

CROFTON
CRANE RENTAL & RIGGING

KOEHRING
665 Spanner
Serial No. C-15097

LIFTING CAPACITIES

LIFT CRANE ONLY - ANGULAR BOOM MAXIMUM ALLOWABLE LIFTING LOADS FOR LEVEL, FIRMLY SUPPORTED MACHINE

144" Wide Crawler Centers

Recommended Hoist Cable Parts

- For loads over 16,200 lbs. — use 2-part line.
- For loads over 32,400 lbs. — use 3-part line.
- For loads over 48,600 lbs. — use 4-part line.
- For loads over 64,800 lbs. — use 5-part line.
- For loads over 81,000 lbs. — use 6-part line.
- For loads over 97,200 lbs. — use 7-part line.
- For loads over 113,400 lbs. — use 8-part line.

Optional low head hook block 65-ton 4-sheave weight 1200 lbs. to be deducted from allowable loads.

Main Boom 140' Maximum Boom Allowable

Booms up to 90° straight, 90° offset, or 80° folded can be carried with Gantry lowered.

*Maximum Rated Jib Load in Pounds

The allowable load over jib sheave at any radius from the center of rotation of the machine is the same load that may be lifted over boom sheave with the boom lowered to that radius, but not to exceed the following:

Jib Point Offset

Jib Lgth.	0'	5'	10'	15'	20'
20'	14000	13400	11800		
30'	12000	11600	11000	8600	
40'	10600	10350	10100	8800	7000

*MAXIMUM BOOM WITH JIB COMBINATION

120' BOOM PLUS 40' JIB

DO NOT USE jib for clamshell or dragline bucket work.

10 ton hook and ball for jib work — 267 lbs.

Main boom sheave loads must be reduced as follows when jib is attached:

20' jib	1300 lbs.
30' jib	1500 lbs.
40' jib	1850 lbs.

CAUTION: All rated loads are based on the machine being on a firm, level and uniform supporting surface. Before lifting at or near rated loads, the machine should be leveled with a commercial level in two directions. For safe working loads the user is expected to make due allowances for his particular job conditions such as: soft or uneven ground, out of level conditions, side loads, pendulum action, jerking or sudden stopping of loads, hazardous conditions, experience of personnel, etc. Side pull on boom or jib is extremely dangerous. The operator and other personnel should fully acquaint themselves with the operators' manual furnished by the manufacturer before operating this machine and rules for safe operation of equipment should be adhered to at all times. Operators and supervisors should also acquaint themselves with standard safety codes for cranes, derricks and hoists USA5 830.5 1968 (latest issue). The weight of jibs, hook blocks, slings and any auxiliary lifting devices shall be included as part of the rated load.

BOOM LENGTH IN FEET	RADIUS IN FEET	BOOM ANGLE DEGREES	OVER END OR SIDE CRAWLERS EXTENDED			BOOM LENGTH IN FEET	RADIUS IN FEET	BOOM ANGLE DEGREES	OVER END OR SIDE CRAWLERS EXTENDED	
			CRANE CWT HIGH GANTRY	DRAG CWT HIGH GANTRY	CRANE CWT **LOW GANTRY				CRANE CWT HIGH GANTRY	DRAG CWT HIGH GANTRY
40	12	78	*130000	124940	*130000	110	25	79	45090	34320
	15	74	104450	81420	104450		30	76	34500	28990
	20	66	65640	50950	65640		35	74	27580	20550
	25	59	47480	36700	47480		40	71	22720	16720
	30	49	36950	28440	36950		45	68	19100	13880
	35	39	30080	23050	30080		50	65	16320	11690
	40	26	25240	19250	* 21990		60	59	12290	8530
							70	53	9530	6360
50	15	77	104160	81130	104160	100	25	80	44750	33970
	20	71	65310	50630	65310		30	77	34150	25640
	25	65	47140	36360	47140		35	75	27230	20190
	30	59	36600	28090	36600		40	73	22360	16360
	35	52	29720	22690	29720		45	70	18740	13520
	40	44	24880	18890	24880		50	67	15980	11320
	45	35	21290	15070	* 16270		60	62	11920	8150
	50	23	18520	12890			70	57	9160	6990
60	15	79	103870	80840	103870	90	25	80	44750	33970
	20	75	64990	50300	64990		30	77	34150	25640
	25	70	46800	36020	46800		35	75	27230	20190
	30	64	35250	27740	35250		40	73	22360	16360
	35	59	29370	22330	29370		45	70	18740	13520
	40	53	24520	18530	24520		50	67	15980	11320
	45	47	20920	15700	20920		60	64	11550	8790
	50	40	18150	13530	* 18150		70	59	8790	6770
60	21	14150	10380	* 11900	80	54	6770	5240		
70	20	77	64660	49980	64660	130	25	78	33800	26870
	25	73	46450	35680	46450		30	76	26870	21990
	30	68	35900	27390	35900		40	74	21990	18370
	35	64	29010	21980	29010		45	72	18370	15880
	40	59	24160	18170	24160		50	69	15880	11550
	45	54	20560	15340	20560		60	64	11550	8790
	50	49	17780	13160	17780		70	59	8790	6770
	60	37	13780	10010	* 8530		80	54	6770	5240
80	20	78	64340	49660	64340	140	25	78	33800	26870
	25	75	46110	35340	46110		30	76	26870	21990
	30	71	35550	27040	35550		40	74	21990	18370
	35	67	28650	21620	28650		45	72	18370	15880
	40	63	23800	17810	23800		50	69	15880	11550
	45	59	20200	14980	20200		60	64	11550	8790
	50	55	17420	12790	17420		70	59	8790	6770
	60	46	13410	9540	* 8530		80	54	6770	5240
70	34	10550	7480		90	49	5240	4030		
80	18	8580	5900		100	42	4030	3060		
90	20	80	64010	49330	64010	150	25	79	33450	26510
	25	77	45770	35000	45770		30	77	26510	21630
	30	73	35200	26690	35200		35	75	21630	18010
	35	70	28300	21260	28300		40	73	18010	15220
	40	66	23440	17450	23440		45	71	15220	11180
	45	63	19830	14610	19830		50	68	12290	9240
	50	59	17050	12420	17050		60	62	9240	7110
	60	52	13040	9370	* 8270		70	57	7110	5630
70	43	10280	7110		80	52	5630	4330		
80	32	8270	5530		90	47	4330	3390		
90	17	6740	4330							
100	25	78	45430	34650			25	78	33800	26870
	30	75	34850	26340			30	76	26870	21990
	35	72	27940	20910			40	74	21990	18370
	40	69	23080	17080			45	72	18370	15880
	45	66	19470	14250			50	69	15880	11550
	50	63	16680	12050			60	64	11550	8790
	60	56	12660	8900			70	59	8790	6770
	70	49	9910	6730			80	54	6770	5240
80	41	7900	5150		90	49	5240	4030		
90	31	6370	3950							
100	16	5160	3000							

** Under no circumstances do loads exceed 75% of stability with crawlers extended and with crane counterweight. These same loads limit the lift with the drag counterweight, provided they do not exceed the stability rating.

DO NOT TIP THE MACHINE TO DETERMINE ALLOWABLE LOADS. RATED LOADS SHOULD NOT BE EXCEEDED. RATED LOADS DO NOT EXCEED 75% OF STABILITY. RATED LOADS ARE BASED ON MACHINERY AND STRUCTURAL STRENGTH WHERE MARKED WITH AN ASTERISK (*). THE RATED LOADS AS DETERMINED BY BOOM LENGTH, RADIUS, AND WEIGHT OF LOAD IN POUNDS PERTAIN TO THIS MACHINE AS ORIGINALLY MANUFACTURED AND EQUIPPED. THEY ARE MAXIMUM LIFTING CAPACITIES. THE RATED LOADS ARE IN ACCORDANCE WITH THE STANDARDS OF THE POWER CRANE & SHOVEL ASSOCIATION STANDARD NO.1 AND THE SAE CRANE LOAD STABILITY TEST CODE J785.

LIFTING CAPACITIES

DRAGLINE—CLAMSHELL—GRAPPLE—MAGNET TUBULAR OR ANGULAR BOOM MAXIMUM ALLOWABLE LOADS FOR LEVEL, FIRMLY SUPPORTED MACHINE

144" Wide
Crawler Centers

BOOMS

80' maximum boom for dragline, clamshell, grapple, magnet.

MAXIMUM WEIGHT OF LOAD AND BUCKET

Clamshell, Grapple, Magnet 16,000 lbs.
Dragline 13,000 lbs.

The rated loads as determined by boom lengths, radius and weight of load in pounds pertain to this machine as originally manufactured and equipped. THEY ARE MAXIMUM LOADS. The rated loads are in accordance with standards of the Tower Crane & Shovel Association Standard No. 1 and the SAE Crane Load Stability Test Code J765.

DO NOT TIP THE MACHINE TO DETERMINE THE ALLOWABLE LOADS.

RATED LOADS SHOULD NOT BE EXCEEDED.

All rated loads are based on the machine being on a firm, level and uniform supporting surface.

FOR SAFE WORKING LOADS the USER is expected to make due allowances for his particular job conditions such as: Soft or uneven ground, out of level conditions, side loads, pendulum action, jerking or sudden stopping of loads, bucket suction, hazardous conditions, experience of personnel, etc. Side pull on boom is extremely dangerous.

CAUTION! The operator and other personnel should fully read and acquaint themselves with the Operators Manual furnished by the manufacturer before operating this machine and Rules for Safe Operation of Equipment should be adhered to at all times.

Operators and supervisors should also acquaint themselves with Standard Safety Codes for Cranes, Derricks and Hoists USAS B30.5 — 1968 (latest issue).

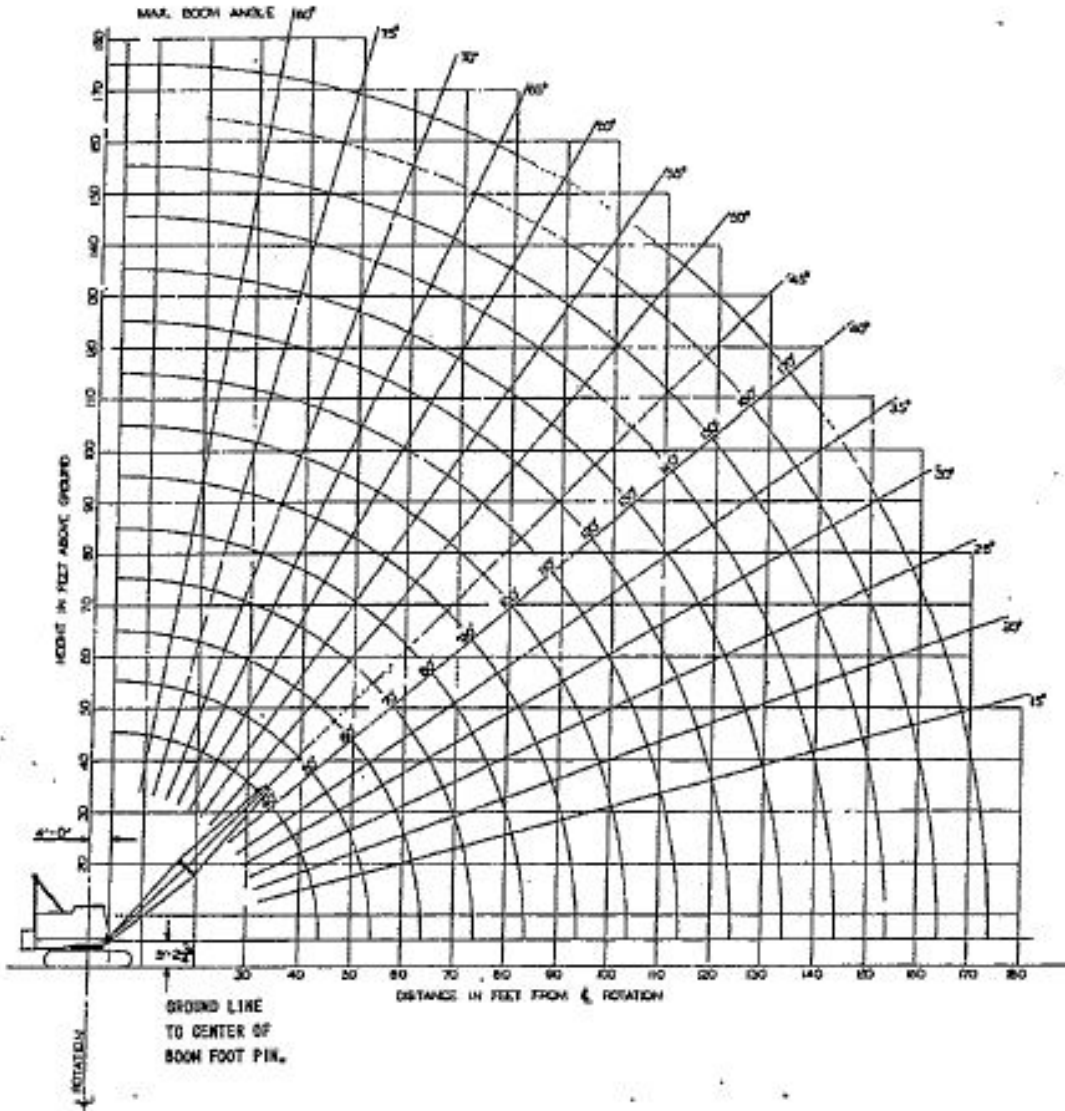
MAXIMUM RATED LOAD IN POUNDS*							
BOOM LENGTH IN FEET	RADIUS IN FEET	BOOM ANGLE IN DEGREES	BOOM POINT PIN HEIGHT	CRAWLER EXTENDED		CRAWLER RETRACTED	
				DRAGLINE	CLAMSHELL GRAPPLE MAGNET	DRAGLINE	CLAMSHELL GRAPPLE MAGNET
40	20	66°	43'-1"	—	16,000	—	16,000
	25	58°	40'-3"	13,000	16,000	13,000	16,000
	30	49°	36'-3"	13,000	16,000	13,000	16,000
	35	38°	31'-1"	13,000	16,000	13,000	16,000
	40	25°	22'-6"	—	16,000	—	13,560
50	25	65°	51'-9"	13,000	16,000	13,000	16,000
	30	59°	48'-11"	13,000	16,000	13,000	16,000
	35	52°	45'-4"	13,000	16,000	13,000	15,840
	40	44°	40'-7"	13,000	16,000	13,000	13,220
	45	35°	34'-2"	13,000	14,460	12,490	11,240
60	50	23°	24'-6"	—	12,500	—	9,700
	25	70°	62'-8"	—	16,000	—	16,000
	30	64°	60'-6"	13,000	16,000	13,000	16,000
	35	59°	57'-9"	13,000	16,000	13,000	15,500
	40	53°	54'-1"	13,000	16,000	13,000	12,880
	45	47°	49'-9"	13,000	14,130	12,110	10,900
70	50	40°	44'-3"	13,000	12,180	10,400	9,360
	55	32°	37'-1"	11,960	10,760	9,160	8,240
	60	21°	26'-2"	—	9,340	—	7,110
	30	68°	70'-2"	—	16,000	—	16,000
	35	63°	68'-0"	13,000	16,000	13,000	15,160
80	40	59°	65'-3"	13,000	16,000	13,000	12,540
	45	54°	61'-11"	13,000	13,800	11,740	10,560
	50	49°	57'-11"	13,000	11,840	10,020	9,020
	55	43°	53'-2"	11,590	10,430	8,780	7,900
	60	36°	47'-2"	10,010	9,010	7,530	6,780
	65	29°	39'-7"	—	8,040	—	6,000
80	70	19°	28'-8"	—	7,060	—	5,220
	35	67°	78'-11"	—	16,000	—	14,830
	40	63°	76'-7"	13,000	16,000	13,000	12,200
	45	59°	73'-10"	13,000	13,480	11,350	10,220
	50	55°	70'-7"	12,790	11,510	9,640	8,680
	55	50°	66'-10"	11,220	10,090	8,400	7,560
	60	45°	62'-3"	9,640	8,670	7,150	6,440
65	40°	57'-11"	8,560	7,700	6,280	5,650	
70	34°	49'-11"	7,480	6,730	5,420	4,880	
75	28°	42'-9"	—	6,020	—	4,300	

*The weight of the bucket or magnet and slings or auxiliary lifting devices shall be included as part of the rated load.

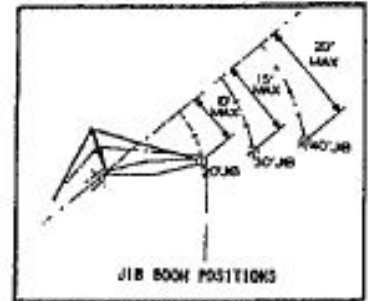
DRAGLINES: Boom angles less than 30° or greater than 65° are not recommended. Rated loads are based on 75% of tipping provided loads do not exceed 13,000 lbs.

CLAMSHELL, GRAPPLE OR MAGNET: Boom angle over 70° not recommended. Special care must be exercised whenever 60° boom angle is exceeded to prevent clamshell bucket, grapple or magnet from striking boom. Rated loads are based on 67½% of tipping provided loads do not exceed 16,000 lbs.

RADIUS DIAGRAM SPANNER

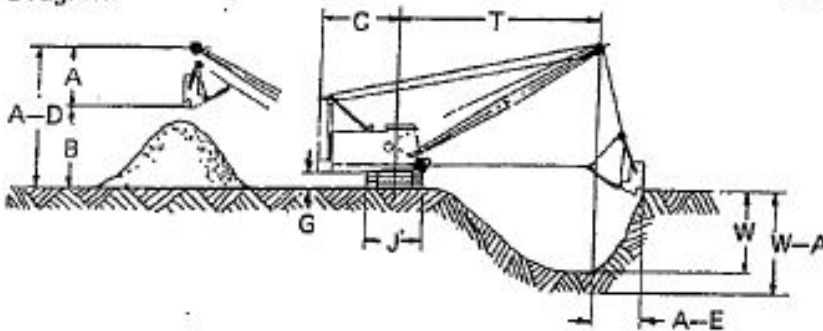


Max. Boom W/Jib:
Angle - 120° W/40° Jib
Tube - 160° W/40° Jib



Note: Total Length Of Boom
Not To Exceed 140'
Angle Type & 170' Tubular
Type For Lifterans,
Max. Boom Of 80' For
Drag Or Clam Application.

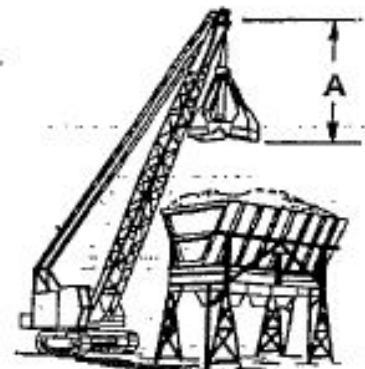
Dragline:



Clamshell:

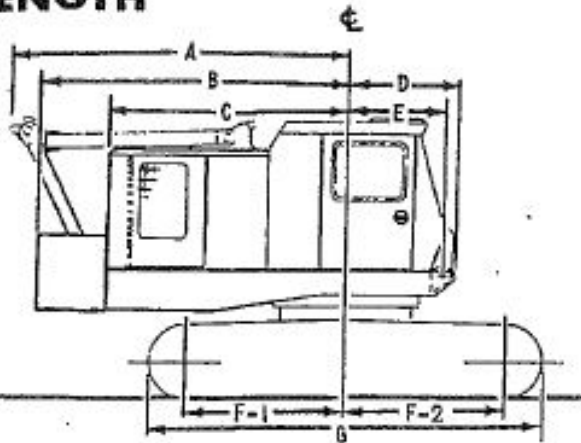
CLAMSHELL BUCKETS	
Size	Cu. Yd.
2-1/2	12'-0"
2	12'-0"
1-3/4	11'-0"
1-1/2	10'-6"
1-1/4	10'-6"
1	10'-0"

- A - 9' to 11' Depending On Bucket Size
- A-D - Height Of Sheave Pin Above Grade See Radius Diagram
- A-E - Depending On Operator-Throw Of Bucket 1/3 to 1/2 of "B"
- B - Dumping Height Height Of Boom Minus "A"
- C - Tailswing Clearance 13'-8-3/8"
- G - Clearance Under Counterweight 3'-6-1/2"
- J - Width Of Crawler (36" SHOES) 15'
- T - Operating Radius See Radius Diagram
- W - Depth Of Cut Working Over Side Approx. 40% of "T"
- W-A - Depth Of Cut Working Over End Approx. 50% of "T"



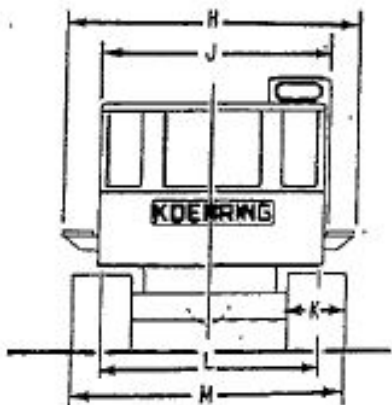
GENERAL DIMENSIONS

LENGTH



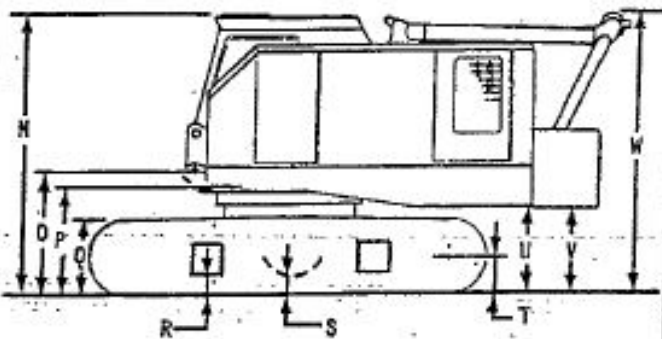
KEY	DESCRIPTION	DIM.
<u>Length:</u>		
A	Centerline Of Rotation To: Gantry Low Position	14'-0-1/2"
	Gantry High Position	10'-9"
B	Rear Of CWT.	12'-10-1/2"
	Rear Corner Of CWT.	13'- 8-1/2"
C	Rear Of Cab	10'-1"
D	Front Of Turntable	4'-7"
E	Center Of Boom Foot Pins	4'-0"
F-1	Center Of Drive Tumbler	6'-9"
F-2	Center Of Idler Tumbler	6'-8"
G	Overall Length Of Crawlers	18'-5"

WIDTH

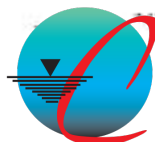


KEY	DESCRIPTION	DIM.
<u>Width:</u>		
H	Outside To Outside Catwalks	12'-2-1/2"
J	Overall Cab	9'-6-1/2"
K	Std. Crawler Shoe	30"
	Dpt. Crawler Shoe	36"
L	C.To C. Crawlers Retracted	9'-0"
	C.To C. Crawlers Extended	12'-0"
M	30" SHOES	
	Overall Crawlers Retracted	11'-6"
	Overall Crawlers -Extended	14'-6"
	36" SHOES	
	Overall Crawlers Retracted	12'-0"
	Overall Crawlers Extended	15'-0"

HEIGHT



KEY	DESCRIPTION	DIM.
<u>Height:</u>		
N	Over Cab	11'-7-1/2"
O	To Boom Foot Pin Center	5'-3"
P	Over Ring Gear	4'-3"
Q	Over crawlers	3'-3"
R	Under Axles	1'-4"
S	Under Lower Gear Case	1'-3"
T	To Crawler Tumbler Center	1'-6"
U	Under Turntable	3'-8"
V	Under CWT.	3'-6-1/2"
W	Over gantry Lowered	11'-8"
	Over Gantry Raised	18'-0"



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