH "D" TYPE WEIGHTS LONG STROKE

CRANK WEIGHT COUNTER-BALANCE EFFECT

DESCRIPTION		39"	51"	STROKES 62"	74"
PITMAN, W. PINS & CRANKS ONLY		3,495	2,895	2,515	2,255
TITIAN, W. PINS & CRANAS UNLI			2,075	ريروع	29277
	MASTER WEI	GHTS ONLY			
WEIGHTS-POSITION	1 2 3 4 5 6 7 8 9	7,725 8,555 9,390 10,220 11,055 11,885 12,715 13,550 14,380	6,160 6,805 7,445 8,090 8,730 9,375 10,020 10,660 11,305	5,175 5,700 6,225 6,745 7,270 7,795 8,320 8,845 9,370	4,500 4,940 5,385 5,825 6,270 6,710 7,150 7,595 8,035
MASTER WEI	GHTS & (1)	SET INNER	WEIGHTS		
EICHTS-POSITION	123456789	9,120 10,235 11,350 12,470 13,585 14,700 15,815 16,930 18,045	7,235 8,095 8,960 9,820 10,685 11,545 12,410 13,270 14,135	6,055 6,755 7,460 8,160 8,865 9,565 10,265 10,970 11,675	5,240 5,835 6,425 7,020 7,610 8,205 8,800 9,390 9,985
MASTER WEI	GHTS & (2)	SETS INNER	WEIGHTS		
EIGHTS-POSITION	123456789	10,490 11,885 13,280 14,675 16,070 17,465 18,860 20,255 21,650	8,295 9,375 10,450 11,530 12,600 13,685 14,765 15,840 16,920	6,915 7,795 8,670 9,550 10,430 11,305 12,185 13,060 13,940	5,795 6,560 7,320 8,080 8,845 9,605 10,370 11,130 11,895

AC20-64-160D AC20-64-228D

WITH STANDARD TYPE WEIGHTS

CRANK WEIGHT COUNTER-BALANCE EFFECT

MASTER WEIGHTS ONLY

DESCRIPTION			Si	TROKES	
DESCRIP TION		3411	44!	54"	64"
		24			
PITMANS, W. PINS & CRANKS	ONLY	4,004	3, 308	2,869	2,568
WEIGHTS-POSITION	. 1	8, 448	6,742	5, 667	4,929
	2	9, 169	7,299	6, 121	5, 312
	3	9,890	7,856	6, 575	5,695
	4	10,611	8, 413	7,029	6,078
	5	11, 330	8,969	7,482	6,460
	6	12,051	9, 526	7,936	6,843
	7	12,772	10,083	8, 390	7,226
	8	13,493	10,640	8,844	7,609
	9	14, 214	11, 197	9, 297	7,992
MAST	TER WE	IGHTS & (I) SET INNE	R WEIGHTS	
WEIGHTS-POSITION	1	9,932	7,889	6,602	5,718
	2	10,894	8,632	7, 207	6, 229
	3	11,856		7,813	6,740
	4	12,817		8, 418	7,250
	5	13,777	10,860	9,023	7,760
	6	14,739	11,603	9,629	8, 271
	7	15,700	12, 346	10, 234	8,782
	8	16,662	13,089	10,840	9, 293
	9	17,624	13,832	11,444	9,804
MASTE	R WEIG	GHTS & (2)	SETS INNER	WEIGHTS	
				7 52/	1 501
WEIGHTS-POSITION	1	11,416	9, 036	7,536	6, 506
	2	12,619	9,965	8, 293	7, 145
	3	13, 822	10.895	9,051	7,784
	4	15, 023	11,822	9,807	8, 422 9, 060
	5	16, 224	12,751	10, 563	9,000
	6	17, 427	13,680	11, 321	
	7	18,628	14,608	12,077	
	8	19,831	15, 537	12, 835	10,976
	9	21,034	16, 467	13, 591	11,615

AC20-74-160D AC20-74-228D

WITH STANDARD TYPE WEIGHTS

CRANK WEIGHT COUNTER-BALANCE EFFECT

MASTER WEIGHTS ONLY

	DESCRIP	TION				STROKE	ES	
				34"	44"	54"		74"
F	ITMAN, W. PINS &	CRANKS	ONLY	4, 989	4, 049	3, 458	3, 051	2,754
				11, 101				
Н			2		9,431	- Contract of the Contract of		
П			3				7, 203	
			4	13,658	10,748	8,916	7,656	6,737
			5		11,407			
П			6	15, 364	12,066	9,991	8, 563	7,521
П			7	16,215	12,724	10, 526	9,015	7,912
			8	17,068	13, 383	11,064	9,468	8, 304
П			9	17: 922	14,042	11,601	9,921	8,696
			10	18,775	14,702	12, 138	10, 375	9,088
		MASTER	WEIGHTS	& (1) SE	T INNER	WEIGHT	S	
W	EIGHTS-POSITION		1	13, 313	10, 481	8, 699	7, 473	6, 578
П			2	14, 474	11, 378	9,474	8, 090	7,112
			3	15,634	12, 374	10,160	8,706	7,645
			4	16, 795	13 172	10,891	9, 322	8, 178
П			5	17,956	14,069	11,622	9,940	8,712
			6	19, 118	A CONTRACTOR OF THE CONTRACTOR	12, 354		
П			7		15, 863	13,083		9,778
П			8		16,760	13, 816		
Н			9	22, 201			12,407	
П			10	23, 763	18, 556	15, 278	13,025	11,380
		MASTER	WEIGHTS	AND (2) S	ETS INN	ER WEIG	HTS	
90-	GHTS-POSITION		1	15, 524	12, 189	10,091	8, 648	7,594
			2				9,428	
			3		14, 459			8,944
			4			12,865	The second secon	9,619
			5		16,730			
			6	22, 871	17,867	14,717	12, 551	10,970-

7 24, 338 19, 001 15, 640 13, 330 11, 644

AC23-74-228D AC23-74-320D

WITH STANDARD TYPE WEIGHTS

CRANK WEIGHT COUNTER-BALANCE EFFECT

MASTER WEIGHTS ONLY

	DESCRI	PTION				STROK	FC	
				34"	44"	54"	64"	74"
	TMAN, W. PINS	& CRANKS ONL	Y	4, 989	4, 049	3, 458	3, 051	2,754
П			1		8,772			
Н			. 2		9, 431			
Н			3	12,805				
П			4	13,658		8, 916	7,656	6,737
			5		11,407	9.453	8 110	7, 129
			6	15, 364	12,066	9, 991	8. 563	7, 521
			7	16, 215	12,724	10, 526	9.015	7,912
Н			8	17,068	13, 383	11,064	9. 468	8, 304
Н			9	17, 922	14,042	11,601	9, 921	8 696
			10	18,775	14,702	12, 138	10, 375	9, 088
		MASTER WEI	GHTS	& (1) SE	T INNER	WEIGHT	'S	
W	EIGHTS-POSITION	1	1	13, 313	10, 481	8, 699	7,473	6, 578
П			2	14, 474	11, 378	9.474	8 090	7, 112
П			3	15,634	12, 374	10.160	8.706	7, 645
Н			4	16, 795		10, 891		
Н			5		14,069	11,622		
П			6		14,967	12, 354		
П			7		15, 863	13,083		9,778
Н			8	21,439	16,760	13, 816		10, 312
П			9		17,657	14, 547		10,846
			10	23, 763	18, 556	15, 278		11,380
		MASTER WEIGH	HTS A	ND (2) S	ETS INNI	ER WEIG	HTS	
w	GHTS-POSITION		1	15, 524	12, 189	10 001	9 640	7 504
						10,091 11,105	9 429	8, 269
						11,941	10, 208	
					15, 595		10, 200	9 610
					16,730	13.790	11 770	10 204
				22, 871	17,867	14.717	12 551	10, 277
1					19,001	15, 640	13 330	11 644
					20 137			

25, 809 20, 137 16, 567 14, 112 12, 320

ACG23-86-228D ACG23-86-320D WITH STANDARD TYPE WEIGHTS

CRANK WEIGHT COUNTER-BALANCE EFFECT

	M	LAS T	ER WEIGHT	S ONLY		
	DESCRIPTION					
П			51"		STROP	ŒS
			51"	63"	75"	86"
F	ITMAN, W. PINS & CRANKS ONL	Y	4,506	2 0/4		
V	EIGHTS-POSITION	1		3, 964	3, 568	3, 267
П		2	.,,	7, 966	7,029	
		3	.,	8, 419	,	
		4		8, 871		.,
П		5	, ,	9, 324		
П			11, 395	9,777		7,696
1		6	11,932	10,230	8,986	8,041
П		7	,,		9, 378	8, 386
		8		11, 137	9,771	8,732
П		9	-,		10, 162	9,077
		10	14,080			9, 422
П		-11	14,617	12,495	10,946	9,767
	MASTER WEIGH	TTS A	ND /1\ ccm			
		LUA	110 (1) 251	INNER WEI	GHTS	
WE	GHTS-POSITION	1	10,965	0.414		
П		2	11,695	9,414	8, 281	7,419
П		3	12, 426	The state of the s	8, 813	7,889
П		4	13, 158	,		8, 359
П		5	13, 888	11, 263	The state of the s	8,829
П		6	14,619	11,881	,	9, 299
П		7	15, 350	12, 497		9,768
Н		8	16, 182	13, 114	11,480	10,238
П		9		13,732	12,015	10,709
П		10	16, 813	14, 349	12,548	11,179
П		11		14,970		11,649
		11	18, 275	15, 582	13,615	12, 119
	MASTER WEIGHT	S AN	D (2) SETS	INNER WEI	GHTS	
EI	CHTS-POSITION					
		1	12,680	10,861	9,533	8, 522
		2	13,604	11,641	10,206	9, 116
		3	14, 530	12, 421	10,882	9,711
		4	1 10 / 10 /	12 222	121 2	

4

5

6

7

15, 456

16,380

17, 305

18, 231

19, 157

13, 202

13,984

14,763

15, 545

16, 327

11,557

12, 233

12,906

13,582

14.259

10, 306

10,901

11,495

12,090

12 606

AC33-120-456D WITH STANDARD TYPE WEIGHTS

CRANK WEIGHT COUNTER-BALANCE EFFECT

MASTER WEIGHTS ONLY

DESCRIPTION			STROKES				
		67"	80 n	93 ¹¹	107"	120"	
PITMAN, W. PINS & CRANKS WEIGHTS-POSITION	1 2 3 4 5 6 7 8 9 10	6,055 17,670 18,850 20,030 21,210 22,400 23,580 24,760 25,940 27,120 28,300 29,480	5,205 14,890 15,870 16,850 17,840 18,820 19,810 20,790 21,780 22,760 23,750 24,730	4,600 12,900 13,740 14,580 15,430 16,270 17,115 17,960 18,800 19,650 20,490 21,330	4,125 11,390 12,120 12,860 13,600 14,340 15,080 15,810 16,550 17,290 18,030 18,770	3,790 10,250 10,900 11,560 12,210 12,870 13,530 14,180 14,860 15,500 16,150 16,810	
	MASTER WEIGH	TS & (1)	SET INNER	WEIGHTS			
WEIGHTS-POSITION	1 2 3 4 5 6 7 8 9 10 11	21,200 22,740 24,280 25,820 27,360 28,900 30,440 31,980 33,520 35,060 36,600	17,810 19,110 20,390 21,680 22,960 24,240 25,530 26,810 28,100 29,380 30,660	15,420 16,520 17,620 18,720 19,820 20,920 22,020 23,120 24,220 25,320 26,420	13,590 14,550 15,510 16,480 17,440 18,400 19,370 20,300 21,290 22,250 23,220	12,210 13,060 13,920 14,770 15,630 16,480 17,340 18,210 19,050 19,910 20,760	
	MASTER WEIGH	TS & (2) S	SETS INNER	WEIGHTS			
WEIGHTS-POSITION	1 2 3 4 5 6 7 8 9 10	24,730 26,630 28,530 30,430 32,330 34,220 36,120 38,020 39,920 41,820 43,720	20,750 22,350 23,930 25,520 27,100 28,680 30,260 31,850 33,430 35,010 36,600	17,950 19,300 20,660 22,020 23,380 24,730 26,090 27,450 28,800 30,160 31,520	15,800 16,980 18,170 19,360 20,540 21,730 22,920 24,070 25,290 26,480 27,670	14,170 15,220 16,280 17,330 18,390 19,440 20,496 21,570 22,610 23,660 24,720	

AC33L-144-456D WITH STANDARD TYPE WEIGHTS LONG STROKE

CRANK WEIGHT COUNTER-BALANCE EFFECT

MASTER WEIGHTS ONLY

DESCRIPTION		STROKES					
	80"	961:	112"	128"	144"		
PITMAN, W. PINS & CRANKS ONLY	5, 050	4, 345	3, 835	3, 440	3, 160		
WEIGHTS-POSITION 1	14,710	12, 400	10,750	9,490	8, 540		
2	15,710	13, 210	11,460	10, 100	9,075		
3	16,710		12, 140	10,700	9,620		
4	17, 860			11,320	10, 180		
5	18,690	15,700	13,550	11,940	10,710		
6	19,650	16,500	14, 280	12,550	11,290		
7	20,620	17, 310	14,970	13, 190	11,800		
8	21,610	18, 120	15,680	13,800	12, 380		
9	22,600	18,920	16, 380	14,400	12,910		
10	23, 590	19,780	17,090	15,020	13,460		
11	24, 590	20,600	17,780	15, 620	13,900		
MASTER WEIGH	TS & (1) SE	T INNER	WEIGHT	S			
WEIGHTS-POSITION 1	17,670	14.830	12,860	11, 310	10,180		
2	18,920	15,920		12, 120	10,880		
3	20, 220			12,920-	11,600		
4	21,550		15,600	13,720	12, 300		
5	22,790	19, 100	16,520	14,530	13,030		
6	24,080	20, 200	17,410	15, 330	13,710		
7	25, 400	21, 250	18, 350	16, 120	14, 440		
8	26,610	22, 350		16,910	15, 190		
9	27, 920	23, 400	20,200	17,630	15,880		
10	29, 220	24, 430	21,070	18, 530	16,600		
11	30, 500	25, 550	22,040	19, 350	17, 290		
MASTER WEIGHT	S AND (2) S	ETS INNI	ER WEIG	HTS			
WEIGHTS-POSITION 1	20,600	17, 290	14,970	13, 170	11,800		
2	.22, 210	18,610	16,100	14, 140	12,700		
3	23,780	19,920	17,210	15, 110	13,580		
4	25, 400	21, 250	18, 380	16, 100	14, 440		
5	26,950	22,600	19, 490	17, 100	15, 320		
6	28, 550	23,920	20,600	18,090	16,210		
7	30, 100	25, 210	21,770	19,090	17,100		
8	31,700	26,580	22,880	20,070	17,970		
9	33, 250	27,850	23,610	21,080	18,870		
10	34, 850	29, 200	25, 120	22,060	19,720		
	2/ 110	20 500	2/ 250	22 040	20 600		

CABOT PUMPING UNITS - STRUCTURAL PARTS No. B3-16

(See Drawings Attached)

, , , , , , , , , , , , , , , , , , ,	B3 16	
Annufacturer's Type No Fran Units Used With This Frame	6 40 100	Rated Polish Rod Load for Rig Parts 3, 200 lbs.
lish Rod Strokes, Inches		
lish kod Strokes, Inches	8" - 12" - 16"	
	WAL	KING BEAM
P. I. Polished Rod Load Rating (All	ow for bolt holes) 3	200 lbs.
uctural Section 8" x 4" at 10		Weight Carbon, Silicon or Alloy Carbon
tance between Working Centers: \		Pitman End_ 30 1/2" - 22" - 17"
vision Made for Servicing Well De	tachable single b	olt horsehead
earance between well and walking	beam when servicing 9	Amount of Adjustment to and from Well 1 1/2"
	BEA	M HANGER
rsehead Type: Mat'l. Wel	ded Steel Plate	Link Type:
Size Wire Rope 5/8" prefor	med	Trunion Diameter
Type Wire Rope 6 x 19 imp	. plow steel	Bearing Length or Mfg. No.
Type Upper End Stationary	Steel Sheave	Proj. Bearing Area or Rating
Type Lower End Cast gate v	vith taper socket	Hanger Reins
for zinced-in wire rop	e	Length
oundation Clearance at Midstroke	e 2'- 1 1/2"	Foundation Clearance at Midstroke
		ead cross member rests on beam behind bar
		SON POST
WF Column-Channel	Bracing	Height (Top Skids to Top S. Post)
Members:	5 lbs.	Height (Fd'n. to Center Line) 41-011
legs 6" x 4" WF at 8.	late	Brocing 611 channel at 8.2 lbs.
zontal Distance from Center Line	of Sampson Post to Center	Line of Crankshaft of Gear Unit_2'-4"
ht (Bottom of Frame to top of Bed	$am)\frac{4'-9}{1/4''}$	
ed or welded to Base_Welded		
	E	BASE
ctural Section 5" channels -	6.7 lbs	back to back 6"
h, Standard Base. 71-7 5/8"		Length of Outrigger (Detachable)
th, Short Base	****	Length of Corrigger (Detachable)
Slide Rails Furnished Ye	S	
dation Bolts10	- 3/4" x 18"	_ Is Reducer Sub-Base Furnished No
		Reducer boits. 3 / 1
ural Shape 2" x 2" x 5/16	" tee at 4. 3 lbs.	MAN Length (Center of Brg. to Center of Brg.) 31-8 1/211
an detachable from Wrist Pin Ber		
	EQUALIZA	ATION BEAM
	7/1/11	11
tural Section 5" x 2 1/2" x on Centers 12" at beam	7/16" tee at 9.45	1b. Material Carbon steel ted Capacity 1365 Lbs. Sq. 1

Bearing Selection is for at least 100,000 hours Minimum Life at 20 S.P.M.

Trunnion Diameter	Saddle 1 750!!	Upper Pitman	Pitman Equalizer	
Join Dearing Length for T.	1 5 1 / 411		1. 750"	
TOISCIED APRA (an III	1 0 0		4 5/8"	1.500"
Bearing Material (or Mfg. N	Sol Bronne			4"
			8.1 sq. in.	6 sq. in.
Method of Lubrication	Alemite oil bath	THE WAR TO WARRED	Bronze	Bronze
Type of Oil Seal Weight of Oil Person	Name oil bath	H 154	Alemita	
Weight of Oil Recommended			Vacante oil bat	h Alemite oil 1
Is Bearing Self-Aligning Trunnion Material	nigh quality, semi	-fluid, aluminum	veoprene	Neoprene
Frunnion Material	INO		1 soap grease.	
	SAE 1020		Yes	Yes
		2	AE 1020	SAE 1020
Material	W	RIST PIN		
Overham E	SAE 1020			
Min Yield Prince Crank to Centre	er Wrist Pin Bearing 1.500"	Dimension of Crank Fi	L 1 3/4" tanes	. 2/4
Min. Yield Point Matl	36,000		capel	- 3/4" per ft
	LD. Per So	. In. A.P.I. Capacity each	2, 239	
	BEAM COL	INTERBALANCE		
Type Available		PITTERBALANCE		
Beam Optional extra	3 0 !			
Maximum Counterbalance Effect	a equipment			
Conferbalance Effect	of Polich D : 2127	_Beam Weights (Wainly	190 1h-	
	di olish kod 2127	LIBIDA / AAGIGINA	DOP SON - / U LUS	
	Constitution Rod 2127	Beam Weights (Weight	per Set) 170 IDS.	
	CITOISI ROD ZIZI	lbs. with_	6	sets of weight
		Jbs. with_	6	
		Jbs. with_	6	
Plary Crank Ontional	CRANK COU	NTERBALANCE	6	
Plary Crank Ontional	CRANK COU	NTERBALANCE	6	
Plary Crank Ontional	CRANK COU	NTERBALANCE	6	
Plary Crank Ontional		NTERBALANCE ight of each extra crank v ke) 543 lbs. at 8	reight 140 lbsNo	
Plary Crank Ontional	CRANK COU	NTERBALANCE ight of each extra crank video 543 lbs. at 80 411 lbs. at 12	reight 140 lbsNo	
Plary Crank Ontional	CRANK COU	NTERBALANCE ight of each extra crank video 543 lbs. at 80 411 lbs. at 12	reight 140 lbsNo	
Plary Crank Ontional	CRANK COU	NTERBALANCE ight of each extra crank v ke) 543 lbs. at 8	reight 140 lbsNo	
Plary Crank Ontional	CRANK COU	NTERBALANCE ight of each extra crank video 543 lbs. at 80 411 lbs. at 12	reight 140 lbsNo	
Plary Crank Ontional	CRANK COU	NTERBALANCE ight of each extra crank video 543 lbs. at 80 411 lbs. at 12	reight 140 lbsNo	
Plary Crank Ontional	CRANK COU	NTERBALANCE ight of each extra crank video 543 lbs. at 80 411 lbs. at 12	reight 140 lbsNo	
Plary Crank Ontional	CRANK COU	NTERBALANCE ight of each extra crank video 543 lbs. at 80 411 lbs. at 12	reight 140 lbsNo	
Plary Crank Ontional	CRANK COU	NTERBALANCE ight of each extra crank video 543 lbs. at 80 411 lbs. at 12	reight 140 lbsNo	
otary Crank <u>Optional ext</u> eximum Counterbalance Effect o	CRANK COUITE Equipment Weiter Polish Rod (Pounds at each stro	NTERBALANCE ight of each extra crank v ke) 543 lbs. at 86 411 lbs. at 12 359 lbs. at 16	reight 140 lbsNo	
ptary Crank <u>Optional ext</u> eximum Counterbalance Effect o	CRANK COUITE Equipment Weiter Polish Rod (Pounds at each stro	NTERBALANCE ight of each extra crank v ke) 543 lbs. at 86 411 lbs. at 12 359 lbs. at 16	reight 140 lbsNo	
ptary Crank Optional ext aximum Counterbalance Effect of the Complete With Cranks, Belt (ves and Bark)	CRANK COUITE equipment Weight Polish Rod (Pounds at each stroit WEIGH	NTERBALANCE ight of each extra crank v ke) 543 lbs. at 8 411 lbs. at 12 359 lbs. at 16	veight 140 lbsNo'stroke	per set 2
ptary Crank Optional ext aximum Counterbalance Effect of the Complete With Cranks, Belt (ves and Bark)	CRANK COUITE equipment Weight Polish Rod (Pounds at each stroit WEIGH	NTERBALANCE ight of each extra crank v ke) 543 lbs. at 8 411 lbs. at 12 359 lbs. at 16	veight 140 lbsNo'stroke	per set 2
ptary Crank Optional ext aximum Counterbalance Effect of the Complete With Cranks, Belt (ves and Bark)	CRANK COUITE equipment Weight Polish Rod (Pounds at each stroit WEIGH	NTERBALANCE ight of each extra crank v ke) 543 lbs. at 8 411 lbs. at 12 359 lbs. at 16	veight 140 lbsNo'stroke	per set 2
ptary Crank Optional ext aximum Counterbalance Effect of the Complete With Cranks, Belt (ves and Bark)	CRANK COUITE equipment Weight Polish Rod (Pounds at each stroit WEIGH	NTERBALANCE ight of each extra crank v ke) 543 lbs. at 8 411 lbs. at 12 359 lbs. at 16	veight 140 lbsNo 'stroke 'stroke 'stroke 'stroke	Per set_2
ptary Crank Optional ext aximum Counterbalance Effect of the Complete With Cranks, Belt (ves and Bark)	CRANK COUITE Equipment Weiter Polish Rod (Pounds at each stro	NTERBALANCE ight of each extra crank v ke) 543 lbs. at 8 411 lbs. at 12 359 lbs. at 16	veight 140 lbsNo'stroke	Reducer, Reducer
ptary Crank Optional ext aximum Counterbalance Effect of the Complete With Cranks, Belt (ves and Bark)	CRANK COUITE equipment Weight Polish Rod (Pounds at each stroit WEIGH	NTERBALANCE ight of each extra crank v ke) 543 lbs. at 8 411 lbs. at 12 359 lbs. at 16	veight 140 lbsNo 'stroke 'stroke 'stroke 'stroke	Per set_2
ptary Crank Optional ext aximum Counterbalance Effect of the Complete With Cranks, Belt (ves and Bark)	CRANK COUITE equipment Weight Polish Rod (Pounds at each stroit WEIGH	NTERBALANCE ight of each extra crank v ke) 543 lbs. at 8 411 lbs. at 12 359 lbs. at 16	veight 140 lbsNo 'stroke 'stroke 'stroke 'stroke	Per set 2
ptary Crank Optional ext aximum Counterbalance Effect of the Complete With Cranks, Belt (ves and Bark)	CRANK COUITE equipment Weight Polish Rod (Pounds at each stroit WEIGH	NTERBALANCE ight of each extra crank v ke) 543 lbs. at 8 411 lbs. at 12 359 lbs. at 16	veight 140 lbsNo 'stroke 'stroke 'stroke 'stroke	Per set 2
ptary Crank Optional ext aximum Counterbalance Effect of the Complete With Cranks, Belt (ves and Bark)	CRANK COUITE equipment Weight Polish Rod (Pounds at each stroit WEIGH	NTERBALANCE ight of each extra crank v ke) 543 lbs. at 8 411 lbs. at 12 359 lbs. at 16	veight 140 lbsNo 'stroke 'stroke 'stroke 'stroke	Per set 2
ptary Crank Optional ext aximum Counterbalance Effect of the Complete With Cranks, Belt (ves and Bark)	CRANK COUITE equipment Weight Polish Rod (Pounds at each stroit WEIGH	NTERBALANCE ight of each extra crank v ke) 543 lbs. at 8 411 lbs. at 12 359 lbs. at 16	veight 140 lbsNo 'stroke 'stroke 'stroke 'stroke	Per set 2

CABOT PUMPING UNITS - STRUCTURAL PARTS No. B5-25

(See Drawings Attached)

(Зее	Drawings Affached)
Manufacture / T. M. B.C. 25D	
Manufacturer's Type No. B5-25D	Rated Polish Rod Load for Rig Parts 5, 730 lbs
Gear Units Used With This Frame 16D - 25D Polish Rod Strokes, Inches 20" - 25"	
rollsh Rod Strokes, Inches 20 - 25	
W	ALKING BEAM
A. P. I. Polished Rod Load Rating (Allow for bolt holes) 5.	730 lbs.
Structural Section 10" x 5 3/4" WF at 21 lbs.	Weight Carbon, Silicon or Alloy Carbon
Distance between Working Centers: Well End 3'-1 1/2"	Dia
Provision Made for Servicing WellDetachable single	bolt horsehead
Clearance between well and walking beam when servicing_	Amount of Adjustment to and from Well 211
The state of the s	
BI	EAM HANGER
Horsehead Type: Mat'l Welded steel plate	e Link Type:
Size Wire Rope 3/4" preformed	Trunion Diameter
Type Wire Rope 6 x 19 Imp. plow steel	
Type Upper End Stationary cast steel shear	re P: 0 : .
Type Lower End Cast gate with taper socket	S for Hanger Reins
Zinced-in wire rope	Length
Foundation Clearance at Midstroke 4'-10 1/2"	Foundation Clearance at Midstroke
Method of Securing Beam Hanger to Walking Beam Cross	mamban an Land
Set screws on each side adjust the alignr	ment of horsehead.
	A Legislander when a control control of the control
SAA	MPSON POST
ypeDerrick-Type - 4 angle legs	Height (Top Skids to Top S. Post) 6'-3 1/2"
ize Members:	Height (Fd'n. to Center Line) 7'-0 1/4"
Legs 3 1/2" x 3 1/2" x 1/4" angles	Bracing 2" x 2" x 3/16" angles
Top 10" x 1/2" x 16" plate	Girts 211 2/1/11
orizontal Distance from Center Line of Sampson Post to Cen	ter Line of Crankshaft of Gear Unit31-011
pigin (bollom of Frame to top of Beam) 0 =0 11/10	
olted or welded to Base Welded	
	BASE
/ 11	
ructural Section 6" x 4" WF at 12 lbs.	Width (Center to Center) 811
ngin, Standard Base. 0 -11	Length of Outrigger (Detachable) 31-311
ngth, Short Base	Length of Engine Extension
e Slide Kails Furnished Yes	Is Reducer Sub-Base Furnished_Yes
undation Bolts 15 - 7/8" x 24"	Reducer Bolts 6 - 7/8"
411 2 2 4 4 1 1	PITMAN
ructural Shape T X 2 3/4" - 1. 1 1D. 1-Deam	Length (Center of Brg. to Center of Brg.) 61-3 5/811
itman detachable from Wrist Pin Bearing? Yes	— comer or big. to center or brg.)
EQUALITY	7ATION AGAIN
	ZATION BEAM
uctural Section ST6 WF tee (6 1/2"x6"x3/8") a	at 13.5# Married Cambon at 1
man Centers 1'-6 5/16" at beam May Stress at B	Peter Consider 883

Bearing Selection is for at least 100,000 hours Minimum Life at 20 S.P.M.

	Saddle	Upper Pitman Pitma	an Equalizer Wrist Pin
Trunnion Diameter	311	2.500"	
Total Bearing Length (or Type)	7 1/2"	11_1/2	
Total Projected Area (or Mfg.)	22.5 sq. in.	24 sq.	- TIKRAYA
Bearing Material (or Mfg. No.)_	Bronze	Rubber	
		1040001	
Method of Lubrication	Alemite oil bath	None	Alemite oil b
Type of Oil Seal	Neoprene	None	
Weight of Oil Recommended	High quality, ser	ni-fluid, aluminum so	Neoprene
Is Bearing Self-Aligning	No	Yes	Yes
Trunnion Material	SAE 1020	SAE 41	
		5AE 41	40 SAE 1020
		12 (14 (A))	
		WRIST PIN	
Material	SAE 1020	Dimension of Crank Fie 1 3	/4" taper - 3/4" per ft.
Overhang-Face Crank to Center W	rist Pin Bearing 1.749"	The section of the research seed of the property of the section of	
Min. Yield Point Matl	2/ 000	Sq. In. A.P.I. Capacity each 3.	250 Lbs.
			LOS
	BEAM CO	DUNTERBALANCE	
T		102	
Type Available			
Beam Regularly furnis Maximum Counterbalance Effect at		Beam Weights (Weight per	Set 250 lbs.
Rotary Crank <u>Optional extra</u> Maximum Counterbalance Effect at i	equipment ,	OUNTERBALANCE Veight of each extra crank weight of each extra crank weight of each extra crank weight stroke) 456 lbs. at 20" st	roke
	W	EIGHTS	
leight Complete With Cranks, Belt G		0	
		Lbs. Counte	erweights, but Less Reducer, Reducer
eight Complete With 16D	1960	25D 2122	VithReducertbs.
Kedi	cer 1 / 00 Lbs., With	Reducer 2130 Lbs., W	VithReducerths
MARKS			
EARNE)		
			The state of the s
150 July 100			
Service and the service of the servi			

CABOT PUMPING UNITS - STRUCTURAL PARTS No. B4L-30

(See Drawings Attached)

Rated Polish Rod Load for Rig Parts 3, 100 lbs.
NG BEAM
lbs.
Weight Carbon, Silicon or Alloy Carbon
Pitman End45" - 36" - 27"
olt horsehead
Amount of Adjustment to and from Well 1 1/2"
HANGER
Link Type:
_ Trunion Diameter
Bearing Length or Mfg. No
Proj. Bearing Area or Rating
r Hanger Reins
_ Length
Foundation Clearance at Midstroke
ead cross member rests on beam behind anglont end of beam retains horsehead in position
Height (Top Skids to Top S. Post) 5'-17/8" Height (Fd'n. to Center Line) 5'-10" Bracing
- Girts
Line of Crankshaft of Gear Unit 21-6"
ASE
back to back 6" Width (CHIEKSKENSE) 6"
Length of Outrigger (Detachable) 31-011
Length of Engine Extension
sengin or engine extension
Is Reducer Sub-Base Furnished No
Is Reducer Sub-Base Furnished No Reducer Bolts 6 - 3/4"
Is Reducer Sub-Base Furnished No
Is Reducer Sub-Base Furnished No
Is Reducer Sub-Base Furnished No. Reducer Bolts 6 - 3/4"
Is Reducer Sub-Base Furnished No Reducer Bolts 6 - 3/4"
Is Reducer Sub-Base Furnished. No Reducer Bolts. 6 - 3/4"
Is Reducer Sub-Base Furnished No Reducer Bolts 6 - 3/4"
AAN Length (Center of Brg. to Center of Brg.) 5'-4 1/2"

BEARINGS

Bearing Selection is for at least 100,000 hours Minimum Life at 20 S.P.M.

	Saddle	Upper Pitman	Pitman Equalizer	Wrist Pin
Trunnion Digmeter	2. 4375"		1.750"	1. 3775"
Total Bearing Length (or Type)_	6 1/2"	the state of the s	4 5/8"	Roller
Total Projected Area (or Mfg.)	15.84 sq. in.	Application of the second	8. l sq. in.	Link Belt
Bearing Material (or Mfg. No.)_	The second secon	The State of the S	Bronze	2830-D
Method of Lubrication	Alemite oil bath	, and 18 11 12 12 12 22	Alemite oil b	athAlemite oil ba
Type of Oil Seal	Neoprene		Neoprene	Neoprene
Weight of Oil Recommended	High quality, se	mi-fluid, alumin	um soap grease	ALL STANDARDS CONTRACTORS TO PERSONS
Is Bearing Self-Aligning	No ·		Yes	Yes
Trunnion Material	SAE 1020		SAE 1020	SAE 1020
		WRIST PIN		
Material	SAE 1020	Dimension of Cro	ink Fit 1 3/4" tap	er - 3/4" per ft.
Overhang-Face Crank to Center			An and the contract of the second	
Min. Yield Point Matl	36,000 Lb. I	Per Sq. In. A.P.I. Capacity	y each 3, 250	Lbs.
Type Available Beam Optional extra	equipment	Beam Weights (\	Veight per Set) 190]	bs.
Rotory Cronk Optional extr	a equipment		crank weight 140 lb.	No. per set 2
Maximum Counterbalance Effect	at Polish Rod (Pounds at e	ach stroke) 381 1b	at 18" stroke	
		271 lb.	at 24" stroke	
		210 lb.	at 30" stroke	
				3.1
		WEIGHTS		
Veight Complete With Cranks, Be heaves and Brake980	olt Guard, Siide Rails and	0	_Lbs. Counterweights, be	ut Less Reducer, Reducer
Veight Complete With 10D	Reducer 1398 Lbs., W	ith 16D Reducer 14	58 Lbs., With	_Reducertbs.
EMARKS				
				and the second s
			in the second probability of	er () r r r r r r r r r r r r r r r r r
Manager and the second				
				200 D. C.

CABOT PUMPING UNITS - STRUCTURAL PARTS

No. B4-20

	Drawing August 19 No. B4-20
(See [Drawings Attached)
Manufacturer's Type No. B4-20	
Gear Units Used With This I IOD 1/D	Rated Polich D. L.
Polish Rod Strokes, Inches 12" - 16" - 20"	Rated Polish Rod Load for Rig Parts 3, 900 1bs.
onokes, inches 12" - 16" - 20"	
	The second secon
WA	ALKING BEAM
A. P. I. Polished Rad Load Rating (Allow for bolt holes) 3, 90 Structural Section 8 x 5 1/4" at 17#	20.11
Structural Section 8 x 5 1/4" at 17#	JO IDS.
Statice Delween Wall:	Weight Carbon Sit:
	Weight Carbon, Silicon or Alloy Carbon
Clearance between well and well:	bolt horsehead
Clearance between well and walking beam when servicing 8'	A service of the serv
The second secon	Amount of Adjustment to and from Well_1 1/2"
	그런 그는
Homel 17	M HANGER
Horsehead Type: Matl Welded Steel Plate Size Wire Rope 5/8" preformed	
Size Wire Rope 5/8" preformed	Link Type:
	Trunion Diameter
Type Upper End Stationary steel sheave Type Lower End Cast gate with	Bearing Length or Mfg. No.
Type Lower End Cast gate with taper socket	Proj. Bearing Area or Rating
zinced-in wire rope	for Hanger Reins
Foundation Clares	land
Method of Securing Remarks	Foundation
welded to hear Sieger to Walking Beam Horsehe	and cross of Midstroke
Single bolt in lower from	member rests on hearn hehind
SALVO	Foundation Clearance at Midstroke ead cross member rests on beam behind angle t end of beam retains horsehead in position. GON POST
SAMPS Derrick Type - 3 legs ize Members: 2 - 3"x3" x 1/4" angle front	ON POST
SAMPS: Derrick Type - 3 legs ite Members: 2 - 3"x3" x 1/4" angle front Legs 1 - 6" channel at 8.2 lbs. rear	Height (Top Skids to Top S. Post) 5'-1 7/8" Height (Fd'n. to Center Line) 5'-10"
SAMPS: Derrick Type - 3 legs Legs 1 - 6" channel at 8.2 lbs. rear	Height (Top Skids to Top S. Post) 5'-1 7/8" Height (Fd'n. to Center Line) 5'-10"
SAMPS Derrick Type - 3 legs Legs	Height (Top Skids to Top S. Post) 5'-1 7/8" Height (Fd'n. to Center Line) 5'-10"
SAMPS pe Derrick Type - 3 legs te Members: 2 - 3"x3" x 1/4" angle front Legs 1 - 6" channel at 8.2 lbs. rear Top 8" x 5/8" x 12" plate prizontal Distance from Center Line of Sampson Post to Center Line of Sampson Post to Center Line (Bottom of Frame Assistance)	Height (Top Skids to Top S. Post) 5'-1 7/8" Height (Fd'n. to Center Line) 5'-10"
SAMPS pe Derrick Type - 3 legs te Members: 2 - 3"x3" x 1/4" angle front Legs 1 - 6" channel at 8.2 lbs. rear Top 8" x 5/8" x 12" plate prizontal Distance from Center Line of Sampson Post to Center Line of Sampson Post to Center Line (Bottom of Frame Assistance)	Height (Top Skids to Top S. Post) 5'-1 7/8" Height (Fd'n. to Center Line) 5'-10"
SAMPS pe Derrick Type - 3 legs te Members: 2 - 3"x3" x 1/4" angle front Legs 1 - 6" channel at 8.2 lbs. rear Top 8" x 5/8" x 12" plate prizontal Distance from Center Line of Sampson Post to Center Line of Sampson Post to Center Line (Bottom of Frame Assistance)	Height (Top Skids to Top S. Post) 5'-1 7/8" Height (Fd'n. to Center Line) 5'-10"
SAMPS Derrick Type - 3 legs Legs	ON POST Height (Top Skids to Top S. Post) 5'-1 7/8" Height (Fd'n. to Center Line) 5'-10" Bracing Girts Line of Crankshaft of Gear Unit 2'-6"
SAMPS Derrick Type - 3 legs Re Members: 2 - 3"x3" x 1/4" angle front Legs 1 - 6" channel at 8.2 lbs. rear Top 8" x 5/8" x 12" plate rizontal Distance from Center Line of Sampson Post to Center I ght (Bottom of Frame to top of Beam) 6'-7 3/4" Ted or welded to Base Welded BASE	CON POST Height (Top Skids to Top S. Post) 5'-1 7/8" Height (Fd'n. to Center Line) 5'-10" Bracing Girts Line of Crankshaft of Gear Unit 2'-6"
SAMPS Derrick Type - 3 legs The Members: 2 - 3"x3" x 1/4" angle front Legs 1 - 6" channel at 8.2 lbs. rear Top 8" x 5/8" x 12" plate Trizontal Distance from Center Line of Sampson Post to Center I ght (Bottom of Frame to top of Beam) 6'-7 3/4" Ted or welded to Base Welded BASE	CON POST Height (Top Skids to Top S. Post) 5'-1 7/8" Height (Fd'n. to Center Line) 5'-10" Bracing Girts Line of Crankshaft of Gear Unit 2'-6"
SAMPS Derrick Type - 3 legs The Members: 2 - 3"x3" x 1/4" angle front Legs 1 - 6" channel at 8.2 lbs. rear Top 8" x 5/8" x 12" plate Trizontal Distance from Center Line of Sampson Post to Center I ght (Bottom of Frame to top of Beam) 6'-7 3/4" Ted or welded to Base Welded BASE Stortural Section 6" channels - 8.2 lbs. The Standard Base 8'-2 7/8"	Height (Top Skids to Top S. Post) 5'-1 7/8" Height (Fd'n. to Center Line) 5'-10" Bracing Girts Line of Crankshaft of Gear Unit 2'-6" SE back to back Width (Center Kine) 6"
SAMPS Derrick Type - 3 legs to Members: 2 - 3"x3" x 1/4" angle front Legs 1 - 6" channel at 8.2 lbs. rear Top 8" x 5/8" x 12" plate rizontal Distance from Center Line of Sampson Post to Center I ght (Bottom of Frame to top of Beam) 6'-7 3/4" ted or welded to Base Welded BA: ctural Section 6" channels - 8.2 lbs. th, Standard Base 8'-2 7/8"	Height (Top Skids to Top S. Post) 5'-1 7/8" Height (Fd'n. to Center Line) 5'-10" Bracing Girts Line of Crankshaft of Gear Unit 2'-6" SE Width (Contexto Context) 6" Length of Outrigaer (Detachable) 31-0"
SAMPS Derrick Type - 3 legs to Members: 2 - 3"x3" x 1/4" angle front Legs 1 - 6" channel at 8.2 lbs. rear Top 8" x 5/8" x 12" plate rizontal Distance from Center Line of Sampson Post to Center I ght (Bottom of Frame to top of Beam) 6'-7 3/4" ted or welded to Base Welded BAR Schurd Section 6" channels - 8.2 lbs. th, Standard Base 8'-2 7/8"	Height (Top Skids to Top S. Post) 5'-1 7/8" Height (Fd'n. to Center Line) 5'-10" Bracing Girts Line of Crankshaft of Gear Unit 2'-6" SE Width (Contex to back 6" Length of Outrigger (Detachable) 3'-0" Length of Engine Extension
SAMPS Derrick Type - 3 legs te Members: 2 - 3"x3" x 1/4" angle front Legs 1 - 6" channel at 8.2 lbs. rear Top 8" x 5/8" x 12" plate rizontal Distance from Center Line of Sampson Post to Center I ght (Bottom of Frame to top of Beam) 6'-7 3/4" ted or welded to Base Welded BAS ctural Section 6" channels - 8.2 lbs. th, Standard Base 8'-2 7/8" th, Short Base Lation Bolts 10 - 3/4" x 18"	Height (Top Skids to Top S. Post) 5!-1 7/8" Height (Fd'n. to Center Line) 5!-10" Bracing Girts Line of Crankshaft of Gear Unit 2!-6" SE Width (Contex to back 6" Length of Outrigger (Detachable) 3!-0" Length of Engine Extension S Reducer Sub-Base Furnished No. 100 No.
SAMPS Derrick Type - 3 legs to Members: 2 - 3"x3" x 1/4" angle front Legs	Height (Top Skids to Top S. Post) 5!-1 7/8" Height (Fd'n. to Center Line) 5!-10" Bracing Girts Line of Crankshaft of Gear Unit 2!-6" SE Width (Contex to back 6" Length of Outrigger (Detachable) 3!-0" Length of Engine Extension S Reducer Sub-Base Furnished No. 100 No.
SAMPS Derrick Type - 3 legs to Members: 2 - 3"x3" x 1/4" angle front Legs 1 - 6" channel at 8.2 lbs. rear Top 8" x 5/8" x 12" plate rizontal Distance from Center Line of Sampson Post to Center I ght (Bottom of Frame to top of Beam) 6'-7 3/4" ted or welded to Base Welded BAS ctural Section 6" channels - 8.2 lbs. th, Standard Base 8'-2 7/8" th, Short Base L Slide Rails Furnished Yes dation Bolts 10 - 3/4" x 18"	Height (Top Skids to Top S. Post) 5'-1 7/8" Height (Fd'n. to Center Line) 5'-10" Bracing Girts Line of Crankshaft of Gear Unit 2'-6" SE Width (Contex to back 6" Length of Outrigger (Detachable) 3'-0" Length of Engine Extension
SAMPS Derrick Type - 3 legs Legs	Height (Top Skids to Top S. Post) 5'-1 7/8" Height (Fd'n. to Center Line) 5'-10" Bracing Girts Line of Crankshaft of Gear Unit 2'-6" SE Width (Contex (Contex)) 6" Length of Outrigger (Detachable) 3'-0" Length of Engine Extension S Reducer Sub-Base Furnished No Reducer Bolts 6 - 3/4"
SAMPS Derrick Type - 3 legs Legs	Height (Top Skids to Top S. Post) 5'-1 7/8" Height (Fd'n. to Center Line) 5'-10" Bracing Girts Line of Crankshaft of Gear Unit 2'-6" SE Width (Contex Mark (Contex Mark) Length of Outrigger (Detachable) 3'-0" Length of Engine Extension S Reducer Sub-Base Furnished No Reducer Bolts 6 - 3/4"
SAMPS Derrick Type - 3 legs Legs	Height (Top Skids to Top S. Post) 5'-1 7/8" Height (Fd'n. to Center Line) 5'-10" Bracing Girts Line of Crankshaft of Gear Unit 2'-6" SE Width (Contex to back 6" Length of Outrigger (Detachable) 3'-0" Length of Engine Extension S Reducer Sub-Base Furnished No Reducer Bolts 6 - 3/4"
SAMPS Derrick Type - 3 legs Legs	Height (Top Skids to Top S. Post) 5'-1 7/8" Height (Fd'n. to Center Line) 5'-10" Bracing Girts Line of Crankshaft of Gear Unit 2'-6" SE Width (Construction of Control of
SAMPS Derrick Type - 3 legs Legs 1 - 6" channel at 8.2 lbs. rear Top 8" x 5/8" x 12" plate rizontal Distance from Center Line of Sampson Post to Center I ght (Bottom of Frame to top of Beam) 6'-7 3/4" Ted or welded to Base Welded BASE Standard Base 8'-2 7/8" Leth, Standard Base 8'-2 7/8" Leth, Short Base Side Rails Furnished Yes Idation Bolts 10 - 3/4" x 18" Furnal Shape 2"x2"x5/16" tee at 4.3 lbs. Leth an detachable from Wrist Pin Bearing? Yes	Height (Top Skids to Top S. Post) 5'-1 7/8" Height (Fd'n. to Center Line) 5'-10" Bracing Girts Line of Crankshaft of Gear Unit 2'-6" SE Width (Center Processes) 6" Length of Outrigger (Detachable) 3'-0" Length of Engine Extension S Reducer Sub-Base Furnished No Reducer Bolts 6 - 3/4" AN Length (Center of Brg. to Center of Brg.) 5'-4 1/2"
SAMPS Derrick Type - 3 legs Legs	Height (Top Skids to Top S. Post) 5'-1 7/8" Height (Fd'n. to Center Line) 5'-10" Bracing Girts Line of Crankshaft of Gear Unit 2'-6" SE Width (Center Processes) 6" Length of Outrigger (Detachable) 3'-0" Length of Engine Extension S Reducer Sub-Base Furnished No Reducer Bolts 6 - 3/4" AN Length (Center of Brg. to Center of Brg.) 5'-4 1/2"
SAMPS Derrick Type - 3 legs Legs	Height (Top Skids to Top S. Post) 5'-1 7/8" Height (Fd'n. to Center Line) 5'-10" Bracing Girts Line of Crankshaft of Gear Unit 2'-6" SE back to back Width (Context Context) 6" Length of Outrigger (Detachable) 3'-0" Length of Engine Extension s Reducer Sub-Base Furnished No Reducer Bolts 6 - 3/4" AN ength (Center of Brg. to Center of Brg.) 5'-4 1/2"
SAMPS Derrick Type - 3 legs Legs	Height (Top Skids to Top S. Post) 5'-1 7/8" Height (Fd'n. to Center Line) 5'-10" Bracing Girts Line of Crankshaft of Gear Unit 2'-6" SE back to back Width (Context Context) 6" Length of Outrigger (Detachable) 3'-0" Length of Engine Extension S Reducer Sub-Base Furnished No Reducer Bolts 6 - 3/4" AN ength (Center of Brg. to Center of Brg.) 5'-4 1/2"
SAMPS Derrick Type - 3 legs ize Members: 2 - 3"x3" x 1/4" angle front Legs 1 - 6" channel at 8.2 lbs. rear Top 8" x 5/8" x 12" plate crizontal Distance from Center Line of Sampson Post to Center II right (Bottom of Frame to top of Beam) 6'-7 3/4" Ted or welded to Base Welded BASE Cottoral Section 6" channels - 8.2 lbs. Sith, Standard Base 8'-2 7/8" Sth, Short Base Slide Rails Furnished Yes Indiation Bolts 10 - 3/4" x 18" Coural Shape 2"x2"x5/16" tee at 4.3 lbs. Than detachable from Wrist Pin Bearing? Yes EQUALIZATION	Height (Top Skids to Top S. Post) 5'-1 7/8" Height (Fd'n. to Center Line) 5'-10" Bracing Girts Line of Crankshaft of Gear Unit 2'-6" SE back to back Width (Contex Contex C
SAMPS Spe Derrick Type - 3 legs ite Members: 2 - 3"x3" x 1/4" angle front Legs 1 - 6" channel at 8.2 lbs. rear Top 8" x 5/8" x 12" plate crizontal Distance from Center Line of Sampson Post to Center I ght (Bottom of Frame to top of Beam) 6'-7 3/4" Dred or welded to Base Welded BASE Stince the Standard Base 8'-2 7/8" cth. Short Base Slide Rails Furnished Yes Indiation Bolts 10 - 3/4" x 18" Coural Shape 2"x2"x5/16" tee at 4.3 lbs. The standard Base 1 legs First Annual Shape 2"x2"x5/16" tee at 4.3 lbs. The standard Base 2"x2"x5/16" tee at 4.3 lbs. The standard Base 2"x2"x5/16" tee at 4.3 lbs. The standard Base 2"x2"x5/16" tee at 4.3 lbs.	Height (Top Skids to Top S. Post) 5'-1 7/8" Height (Fd'n. to Center Line) 5'-10" Bracing Girts Line of Crankshaft of Gear Unit 2'-6" SE back to back Width (Contex to Contex Line) 3'-0" Length of Outrigger (Detachable) 3'-0" Length of Engine Extension S Reducer Sub-Base Furnished No Reducer Bolts 6-3/4" AN Length (Center of Brg. to Center of Brg.) 5'-4 1/2"

Bearing Selection is for at least 100,000 hours Minimum Life at 20 S.P.M.

Trunning Diameter	2 427511	Upper Pitman	Pitman Equalizer	Wrist Pin
Trunnion Diameter Total Bearing Length (or Type)	2. 4375"		1.750"	_ 1. 3775"
Total Projected Area (or Mfg.)	6 1/2"		4 5/8"	Roller
Bearing Material (or Mfg. No.)_	15.84 sq. in.		8.1 sq. in.	Link Belt
	Bronze		Bronze	2830-D
Method of Lubrication	A 7	279 350 3		<u> 2030-D</u>
Type of Oil Seal	Alemite oil bath		Alemite oil h	ath Alemite oil ba
Weight of Oil Recommended	Neoprene	11211	Neoprene	No and the oil ha
Is Bearing Self-Aligning	High quality, se	mi-fluid, alumi	num soap grease	Neoprene
Trunnion Material	No.	The state of the s	Yes	Yes
· · · · · · · · · · · · · · · · · · ·	SAE 1020	The state of the s	SAE 1020	SAE 1020
				DAE 1020
		WRIST PIN		
Material	SAE 1020	100 mar		- 1. *
Overhang-Face Crank to Center W	rist Pin Reggins 1 74911	Dimension of Cra	nk Fit 1 3/4" taper	- 3/4" per ft.
Min. Yield Point Matl.	26 000	7 (A) (A) (B)	A SHARE SHEET AND A SHEET OF THE SHEET OF	e Albania and a second
	Lb. Per	Sq. In. A.P.I. Capacity	each 3, 250	lbs.
				LDS.
	BEAM C	OUNTERBALANCE		
Type Available				
Beam Optional extra	aguin			
CALLA	equipment			The second secon
Adximum Counterbalance Ess.	2444	Beam Weights (W	eight ner Set 190 Th	•
Maximum Counterbalance Effect at	Polish Rod 2446	Beam Weights (We	with 6	
Aaximum Counterbalance Effect at	Polish Rod 2446	Beam Weights (We	eight per Set) 190 lb. with 6	sets of weights
Aaximum Counterbalance Effect at	Polish Rod 2446	bs.	eight per Set) 190 1b. with 6	
daximum Counterbalance Effect at	Polish Rod 2446 CRANK CO	— Beam Weights (Weights (Weights)	eight per Set) 190 1b. with 6	
otary Crank Optional extra	Polish Rod 2446 CRANK CO	OUNTERBALANCE	with 6	sets of weights
otary Crank Optional extra	Polish Rod 2446 CRANK CO	OUNTERBALANCE	with 6	sets of weights
Programum Counterbalance Effect at	Polish Rod 2446 CRANK CO	OUNTERBALANCE Weight of each extra cr	rank weight 140 lb.	sets of weights
Programum Counterbalance Effect at	Polish Rod 2446 CRANK CO	OUNTERBALANCE Weight of each extra cr stroke) 571 lb. at 407 lb. at	rank weight 140 lb. No. 12" stroke	sets of weights
daximum Counterbalance Effect at	Polish Rod 2446 CRANK CO	OUNTERBALANCE Weight of each extra cr stroke) 571 lb. at 407 lb. at	rank weight 140 lb. No. 12" stroke	sets of weights
otary Crank Optional extra	Polish Rod 2446 CRANK CO	OUNTERBALANCE Weight of each extra cr stroke) 571 lb. at 407 lb. at	rank weight 140 lb.	sets of weights
otary Crank Optional extra	Polish Rod 2446 CRANK CO	OUNTERBALANCE Weight of each extra cr stroke) 571 lb. at 407 lb. at	rank weight 140 lb. No. 12" stroke	sets of weights
otary Crank Optional extra	Polish Rod 2446 CRANK CO	OUNTERBALANCE Weight of each extra cr stroke) 571 lb. at 407 lb. at	rank weight 140 lb. No. 12" stroke	sets of weights
Programum Counterbalance Effect at	Polish Rod 2446 CRANK CO	OUNTERBALANCE Weight of each extra cr stroke) 571 lb. at 407 lb. at	rank weight 140 lb. No. 12" stroke	sets of weights
otary Crank Optional extra	Polish Rod 2446 CRANK CO	OUNTERBALANCE Weight of each extra cr stroke) 571 lb. at 407 lb. at	rank weight 140 lb. No. 12" stroke	sets of weights
otary Crank Optional extra	Polish Rod 2446 CRANK CO	OUNTERBALANCE Weight of each extra cr stroke) 571 lb. at 407 lb. at	rank weight 140 lb. No. 12" stroke	sets of weights
otary Crank Optional extra	CRANK Control of Pounds of each s	OUNTERBALANCE Weight of each extra crestroke) 571 lb. at 407 lb. at 313 lb. at	rank weight 140 lb. No. 12" stroke	sets of weights
ctary Crank Optional extra	CRANK Control of the	OUNTERBALANCE Weight of each extra cr stroke) 571 lb. at 407 lb. at	rank weight 140 lb. No. 12" stroke	sets of weights
otary Crank Optional extra eximum Counterbalance Effect at F	CRANK Control of the	OUNTERBALANCE Weight of each extra crestroke) 571 lb. at 407 lb. at 313 lb. at	rank weight 140 lb. No. 12" stroke 16" stroke 20" stroke	sets of weights
otary Crank Optional extra eximum Counterbalance Effect at Particular Counterbalance Effect at Particu	Polish Rod 2446 CRANK Control of Crank	OUNTERBALANCE Weight of each extra crestroke) 571 lb. at 407 lb. at 313 lb. at	rank weight 140 lb. No. 12" stroke 16" stroke 20" stroke	sets of weights
otary Crank Optional extra eximum Counterbalance Effect at Particular Counterbalance Effect at Particu	Polish Rod 2446 CRANK Control of Crank	OUNTERBALANCE Weight of each extra crestroke) 571 lb. at 407 lb. at 313 lb. at	rank weight 140 lb. No. 12" stroke 16" stroke 20" stroke	sets of weights lo. per set 2
ight Complete With Cranks, Belt Graves and Brake 980 ght Complete With 10D Reduced to the state of the complete With 10D Reduced to the state of the complete With 10D Reduced to the state of the complete With 10D Reduced to the state of the complete With 10D Reduced to the state of the complete With 10D Reduced to the state of the complete With 10D Reduced to the complete With 10D Reduced to the state of the complete With 10D Reduced to the complete With 10D	Polish Rod 2446 CRANK Control of Crank	OUNTERBALANCE Weight of each extra crestroke) 571 lb. at 407 lb. at 313 lb. at	rank weight 140 lb. No. 12" stroke 16" stroke 20" stroke	sets of weights lo. per set 2
ight Complete With Cranks, Belt Graves and Brake 980	Polish Rod 2446 CRANK Control of Crank	OUNTERBALANCE Weight of each extra crestroke) 571 lb. at 407 lb. at 313 lb. at	rank weight 140 lb. No. 12" stroke 16" stroke 20" stroke	sets of weights lo. per set 2
ight Complete With Cranks, Belt Graves and Brake 980 ght Complete With 10D Reduced to the state of the complete With 10D Reduced to the state of the complete With 10D Reduced to the state of the complete With 10D Reduced to the state of the complete With 10D Reduced to the state of the complete With 10D Reduced to the state of the complete With 10D Reduced to the complete With 10D Reduced to the state of the complete With 10D Reduced to the complete With 10D	Polish Rod 2446 CRANK Control of Crank	OUNTERBALANCE Weight of each extra crestroke) 571 lb. at 407 lb. at 313 lb. at	rank weight 140 lb. No. 12" stroke 16" stroke 20" stroke	sets of weights lo. per set 2
ight Complete With Cranks, Belt Graves and Brake 980 ght Complete With 10D Reduced to the state of the complete With 10D Reduced to the state of the complete With 10D Reduced to the state of the complete With 10D Reduced to the state of the complete With 10D Reduced to the state of the complete With 10D Reduced to the state of the complete With 10D Reduced to the complete With 10D Reduced to the state of the complete With 10D Reduced to the complete With 10D	Polish Rod 2446 CRANK Control of Crank	OUNTERBALANCE Weight of each extra crestroke) 571 lb. at 407 lb. at 313 lb. at	rank weight 140 lb. No. 12" stroke 16" stroke 20" stroke	sets of weights lo. per set 2
otary Crank Optional extra eximum Counterbalance Effect at Parameter Counterbalance Ef	Polish Rod 2446 CRANK Control of Crank	OUNTERBALANCE Weight of each extra crestroke) 571 lb. at 407 lb. at 313 lb. at	rank weight 140 lb. No. 12" stroke 16" stroke 20" stroke	sets of weights lo. per set 2
otary Crank Optional extra eximum Counterbalance Effect at Paximum	Polish Rod 2446 CRANK Control of Crank	OUNTERBALANCE Weight of each extra crestroke) 571 lb. at 407 lb. at 313 lb. at	rank weight 140 lb. No. 12" stroke 16" stroke 20" stroke	sets of weights lo. per set 2

CABOT PUMPING UNITS - STRUCTURAL PARTS No. B3L-24

(See Drawings Attached)

ear Units Used With This Frame 6. 4D - 10D clish Rod Strokes, Inches 12" - 18" - 24"	
aish Rod Strokes, Inches	
WALK	NG BEAM
WALKI	ING BEAM
P. I. Polished Rod Load Rating (Allow for bolt holes) 2600	lbs.
uctural Section 8" x 4" at 13 lbs.	Weight Carbon, Silicon or Alloy Carbon
tance between Working Centers: Well End 31-011	Pitman End 30 1/2" - 22" - 17"
vision Made for Servicing WellDetachable single bo	lt horsehead
arance between well and walking beam when servicing 9"	Amount of Adjustment to and from Well 1 1/2"
BEAM	HANGER
sehead Type: Mat'l Welded steel plate	Link Type:
Size Wire Rope 5/8" preformed	Trunion Diameter
Type Wire Rope 6 x 19 Imp. plow steel	Bearing Length or Mfg. No
Type Upper End Stationary Steel Sheave	Proj. Bearing Area or Rating
Type Lower End Cast gate with taper socket fo	
zinced-in wire rope	Length
Foundation Clearance at Midstroke 1'-11 1/2"	Foundation Clearance at Midstroke
rolded to beam. Single bolt in lower from	ad cross member rests on beam behind ang nt end of beam retains horsehead in positio
	in the drawn in the political political property
WF column-channel bracing Members:	Height (Top Skids to Top S. Post) 31-5 3/811 Height (Fd'n. to Center Line) 41-011
legs 6" x 4" WF at 8.5 lbs.	Brocing 6" channel at 8.2 lbs
Top 6" x 1/2" x 10" plate	_Girts
th (Bottom of Frame to top of Beam) 41-9 1/4"	
th (Bottom of Frame to top of Beam) 41-9 1/4"	
th (Bottom of Frame to top of Beam) 4'-9 1/4'' ed or welded to Base Welded	Line of Crankshaft of Gear Unit 21-411
tht (Bottom of Frame to top of Beam) 4'-9 1/4'' ed or welded to Base Welded BA	Line of Crankshaft of Gear Unit 21-411 ASE
tural Section 5" channels - 6.7 lbs.	ASE Width (Kannaexockannae) Line of Crankshaft of Gear Unit 21-411 ASE
th (Bottom of Frame to top of Beam). 4'-9 1/4'' ed or welded to Base	ASE Width (Remerka Remerk) Length of Outrigger (Detachable)
th (Bottom of Frame to top of Beam) 4'-9 1/4'' ed or welded to Base Welded But the Standard Base 7'-7 5/8'' th, Standard Base 7'-7 5/8''	ASE Width (Range XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
th (Bottom of Frame to top of Beam) 4'-9 1/4'' ed or welded to Base Butural Section 5'' channels - 6.7 lbs. th, Standard Base 7'-7 5/8'' th, Short Base Slide Rails Furnished Yes	Line of Crankshaft of Gear Unit 21-411 ASE Width (Remerkance Mark) Length of Outrigger (Detachable) Length of Engine Extension Is Reducer Sub-Base Furnished.
th (Bottom of Frame to top of Beam) 4'-9 1/4'' ed or welded to Base Welded By Ctural Section 5'' Channels - 6.7 lbs. th, Standard Base 7'-7 5/8'' th, Short Base Slide Rails Furnished Yes	ASE Width (Range XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
th, Standard Base 7'-7 5/8" th, Standard Base Yes Slide Rails Furnished Yes dation Bolts 10 - 3/4" zx 18"	Line of Crankshaft of Gear Unit 21-411 ASE Width (Remerkackenter) 611 Length of Outrigger (Detachable) Length of Engine Extension Is Reducer Sub-Base Furnished. No Reducer Bolts 6 - 3/411
thr (Bottom of Frame to top of Beam) 41-9 1/4" ed or welded to Base Welded Buttural Section 5" channels - 6.7 lbs. th, Standard Base 7'-7 5/8" th, Short Base Slide Rails Furnished Yes dation Bolts 10 - 3/4" zx 18"	ASE Width (Remerce Renter) Length of Outrigger (Detachable) Length of Engine Extension Is Reducer Sub-Base Furnished Reducer Bolts 6 - 3/4!
tural Section 5" channels - 6, 7 lbs. th, Standard Base	ASE Width (Remerce Renter) Length of Outrigger (Detachable) Length of Engine Extension Is Reducer Sub-Base Furnished Reducer Bolts 6 - 3/4!
tural Section 5" channels - 6, 7 lbs. th, Standard Base	ASE Width (Remerce Renter) Length of Outrigger (Detachable) Length of Engine Extension Is Reducer Sub-Base Furnished Reducer Bolts 6 - 3/4!
the Bottom of Frame to top of Beam) 4'-9 1/4'' Welded By Stural Section 5'' channels - 6.7 lbs. The Standard Base 7'-7 5/8'' The Short Base Yes Slide Rails Furnished Yes dation Bolts 10 - 3/4'' zx 18'' The Standard Shape 2'' x 2'' x 5/16'' tee at 4.3 lbs. The standard Shape 2'' x 2'' x 5/16'' tee at 4.3 lbs.	ASE Width (Remerce Renter) Length of Outrigger (Detachable) Length of Engine Extension Is Reducer Sub-Base Furnished Reducer Bolts 6 - 3/4!
sht (Bottom of Frame to top of Beam) 4'-9 1/4'' ed or welded to Base Butural Section 5'' channels - 6.7 lbs. th, Standard Base. 7'-7 5/8'' th, Short Base Slide Rails Furnished. Yes dation Bolts 10 - 3/4'' zx 18'' ctural Shape. 2'' x 2'' x 5/16'' tee at 4.3 lbs. PITAL THE PROPERTY OF	Line of Crankshaft of Gear Unit 2'-4" ASE Width (Range XXX Range) 6" Length of Outrigger (Detachable) Length of Engine Extension Is Reducer Sub-Base Furnished No Reducer Bolts 6 - 3/4" MAN Length (Center of Brg. to Center of Brg.) 3'-8 1/2" TION BEAM
ctural Section 5" channels - 6.7 lbs. th, Standard Base 7'-7 5/8" gth, Short Base Slide Rails Furnished Yes Idation Bolts 10 - 3/4" zx 18" ctural Shape 2" x 2" x 5/16" tee at 4.3 lbs. man detachable from Wrist Pin Bearing? Yes EQUALIZA ctural Section 5" x 2 1/2" x 7/16" tee at 9.45	Line of Crankshaft of Gear Unit 21-4" ASE Width (Restrict XX Restrict) 6" Length of Outrigger (Detachable) Length of Engine Extension Is Reducer Sub-Base Furnished No Reducer Bolts 6 - 3/4" MAN Length (Center of Brg. to Center of Brg.) 31-8 1/2" TION BEAM 1b. Material Carbon steel
sht (Bottom of Frame to top of Beam) 4'-9 1/4'' ed or welded to Base	Line of Crankshaft of Gear Unit 2'-4" ASE Width (Remerkor Remer) Length of Outrigger (Detachable) Length of Engine Extension Is Reducer Sub-Base Furnished Reducer Bolts 6 - 3/4" MAN Length (Center of Brg. to Center of Brg.) 3'-8 1/2" TION BEAM 1b. Material Carbon steel

Bearing Selection is for at least 100,000 hours Minimum Life at 20 S.P.M.

Towns of the second sec	Saddle	Upper Pitman	Pitman Equalizer	Wrist Pin
Trunnion Diameter	1.750"		1.750"	1.500"
Total Bearing Length (or Type)	5 1/4"		4 5/8"	4"
Total Projected Area (or Mfg.)	9.2 sq in		8.1 sq. in.	6 sq. in.
Bearing Material (or Mfg. No.)_	Bronze		Bronze	Bronze
Method of Lubrication	Alemite oil bath	h	Alemita oil bat	- Λ1:4 :11 ···
Type of Oil Seal	Neoprene			hAlemite oil bat
Weight of Oil Recommended	High quality-se	mi-fluid alum	Neoprene ninum soap greas	Neoprene
Is Bearing Self-Aligning	No	ani-iluid, aluii	unum soap greas	
Trunnion Material	SAE 1020		Yes SAE 1020	Yes SAE 1020
Material		WRIST PIN		
	SAE 1020	Dimension of Cra	onk Fit. 1 3/4" tape:	r - 3/411 64
Overhang-Face Crank to Center Wi	rist Pin Bearing 1.500'	1	enkin 1 3/1 tape.	r = 3/4" per it
Min. Yield Point Matl	36, 000 Lb. Per	Sq. In. A.P.I. Capacit	v each 2, 239	Lbs
Type Available Beam Optional extra e		OUNTERBALANCE		
Maximum Counterbalance Effect at I	quipment	Beam Weights (V	Veight per Set) 190 1	lbs.
Potary Crank Optional ext Maximum Counterbalance Effect at Po	ra equipment	395 lb. a	crank weight 140 lb. t 12" stroke t 18" stroke t 24" stroke	.No. per set 2
eight Complete With Cranks, Belt Gu		EIGHTS		
eaves and Brake 876	Lbs.		Lbs. Counterweights, but	Less Reducer, Reducer
pight Complete With 6, 4D Reduc	cer 1130 Lbs., With_	10D Reducer 122	27 lbs With	Dad
MARKS			77111	tequcertbs.

CABOT PUMPING UNITS STRUCTURAL PARTS No. B5L-30

N. 9.2 No. 1. Plantage (See Drawings Attached).

Manufacturer's Type No. B5L-30	Rated Polish Rod Load for Rig Parts 4, 800 lbs.
Gear Units: Used With This Frame: 16.D = 25D Garage	
Polish Rod Strokes, Inches 24" - 30"	
talled the state of the state o	The same of the sa
AW DARG U	
1.0205	
A. P. I. Polished Rod Load Rating (Allow for bolt holes) 4, 8	00 lbs.
Structural Section 10" x 5 3/4" WF at 21 lbs.	Weight Carbon, Silicon or Alloy Carbon
Distance: between-Working Centers: Well End: 3! -9!!	Pitman End 31 - 1 1/2"
Provision Made for Servicing Well Detachable sin	gle bolt horsehead
Clearance between well and walking beam when servicing	
CAN BAS SERVING	Amount of Adjustment to diffe from Wenz
BEA	AM HANGER
Horsehead Type: Mat 1. Welded steel plate.	at Trible Tunes
Size Wire Rope 3/4" preformed	Trunion Diameter:
Type Wire Rope_6 x 19 Imp. plow steel	Bearing Length or Mfg. No.
Type Upper EndStationary cast steel sheave	— bearing Lengm. or Mrg. 140.
Type Lower End Cast gate with taper sockets	TOT Hanges Pains
zinced-in wire rope	Length
Foundation Clearance at Midstroke 4'-10"	Foundation Clearance at Midstroke
	member on horsehead rests on beam behind
bar welded to beam. Single bolt in lower	front end of beam retains horsehead in place.
Set screws on each side adjust the alignm	ent of horsehead
Set screws on each side adjust the alignm	ust and a same and a same and the same and a same and the
there in ereconnection of the second	The second of th
SAMI	PSON POST
ype Derrick Type 4 angle legs	61 3 1/211
lize Members:	reignt: (lop:Skids to Top S. Post) 0 -3 1/2
Legs 3 1/2" x 3 1/2" x 1/4" angles	Height (Fd'n. to Center Line) 7'-0 1/4"
Ton 10" x 1/2" x 16" nlate	Girts $2^{11} \times 2^{11} \times 3/16^{11}$ angles
forizontal Distance from Center Line of Sampson Post to Center	GHELS A B GA ST TO SHARE STORY
leight (Bottom of Frame to top of Beam) 81-0 11/16"	er line of Cranksnam of Gear Unit
olted or welded to Base Welded	
oned of weided to pase worked	
	BASE
tructural Section 6" x 4" WF at 12 lbs.	ug ld 10
ength, Standard Base 8'-11"	Width (Center to Center) 811
angth, Short Base	Length of Outrigger (Detachable) 31-311
re Slide Rails Furnished Yes	Length of Engine Extension
pundation Bolts 15 - 7/8" x 24"	Is Reducer Sub-Base Furnished Yes
Judding South 19 170 X 21	
tructural Shape 4" x 2 3/4" - 7.7 lb. I beam	ITMAN - V
	Length (Center of Brg. to Center of Brg.) 61-3 5/811
Pitman detachable from Wrist Pin Bearing? Yes	
Note that the state of the stat	
EQUALIZ	ZATION BEAM
ructural Section ST6 WF tee (6 1/2" x 6" x 3/8	3") at 13.5#Moterial Carbon steel
tman Centers 1'-6 5/16" at beam Max. Stress at R	ated Capacity 883 Lbs. Sq. In.
26 1/2" at wrist pin - 16D	(50% counterbalanced)
34" at wrist pin - 25D	

Bearing Selection is for at least 100,000 hours Minimum Life at 20 S.P.M.

	Saddle	Upper Pitman		talian egyi enegyti.
Trunnion Diameter	311		Pitman Equalize	Wrist Pin
Total Bearing Length (or Type)			2. 500"	1. 3775"
Total Projected Area (or Mfg.)			11_1/2"	Roller
Bearing Material (or Mfg. No.)_	22.5 sq. in Bronze		24 sq. in.	Link Belt
	Drunze		Rubber	2830-D
Method of Lubrication	Alemite oil bath		None	Alemite oil
Type of Oil Seal	Neoprene		Vone	Maanna
Weight of Oil Recommended	High quality, sem	i-fluid, alumi	num soan gran	reoptene
s Bearing Self-Aligning	AU		es	Yes Yes
runnion Material	SAE 1020		AE 4140	SAE 1020
			Section 1	
	W	RIST PIN		
Material	SAE 1020			
verhang-Face Crank to Center W	JAE 1020	Dimension of Crar	nk Fit 1 3/4" tap	er - 3/4" per ft.
in. Yield Point Matl				
	Lb. Per S	q. In. A.P.I. Capacity	each 3, 250	
ary Crank Optional extr	a equipment	UNTERBALANCE	rank weight 140	sets of weight
ximum Counterbalance Effect at P	olish kod (Pounds at each st	70ke) 380 lbs.	at 24" stroke	
		303 Ibs.	at 30" stroke	
Y				
		GHTS		
int Complete With Cranks, Belt Goves and Brake 1566	ard, Slide Rails and			
2000	lbe		s. Counterweights, bu	t Less Reducer, Reducer
ht Complete With 16D Redu	cer 2010 Lbs., With 2	5D and 2180		
	, vviii——	reducer 2100	Lbs., With	_Reducertbs.
RKS				
			The state of the state of the state of	
			A CONTRACTOR OF THE CONTRACTOR	
				**

CABOT PUMPING UNITS - STRUCTURAL PARTS No B7-30

(See Drawings Attached)

Ma	Viacturer's Type No. B7-30 Rated Polish Rod Load for Rig Parts 7, 600 1bs.
Ge	r Units Used With This Frame 25D - 40D
	Rod Strokes, Inches 18" - 24" - 30"
	WALKING BEAM
۱. ۱	Polished Rod Load Rating (Allow for bolt holes) 7, 600 lbs.
tru	thral Section 12" x 6 1/2" WE at 27 1b. Weight Carbon, Silicon or Alloy Carbon
ist	pice between Working Centers: Well End 31-911 Pitman End 31-911
го	ision Made for Servicing Well Detachable single bolt horsehead
le	rance between well and walking beam when servicing 1'-2" Amount of Adjustment to and from Well 2"
	BEAM HANGER
	BEAM HANGER
	ehead Type: Mat'l Welded steel plate Link Type:
	ite Wire Rope 3/4" preformed Trunion Diameter.
	pe Wire Rope 6 x 19 Imp. plow steel Bearing Length or Mfg. No
ı	
	for zinced-in wire rope Length Foundation Clearance at Midstroke Foundation Clearance at Midstroke
	ed of Securing Beam Hanger to Walking Beam Cross member on horsehead rests on beam behind
	r welded to beam. Single bolt in lower front end of beam retains horsehead in
D	osition. Set screws on each side adjust the alignment of horsehead.
VD	SAMPSON POST Derrick Type - 4 angle legs
	Wembers: Height (Fd'n, to Center Line) 7' -5 3/8"
	4 x 4 x 1/4 angles Bracing 2" x 2" x 3/16" angles
ŀ	12" x 1/2" x 17" plate Girts 2" x 2" x 3/16" angles
or	zontal Distance from Center Line of Sampson Post to Center Line of Crankshaft of Gear Unit. 3! -8"
eid	(Bottom of Frame to top of Beam) 8'-8''
olt	or welded to Base_Welded
	BASE
ru	tural Section 6" x 4" WF at 16# Width (Center to Center) 8" - 25D, 15" - 40D
ng	th, Standard Base 11'-6 1/2"-25D, 11'-10 1/2" Length of Outrigger (Detachable) 3'-3"
ng	Short BaseLength of Engine Extension
re	Side Rails Furnished Yes Is Reducer Sub-Base Furnished Yes
UI	dotion Bolts 15 - 7/8" x 24" Reducer Bolts 6 - 7/8"
	DITMAN
	cural Shape 4" x 2 3/4" x 7.7 lb. I beam Length (Center of Brg. to Center of Brg.) 6'-6 3/4"
P;	man detachable from Wrist Pln Bearing? Yes
	EQUALIZATION BEAM
	cural Section ST6 WF tee (6 1/2" x 6" x 3/8") at 13.5# Material Carbon steel
	11 6 5/16!! at hearn May Street at Rated Capacity 1630
1	2'-10" at wrist pin -25D (50% counterbalanced)
1	21 711 at wright pin = 40D

Bearing Selection is for at least 100,000 hours Minimum Life at 20 S.P.M.

Tunnion Diameter		Upper Pitman	Pitman Equalize	er W	rist Pin
	3. 4375"		2. 500"	1.968	The second second second
otal Bearing Length (or Type)_	9 1/4"		11 1/2"	Rolle	
etal Projected Area (or Mfg.)_	31.8 sq. in.		24 sq. in.	Link	
earing Material (or Mfg. No.)_	Gatke		Rubber	3540 -	
thod of Lubrication	The state of the s		3 72 - 21		1 1
pe of Oil Seal	Alemite oil bath	# 1 The second	None	Alem	ite oil b
	Neoprene		None	Neont	ene
eight of Oil Recommended	High quality - se	emi-fluid, alun	ninum soap gre	ease	15 60
Bearing Self-Aligning	No	115 (117)	Yes	Yes	
Author Watsudi	SAE 1020		SAE 4140	SAE 1	020
cterial		WRIST PIN	2.3 /40.4	2/44	on analy
erhang-Face Crank to Center V		Dimension of Cro	ank Fit 2 1/4" tap	er-3/4" p	er ft.
. Yield Point Matl			4 000		CARRIED A STATE
	D. Fer	Sq. In. A.P.I. Capacity	y each 6.000		lbs.
Beam <u>Regularly</u> ximum Counterbalance Effect a	furnished Polish Rod 5910	Beam Weights (V	Veight per Set)	250 lbs.	of weights
rimum Counterbalance Effect a	Polish Rod 5910 CRANK C	COUNTERBALANCE	with 12	set	s of weights
ry Crank Optional ext	Polish Rod 5910 CRANK C	COUNTERBALANCE	with 12	set	
ry Crank Optional ext	Polish Rod 5910 CRANK C	OUNTERBALANCE Weight of each extra stroke) 1390 1bs.	crank weight 340 at 18" stroke	No. per set_	
stimum Counterbalance Effect a	Polish Rod 5910 CRANK C	COUNTERBALANCE Weight of each extra stroke) 1390 1bs. 1040 1bs.	cronk weight 340 at 18" stroke at 24" stroke	No. per set_	
ry Crank Optional ext	Polish Rod 5910 CRANK C	COUNTERBALANCE Weight of each extra stroke) 1390 1bs. 1040 1bs.	crank weight 340 at 18" stroke	No. per set_	
ry Crank Optional ext	CRANK Cora equipment Polish Rod (Pounds at each	COUNTERBALANCE Weight of each extra stroke) 1390 lbs. 1040 lbs. 835 lbs.	cronk weight 340 at 18" stroke at 24" stroke	No. per set_	
ry Crank <u>Optional ext</u>	CRANK Cora equipment Polish Rod (Pounds at each	COUNTERBALANCE Weight of each extra stroke) 1390 1bs. 1040 1bs.	cronk weight 340 at 18" stroke at 24" stroke	No. per set_	
ry Crank Optional extinum Counterbalance Effect at	CRANK Control of Polish Rod (Pounds at each Poli	COUNTERBALANCE -Weight of each extra stroke) 1390 1bs. 1040 1bs. 835 1bs.	crank weight 340 at 18" stroke at 24" stroke at 30" stroke	No. per set_	2
ory Crank Optional ext. Simum Counterbalance Effect at the counterbalance	CRANK Control of Polish Rod (Pounds at each Poli	COUNTERBALANCE -Weight of each extra stroke) 1390 1bs. 1040 1bs. 835 1bs.	crank weight 340 at 18" stroke at 24" stroke at 30" stroke	No. per set_	2
try Crank Optional ext. Improve Complete With Cranks, Belt of and Brake 2172	CRANK Control of Polish Rod (Pounds at each Poli	COUNTERBALANCE Weight of each extra stroke) 1390 1bs. 1040 1bs. 835 1bs.	crank weight 340 at 18" stroke at 24" stroke at 30" stroke	No. per set_	2
ory Crank Optional ext. Simum Counterbalance Effect at the counterbalance	CRANK Control of Polish Rod (Pounds at each Poli	COUNTERBALANCE -Weight of each extra stroke) 1390 1bs. 1040 1bs. 835 1bs.	crank weight 340 at 18" stroke at 24" stroke at 30" stroke	No. per set_	2, Reducer
ory Crank Optional extra complete With Cranks, Belt ves and Brake 2172	CRANK Control of Polish Rod (Pounds at each Poli	COUNTERBALANCE -Weight of each extra stroke) 1390 1bs. 1040 1bs. 835 1bs.	crank weight 340 at 18" stroke at 24" stroke at 30" stroke	No. per set_	2, Reducer
ory Crank Optional extra complete With Cranks, Belt ves and Brake 2172	CRANK Control of Polish Rod (Pounds at each Poli	COUNTERBALANCE -Weight of each extra stroke) 1390 1bs. 1040 1bs. 835 1bs.	crank weight 340 at 18" stroke at 24" stroke at 30" stroke	No. per set_	2, Reducer

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7-36

CABOT PUMPING UNITS - STRUCTURAL PARTS No. B7L-36

(See Drawings Attached)

Ma	rufacturer's Type No. B7L-36	Rated Polish Rod Load for Rig Parts 6, 300 lbs.
Ge	r Units Used With This Frame 25D - 40D	And the second s
Pol	st Rod Strokes, Inches 22" - 29" - 36"	
	MAAAA	CINC DEAM
	WALK	KING BEAM
A.	Polished Rod Load Rating (Allow for bolt holes) 6300	lbs.
	curai Section 12" x 6 1/2" WF at 27 lb.	Weight Carbon, Silicon or Alloy Carbon
	ance between Working Centers: Well End 4'-6"	Pitman End 31-911
Pro	ision Made for Servicing Well Detachable single b	oolt horsehead
-10	mance between well and walking beam when servicing 1 '-	Amount of Adjustment to and from Well 2"
1	The services were the warking beam when servicing	
		· · · · · · · · · · · · · · · · · · ·
	BEAN	M HANGER
	chead Type: Mat'l Welded steel plate	Link Type:
1101	Size Wire Rope 3/4" preformed	Trunion Diameter
	pe Wire Rope 6 x 19 Imp. plow steel	Bearing Length or Mfg. No
	Type Upper End Stationary cast steel sheave	
	Type Lower End Cast gate with taper sockets	for Hanger Reins
	rinced-in wire rope	Length
	Hundation Classense at Midstake 5'-0 3/8"	Foundation Clearance at Midstroke
	of Securing Beam Hanner to Walking Beam Cross r	nember on horsehead rests on beam behind
ba	welded to beam. Single bolt in lower	nember on horsehead rests on beam behind front end of beam retains horsehead in position
\$e	screws on each side adjust the alignment	ent of horsehead.
	The special of the second seco	
	SAMP	SON POST
	Derrick Type - 4 angle legs	Height (Top Skids to Top S. Post) 61-8 5/811
		Height (Fd'n. to Center Line) 71-5 3/8"
Size	Members: legs 4 x 4 x 1/4 angles	Bracing 2" x 2" x 3/16" angles
	12" x 1/2" x 17" plate	Girts 2" x 2" x 3/16" angles
	izontal Distance from Center Line of Sampson Post to Center	or Line of Crankshaft of Gear Unit 31-811
l oi	the (Bottom of Frame to top of Beam)81-811	
	or welded to Base Welded	
001	ed of welded to base	
		BASE
	ctural Section 6" x 4" WF at 16#	Width (Center to Center) 8" - 25D, 15" - 40D
11 1	11 111 (1/24 255 111 10 1/2	2" Length of Outringer (Detachable) 31-311
	461111	Length of Engine Extension
	th, Short Base	Is Reducer Sub-Base Furnished_ Yes
	Side Rails Furnished Yes	Reducer Bolts6 7/8"1
DU	dation Bolts 15 - 7/8" x 24"	Reducer Bons
		"ITMAN Length (Center of Brg. to Center of Brg.) 61-6 3/4"
	tural Shape. 4" x 2 3/4" x 7.7 lb. I beam	Length (Center of brg. to Center of brg.)
s Pi	pan detachable from Wrist Pin Bearing? 185	the control of the co
1		
	EQUALIZ	ZATION BEAM
	and the second s	011 . 10 511
\$tri	cural Section ST6 WF tee (6 1/2" x 6" x 3/	8") at 13.5#Moterial Carbon steel
	on Centers 1' -6 5/16" at beamMax. Stress at R	Rated Capacity 1236 Lbs. 5q. In.
	2'-10" at wrist pin - 25D	(50% counterbalanced)
	41 11	

Bearing Selection is for at least 100,000 hours Minimum Life at 20 S.P.M.

oral Bearing Length (or Type) 9 1/4" 11 1/2" Ro oral Projected Area (or Mfg.) 31.8 sq. in. 24 sq. in. Lin aaring Material (or Mfg. No.) Gatke Rubber 35. ethod of Lubrication Alemiteoil bath None None Need to Gil Seal Neoprene None None Need to Gil Seal Neoprene None None Need to Gil Seal Neoprene None None Need to Gil Recommended High quality - semi-fluid, aluminum soap grease No Yes Yes Yes None None Need This plantage No Yes None Need None None None Need None None None None None None None None	Alemite oil ban Neoprene grease Yes SAE 1020 taper - 3/4" per ft. by taper - 3/4" per ft. Neoprene Yes SAE 1020 Taper - 3/4" per ft. Neoprene Yes SAE 1020
stal Bearing Length (or Type). 9 1/4" 11 1/2" Ro ital Projected Area (or Mfg.) 31.8 sq. in. 24 sq. in. Litatile Projected Area (or Mfg.) 31.8 sq. in. 24 sq. in. 35. stal Projected Area (or Mfg.) 31.8 sq. in. 24 sq. in. 35. stal Projected Area (or Mfg.) 31.8 sq. in. 24 sq. in. 35. stal Projected Area (or Mfg.) 31.8 sq. in. 24 sq. in. 35. stal Projected Area (or Mfg.) 31.8 sq. in. 24 sq. in. 35. stal Projected Area (or Mfg.) 31.8 sq. in. 35. stal Projected Area (or Mfg.) 31.8 sq. in. 35. stal Projected Area (or Mfg.) 35. stal Projected Area (or Mfg.) 35. Alemiteoil bath None Rubber None Neel Neel Stal None None Neel Stal None None None Neel Stal None None None None None None None None	Roller Link Belt 3540-D Alemite oil ba Neoprene Yes SAE 1020 taper - 3/4" per ft. taper - 3/4" per ft. Neoprene Yes SAE 1020 Alemite oil ba Neoprene Yes SAE 1020
stal Projected Area (or Mig.) 31. 8 sq. in. 24 sq. in. Lit aring Material (or Mig. No.) Gatke Rubber 35. Alemiteoil bath None Alemiteoil bath None None None None None High quality - semi-fluid, aluminum soap grease None None None None None None None Non	Link Belt 3540-D Alemite oil ba Neoprene Yes SAE 1020 taper - 3/4" per ft. 1 taper - 3/4" per ft. 1 taper - 3/4" per ft. 250 lbs. 250 lbs. sets of weights Sale oke Oke Oke Oke Oke
thind of Lubrication Alemiteoil bath None Ale Poils for Complete With Cranks, Belf Guard, Slide Rails and Complete With Cranks, Belf Guard, Slide	Alemite oil banke ogrease Yes SAE 1020 taper - 3/4" per ft. 1 taper - 3/4" per ft. 250 lbs. 250 lbs. 250 ke oke oke oke oke
pe of Oil Seol Neoprene None Neoprene None Neoprene High quality - Semi-fluid, aluminum soap grease Searing Self-Aligning No Yes SAE 4140 SAE 1020 Dimension of Crank Fit 2 1/4" taper - 3/4 striang-face Crank to Center Wrist Pin Bearing 2.013" Jb. Per Sq. In. A.P.I. Capacity each 6,000 BEAM COUNTERBALANCE e Available Beam Regularly furnished Beam Weights (Weight per Set) 250 lbs. with 12 Search Counterbalance Effect at Polish Rod 4920 lbs. with 12 Search Counterbalance Effect at Polish Rod (Pounds at each stroke) 1158 lbs. at 22" stroke 696 lbs. at 36" stroke 696 l	Neoprene Yes SAE 1020 Taper - 3/4" per ft. Under the set of weights 340 No. per set 2 Under the set of weights Sets of weights Sets of weights Sets of weights
pe of Oil Seol Neoprene None Neoprene None Neoprene High quality - Semi-fluid, aluminum soap grease Searing Self-Aligning No Yes SAE 4140 SAE 1020 Dimension of Crank Fit 2 1/4" taper - 3/4 striang-face Crank to Center Wrist Pin Bearing 2.013" Jb. Per Sq. In. A.P.I. Capacity each 6,000 BEAM COUNTERBALANCE e Available Beam Regularly furnished Beam Weights (Weight per Set) 250 lbs. with 12 Search Counterbalance Effect at Polish Rod 4920 lbs. with 12 Search Counterbalance Effect at Polish Rod (Pounds at each stroke) 1158 lbs. at 22" stroke 696 lbs. at 36" stroke 696 l	Neoprene Yes SAE 1020 Taper - 3/4" per ft. Under the set of weights 340 No. per set 2 Under the set of weights Sets of weights Sets of weights Sets of weights Sets of weights
High quality - Semi-fluid, aluminum soap grease No Yes Yes No SAE 1020 WRIST PIN Serial SAE 1020 Dimension of Crank Fit 2 1/4" taper - 3/4 Perhang-face Crank to Center Wrist Pin Bearing 2.013" Yield Point Mati. 36,000 BEAM COUNTERBALANCE Available Beam Regularly furnished Beam Regularly furnished Beam Regularly furnished Beam Regularly furnished Beam Weights (Weight per Set) CRANK COUNTERBALANCE Py Crank Optional extra equipment Weight of each extra crank weight 340 Weight o	Yes SAE 1020 taper - 3/4" per ft. 1 taper - 3/4" per ft. 1 taper - 3/4" per ft. 250 lbs. 250 lbs. sets of weights All No. per set 2 Oke Oke Oke Oke Oke
SAE 1020 WRIST PIN SAE 1020 Dimension of Crank Fit 2 1/4" taper - 3/4 writang-Face Crank to Center Wrist Pin Bearing 2.013" Yield Point Math 36,000 BEAM COUNTERBALANCE Available Beam Regularly furnished Beam Weights (Weight per Set) 250 lbs. Beam Regularly furnished Wrist Counterbalance Effect at Polish Rod 4920 CRANK COUNTERBALANCE Or Crank Optional extra equipment Weight of each extra crank weight 340 Mo. per mum Counterbalance Effect at Polish Rod (Pounds at each stroke) 1158 lbs. at 22" stroke 866 lbs. at 29" stroke 696 lbs. at 36" stroke WEIGHTS WEIGHTS WEIGHTS WEIGHTS It Complete With Cranks, Belt Guard, Slide Rails and 0 lbs. Counterweights, but Less Rec es and Brake 2232 lbs. t Complete With 25D Reducer 2845 lbs., With 40D Reducer 3249 lbs., With Reducer.	Yes SAE 1020 taper - 3/4" per ft. taper - 3/4" per ft. tbs. 250 lbs. sets of weights All No. per set 2 oke oke oke oke
wrist PIN SAE 1020 Dimension of Crank Fit 2 1/4" taper - 3/4 Partiang-Face Crank to Center Wrist PIn Bearing 2.013" Yield Point Math. 36,000 BEAM COUNTERBALANCE Available Beam Regularly furnished Beam Weights (Weight per Set) 250 lbs. Beam Regularly furnished Beam Weights (Weight per Set) 250 lbs. CRANK COUNTERBALANCE For Crank Optional extra equipment Weight of each extra crank weight 340 No. per imum Counterbalance Effect at Polish Rod (Pounds at each stroke) 1158 lbs. at 22" stroke 866 lbs. at 29" stroke 696 lbs. at 36" stroke WEIGHTS WEIGHTS WEIGHTS WEIGHTS To Complete With Cranks, Belt Guard, Slide Rails and 0 Lbs. Counterweights, but Less Received and Brake 2232 Lbs. It Complete With 25D Reducer 2845 Lbs., With 40D Reducer 3249 Lbs., With Reducer.	SAE 1020 taper - 3/4" per ft. tbs. 250 lbs. sets of weights All No. per set 2 oke oke oke oke
rerial SAE 1020 Dimension of Crank Fit. 2 1/4" taper - 3/4 erhang-Face Crank to Center Wrist Pin Bearing 2.013" Nield Point Matl. 36,000 Lb. Per Sq. In. A.P.I. Capacity each 6,000 BEAM COUNTERBALANCE e Available Beam Regularly furnished Beam Weights (Weight per Set) 250 lbs. cimum Counterbalance Effect at Polish Rod 4920 lbs. with 12 CRANK COUNTERBALANCE ry Crank Optional extra equipment Weight of each extra crank weight 340 No. per imum Counterbalance Effect at Polish Rod (Pounds at each stroke) 1158 lbs. at 22" stroke 866 lbs. at 29" stroke 696 lbs. at 36" stroke WEIGHTS WEIGHTS th Complete With Cranks, Belt Guard, Slide Rails and 0 Lbs. Counterweights, but Less Recess and Brake 2232 Lbs., With 40D Reducer 3249 Lbs., With Reducer.	250 lbs.
BEAM COUNTERBALANCE Available Beam Regularly furnished CRANK COUNTERBALANCE CRANK COUNTERBALANCE CRANK COUNTERBALANCE CRANK COUNTERBALANCE CRANK COUNTERBALANCE CRANK COUNTERBALANCE Or Crank Optional extra equipment Weight of each extra crank weight 340 No. per N	250 lbs.
BEAM COUNTERBALANCE Available Beam Regularly furnished CRANK COUNTERBALANCE CRANK COUNTERBALANCE Beam Weights (Weight per Set) 250 lbs. CRANK COUNTERBALANCE Ty Crank Optional extra equipment weight of each extra crank weight 340 No. per imum Counterbalance Effect at Polish Rod (Pounds at each stroke) 1158 lbs. at 22" stroke 866 lbs. at 29" stroke 696 lbs. at 36" stroke WEIGHTS WEIGHTS WEIGHTS The Complete With Cranks, Belt Guard, Slide Rails and 0 Lbs. Counterweights, but Less Recess and Brake 22.32 Lbs. It Complete With 25D Reducer 2845 Lbs., With 40D Reducer 3249 Lbs., With Reducer.	250 lbs. sets of weights 340 No. per set 2 oke oke oke oke
BEAM COUNTERBALANCE e Available Beam Regularly furnished CRANK COUNTERBALANCE ry Crank Optional extra equipment imum Counterbalance Effect at Polish Rod (Pounds at each stroke) 1158 lbs. at 22" stroke 866 lbs. at 29" stroke 866 lbs. at 36" stroke WEIGHTS ht Complete With Cranks, Belt Guard, Slide Rails and es and Brake 2232 lbs. tr Complete With 25D Reducer 2845 lbs., With 40D Reducer 3249 lbs., With Reducer.	250 lbs. sets of weights 340 No. per set 2 oke oke oke oke
Beam Regularly furnished Beam Regularly furnished Beam Regularly furnished CRANK COUNTERBALANCE TO Crank Optional extra equipment Imum Counterbalance Effect at Polish Rod (Pounds at each stroke) 1158 lbs. at 22" stroke 866 lbs. at 29" stroke 696 lbs. at 36" stroke WEIGHTS WEIGHTS WEIGHTS To Complete With Cranks, Belt Guard, Slide Rails and 0 lbs. Counterweights, but Less Receives and Brake 2232 lbs., with 40D Reducer 3249 lbs., With Reducer.	340 No. per set 2 oke oke oke oke
WEIGHTS WEIGHTS To Complete With Cranks, Belt Guard, Slide Rails and 0 Lbs. Counterweights, but Less Receipt Complete With 25D Reducer 2845 Lbs., With 40D Reducer 3249 Lbs., With Reducer.	oke oke oke oke
WEIGHTS To Complete With Cranks, Belt Guard, Slide Rails and 0 Lbs. Counterweights, but Less Recessand Brake 2232 Lbs. To Complete With 25D Reducer 2845 Lbs., With 40D Reducer 3249 Lbs., With Reducer.	oke oke oke oke
WEIGHTS To Complete With Cranks, Belt Guard, Slide Rails and 0 Lbs. Counterweights, but Less Recessand Brake 2232 Lbs. To Complete With 25D Reducer 2845 Lbs., With 40D Reducer 3249 Lbs., With Reducer.	oke hights, but Less Reducer, Reducer
WEIGHTS Int Complete With Cranks, Belt Guard, Slide Rails and 0 Lbs. Counterweights, but Less Receives and Brake 2232 Lbs. It Complete With 25D Reducer 2845 Lbs., With 40D Reducer 3249 Lbs., With Reducer.	rights, but Less Reducer, Reducer
of Complete With Cranks, Belt Guard, Slide Rails and 0 Lbs. Counterweights, but Less Recessand Brake 2232 Lbs. It Complete With 25D Reducer 2845 Lbs., With 40D Reducer 3249 Lbs., With Reducer Reduc	
t Complete With Cranks, Belt Guard, Slide Rails and 0 Lbs. Counterweights, but Less Recessand Brake 2232 Lbs. t Complete With 25D Reducer 2845 Lbs., With 40D Reducer 3249 Lbs., With Reducer	1985 (act)
t Complete With 25D Reducer 2845 Lbs., With 40D Reducer 3249 Lbs., With Reducer.	
t Complete With 25D Reducer 2845 Lbs., With 40D Reducer 3249 Lbs., With Reducer	
	Reducertbs.
RKS	
The commence of the contract o	

CABOT PUMPING UNITS - STRUCTURAL PARTS No. B8-36

(See Drawings Attached)

1	Adnufacturer's Type No. B8-36 Rated	Polish Rod Load for Rig Parts 8, 800 1bs.
4	Gear Units Used With This Frame 40D	
P	Polish Rod Strokes, Inches 2011 - 2811 - 3611	
1		
1	WALKING BEA	
1	WALKING BLAZ	
A	A. P. I. Polished Rod Load Rating (Allow for bolt holes) 8, 800 lbs.	
S	Structural Section 12" x 6 1/2" WF at 31 lbs.	Weight Carbon, Silicon or Alloy Carbon
		Pitman End 41-611
P	Porision Made for Servicing Well Detachable single bolt hor	sehead
	Clearance between well and walking beam when servicing 1'-5 3/8'	
1		
1	DEAL HANGE	
1	BEAM HANGER	
Н	Hirsehead Type: Mat'l. Welded steel plate Link Typ	-
		ion Diameter
		ing Length or Mfg. No
		Bearing Area or Rating
1	- Cast water with temory as also to	
1	c	ger Reins
1		
	Four Hond of Committee of Midstroke 5:-4" Homachand on	dation Clearance at Midstroke
	tod of Securing Beam Hanger to Walking Beam Horsehead cr	oss member rests on beam behind har
	elded to beam. Single bolt in lower front end	of beam retains horsehead in position.
7	Get screws on each side adjust alignment of hor	sehead.
1		
1	SAMPSON POST	
1		
у	yse Derrick Type - 4 angle legs Height (Top Skids to Top S. Post) 6'-9 1/2"
	ize Members: Height (d'n. to Center Line) 71-8 1/211
	legs 4" x 4" x 1/4" angles Bracing 10p 12" x 1/2" x 17" plate Girts	2" x 2" x 3/16" angles
1	Top 12" x 1/2" x 17" plate Girts	" x 2" x 3/16" angles
lo	derizontal Distance from Center Line of Sampson Post to Center Line of C	ankshaft of Gear Unit 41-3 3/4"
le	le ght (Bottom of Frame to top of Beam) 8'-11 1/4"	
0	o led or welded to Base_Welded	
1		
1	BASE	
	trictural Section 8" x 5 1/4" WF at 17 lbs. Width (C	11 2 1/48
	101 -11	enter to Center) 1 1 - 2 1 / 4**
		f Outrigger (Detachable) 31-511
	<u> </u>	f Engine Extension
	10 = / 000 = 100	er Sub-Base Furnished Yes
۳	Reducer	Bolts 6 - 7/8"
	PITMAN	
	tric ural Shape $\frac{4" \times 2 \cdot 3/4" - 7.7 \cdot 1b}{1 \cdot 1 \cdot 1beam}$ Length (6)	Center of Brg. to Center of Brg.) 6'-6 1/2"
P	Pin an detachable from Wrist Pin Bearing? Yes	
1	EQUALIZATION BE	MA .
rı	ry syral Section ST5 WF tee (8" x 5" x 7/16") at 16.5#	Material Carbon steel
tn	trian Centers 31-7" at wrist pins Max. Stress at Rated Capac	2002
	2'-3 1/2" at beam	(50% counterbalanced)

BEARINGS

Bearing Selection is for at least 100,000 hours Minimum Life at 20 S.P.M.

	Saddle	Upper Pitman	Pitman Equalizer	Wrist Pin
			3. 750"	2, 250"
Tunion Diameter	4"		22"	Roller
Total Bearing Length (or Type)	10"		82.5 sq. in.	Link Belt
Total Projected Area (or Mfg.) Bearing Material (or Mfg. No.)_	40 sq. in		Rubber	3941-D
			27	Alemite oil bat
Arthod of Lubrication	Alemite oil bath		None	Neoprene
of Oil Seal	Neoprene		None	
Apight of Oil Recommended	High quality, sem	<u>i-fluid, alumin</u> ı	um soap grease.	Voc
s Bearing Self-Aligning	No		Yes	Yes
runion Material	SAE 1020 -		SAE 4140	SAE 1020
		WRIST PIN		
Material	SAE 1020	Dimension of Cra	nk Fit 2 15/16" tap	er - 3/4" per ft.
Derhang-Face Crank to Center	Wrist Pin Bearing 2.016	1		
Mn Yield Point Matl	36, 000 Lb. Per	Sq. In. A.P.I. Capacity	each 13, 330	Lbs.
cary Crank Optional		COUNTERBALANCE	crank weight 565	No. per set2
Assimum Counterbalance Effect	at Ballah Bad (Baunda et age	betale 2125 lbs	at 20" stroke	
Washington Coomer paidnes Ellect	ar Polish Rod (Pounds di ede	1520 lbs	. at 28" stroke	
			. at 36" stroke	
		1100 155	. 40 50 502 500	
		WEIGHTS		
hight Complete With Cranks, Be	olt Guard Slide Pails and O		Lbs. Counterweights, b	out Less Reducer, Reduce
nedves and Brake 3795	Lbs.			
eight Complete With 40D	Reducer 4810 Lbs., With	Reducer	Lbs., With	Reducertbs.
EMARKS	And the second s		di talan di talan	
		- 1. J	. 2 (1.2-2	

CABOT PUMPING UNITS - STRUCTURAL PARTS No. B8L-42

(See Drawings Attached)

		7 300 lbs.					
1	POT _42	Rated Polish Rod Load for Rig Parts 7, 300 lbs.					
Mai		33333					
Poli	lish Rod Strokes, Inches 23" - 33" - 42"						
	WAIKIN	G BEAM					
	WALKING BEAM						
	(1) San hall hales) 7, 300 1	lbs. Carbon					
A.	Polished Rod Load Rating (Allow for bolt holes) 7, 300 1 Prictural Section 12" x 6 1/2" WF at 31#	Weight Carbon, Silicon or Alloy Carbon					
Str	ricural Section 12 A 0 17 - Well End 51-311	Pitman End 41-611					
Dis	is ance between Working Centers: Well End 51-311 covision Made for Servicing Well Detachable single how	It horsehead					
Pro	is ance between Working Centers: Well Character Single book of the single book of the single book of the single book of the servicing 1'-5	3/8" Amount of Adjustment to and					
Cle	labrance between well allo walking 200						
	BEAM	HANGER					
	Mat'l. Welded steel plate	Link Type:					
Ho	3/4" preformed	the Alfa No					
	ype Wire Rope 6 x 19 Imp. plow steel	Bearing Length or Mig. 110					
	ype Wire Rope 6 x 19 Imp. plow steet ype Upper End Stationary cast steel sheave ype Upper End Coat gate with taper sockets	Proj. Bearing Area or Kulling Hanger Reins					
	The lower Find Cast gate With the	Lagath					
	for zinced-in wire rope	Foundation Clearance at Midstrokehearn hearn					
7		ad cross member restson beam beam beam a					
	nod of Securing Beam Hanger to Walking Beam 1101 School	Foundation Clearance at Midstroke ad cross member restson beam behind bar end of beam retains horsehead in position. If horsehead					
	welded to beam. Single bolt in lower it or	f horsehead					
2	set screws on each side adjust alignment of						
		SON POST					
	SAMP	41 0 1/2"					
	1 1000	Height (Top Skids to Top S. Post) 6!-9 1/2!! Height (Fd'n. to Center Line) 7!-8 1/2!!					
T	Derrick type - 4 angle legs	Height (Fd'n. to Center Line) 7'-8 1/2 Height (Fd'n. to Center Line) 7'-8 1/2					
5	Size Members:	Bracing Z' X Z' X 3/10 William					
	Tipe Derrick type = 4 angle legs Size Members: Legs 4" x 4" x 1/4" angles Top_ 12" x 1/2" x 17" plate Illarizontal Distance from Center Line of Sampson Post to Center Line (Rettom of Frame to top of Beam) 8'-11 1/4"	Girts2" x 2" x 3/10 ang to 3/4"					
	Top_ 12" X 1/2" X 11 place	er Line of Crankshaft of Gear Unit					
1	librizontal Distance from Center Line of Beam) 81-11 1/411						
1	leight (Bottom of Frame to top of Beam) 8 - 11 1/4* lotted or welded to Base Welded						
1	bed or welded to base						
		BASE					
		11 -2 1/4"					
	it uctural Section 8" x 5 1/4" WF at 17 lbs.	Width (Center to Center).1 = 2 = 17 = 511Length of Outrigger (Detachable).31 = 511					
Ι,	ength, Standard Base. 12'-7"	Length of Engine Extension————					
'	Lab Short Base	La Raducer Sub-Base Furnished					
	ata t a 11 Euraished I es						
	oundation Bolts 18 - 7/8" x 24"	Reduce: Don't					
		(1/21)					
	The am	length (Center of Brg. to Center of Brg.) 6'-6 1/2"					
	Structural Shape 4" x 2 3/4" - 7, 71b. 1 beam	PITMAN Length (Center of Brg. to Center of Brg.) 61-6 1/211					
	is Pitman detachable from Wrist Pin Bearing? Yes						
		TATION REAM					
1	EQUA	LIZATION BEAM					
	Structural Section ST5 WF tee (8" x 5" x 7/16") Structural Section ST5 WF tee (8" x 5" x 7/16")	at 16.5 # Material Carbon steel Lbs. Sq. In.					
	Structural Section ST5 WF tee (8" x 5" x 7/10	Rated Capacity 2093					
	Centers 3'-(" at Wilse P	(50% counterbalanced)					
	2'-3 1/2" at beam						

BEARINGS

B8L-42

Bearing Selection is for at least 100,000 hours Minimum Life at 20 S.P.M.

Trunnion Diameter	Saddle	Upper Pitman	Pitman Equalizer	Wrist Pin 2. 250"
Total Bearing Length (or Type)	10"		22"	Roller
otal Projected Area (or Mfg.)	40 sa in		82.5 sq. in.	Link Belt
Bearing Material (or Mfg. No.)_	Gatke		Rubber	3941 -D
ethod of Lubrication	Alemite oil bath		None	Alemite oil bath
pe of Oil Seal	Neoprene		None	Neoprene
eight of Oil Recommended	High quality, ser	mi-fluid, alumi	in <u>um soap grea</u>	se
Bearing Self-Aligning			Yes	Yes
nnion Material	SAE 1020		SAE 4140	SAE 1020
		WRIST PIN		
ererial	SAE 1020	Dimension of Car	-L Et 2 15/16 ¹¹ +	aper - 3/4" per ft.
erhang-Face Crank to Center W		Dimension of Cld	nk Pir & 13/10 Ca	aper - 3/4 per It.
in. Yield Point Matl	0/ 000	Sq. In. A.P.I. Capacity	each 13, 330) Lbs.
	REAM C	OUNTERBALANCE		
	DEAM C	OUNTERBALANCE		
e Available Beam Regularly furn	nished			
ximum Counterbalance Effect at		Beam Weights (W	reight per Set) 32	.0
ery Crank Optional extra	equipment	OUNTERBALANCE Weight of each extra a stroke) 1820 lbs.	crank weight 565	No. per set2
		1300 lbs.	at 33" stroke	
			at 42" stroke	
	W	/EIGHTS		
ht Complete With Cranks, Belt (. Lanta .	0		
wes and Brake3910	ouard, Slide Rails and Lbs.	0	Lbs. Counterweights, I	out Less Reducer, Reducer
ht Complete With 40D Red	ucer 4924 Lbs., With_	Reducer	Lbs., With	Reducertbs.
RKS				
				787
				# # P

CABOT SHOPS, INC.

No. B9-36 B9L-42

STRUCTURAL SPECIFICATIONS

	STRUCTUR	AL SPECIFICAL.	IONS	
		B9-36	B9L-42	
- 111	pe car Units Used with this Structure	40D-57D	40D-57D	All the second
- 111	P. I. Structural Capacity	9,000 lbs.	7,950 lbs.	
- 111	olished Rod Stroke, inches	20"-28"-36"	23"-33"-42"	
1	onshed Rod Stroke, Thenes			
	W A	LKING BEAM		
5	tructural Section 1	4" WF at 34#	14" WF at 34#	
V		1_3	4'-11 1/2	
W		1_3	41-3	
F	rovisions Made for Servicing Well _F	linge back hors	ehead	
1	ell Servicing Clearance 1	1_5		
A	djustment to and from well 1	1/2"		
	Н	ORSEHEAD		
S	ize and Type Wire Rope 3/4" prefor	med 6 x 19 Impr	oved Plow Steel	
4	the Unner EndStationary Cast Steel	Sheave		
1	pe Lower End Cast gate with taper	sockets for zince	d-in wire rope	
9	Ladeties Classes at Midstroke	4'-11	4'-5	
1	ethod of Securing Horsehead to Wal	lking Beam Cross	member rests in b	racket welded
t:	beam. Single bolt in lower front e	nd of beam.		
-				
	SA	MSON POST		
			71 0 1/2	
3	peDerrick-4 angle legs Height (Fdn. to Center I	ine) 1'-0 1/2	
S	e Members: Front Legs4x4x1/4	Bracing	2x2x3/16 angle	
	Rear Legs 4x4x1/4			
	Top) 12x1/2x17 plate	Girts	2x2x3/16 angle	
	orizontal Distance from Center Lin		Center Line of Crawelded to base	ank Shaft of Gear Welded
		BASE		
c	Tuestural Section Of MED at 17#	Width /Canta	r to Center) 14 1/	4"
	ructural Section 8" WF at 17# ength, Long Base		trigger (Detachable	
			gine Estension	4'-8 1/2
	ength, Short Base 8'-7 1/4		Floor Clearing yes	
	re Slide Rails Furnished yes	Reducer Bol		
- 111	undation Bolts:	Veducet Dot	0 - 170	
7	ase 8 - 7/8" x 14"			
	tension 4 - 7/8" x 14" 2 - 7/8" x 14"			
4	trigger 2 - 7/8" x 14"			
1		PITMAN		

PITMAN

Structural Shape 4" I at 7.7# Length (Center of Brg. to Center of Brg.) 6'-8 1/2

I: Pitman Detachable from Wrist Pin Yes

EQUALIZER BEAM

Structural Section ST5 WF tee at 16.5#

BEARINGS

Bearing Selection is for at least 100,000 hours Minimum Life at 20 S.P. M.

		Optio	nal	
	Saddle	Equalizer	Equalizer	Wrist Pin
runnion Diameter	4"		3.750"	2.250" Sph. Roller
otal Bearing Length (or Typotal Projected Area	40 sq. in.		82.5 sq. in.	
earing Material (or Mfg. No			Rubber	3941-D
ethod of Lubrication	Grease		None	Grease
ype of Oil Seal	Neoprene		None	Neoprene
Bearing Self-Aligning	No		Yes	Yes
runnion Material	SAE 1020		SAE 4140	SAE 1020

WRIST PIN

Material SAE 1020	Dimension of Cra	nk Fit 2 15/16" tapered
Overhang-Face Crank to Center	Wrist Pin Bearing 2.016"	11 D S Is
Material SAE 1020 Overhang-Face Crank to Center Min. Yield Point of Material	36, 000	lbs. Per Sq. In.

COUNTERBALANCE

pe Available Safety beam weights in pairs and one piece crank weights for partial crank counterbalance.

> For Counterbalance Effect at Polished Rod, see Counterbalance Tables for Each Type Unit

WEIGHTS

ipping Weight of Unit Complete with Engine Extension, Cranks, Belt Guard, Slide Rails Master Crank Weights (A and AC units only), but less beam weights and inner crank ghts.

B9-36	With	40D	Reducer	5140	lbs.
B9L-42	With	40D	Reducer	5260	lbs.
B9-36	With	57D	Reducer	5790	lbs.
E9-36 E9L-42 E9-36 E9L-42	With	57D	Reducer	5910	lbs.