Tech Spec

IC-200-F





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IC-200-2F

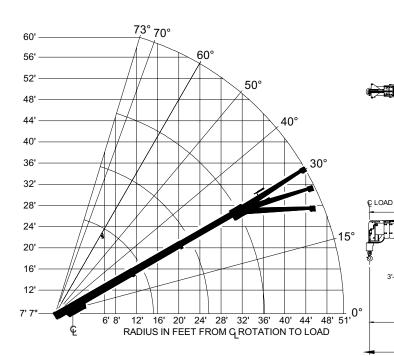
CRANE CAPACITY CHART IC-200-2F

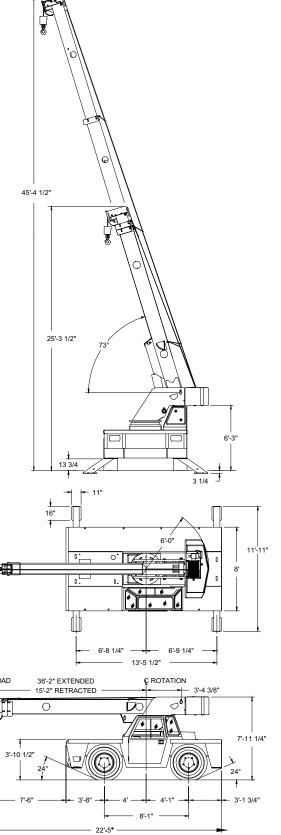
	CAPACITIES APPLY TO OPERATION ON FIRM LEVEL SURFACE									
	LOAD MAIN BOOM OR EXTENSION CAPACITIES IN POUNDS								JNDS	
	RADIUS	360° ROTATION				OVER FRONT			Т	
	FEET	ON RUE	BER	ON OUTRIGG	ERS	ON RUBBER		ON O	ON OUTRIGGERS	
	6	1620	0	30000		17000			30000	
	8	1320	0	24000		13800			24000	
	10	1100	0	19800		11500			19800	
	12	8100		16100	9600			16100		
Σ	14	6250		13500	7900			13500		
0	16	5000		11200	6300			11200		
0	18	4100 3400		10000	5100 4300			10000 8800		
B	20			8800						
z	22	2850		7700		3600			7800	
_	24	2400		6600		3000			6900	
⋖	26	2100		5750		2600			6200	
Σ	28	1850		5150		2300			5700	
	30	1650		4650		2100			5300	
	32	1450		4200		1850			4900	
	36	1150		3400		1500			4200	
Ή.	40	900		3050		1200			3600	
×	44	650		2600		950			3100	
E I	48	450		2200		750			2700	
	51	51 250		1900	600			2400		
Σ	воом	15-FOOT BOOM EXTENSION - STRAIGHT OR OFFSET								
0	EXTENSION				воо	DM ANGLE				
0	ANGLE	0°	15°	30°	40)°	50°	60°	70°	
В	0°		3100	3450	39		4650	6000	7500	
5	15°		3000	3100	33	00	3650	4250	5200	
1	30°			3000	30	50	3200	3450	3900	

CAUTION BOOM EXTENSION LOADS MUST NOT EXCEED MAIN BOOM CAPACITY.

BOOM EXTENSION DEDUCT: 400 LBS. WHEN STOWED ON BASE BOOM; 800 LBS. IN WORK POSITION WITH LOAD ON MAIN BOOM.







IC-200-3F

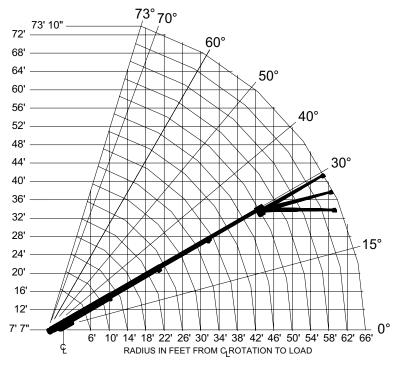
CRANE CAPACITY CHART IC-200-3F

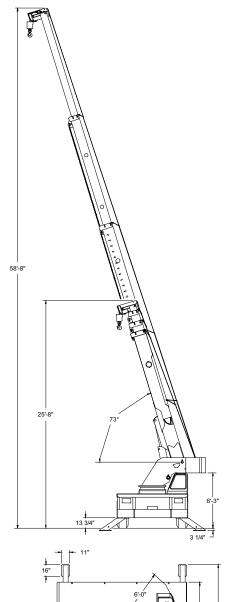
		CAPACITIE	ES IN POUNDS	FOR C	PERATI	ON ON FI	IRM LE	VEL SURFA	CE		
LOAD	MAIN BOOM ONLY				BOOM EXTENSION						
RADIUS	ON RU	BBER	ON OUTR	ON OUTRIGGERS		C	ON RUBBER			ON OUTRIGGERS	
FEET	360°	FRONT	360°	FR	ONT	360)°	FRONT		360°	FRONT
6	16000	16400	30000	30	0000						
8	12500	13000	22400	22	2400						
10	10000	10500	18500	18	3500	750	0	7500		7500	7500
12	8040	8700	15700	15	5700	750	0	7500		7500	7500
14	6500	7200	13500	13	3500	750	0	7500		7500	7500
16	5330	6200	10800	10	0800	614	0	7500		7500	7500
18	4450	5400	9560	9	560	501	0	6440		7500	7500
20	3720	4700	8550	8	550	420	0	5430		7500	7500
22	3140	4200	7700	7	700	358	0	4650		6850	6850
24	2680	3700	6980	6	980	308	0	4030		6250	6250
26	2300	3200	6300	6	350	2660		3530		5750	5750
28	1980	2800	5550	5	800	2290		3100		5300	5300
30	1700	2460	4830	5	320 199		0	2710		4920	4920
32	1470	2150	4200	4	900 173		0	2400		4580	4580
34	1260	1850	3700	4	520 151		0	2130		4270	4270
38	920	1300	2970	3	870	114		1680		3530	3760
42	640	950	2400	3	340	840)	1320		2960	3340
46	390	650	1840	2	890	600)	1040		2440	2980
50	0	550	1750	2	520	410)	800		2040	2630
54						0		600		1710	2290
58					0			430		1370	2000
62					0			290		1140	1740
66						0		0		930	1500
BOOM			BOOM EX	TENSI	ON - STR	AIGHT O	R OFF	SET			
EXT.	MAIN BOOM ANGLE										
ANGLE	0°	15°	30°	30°		0°		50°		60°	70°
0°	3000	3100	3450	450 39		900		4650		6000	7500
15°	-	3000	3000	0 30		00		3000		3700	5000
30°	-	-	2500	2500 2		00	2600			3100	3800

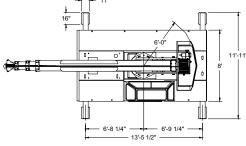
CAUTION BOOM EXTENSION LOADS MUST NOT EXCEED CAPACITIES IN ANGLE CHART AND LOAD RADIUS CHART.

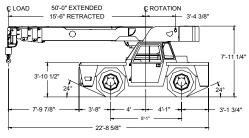
BOOM EXTENSION DEDUCT: $400~{\rm LBS}.$ WHEN STOWED ON BASE BOOM; $800~{\rm LBS}.$ IN WORK POSITION WITH LOAD ON MAIN BOOM.











GENERAL:

Gradeability:

Turning Radius:

Weight:	IC-200-2F	IC-200-3I	Ē
	27,760 lbs.	30,160 lb	S.
Boom Movement:			
Rotation Elevation Extension	Continuous 0° to 73° 15' 4"	Continuous 0° to 73° 21' 0"	Continuos 0° to 73° 34' 6"
Boom Speeds:			
Rotation Elevation Extension	1.8 RPM 21 sec. 26 sec.	1.8 RPM 21 sec. 35 sec.	1.8 RPM 21 sec. 53 sec.

75% (37 Degrees)

13'9"

ENGINE:	<u>Standard</u>	<u>Optional</u>	
Make	GM*	Cummins**	
Model	4.3L V-6	B4.5-C	
Туре	Gasoline	Turbo-Diesel	
No. Cyl.	6	4	
Displacement	262 CID	4.5L	
HP @ Gov. Speed	110 H.P.	99 H.P.	
Fuel Tank Capacity	30 Gallons		

- Electronic Fuel Injection with Dual Fuel, Tier II CARB & US EPA Tier I Emissions Certified
- ** Tier II CARB & US EPA Tier II Emissions Certified

TRANSMISSION:

Powershift transmission with 4-speeds forward and reverse. Provides powershifts at any engine speed in any gear. All shifting is done with a single lever electrical control mounted on the steering column. Equipped with torque convertor and transmission oil cooler. Torque convertor has stall ratio of 2.2:1.

Gear Ratio:

First	5.72:1	Second	3.23:1
Third	1.77:1	Fourth	1.00:1

AXLES:

Front Axle:

Planetary drive/steer front axle with 15.78 to 1.0 ratio. Differential equipped with "limited slip" feature. Front axle mounted rigidly to frame.

Travel Speed	Drawbar Pull*
3 MPH	19,000*
6 MPH	10,000*
11 MPH	5,700*
20 MPH	3,000*
	3 MPH 6 MPH 11 MPH

*Drawbar pull is calculated for GM 4.3L engine.

Rear Axle:

Standard (2-Wheel Drive):

Steering axle with 1-1/2 degree oscillation in either direction.

Optional (4-Wheel Drive):

Planetary drive/steer axle with 24.98 to 1.0 ratio. Differential is not "limited slip" in rear axle. 1-1/2 degree oscillation in either direction. Axle ratio compatible with 4-wheel drive transmission output for front axle match. Transmission equipped with electro-hydraulic control for shifting between 2-wheel drive and 4-wheel drive.

STEERING:

Full hydraulic steering unit with two 3-inch cylinders attached to each axle. Allows limited steering when engine is not running. A switch on the control panel is used to select rear-wheel steering, four-wheel steering or crab steering. Electronic sensors and control box automatically align the steering when a new mode is selected.

BRAKES:

Service: Split-system, 4-wheel hydraulic-boosted multiple-plate wet disc brakes.

Parking: Hand lever actuated disc-type parking brake on transmission.

TIRES: 15x22.5, 20-ply rating.

OPERATOR COMPARTMENT:

Provides one-position access to all chassis and crane functions. Includes adjustable operator's seat, retracting seat belts, fire extinguisher and bubble level.

CHASSIS:

Cargo Deck:

72 square feet of deck area. 17,000 lbs. capacity on deck when load is centered over or between axles. Steps located on front corners.

Lifting Rings

Lifting rings at each corner of load deck so sling can be attached for lifting crane.

Outriggers:

Four hydraulic outriggers of box beam construction with direct-connected holding valves. Independent controls for each outrigger.

Outrigger pad dimension: 11" x 16".

Accessory Storage Box:
Storage box is 14" deep x 10-1/2" long x 36-1/2" wide, located in front cargo deck.

ELECTRICAL:

12 Volt System

Lighting Package:

One pair headlights with high and low beams, tail, brake and turn signal lights and back-up lights in rear, front turn signals and emergency flasher switch at operator's station.

Instrument Package:

Fuel, ammeter, oil pressure, water temperature and transmission oil temperature gauges. All gauges are lighted. Hourmeter records hours only during actual engine operation. Also included are warning lights for low transmission pressure, turn signals, high beams, hazard lights, park brake and four-wheel drive.

Back-Up Alarm:

Provides pulsating sound when transmission is in reverse.

Outrigger Alarm System:

Two-tone alarm is activated when "outrigger down" controls are operated.

HYDRAULIC SYSTEM:

Tandem pump, direct-driven by engine crankshaft, rated at 29 and 34 GPM at rated RPM. Hydraulic oil tank capacity of 54 gallons.

BOOM ASSEMBLY:

Three or four section boom assembly equipped with bearing pads, double-acting hydraulic cylinders with direct-connected holding valves and boom angle indicator on each side of boom.

Boom Rotation:

Heavy-duty ball bearing rotation gear with external teeth. Rotation is powered by hydraulic motor and worm gear drive.

Turret mounted planetary gear hoist hydraulically powered with a bare drum line pull of 10,000 lbs. at a line speed of 100 FPM. Includes downhaul weight, swivel hook and sheave block for 4-part line and 240 ft. of 1/2" hoist rope.

Anti-Two-Block Device:

Prevents damage to hoist rope and/or crane components from pulling load hook against tip.

Sheave Block, Four Part Line

Double sheave block for 4-part line requirements.

IC-200-F

Listed below are brief descriptions of each option available for the IC-200-F Industrial Crane. Consult the IC-200-F Engineering Spec for additional information on each option.

MODEL:

IC-200-2F Industrial Crane with 15' 2"-36' 2" Boom

IC-200-3F Industrial Crane with 15' 6"-50' 0" Boom

ENGINE OPTIONS:

Diesel Engine

Cummins Turbo-B4.5-C

Spark Arrester Muffler

Installed in addition to std. muffler.

Catalytic Convertor

Reduces engine emissions.

Engine Heater

Engine coolant heater installed to circulate warm water through engine, plugs into 120 volt AC.

Ether Injection System

Ether starting aid controlled by switch in operator compartment and injects ether directly into intake manifold.

Engine Shut Down Gauges

Shuts engine off when high water temperature or low engine oil pressure occurs. (Diesel Only)

Axle & Steering Options:

4-Wheel Steer & 2-Wheel Drive 4-Wheel Steer & 4-Wheel Drive

TIRE OPTIONS:

Non-Marking Tires Foam Filling of Tires Spare Tire & Wheel

CHASSIS OPTIONS:

Auxiliary Winch

Mounted behind front bumper, hydraulically driven with control in operator's console.

Pintle Hook:

Pintle Hook, Rear Pintle Hook, Front

Headlight and Taillight Grilles

Welded steel protective grilles for headlights and taillights.

Rearview Mirrors

One mounted on right-hand deck stake and one mounted on left-hand deck stake.

OPERATOR COMPARTMENT OPTIONS:

Operator Guard

Tubular steel weldment with heavy expanded steel mesh top section.

Operator Guard Cover

Clear vinyl cover over Operator Guard, for inclement weather operations.

All Weather Cab

Rigid-mounted canopy section and removable hinged door. Includes heater, electric windshield wiper, one sliding glass window in the door & one in the right side of canopy. Defroster fan & dome light included.

Cab Heater Only

Heater with two-speed fan for units without All Weather Cab.

Windshield Washer

Includes reservoir, pump and nozzle.

Floor Mat

Vinyl mat with foam backing.

Operator Suspension Seat

Provides additional operator comfort.

Noise Reduction Kit

Includes floor mat, control valve cover and side panels of foam backed vinyl for noise reduction.

Air Conditioning

Air Conditioner with R 134 coolant.

ELECTRICAL OPTIONS:

Strobe Lights

Yellow strobe light mounted on each side of turret weight box.

Amber Rotating Beacons

Amber rotating beacon mounted on each side of turret weight box.

Boom Work Lights

One work light mounted to boom to light boom tip and one work light mounted to turret to light ground under boom tip.

Work Lights - Rear

Two works lights recessed in rear bumper.

BOOM ATTACHMENTS:

Boom Extension, 15 Ft. (2F Only)
Boom stowable.

Boom Extension, 15 Ft., Offsettable (2F Only)

Same as above except the boom extension is offsettable to 3 different positions; 0 degree (inline), 15 degree and 30 degree offset.

Boom Extension, 16 Ft., Offsettable (3F Only)

Same as above except the boom extension is 16 ft.

Sheave Block - Two-Part Line

Searcher Hook:

Nose Mount

Should you, as an end user, require an option or special equipment on your IC-200-F that is not listed on our sales literature, please contact your dealer salesperson or the factory to receive a special quoted price.

