COUNTERBALANCE EFFECT AT POLISH ROD WITH #5456-B CRANKS STRUCTURE UNBALANCE OF 550# INCLUDED BELOW

												With #50 Me	un & I	F ille r W	eig hi
												Pounds			
												CBE	THE PARTY NAMED IN	tual We	ight
												@		of	-0
								n 81140				54" Stroke	Co	unterwe:	ights
Ca	renks	On	ly									3,150			
Cı	anks	Plu	ıs 1	Main	Weight	t						3,970		550	
Cr	anks	Plu	ıs 2	Main	Weight	Ð						4,790		1,100	
Cr	CE1 HS	Plu	s 3	Main	Weight	2						5,610		1,650	
					Weighi							6,430		2,200	
Cre	anks	Plu	\$ 4	Mgin	Weight	s an	nd 1 1	Fille	r T	Weight		6,850		2,485	
	11	F9	Ą	÷11	11	10	2	. 11	1	11		7,270		2,770	
	10	. 88	4	-11	9.6	11	3	99		ı II		7,690		3,055	
	91	6.5	4	- 11	11	85	4	11		¥9		8,110		3,340	
	88	11	4	\$0	11	89	5	11		11		8,530		3,625	
	91	11	4.	. 11	60	***	6 .	11		11		8,950		3,910	
	11	* * * * * * * * * * * * * * * * * * * *	4	11	19	11	7	19		11		9,360		4,195	
	11	**	4	f f	?1	11	8	11		SA		9,780		4,480	
	94	11	4	99	91	**	9	99		77		10,200		4,765	
	99	89	4	??	11	88	10	11		11		10,620		5,050	
	19	78	4	51	99	11	11	11	1	11		11,040		5,335	
	14	80	4	88	11	11	12	11		11		11,460		5,620	
	11 .	11	4	"		11	13*			tt.		11,880		5,905	
		a.	4	11	11	ŧŧ	14*	U		11		12,300		6,190	

*For 114 Reducer Only

Also only for Ground Level Power Assembly not for Elevated Motors.

COUNTERBALANCE EFFECT AT POLISH ROD AT MAXIMUM STROKE AS WEIGHTS ARE MOVED TOWARD CRANKSHAFT FROM END OF CRANK

STRUCTURE UNBALANCE OF 550# INCLUDED BELOW

Distance of	4 Main Weights Only #50	4 Main and	4 Main and	4 Main and	1 Filler
Counterweights		4 Filler Wts.	8 Filler Wts.	12 Filler Wts.	Weight Only
From Crank End		#50	#50	#50	#50
0"	6,430	8,110	9,780	11,460	420
6"	5,940	7,370	8,785	10,210	355
12"	5,450	6,625	7,790	8,960	290
18"	4,965	5,883	6,795	7,715	230
24"	4,475	5,140	5,800	6,465	165
25" (Max.)	4,390	5,020	5,630	6,255	155

For 44" Stroke Multiply Above CBE Values by 1.21

For 34^{II} Stroke Multiply Above CBE Values By 1.55

For 24" Stroke Multiply Above CBE Values By 2.17

COUNTERBALANCE EFFECT AT POLISH ROD WITH #5456-B CRANKS STRUCTURE UNBALANCE OF 400# INCLUDED BELOW

		S 19							With #50 Mai	n & Filler Weights
									Po	ounds
									CBE	Actual Weight
									@	of
									64" Stroke	Counterweights
Crank	s On	ly							2,630	
Crank	s Plu	s 1	Main	Weigh	t				3,340	550
Crank	s Plu	s 2	Moin	Weigh	ts				4,040	1,100
				Weight					4,750	1,650
				Weigh					5,450	2,200
					is an	d 1 F	iller	Weight	5,810	2,485
. 11	89	e de	FF	, fe		2	88	19	6,170	2,770
19	16	4	. 11	68	**	3	18	68	6,530	3,055
99	. 64	4	98	99	66	Ą.	16	**	§ ₂ 890	3,340
11	11	4	. 88	11	***	5	11	11	7,250	3,625
99	- 11	4	#1	"	10	6	10	11	7,610	3,910
90	***	4	11	ff	66	8	11	11	7,960	4,195
96	11	4	. 11	11	***	9	11		8,320	4,480
Q#	ti	4		19	11	10	88	10	8,680	4,765
. 10	\$ 0	4	46	11	88	11	11	99	9,040	5,050
88	80	4		#1	98	12	9.6	H :	9,400	5,335
11	11	4	11	11	11	13*		II.	9 ₀ 760 10,120	5,620 5,905
11	11	4	11 5	11	11	14*		II	10,480	6,190

*For 114 Reducer $\underline{\text{only}}$ Also only for Ground Level Power Assemblies $\underline{\text{not}}$ for Elevated Motors.

COUNTERBALANCE EFFECT AT POLISH ROD AT MAXIMUM STROKE AS WEIGHTS ARE MOVED TOWARD CRANKSHAFT FROM END OF CRANK

STRUCTURE UNBALANCE OF 400# INCLUDED BELOW

Distance of	4 Main	4 Main and	4 Main and	4 Main and	1 Filler
Counterweights	Weights Only	4 Filler Wts.	8 Filler Wts.	12 Filler Wts.	Weight Only
From Crank End	#50	#50	#50	#50	#50
0"	5,450	6,890	8,320	9,760	360
6"	5,040	6,265	7,480	8,705	305
12"	4,625	5,640	6,640	7,650	250
18"	4,213	5,010	5,800	6,600	200
24"	3,800	4,385	4,960	5,545	145
25" (Max.)	3,720	4,280	4,820	5,370	135

For 52" Stroke Multiply Above CBE Values By 1.21

For $40^{\circ\circ}$ Stroke Multiply Above CBE Values By 1.55

For 28" Stroke Multiply Above CBE Values By 2.18

COUNTERBALANCE EFFECT AT POLISH ROD WITH #6468-B CRANKS

STRUCTURE UNBALANCE OF 600# INCLUDED BELOW

		in & Filler Weights	With #46 Main & Filler Weigl		
	CBE	Actual Weight	P	ounds	
	@	of	CBE	Actual Weight	
	64" Stroke		@	of	
	04" Stroke	Counterweights	64" Stroke	Counterweights	
Cranks Only	4,680		4,680		
Cranks Plus 1 Main Weight	5,570	550	5,470	475	
Cranks Plus 2 Main Weights	6,470	1,100	6,255	950	
Cranks Plus 3 Main Weights	7,360	1,650	7,045	1,425	
Cranks Plus 4 Main Weights	8,250	2,200	7,830	1,900	
Cranks Plus 4 Main Weights and 1 Filler Weight	8,710	2,485	8,230	2,150	
Cranks Plus 4 Main Weights and 2 Filler Weights	9,170	2,770	8,630	2,400	
Cranks Plus 4 Main Weights and 3 Filler Weights	9,620	3,055	9,030	2,650	
Cranks Plus 4 Main Weights and 4 Filler Weights	10,080	3,340	9,430	2,900	
Cranks Plus 4 Main Weights and 5 Filler Weights	10,540	3,625	9,830	3,150	
Cranks Plus 4 Main Weights and 6 Filler Weights	10,990	3,910	10,230	3,400	
Cranks Plus 4 Main Weights and 7 Filler Weights	11,450	4,195	10,635	3,650	
Cranks Plus 4 Main Weights and 8 Filler Weights	11,900	4,480	11,040	3,900	
Cranks Plus 4 Main Weights and 9 Filler Weights	12,360	4,765	11,440	4,150	
Cranks Plus 4 Main Weights and 10 Filler Weights	12,820	5,050	11,840	4,400	
Cranks Plus 4 Main Weights and 11 Filler Weights	13,270	5,335	12,240	4,650	
Cranks Plus 4 Main Weights and 12 Filler Weights	13,730	5,620	12,640	4,900	

COUNTERBALANCE EFFECT AT POLISH ROD AT MAXIMUM STROKE AS WEIGHTS ARE MOVED TOWARD CRANKSHAFT FROM END OF CRANK

STRUCTURE UNBALANCE OF 600# INCLUDED BELOW

Distance of Counterweights From Crank End	4 Main Weights Only #50	4 Main and 4 Filler Wts. #50	4 Main and 8 Filler Wts. #50	4 Main and 12 Filler Wts. #50	1 Filler Weight Only #50
O"	8,250	10,080	11,900	13,730	460
6"	7,840	9,455	11,060	12,675	410
12"	7,425	8,825	10,220	11,620	355
18"	7,015	8,200	9,380	10,570	300
24"	6,600	7,570	8,540	9,515	250
30"	6,190	6,945	7,700	8,460	195
36"	5,775	6,320	6,860	7,410	140
38" (Max.)	5,640	6,115	6,580	7,055	120

Distance of Counterweights From Crank End	4 Main Weights Only #46	4 Main and 4 Filler Wts. #46	4 Main and 8 Filler Wts. #46	4 Main and 12 Filler Wts. #46	1 Filler Weight Only #46
On	7,830	9,430	11,040	12,640	400
6"	7,500	8,930	10,370	11,800	360
12"	7,140	8,380	9,625	10,865	310
18"	6,775	7,825	8,880	9,930	265
2411	6,415	7,275	8,140	9,000	215
30"	6,050	6,720	7,395	8,065	170
36"	5,690	6,170	6,650	7,130	120
38"(Max.)	5,570	5,985	6,405	6,820	100

For 54" Stroke Multiply Above CBE Values By 1.17

For 44" Stroke Multiply Above CBE Values By 1,43

For 34" Stroke Multiply Above CBE Values By 1.83