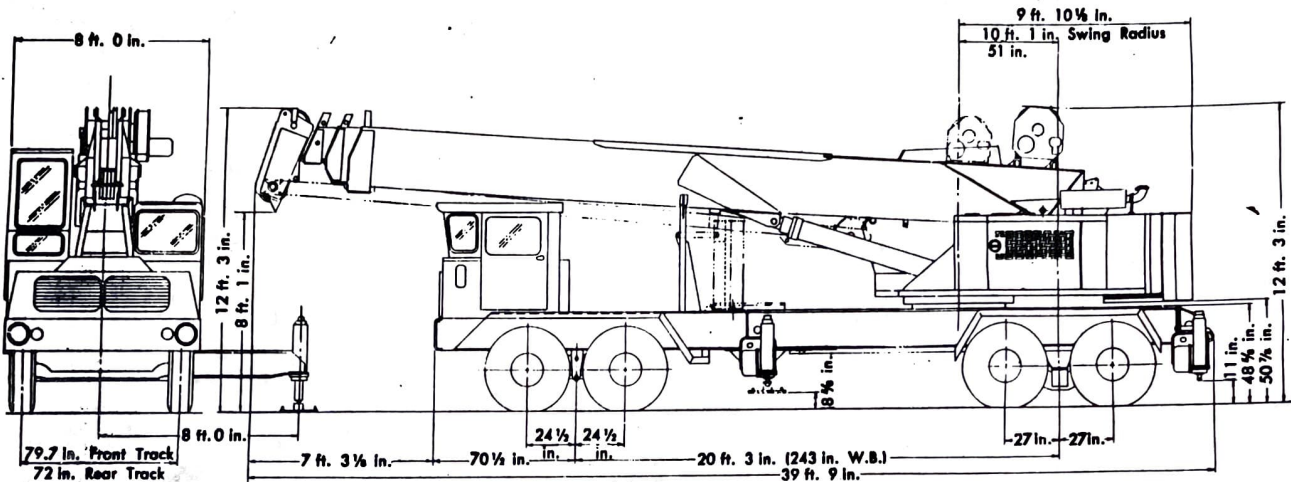


B**BUCYRUS-ERIE****E****45-C**

**SERIES TWO-B—100
35 TON HYDRAULIC TRUCK CRANE
SPECIFICATIONS**

"Competitor" (243 in. Wheel Base)



866834

HOIST DRUMS

Unit	Drum	Type Of Lugging	Layer Of Rope	Pitch Diameter (Inches)	Pull In Pounds	Full Load Line Speed (FPM)		Rope Capacity	
						Normal	High	With Controlled Free Fall (Feet)	Without Controlled Free Fall (Feet)
B-E Model 12	Main 5/8 In. Rope	Standard	1st	12 1/2	12,150	122	244	91	111
			5th	17 1/2	8,680	170	340	548	666
B-E Model 12	Main 5/8 In. Rope	High Speed	1st	20 1/2	7,500	195	390	147	179
			2nd.	21 1/2	7,100	207	414	303	368
B-E Model 8	Auxiliary (Runner) 1/2 In. Rope	Standard	1st	10	8,500	165	—	91	109
			5th	14	6,080	232	—	548	658
B-E Model 8	Auxiliary (Runner) 1/2 In. Rope	High Speed	1st	17 1/2	4,860	288	—	160	191
			2nd.	18 1/2	4,600	305	—	329	394

ENGINE SPECIFICATIONS — UPPER

Make	Model	Type	Cylinders	Bore x Stroke (Inches)	Displacement (Cubic Inches)	Horsepower (Net)	Max. Altitude (Feet)
General Motors	6V-53N	Diesel	6	3 7/8 x 4 1/2	318	143 at 2400 RPM	12,000'
Cummins	V-504C	Diesel	8	4 1/2 x 3 3/4	504	138 at 2400 RPM	6,000
Deutz	BF6L-912	Diesel	6	3.937 x 4.718	346	136 at 2400 RPM	4,000
Ford	391	Gas	V8	4.01 x 3.79	391	142 at 2400 RPM	6,500
Ford	361	Gas	V8	4.05 x 3.50	361	131 at 2400 RPM	4,000

WEIGHTS IN POUNDS (APPROXIMATE)

Type	Net	Working	Export Shipping	Ships Option Tons
Crane	72,977	73,225	73,925	110

45-C HYDROCRANE[®] 30 TON HYDRAULIC TRUCK CRANE

PCSA CLASS 10-117

MAXIMUM ALLOWABLE CRANE LOADS (POUNDS) — WITH OUTRIGGERS †

POINT SECTION RETRACTED	Boom Length In Feet	Load Radius In Feet	Boom Angle In Degrees	Boom Point Pin Height (Ft. In.)	Over Side	Over Rear
	32	10	67	37 0	*60,000	*60,000
12		63	36 0	*53,100	*53,100	
15		57	34 1	*45,300	*45,300	
20		45	29 8	*34,000	*36,100	
25		29	17 0	*26,200	*28,000	
40	10	72	45 7	*57,400	*57,400	
	12	69	44 10	*50,400	*50,400	
	15	64	43 4	*42,800	*42,800	
	20	56	40 4	*34,000	*34,200	
	25	46	36 0	*26,200	*28,000	
	30	35	29 10	*19,900	*22,500	
50	12	74	55 6	*48,700	*48,700	
	15	70	54 4	*41,000	*41,000	
	20	63	52 1	*32,500	*32,500	
	25	57	49 0	*26,000	*26,900	
	30	49	45 1	*19,900	*22,500	
	35	41	39 9	15,000	*18,500	
60	15	74	65 1	*39,400	*39,400	
	20	69	63 2	*31,000	*31,000	
	25	63	60 9	*25,500	*25,500	
	30	58	57 8	*19,900	*21,600	
	35	52	54 0	15,100	*18,500	
	40	45	49 2	11,700	*15,500	
70	20	72	73 10	*30,300	*30,300	
	25	68	71 10	*24,800	*24,800	
	30	63	69 4	*19,900	*20,900	
	35	58	66 4	15,100	*17,900	
	40	53	62 9	11,700	*15,600	
	50	42	53 1	7,400	*11,000	
76	20	74	80 3	*29,400	*29,400	
	25	70	78 4	*24,000	*24,000	
	30	66	76 2	*19,900	*20,000	
	35	61	73 6	*15,100	*17,200	
	40	57	70 3	11,700	*14,000	
	50	47	61 10	7,400	*10,500	

POINT SECTION EXTENDED	Boom Length In Feet	Load Radius In Feet	Boom Angle In Degrees	Boom Point Pin Height (Ft. In.)	Over Side	Over Rear
	56	15	72	60 10	*16,600	*16,600
20		66	58 9	*14,500	*14,500	
25		60	56 2	*11,000	*11,000	
30		54	52 9	*9,200	*9,200	
35		47	48 6	*7,800	*7,800	
40		40	43 2	*6,800	*6,800	
60	15	73	65 0	*16,600	*16,600	
	20	68	63 2	*14,500	*14,500	
	25	63	60 9	*11,800	*11,800	
	30	57	57 8	*9,900	*9,900	
	35	51	53 11	*8,400	*8,400	
	40	44	49 3	*7,300	*7,300	
70	20	71	73 11	*15,000	*15,000	
	25	67	71 10	*14,000	*14,000	
	30	62	69 5	*11,700	*11,700	
	35	58	66 5	*10,000	*10,000	
	40	52	62 9	*8,700	*8,700	
	50	41	53 0	*6,900	*6,900	
80	25	71	82 8	*15,000	*15,000	
	30	68	80 7	*13,600	*13,600	
	35	64	78 1	*11,800	*11,600	
	40	59	75 1	*10,200	*10,200	
	50	50	67 4	*8,100	*8,100	
	60	40	56 7	*6,600	*6,600	
90	25	74	93 3	*14,700	*14,700	
	30	71	91 6	*14,100	*14,100	
	35	67	89 3	*11,200	*11,200	
	40	64	86 8	*10,000	*10,000	
	50	56	80 3	*8,400	*8,400	
	60	48	71 8	*6,200	*7,000	
100	30	73	102 2	*14,100	*14,100	
	40	67	98 0	*10,500	*10,500	
	50	60	92 4	*8,400	*8,400	
	60	53	85 2	*6,000	*7,000	
	70	46	75 8	4,200	*5,800	
	80	36	62 10	2,900	*4,700	

Crane Loads do not exceed 85% of the tipping loads with the machine leveled and standing on a firm uniform supporting surface.

*Maximum Allowable Crane Load is limited by factors other than tipping.

†The Maximum Allowable Crane Loads are those loads which can be lifted within the included angles between the outrigger supports when beams are fully extended, as shown in the quadrant diagram (page 4).

Do not lift or swing any loads within the included angle between the front outrigger supports marked front.

WARNING: The information contained in this specification is to be used only as a guide in evaluating the performance of a machine. For operation of a machine always refer to the capacity plate on the machine (since this specification may apply to a different model or series).

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LOAD RATING DEDUCT DATA

Deduct weight of optional equipment from crane load rating:
HOOK BLOCKS:

- 5 Ton weighted hook175 lbs.
- 10 Ton single sheave swivel200 lbs.
- 25 Ton double sheave swivel425 lbs.
- 30 Ton quad sheave swivel800 lbs.

JIB: (when lifting over main boom with jib attached)

- Tuckaway jib on boom point1150 lbs.
- Tuckaway jib stored200 lbs.
- 20 Foot935 lbs. 40 Foot1400 lbs.
- 30 Foot1150 lbs. 50 Foot1700 lbs.

RECOMMENDED HOIST TACKLE

MAIN HOIST UNIT —							
Loads over 8,400	16,500	24,400	32,000	39,500	46,800	53,800	
Parts of line 2	3	4	5	6	7	8	
AUX. HOIST UNIT —							
Loads over 6,400	12,600	18,600	24,500	30,000	35,600	41,000	
Parts of line 2	3	4	5	6	7	8	

45-C HYDROCRANE® 30 TON HYDRAULIC TRUCK CRANE

CRANE AND JIB SERVICE

Load Ratings are based on freely suspended loads with the machine leveled and standing on firm, uniform supporting surface. Practical working loads depend on supporting ground, wind, and other factors affecting stability, hazardous surroundings, experience of personnel and proper handling, all of which must be taken into account by the operator.

Operating Radius is the horizontal distance from the axis of rotation before loading, to the center of the vertical hoist line or tackle with loads applied.

Load Ratings "With Outriggers" are based on outriggers fully extended and set to a distance of 16 feet between centerline of the float connections. All wheels shall be relieved of all weight.

Load Ratings are based on crane components and conditions shown under MACHINE EQUIPMENT.

Weight of jibs, hooks, hook blocks, slings, and all other load handling and load indicating devices, except the hoist rope, shall be considered part of the load.

MACHINE EQUIPMENT

10,000 pounds removable counterweight (2-piece), (8 x 4) carrier, 243 inch wheelbase, conventional cab, diesel engines in carrier and upper works. If gasoline engines are installed stability loads in the "maximum allowable crane loads" chart must be reduced. Refer to specific capacity plate in cab of crane.

LOAD RATING DEDUCT DATA

When working with the lattice jib, the upper boom section must be fully extended and pinned.

Deduct weight of hook and all other load handling and indicating devices from allowable load:

5 Ton Weighted Hook 175 lbs.

When hook block is suspended from boom point sheave, the load over jib point must be reduced as follows:

20 Ft. Jib 490 lbs.
30 Ft. Jib 450 lbs.
40 Ft. Jib 410 lbs.
50 Ft. Jib 380 lbs.

When tuckaway jib is in storage position on underside of boom, the load over jib point must be reduced as follows:

20 Ft. Jib 150 lbs.
30 Ft. Jib 140 lbs.
40 Ft. Jib 130 lbs.
50 Ft. Jib 120 lbs.

CLAMSHELL SERVICE

Maximum length of boom for bucket service is 50 ft. Recommended maximum allowable loads for general clamshell service are 80% of those shown for crane service, but not to exceed 8,000 lbs. for weight of bucket and contents.

TUCKAWAY JIB		
MAXIMUM ALLOWABLE LOADS OVER JIB SHEAVE (LBS.)		
— For Lifting Crane Service Only — † On Outriggers Over Side and Over Rear		
32 Ft. Thru 100 Ft. Boom + 25 Ft. Jib		
Boom Angle	Straight	Offset
75	*8,400	*6,000
70	*7,800	*5,400
65	*6,450	*4,800
60	*5,400	*4,000
55	*4,550	*3,400
50	3,400	3,050
45	2,800	2,350
40	2,250	1,800
35	1,650	1,350
30	1,100	1,000

*Maximum allowable crane load is limited by factors other than tipping.

†Refer to note on page 2.

MAXIMUM ALLOWABLE LOADS (LBS.)	
LOAD RATINGS DEPEND ON TIRE CAPACITY, CONDITION OF TIRES AND TIRE AIR PRESSURE.	
Pick and Carry Over Rear Only (On Centerline of Carrier)	
Point Section Retracted Minimum Tire Pressure 85 PSI Speed 0-3 MPH	
Radius In Feet	Allowable Load (Pounds)
10	*21,800
12	*19,600
15	*17,000
20	*12,900
25	* 8,500
30	* 5,800
35	* 3,700
40	* 2,350

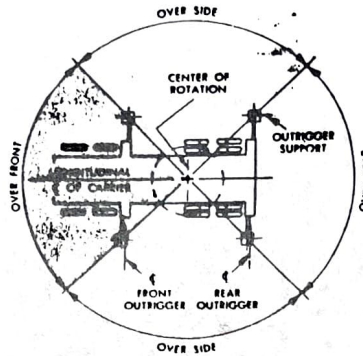
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MAXIMUM ALLOWABLE LOADS (IN POUNDS) LATTICE JIB** FOR LIFTING CRANE SERVICE ONLY Loads Shown Are For All Boom Lengths — On Outriggers Over Side And Over Rear —												
Boom Angle In Degrees	20 Ft. Jib			30 Ft. Jib			40 Ft. Jib			50 Ft. Jib		
	0° Offset*	15° Offset*	30° Offset*	0° Offset*	15° Offset*	30° Offset*	0° Offset*	15° Offset*	30° Offset*	0° Offset*	15° Offset*	30° Offset*
75	8,400	7,200	6,000	6,300	4,650	3,900	4,300	3,000	2,800	2,000	1,950	1,850
70	7,800	6,000	5,400	4,800	3,700	3,750	3,100	2,600	2,200	1,850	1,750	1,550
65	6,400	5,000	4,600	3,700	3,100	2,800	2,300	2,200	1,750	1,600	1,500	1,100
60	5,400	4,200	4,000	3,000	2,500	2,400	1,850	1,600	1,500	1,200	1,050	850
55	4,500	3,700	3,400	2,400	2,250	2,150	1,550	1,300	1,150	950	750	650
50	3,400	3,200	3,000	2,000	1,950	1,850	1,200	1,000	950	600	600	500
45	2,800	2,400	2,300	1,750	1,650	1,650	950	850	850	450	450	400
40	1,900	1,850	1,800	1,600	1,500	1,500	750	750	750	400	400	350
35	1,400	1,350	1,300	1,300	1,200	1,200	650	650	650	350	350	300
30	1,100	1,050	1,000	900	900	900	600	600	600	300	300	250

*Maximum offset (angular from centerline of Boom to centerline of Jib).

**Indicates that Maximum Allowable Loads are limited by factors other than tipping.

45-C HYDROCRANE® 30 TON HYDRAULIC TRUCK CRANE



QUADRANT OF OPERATION

HOOK BLOCKS		
Capacity (Tons)	No. Parts	Y (Inches)
5	1	25 1/4
10	2	60
25	4	60
30	6	60
30	8	60

