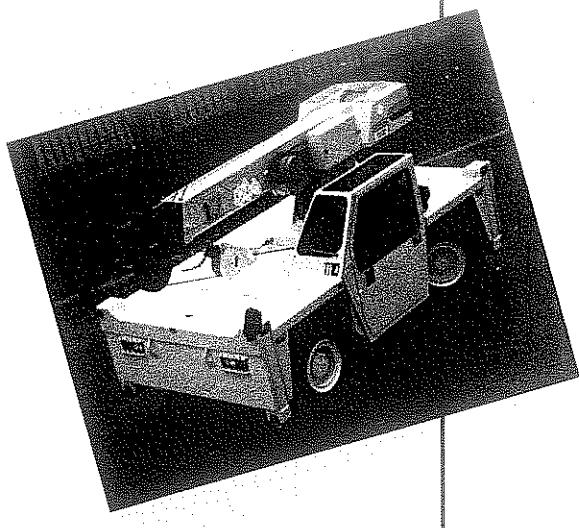


D 85i

8.5 Ton (7.7 tonne) Capacity
Carry Deck Industrial Crane



TEREX CRANES, INC.



D85i FEATURES

■ Boom Choices:

The longest standard boom in the class at 25 ft. (7.6 m), or a four section 32 ft. (9.8 m) boom.

■ Pick and Carry Capacity:

At almost 8 tons (7.5 tonnes), it's the highest in its class.

■ Versatile and Agile:

Designed specifically for industrial in-plant operation, its compact dimensions and four wheel steering make it very maneuverable.

■ Strong Winch:

At 12,000 lbs. (5445 kg), it has the highest maximum line pull of any crane in its class. Reduces reeving changes.

■ Electronic LMI:

A load moment indicator is standard, giving the operator precise crane information under any load conditions.

■ Load Capacity:

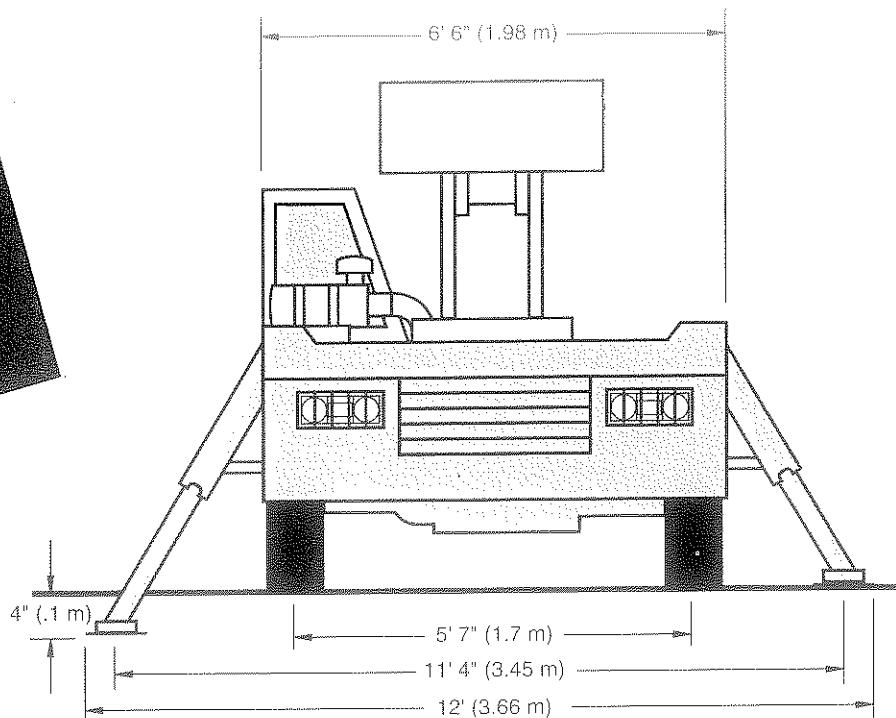
Crane capacities are among the highest in the industry and a carry deck capacity of 14,340 lbs. (6505 kg) adds to the machine's utility.

■ "Loaded Machine":

Comes standard with typical "options" such as four wheel steer and brakes and a fully enclosed cab with excellent visibility, even to the right.

■ Pride Plus Warranty:

The most comprehensive warranty in the business. Covers the entire crane for 12 months or 2,000 hours of operation. Plus, major weldment structures are covered for 5 years or 10,000 hours.



This crane meets the requirements of ANSI B30.5. The machine structure has been tested per SAE J1063. The machine stability has been tested per SAE J765.

BOOM

11 ft. to 25 ft. (3.35m to 7.6m) three section full power telescopic boom. Boom point has one nonmetallic main sheave and one nonmetallic idler sheave. A mechanical boom angle indicator is provided.

Boom Telescope:

One double-acting cylinder and a chain crowd mechanism. Fully synchronous operation.

Boom Hoist:

One double-acting cylinder provides elevation from 0 degrees to 70 degrees.

BOOM OPTIONS

Four Section Boom:

11 ft. to 32 ft. (3.35m to 9.8m) four section telescopic boom. Boom point has one nonmetallic main sheave and one nonmetallic idler sheave. A mechanical boom angle indicator is provided. Boom is same as standard boom with the addition of a manual pull-out section for increased reach.

Extension:

Swingaway, 10ft. (3m) self-storing on base section of main boom.

Rhino Hook:

Mounted at boom point with 6,000 lbs. (2720 kg) capacity, for use where headroom is limited.

COUNTERWEIGHT

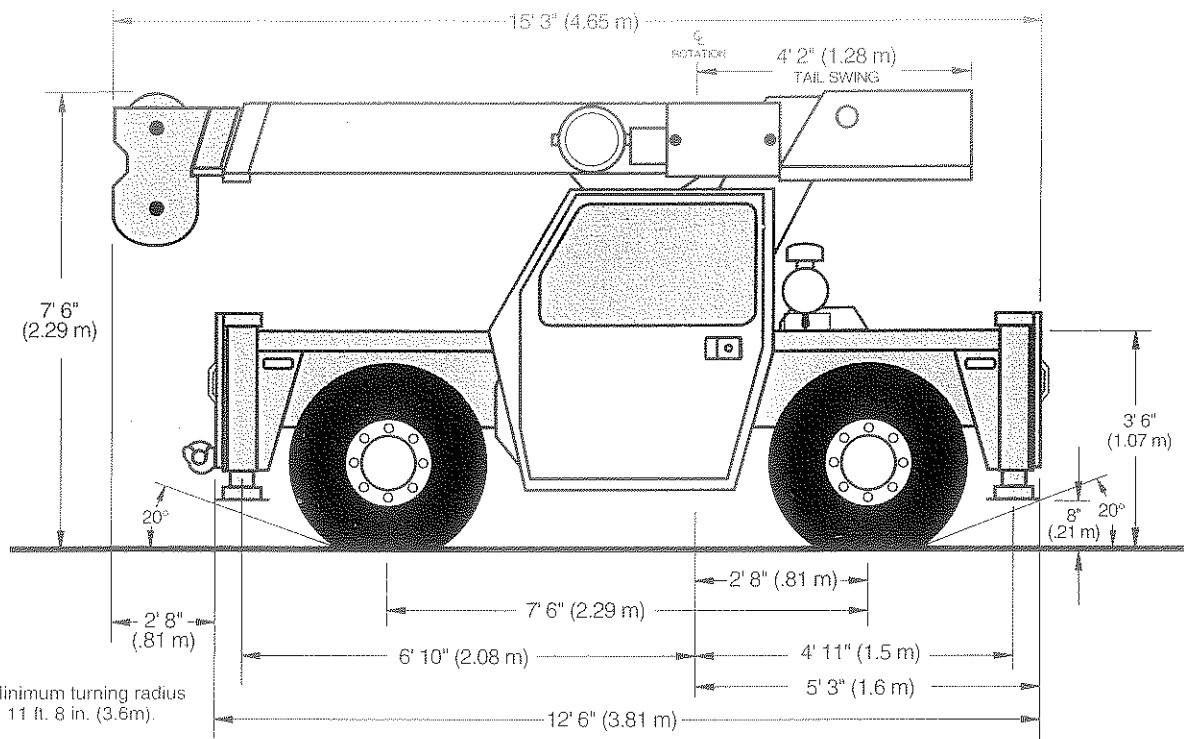
770 lbs. (350 kg).

CAB

All-weather, low profile cab of steel has removable, locking door with easy entrance from ground level. Windows all around and above with tinted safety glass; the right side and door windows open.

Operator's seat is four-way adjustable and has a seat belt. Contains all roading and dash mounted crane function controls. Foot pedals for service brakes and engine throttle.

Front console includes back-lit gauges for engine water temperature, engine oil pressure, and fuel. Also includes hourmeter, tachometer, voltmeter, anti-two block warning device and electronic LMI. Additional cab equipment includes windshield wiper and washer, hot water heater and defroster, dome light, fire extinguisher, machine level gauge, and horn.



WINCH

Single speed with planetary gearing for equal speed power raising and lowering and infinitely variable speed control. Has automatic multi-disc brake.

Drum Capacity:

160 ft. (50m) of 9/16 in. (14mm) wire rope.

Wire Rope:

121 ft. (37m) of 9/16 in. (14mm) diameter, 6x37 EIP.

Line Pull (Max):

12,000 lbs. (5445 kg) first layer.

Line Pull (Permissible):

9,730 lbs. (4415 kg) per part of line.

Line Speed (Max):

92 fpm (28 mpm) second layer.

HOISTING OPTIONS

Hook Block:

10 ton (9.0 tonne) with one sheave.

Headache Ball:

7 ton (6.3 tonne) weighted hook.

SWING UNIT

360 degree continuous rotation to 1.5 rpm with fully automatic swing brake, integral with worm gear drive.

House Lock:

Automatic, as swing is locked when hydraulic power is removed from the worm gear drive.

HYDRAULIC SYSTEM

System uses one tandem gear type pump with a total flow of 44 gpm (166 lpm). Filtration is by a 10 micron return line filter externally mounted to the reservoir. The valves, with the control levers directly connected, have low effort spools and pilot operated relief valves for quick, smooth response.

Oil Reservoir:

40 gallons (150 liters) capacity.

CARRIER

4 x 2 x 4:

Front wheel drive steer with rear wheel steering .

Carry Deck:

Surface area is 64 sq. ft. (5.9 sq. m) with a capacity of 14,340 lbs. (6505 kg).

Outriggers:

Operating in pairs for quick set up, they are arm type that pivot out, then telescope down, with control from the cab. Extension is

11 ft. 4 in. (3.45m). Front to rear spread is 11 ft. 9 in. (3.58m).

Outrigger Floats:

80 sq. in. (515 sq. cm) with self-storage on arms.

Front Axle:

Planetary drive steer with limited-slip differential, rigid mounted. Four wheel steer is standard.

Rear Axle:

Rigid mounted, steering type.

Service Brakes:

Dual circuit, hydraulic assisted disc brakes at each wheel. Wet disc on front axle and dry disc on rear.

Parking Brake:

Disc brake on the transmission output yoke.

Steering:

Hydrostatic power steering on both axles. The operator selects two wheel steer only, four-wheel cramp, or crab steering, all three modes controlled by the steering wheel. Minimum turning radius is 15 ft. 7 in. (4.8m) with two wheel steer only and 11 ft. 8 in. (3.6m) with four wheel steer.

Tires:
255/70R-22.5 tubeless with highway tread.

Tire Options:
Spare tire with rim (will fit either front or rear axle).

ENGINE

Cummins 4B3.9, 4 cycle, diesel with a displacement of 239 cu. in. (3.9 liters). Output is 76 HP (57 kw) at 2,500 rpm with maximum torque of 184 ft. lbs. (249 Nm) at 1,200 rpm.

ENGINE OPTION

Continental dual fuel TM 27, 4 cycle, gasoline/propane (LPG) with a displacement of 165 cu. in. (2.7 liters). Output is 63 HP (47 kw) at 2,500 rpm with maximum torque of 140 ft. lbs. (190 Nm) at 1,200 rpm.

Electrical:

12 volt system with negative ground, a battery with 320 cold cranking amps, and a 63 amp alternator.

Fuel Tank:

20 gallons (76 liters) capacity.

TRANSMISSION

Full synchromesh with steering column mounted shuttle shift operation, four speeds forward and reverse.

Max Speed:

19 mph (30 km/h).

Max Grade:

96% at 1 mph (1 km/h), theoretical.

MACHINE WEIGHT

GVW: 16,315 lbs. (7400 kg)

Front: 7,180 lbs (3255 kg)

Rear: 9,135 lbs. (4145 kg)

Miscellaneous Equipment (Standard):

Under-deck storage compartment, lift-up engine hood, back-up alarm, front and rear tow lugs, headlights, tail lights, turn signals and flashers, with protective grills over all lights.

Miscellaneous Equipment (Optional):

Pintle hooks, floodlights, amber beacon, engine condition warning system, and Rhino Hook.

TEREX CRANES, INC.

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NOTE: All designs, specifications, and components of the equipment described are subject to change at the manufacturer's sole discretion at any time and without advance notice. Capacity charts and information printed here are only a guide and may not be complete. They should not be relied upon to operate the crane. The individual load charts and related lifting data on each crane must be understood and govern operation of the crane. Data published herein is informational in nature and shall not be construed to warrant suitability of the machine for any particular purpose as performance may vary with conditions encountered. The only warranty applicable is our standard warranty for this machine.

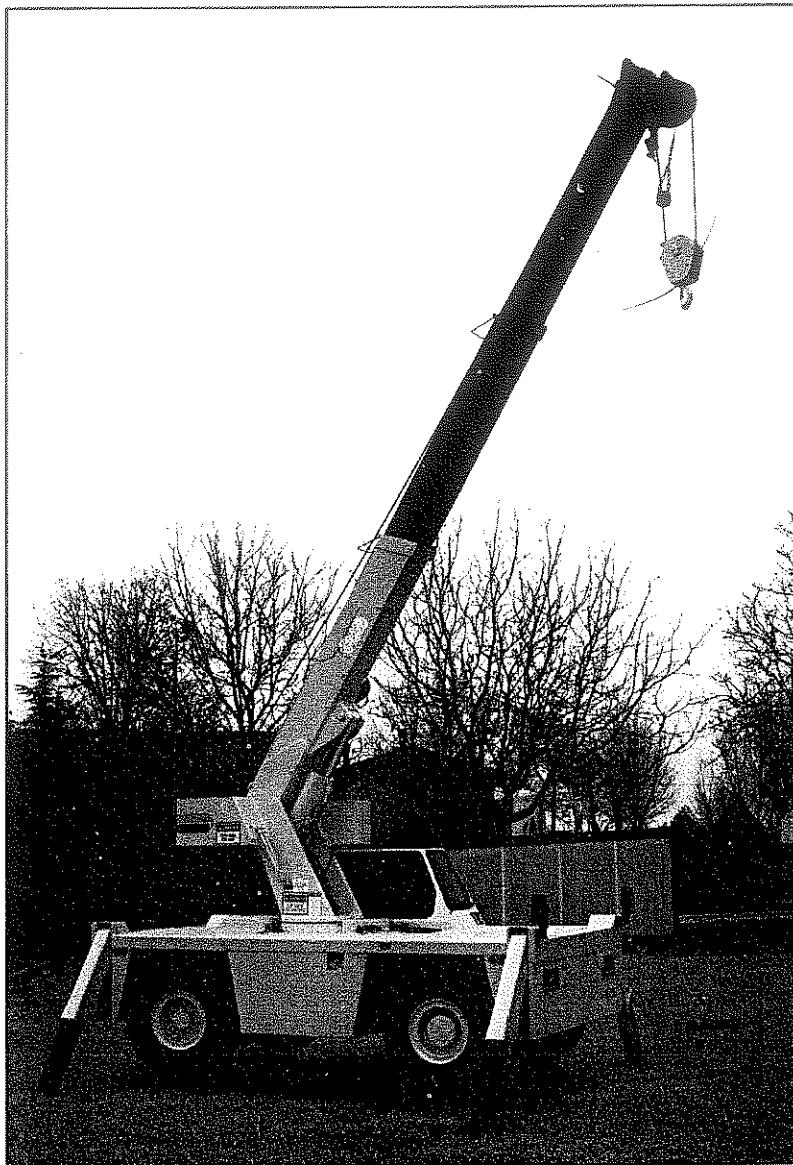


LIFTING DATA

85% USA

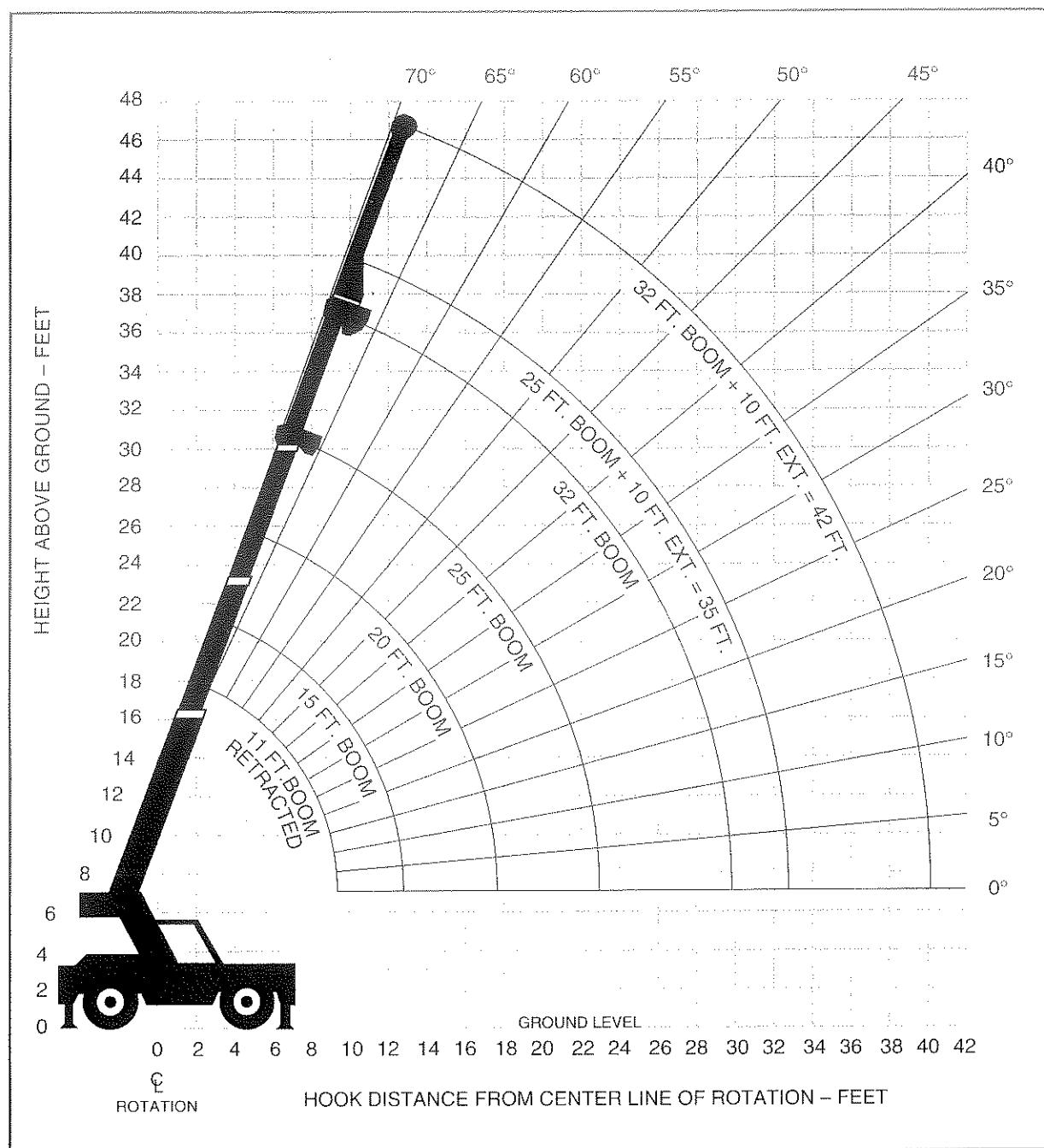
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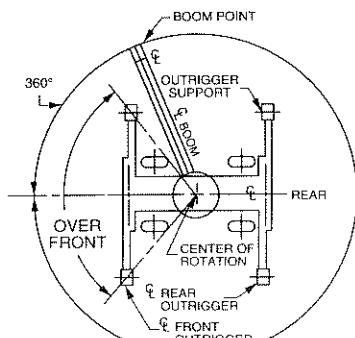


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D 85i RANGE DIAGRAM

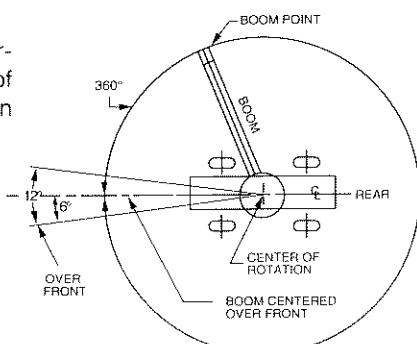


AREAS OF OPERATION

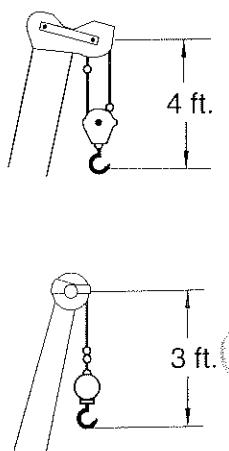


ON OUTRIGGERS

NOTE: These lines determine the limiting position of any load for operating within working areas indicated.



ON TIRES



LOAD RATINGS IN POUNDS

25 Ft. Boom and 10 Ft. Extension

RADIUS IN FEET	ON OUTRIGGERS FULLY EXTENDED				ON TIRES		RADIUS IN FEET	
	25 FT. BOOM		BOOM + 10 FT. EXT.		STATIONARY OVER 360°	PICK & CARRY TO 25 MPH		
	OVER 360°	OVER FRONT	OVER 360°	OVER FRONT				
5	17000	17000			9700	15900	5	
6	16200	16200			8400	13800	6	
8	13300	13300			5700	10700	8	
10	11200	11200	7600	7600	3800	8500	10	
12	9200	9800	7600	7600	2800	6000	12	
14	7000	8700	6900	7600	2100	4500	14	
16	5500	7800	5600	7100	1700	3500	16	
18	4600	6600	4700	6300	1400	2900	18	
20	3800	5300	3800	5300	1100	2300	20	
22	3300	4500	3300	4500	900	2000	22	
24			2800	3900	750	1750	24	
26			2400	3300			26	
28			2100	3000			28	
30			1900	2600			30	
32			1700	2300			32	
0° 	2700	3900	1500	2000			0° 	

32 Ft. Boom and 10 Ft. Extension

RADIUS IN FEET	ON OUTRIGGERS FULLY EXTENDED				ON TIRES		RADIUS IN FEET	
	32 FT. BOOM		BOOM + 10 FT. EXT.		STATIONARY OVER 360°	PICK & CARRY TO 25 MPH		
	OVER 360°	OVER FRONT	OVER 360°	OVER FRONT				
6	17000	17000			8400	13800	6	
7	15800	15800			7300	12300	7	
8	13900	13900			6000	10900	8	
10	11100	11100			4100	8800	10	
12	9100	9400			3000	6200	12	
14	7200	8400	7000	7300	2400	4700	14	
16	5700	7500	5600	6500	1900	3700	16	
18	4800	6500	4700	5800	1600	3100	18	
20	3900	5600	3900	5100	1200	2500	20	
22	3400	4800	3300	4500	1000	2100	22	
24	3000	4100	2900	4000	900	1800	24	
26	2600	3500	2500	3400	700	1600	26	
28	2300	3100	2200	3000	600	1400	28	
30			1900	2600			30	
32			1700	2400			32	
34			1500	2100			34	
36			1400	1900			36	
38			1300	1700			38	
40			1200	1500			40	
0° 	1800	2600	1100	1400		1200	0° 	

DEDUCTIONS TO BE MADE FROM LOAD RATINGS

10 ft. Extension Erected (but lifting from Powered Boom)	430 lbs.
Stowed Extension	0 lbs.
10 ton Hook Block	110 lbs.
7 ton Headache Ball	100 lbs.

NOTE: These load deductions apply only to equipment supplied by PPM Cranes, Inc.

This Lifting Data is for informational purposes only. Do not use to operate the crane; refer to the Operator's Manual and Crane Rating Information supplied with each crane.

OPERATION ON OUTRIGGERS

1. Crane lifting capacities on fully extended outriggers do not exceed 85% of the tipping load.
2. Rated lifting capacities above the bold line are based on the machine's hydraulic or structural competence. Rated lifting capacities below the bold line are based on the machine's stability.
3. Rated lifting capacities include the weight of hook block, slings and auxiliary lifting devices. Their weight must be subtracted from the listed rated lifting capacity to obtain the net load to be lifted. Also see deductions for auxiliary sheave, stowed or erected extensions and jibs.
4. Extension rated lifting capacity is based on loaded main boom angle with reference to horizontal, regardless of main boom length. Reference radius is for fully extended main boom. For angles not shown, use the next lower boom angle to determine the allowable capacity.
5. Do not tip machine to determine allowable lifting capacities.

OPERATION ON TIRES

1. Crane lifting capacities on tires do not exceed 75% of the tipping load.
2. Crane lifting capacities on tires depend on tire capacity, condition of the tires and tire air pressure. Tires must be inflated to the recommended pressure before lifting.
3. Rated lifting capacities above the bold line are based on the machine's hydraulic or structural competence. Rated lifting capacities below the bold line are based on the machine's stability.
4. Rated lifting capacities include the weight of hook block, slings and auxiliary lifting devices. Their weight must be subtracted from the listed rated lifting capacity to obtain the net load that can be lifted.
5. For pick and carry operations, the boom must be centered over the front of the machine, the mechanical swing lock engaged and the load must be restrained from swinging.



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