

IC-80-H Industrial Crane



IC-80-1H

	CAPACITIES APPLY TO OPERATION ON FIRM LEVEL SURFACE							
	LOAD	MAIN BOOM	MAIN BOOM OR EXTENSION CAPACITIES IN POUNDS					
	RADIUS	360°			OVER	FRO	NT	
	FEET	ON RUBBER	ON OUTRI	GGERS	ON	RUBBER	ON	OUTRIGGERS
	5	9600	1700	00	1	1700		18000
Σ	6	7900	1450	00	1	0400		14500
0	8	5750	1025	50	8	400		10250
ВО	10	4150	770	0	6	300		7700
	12	3100	655	0	4	650		6550
z	14	2425	555	0	3	750		5550
⋖	16	2000	465	0	3	100		4650
Σ	18	1700	410	0	2	2650		4150
	20	1450	355	0	2	300		3800
	22	1275	300	0	2	2000		3000
⊬	24	1075	280	0	1	725		2800
×	26	925	250	0	1	500		2600
ш	28	775	220	0	1	300		2400
Σ	30	675	200	0	1	150		2250
0	воом	10-FOOT BOOM EXTENSION - STRAIGHT OR OFFSET						
ВО	EXT	MAIN BOOM ANGLE						
1 _	ANGLE	0°	30°	45	5°	60°		70°
10	*† 0°	2250	2600	32	00	5000		7000
`-	†15°		2400	27	00	3500		4200
	†30°		2250	25	00	3000		3300

* USE 0° FOR STRAIGHT BOOM EXTENSION.
† USE 0°, 15° OR 30° FOR OFFSET BOOM EXTENSION.

 $\frac{\text{CAUTION}}{\text{DO NOT PICK \& CARRY WITH LOADS ON BOOM EXTENSION.}}$

CAPACITIES ON OUTRIGGERS ARE 85% OF TIPPING LOADS. CAPACITIES ON RUBBER ARE 75% OF TIPPING LOADS. CAPACITIES BELOW BOLD LINE ARE LIMITED BY TIPPING. OTHER CAPACITIES ARE LIMITED BY STRUCTURAL OR HYDRAULIC CAPABILITY.

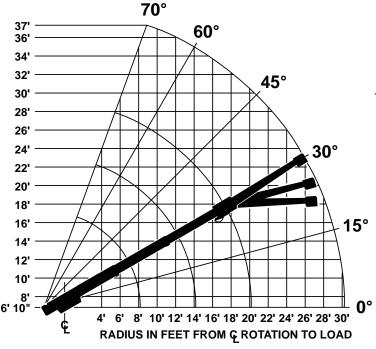
BOOM EXTENSION DEDUCT: 100 LBS WHEN STOWED ON BASE BOOM.

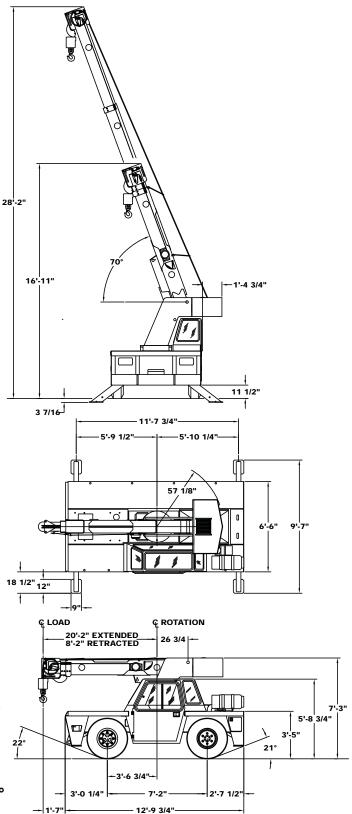


USE SINGLE PART LOAD LINE FOR LOADS TO 9000 LBS. (WT. 90 LBS.)



USE TWO PART LOADLINE FOR LOADS TO 18000 LBS. (WT. 124 LBS.)





IC-80-2H

CAPACITIES APPLY TO OPERATION ON FIRM LEVEL SURFACE								
	LOAD MAIN BOOM OR EXTENSION CAPACITIES IN POUNDS							
	RADIUS	360° ROTATION				OVER F	RC	NT
	FEET	ON RUBBER	ON OUTRI	GGERS	ON	RUBBER	ON	OUTRIGGERS
	5	9500	1700	00	11	1600		18000
l	6	7800	1450	00	1	0200		14500
Σ	8	5650	1025	50	8	250		10250
0	10	4000	770	0	6	200		7700
0	12	3000	655	0	4	650		6550
B	14	2350	555	0	3	650		5550
Z	16	1900	455	0	2	950		4550
₹	18	1600	395	0	2	500		4050
ΙÈ	20	1350	335	0	2	150		3650
=	22	1150	295	0	1	850		3300
	24	1000	255	0	1	650		3100
	26	850	245			450		2750
 	28	725	217	_		275		2500
×	30	625	190	0	1	125		2300
ш	32	525	172	5	1	000		2100
Σ	34	425	150	0		900		1950
0	воом	10-FOOT BOOM EXTENSION - STRAIGHT OR OFFSET						
0	EXT.	MAIN BOOM ANGLE						
B	ANGLE	0°	30°	45	5°	60°		70°
6	*t 0°	2250	2600	32	00	5000		7000
_	†15°		2400	27	00	3500		4200
	†30°		2250	25	00	3000		3300

- † USE 0°, 15° OR 30° FOR OFFSET BOOM EXTENSION.

 $\frac{\text{CAUTION}}{\text{DO NOT PICK \& CARRY WITH LOADS ON BOOM EXTENSION.}}$

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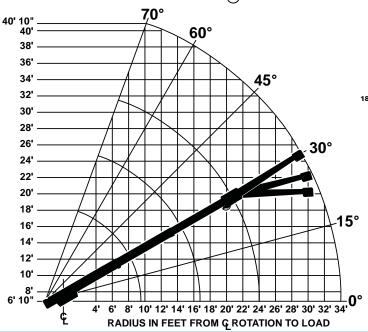
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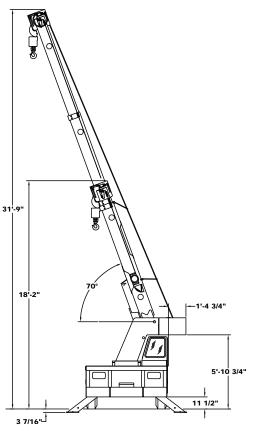


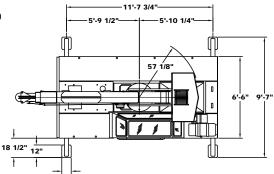
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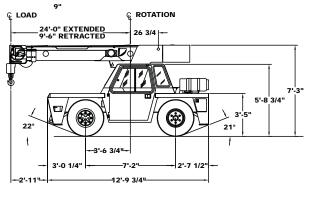


USE TWO PART LOADLINE FOR LOADS TO 18000 LBS. (WT. 124 LBS.)









IC-80-3H

	CAPACITIES APPLY TO OPERATION ON FIRM LEVEL SURFACE							
	LOAD MAIN BOOM OR EXTENSION CAPACITIES IN POUNDS							
	RADIUS					OVER FRONT		
	FEET	ON RUBBER			-	RUBBER	10	OUTRIGGERS
	5	9400	1700	00	1	1400		18000
	6	7550	1400	00	1	0000		14000
	8	5600	1000	00	w.	3100		10000
Σ	10	4300	770	0	6	6100		7700
0	12	3200	610	0	4	450		6100
ō	14	2550	520	0		3400		5200
В	16	2050	440			2700		4400
z	18	1650	390	0		2200		3900
4	20	1350	340	-		800		3400
Σ	22	1150	305			550		3050
	24	1000	275	-		350		2800
	26	850	245	-		200		2550
	28	750	220			100		2350
	30	650	195			000		2150
	32	450	175			900		1950
ŀ∸	34	350	160	0		800		1800
×	36	250	145	0		700		1650
ш	38	200	130	0		600		1500
Σ	40	150	115			500		1400
0	воом	10-FOO	T BOOM EX				OR	OFFSET
0	EXTENSION			N BOO				
<u>а</u>	ANGLE	0°	30°	4:		60°		70°
10.	*†0°	2250	2600		00	5000		7000
`	115°		2400	27	00	3500		4200
	130°		2250	25	00	3000		3300

* USE 0° FOR STRAIGHT BOOM EXTENSION.
† USE 0°, 15° OR 30° FOR OFFSET BOOM EXTENSION.

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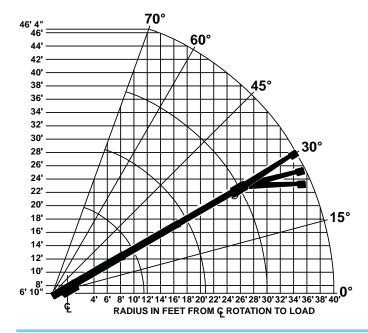
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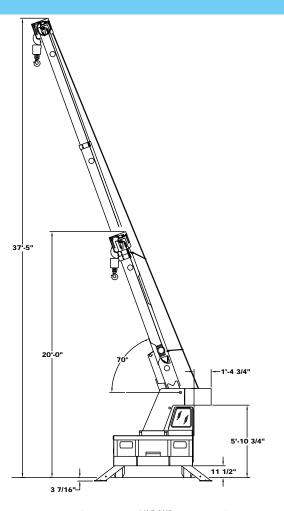


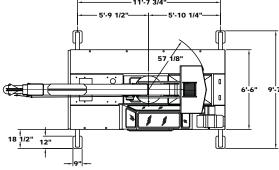
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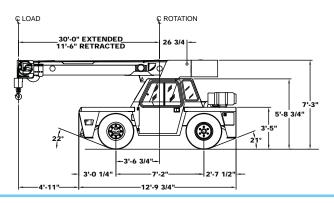


USE TWO PART LOADLINE FOR LOADS TO 18000 LBS. (WT. 124 LBS.)









IC-80-H Specifications

G	Е	N	Ε	R	Α	L:	
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Weight:	IC-80-1H	IC-80-2H	IC-80-3H
4-Wheel Steer	16,150 lb	16,350 lb	16,750 lb
4-Wheel Drive	17,000 lb	17,200 lb	17,600 lb
Boom Movement:			
Rotation	Continuous	Continuous	Continuous
Elevation	0° to 70°	0° to 70°	0° to 70°
Extension	12 ft.	14 ft. 6 in.	18 ft. 6 in.
Boom Speeds:			
Rotation	2.0 RPM	2.0 RPM	2.0 RPM
Elevation	10.0 sec.	10.0 sec.	10.0 sec.
Extension	17.0 sec.	21.0 sec.	27.0 sec.
Turning Radius:			
(C/L of Outside St	teering Wheel)	10 ft. 0 in.	
Aisle Width for 90	⁰ Turn:	9 ft. 6 in.	

ENGINE:

iviake	GIVI	Cummins
Model	3.0 EFI*	QSB 3.3L EPA Tier 3
Type	Gas	Diesel
No. Cyl.	4	4
Displacement	1.81 CID	199 CID
HP @ Gov. Speed	69	85

*Electronic Fuel Injection with Dual Fuel, US EPA & CARB Certified for 2005 Emissions Standards

Fuel Tank Capacity: 20 Gallons

TRANSMISSION:

Powershift transmission with 4-speeds in forward & 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. Multiple-disc clutch packs operated by solenoid valve provide forward, neutral, reverse and speed selection. Equipped with oil cooler and filter. Torque converter has stall ratio of 2.2:1. Gradeability 63 percent.

	F	orwa	rd/Re	verse	Travel
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Drawbar			
Gear	Gear Ratios	Speed	Pull
First	5.72:1	4 MPH	10,500 lb
Second	3.23:1	7 MPH	6,000 lb
Third	1.77:1	13 MPH	3,200 lb
Fourth	1.00:1	22 MPH	1,800 lb

AXLES:

Front:

Planetary drive/steer axle with 11.625:1 axle ratio. Differential is "No-Spin." Axle mounted rigidly to frame.

Optional 4-Wheel Drive

Planetary drive/steer axle with integral drop box input 11.625:1 axle ratio. Differential is "No-Spin." Mining and Industrial tires standard.

Rear:

2-Wheel Drive:

Axle with 1-1/2° oscillation in either direction.

Optional 4-Wheel Drive:

Planetary drive/steer axle with 11.625:1 axle ratio. Differential is "Limited Slip." 1-1/2° oscillation degree in either direction.

	Forward/Reverse	Travel	Drawbar
Gear	Gear Ratios	Speed	<u>Pull</u>
First	5.72:1	3 MPH	12,300 lb
Second	3.23:1	6 MPH	7,000 lb
Third	1.77:1	11 MPH	3,800 lb
Fourth	1.00:1	20 MPH	2,200 lb

STEERING:

Hydraulic steering unit with cylinders attached to each axle. Rear axle is the primary steer. An electric switch in the operator's compartment is used to select rear-wheel steering, four-wheel round steering or crab steering. Electronic sensors and control box automatically align the steering when a new mode is selected.

,	0	
BRAKES:	2-Wheel Drive	4-Wheel Drive
Front	Internal wet disc	Internal wet disc
Rear	Drum type	Internal wet disc
Parking	Disc type	Disc type

TIRES:

2-Wheel Drive 10.00 x 15, load range H bias, 16-ply rating. 4-Wheel Drive 36 X 11-15, Mining & Industrial, 16 ply rating.

CHASSIS:

Cargo Deck:

53 square feet of deck area. 14,000 lbs. capacity on deck when load is centered over or between axles. A storage box is located in front cargo deck. Steps located on front corners.

1. 14,000 pounds allowed at creep speed of 2 MPH and 200 feet maximum in 30 minutes.

Outriggers:

Four hydraulic outriggers of box beam construction. Independent controls for each outrigger. Each cylinder equipped with direct-connected holding valves. Outrigger pad dimension 9"x12".

Lifting Rings:

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

OPERATOR COMPARTMENT:

Operator's control station provides one-position access to all operating functions. Includes adjustable operator's seat, retracting seat belt, fire extinguisher and bubble level.

ELECTRICAL:

12 Volt System

Instrument Package:

Includes fuel and hourmeter. Also included are, warning lights for low oil and transmission pressure, turn signal, high beams, hazard lights, parking brake, hydraulic oil temperature, battery, check engine, stop engine, coolant temperature, outriggers and optional 4-wheel drive.

Lighting Package:

One pair headlights with Hi and Low beams, back-up lights, integral tail, brake, front and rear turn signals and emergency flasher switch at operator's station. 12V horn actuated by button on shifting control.

Back-Up Alarm:

Provides pulsating sound from 97 dB alarm when transmission is in reverse. Conforms to SAE J994b.

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 17 & 32 GPM at rated RPM. Hydraulic oil tank capacity of 25 gallons.

BOOM ASSEMBLY:

Three-section boom assembly equipped with bearing pads, double-acting hydraulic cylinders with direct-connected holding valves & 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.

Boom Hoist

Turret mounted planetary gear hoist hydraulically powered with a bare drum line pull of 10,000 lb at a line speed of 110 FPM. Includes downhaul weight, swivel hook & sheave block for 2-part line and 125 ft of 9/16" hoist rope.

Anti-Two-Block Device:

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

Sheave Block, Two-Part:

Single sheave block for 2-part line requirements.

Rated Capacity Limiter:

Warns operator of impending overload with audible and visual signals. Prevents overload by stopping boom functions that cause overloads.



Listed below are brief descriptions of options available for this product. Consult the IC-80-H Engineering Spec for additional information.

MODELS:

IC-80-1H Industrial Crane with 8'2"-20'2" Boom Reach IC-80-2H Industrial Crane with 9'6"-24' Boom Reach IC-80-3H Industrial Crane with

11'6"-30' Boom Reach

ENGINE:

Spark Arrester Muffler

Installed in addition to std. muffler.

Catalytic Converter

Reduces engine emissions.

Engine Heater

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

TIRE OPTIONS:

Mining & Industrial Tires
36 x 11-15, 16-Ply Rating
36 x 11-15, Non Marking
Solid Rubber Tires, 8.25 x 15
Foam Filling of Tires
Spare Tire & Wheel
Radial
Bias
Mining & Industrial, 36 x 11-15

Mining & Industrial, Non Marking

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 which goes over Operator Guard, for inclement weather operations.

All-Weather Cab

Rigid-mounted canopy section & 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

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

Windshield Washer

Includes reservoir pump and nozzle.

Floor Ma

Vinyl mat with foam backing.

Operator Suspension Seat

Provides additional operator comfort.

Noise Reduction Kit

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

Air Conditioning

Air Conditioner with R134 coolant.

ELECTRICAL OPTIONS:

Strobe Lights

Yellow strobe light 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 work lights recessed in rear bumper.

BOOM ATTACHMENTS:

Boom Extension, 10 Foot

Boom stowable.

Boom Extension, 10 Foot, Offsettable

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

Searcher Hook:

Nose Mount

Should you require an option or special equipment not listed please consult your dealer salesperson or BMC®.

BRODERSON® Manufacturing Corp.

14741 West 106th Street Lenexa, KS 66215 USA Tel (913) 888-0606 Fax (913) 888-8431 www.bmccranes.com Dimensions and values shown are for reference purposes only. Specifications subject to change.

