

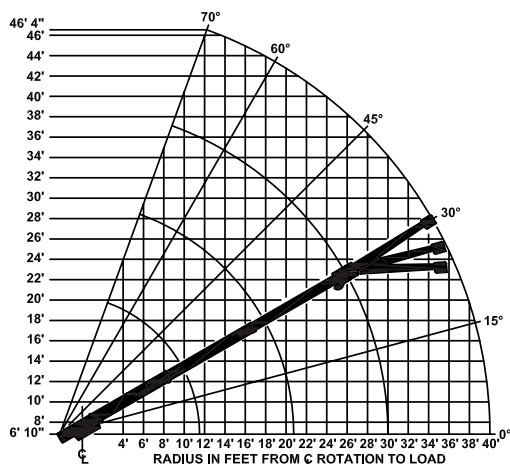
BMC[®] BRODERSON[®]

Manufacturing Corp.

Load Chart US Standard

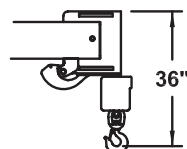
IC-80-3L

Industrial Crane

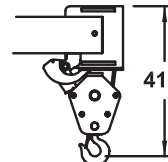


CAPACITIES APPLY TO OPERATION ON FIRM LEVEL SURFACE						
LOAD RADIUS FEET	MAIN BOOM OR EXTENSION CAPACITIES IN POUNDS					
	360° ROTATION		OVER FRONT			
	ON RUBBER	ON OUTRIGGERS	ON RUBBER	ON OUTRIGGERS		
MAIN BOOM	5	9400	17000	11400	18000	
	6	7550	14000	10000	14000	
	8	5600	10000	8100	10000	
	10	4300	7700	6100	7700	
	12	3200	6100	4450	6100	
	14	2550	5200	3400	5200	
	16	2050	4400	2700	4400	
	18	1650	3900	2200	3900	
	20	1350	3400	1800	3400	
	22	1150	3050	1550	3050	
	24	1000	2750	1350	2800	
	26	850	2450	1200	2550	
	28	750	2200	1100	2350	
	30	650	1950	1000	2150	
10' BOOM EXT.	32	450	1750	900	1950	
	34	350	1600	800	1800	
	36	250	1450	700	1650	
	38	200	1300	600	1500	
	40	150	1150	500	1400	
	BOOM EXTENSION	10-FOOT BOOM EXTENSION - STRAIGHT OR OFFSET				
		MAIN BOOM ANGLE				
	ANGLE	0°	30°	45°	60°	70°
	*† 0°	2250	2600	3200	5000	7000
	† 15°	---	2400	2700	3500	4200
	† 30°	---	2250	2500	3000	3300

+ USE 0° FOR STRAIGHT BOOM EXTENSION † USE 0°, 15° or 30° FOR OFFSET BOOM EXTENSION



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.)

LOAD RADIUS IS THE HORIZONTAL DISTANCE FROM THE CENTER OF ROTATION OF THE UNLOADED CRANE TO THE VERTICAL LOAD LINE WITH THE LOAD APPLIED.

EXCEEDING CAPACITY RATINGS OR APPLYING SIDE LOADS TO THE BOOM OR BOOM EXTENSION IS MISUSE, HAZARDOUS, AND VOIDS WARRANTY.

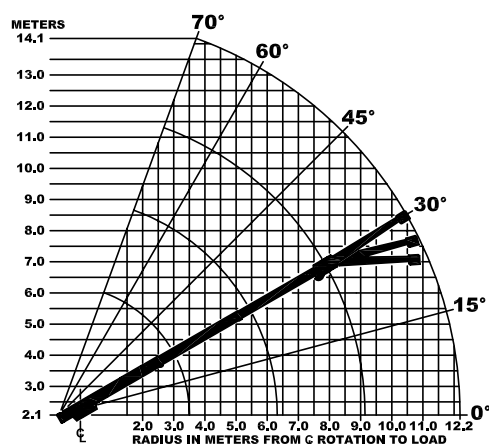
CAUTION: BOOM EXTENSION LOADS MUST NOT EXCEED MAIN BOOM CAPACITY. BOOM EXTENSIONS CAN BE USED ON RUBBER WHEN CRANE IS STATIONARY. DO NOT PICK AND CARRY WITH BOOM EXTENSION DEPLOYED.

CAPACITIES ON OUTRIGGERS ARE 85% OF TIPPING LOADS. CAPCITIES ON RUBBER ARE 75% OF TIPPING LOADS. CAPACITIES ON IN & DOWN OUTRIGGERS ARE LESS THAN 85% OF TIPPING LOADS. CAPACITIES BELOW BOLD LINE ARE LIMITED BY TIPPING. OTHER CAPACITIES ARE LIMITED BY STRUCTURAL OR HYDRAULIC CAPABILITY.

Load Chart Metric

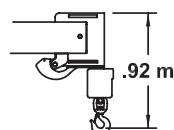
IC-80-3L

Industrial Crane

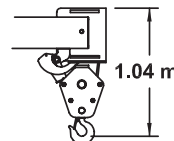


CAPACITIES APPLY TO OPERATION ON FIRM LEVEL SURFACE				
LOAD RADIUS METERS	MAIN BOOM OR EXTENSION CAPACITIES IN KILOGRAMS			
	360° ROTATION		OVER FRONT	
	ON RUBBER	ON OUTRIGGERS	ON RUBBER	ON OUTRIGGERS
MAIN BOOM	1.5	4260	7710	5170
	2.0	3140	5790	4290
	2.5	2470	4400	3580
	3.0	1990	3560	2830
	3.5	1560	2910	2180
	4.0	1270	2520	1720
	4.5	1060	2210	1400
	5.0	890	1950	1170
	5.5	740	1760	990
	6.0	630	1570	840
	6.5	540	1430	730
	7.0	480	1320	650
	7.5	430	1200	580
	8.0	380	1090	530
	8.5	340	1000	500
3 m BOOM EXT.	9.0	290	910	460
	10.0	180	760	390
	11.0	110	650	310
	12.2	60	520	220
	3 METER BOOM EXTENSION - STRAIGHT OR OFFSET			
	MAIN BOOM ANGLE			
	ANGLE	0°	30°	45°
	† 0°	1020	1180	1450
	† 15°	---	1090	1220
	† 30°	---	1020	1130

+ USE 0° FOR STRAIGHT BOOM EXTENSION † USE 0°, 15° or 30° FOR OFFSET BOOM EXTENSION



USE SINGLE-PART
LOAD LINE FOR
LOADS TO 4080 kg
(WT. 40 kg)



USE TWO-PART
LOAD LINE FOR
LOADS TO 8160 kg
(WT. 56 kg)

LOAD RADIUS IS THE HORIZONTAL DISTANCE FROM THE CENTER OF ROTATION OF THE UNLOADED CRANE TO THE VERTICAL LOAD LINE WITH THE LOAD APPLIED.

EXCEEDING CAPACITY RATINGS OR APPLYING SIDE LOADS TO THE BOOM OR BOOM EXTENSION IS MISUSE, HAZARDOUS, AND VOIDS WARRANTY.

CAUTION: BOOM EXTENSION LOADS MUST NOT EXCEED MAIN BOOM CAPACITY. BOOM EXTENSIONS CAN BE USED ON RUBBER WHEN CRANE IS STATIONARY. DO NOT PICK AND CARRY WITH BOOM EXTENSION DEPLOYED.

CAPACITIES ON OUTRIGGERS ARE 85% OF TIPPING LOADS. CAPCITIES ON RUBBER ARE 75% OF TIPPING LOADS. CAPACITIES ON IN & DOWN OUTRIGGERS ARE LESS THAN 85% OF TIPPING LOADS. CAPACITIES BELOW BOLD LINE ARE LIMITED BY TIPPING. OTHER CAPACITIES ARE LIMITED BY STRUCTURAL OR HYDRAULIC CAPABILITY.

IC-80-L ***Industrial Crane***

Fully adaptable for a wide variety of industrial and maintenance applications, the IC-80 is the ideal industrial carry deck crane for heavy lifting in constrained environments. The IC-80 is the most popular compact pick and carry crane in the industry.

Capacity

18,000 lbs (8,165 kg)

Sheave Height

46' 8" (14.2 m)
(with boom extension)

Horizontal Reach

40' (12.1 m)
(with boom extension)

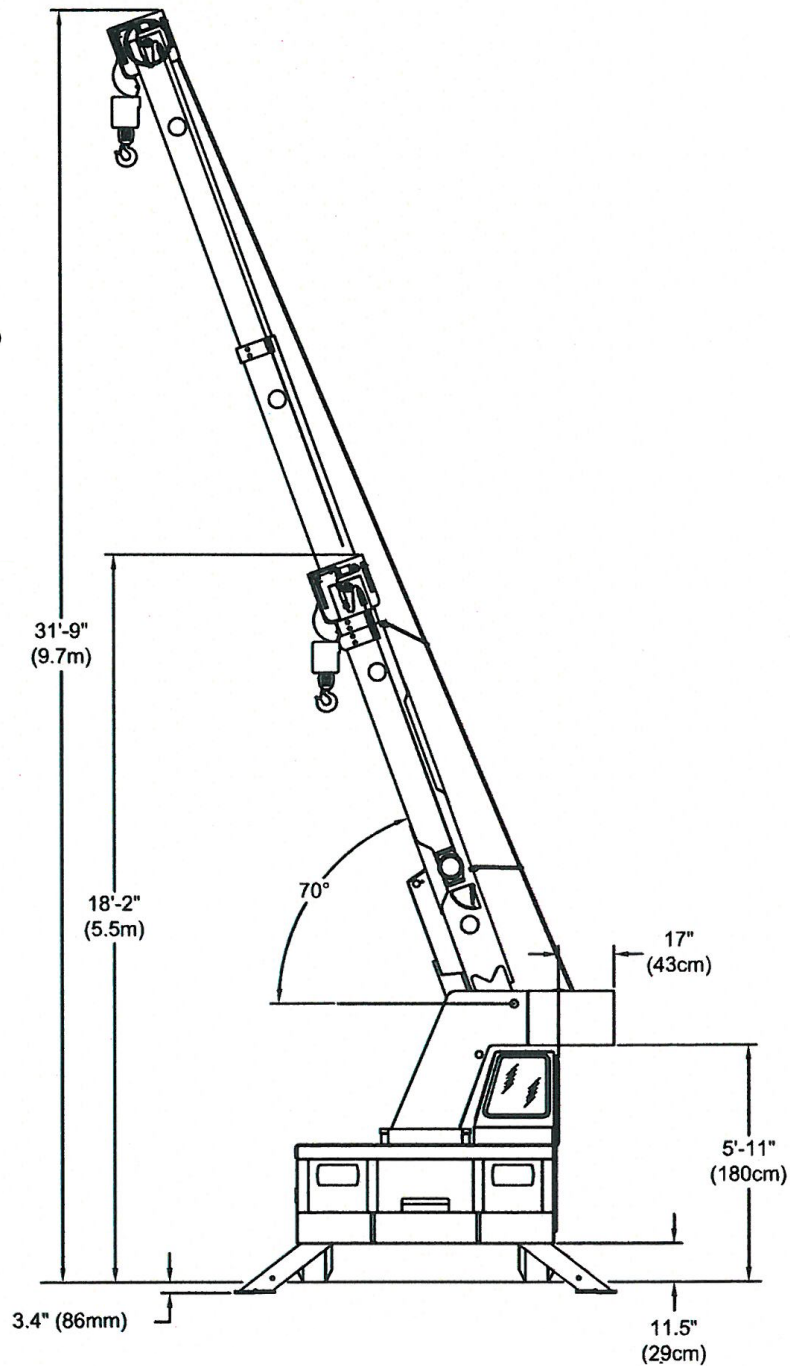
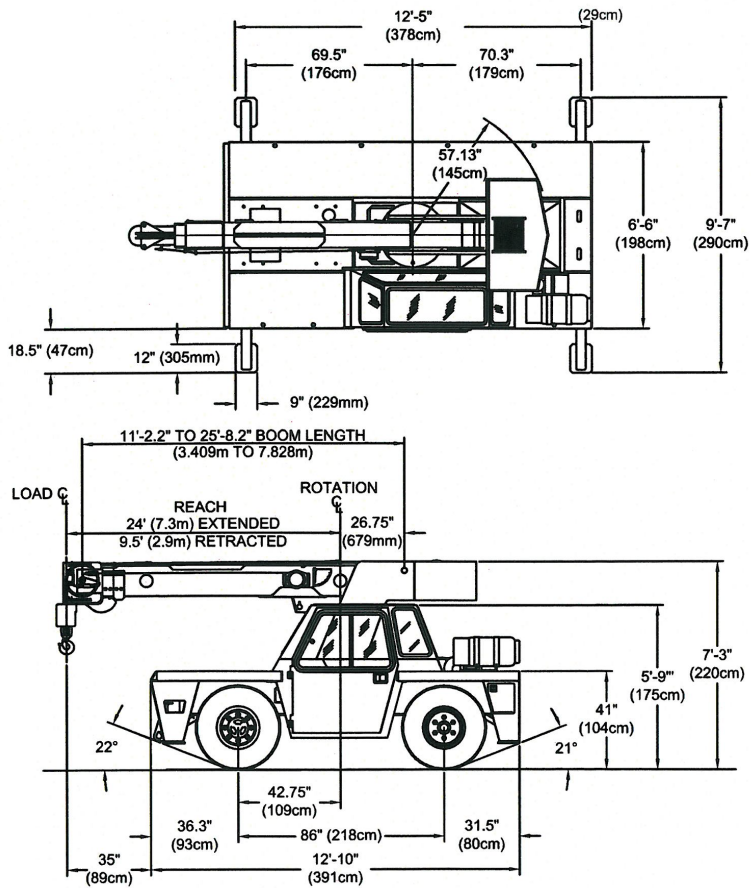
Height

7' 3" (2.2 m)

Width

6' 6" (2 m)





IC-80-L

GENERAL SPECIFICATIONS



GENERAL

	ROTATION	ELEVATION	EXTENSION
Boom Movement	Continuous	0° to 70°	2 wheel drive: 14' 6" (4.42m) 4 wheel drive: 18' 5" (5.64 m) Hyd.
Weight Total	2 wheel drive: 16,400 lbs. (7,440 kg.) 4 wheel drive 16,750 lbs. (7,600 kg.)		
Turning Radius	C/L of outside steering wheel: 11' 2" (3.4m) Aisle Width for 90° Turn: 9'7" (2.92m)		

ENGINE

Make	GM	Kubota
Model	3.0L	V3307 EPA (Tier 4i)
Type	Gas, Dual Fuel	Diesel
Cylinder	4	4
Displacement	181 CID (3L)	203.27 CID (3.33L)
HP @ Gov. Speed	59HP (44 kW)	74.3 HP (55.4 kW)
Fuel Tank Capacity	17.6 gal. (66.6L)	17.6 gal. (66.6L)

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.

Transmission Gear	Forward/Reverse	Speed	Drawbar Pull
First	5.72 : 1	4 MPH (6 km/h)	15,500 lbs. (7,031 kg.)
Second	3.23 : 1	7 MPH (11 km/h)	8,700 lbs. (3,946 kg.)
Third	1.77 : 1	13 MPH (11 km/h)	4,600 lbs. (2,087 kg.)
Fourth	1.00 : 1	22 MPH (35km/h)	2,500 lbs. (1,134 kg.)

Drawbar pull is calculated based on GM 3.0L gasoline engine.

AXLES

Planetary drive/steer axle with 11.625 : 1 axle ratio. Differential is "No-Spin." Axle mounted rigidly to frame. 1-1/2° oscillation in either direction.

2-Wheel Drive:
Axle with 1-1/2° oscillation in either direction

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.

BRAKES

Four-wheel hydraulic.
Wet disc brakes are on the front and rear axles.
Parking brake is disc type.

TIRES

2-WHEEL DRIVE
10.00 x 15, 16-ply rating, Highway Type Tread.
4-WHEEL DRIVE (ONLY)
Mining Tire.

CHASSIS

CARGO DECK
53 square feet (5 m²) of deck area. A maximum of 14,000 lb. (6,350 kg) 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. Heavy deck loads allowed at creep speed below 2 MPH (3.2 km/h) and less than 200 feet (61 m) 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 inches (23 cm.) x 12 inches (30 cm.)

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

OPERATOR'S 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.

INSTRUMENT PACKAGE

Includes fuel gauge 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, engine oil pressure and transmission temperature.

LIGHTING PACKAGE

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.

ELECTRICAL (12-VOLT SYSTEM)

HYDRAULIC

TANDEM PUMP, direct-driven by engine crankshaft, rated at 16 & 32 GPM at rated RPM (61 L/min & 121 L/min). Hydraulic oil tank capacity of 25 gallons (95 L).

THREE-SECTION BOOM ASSEMBLY equipped with bearing pads, double-acting hydraulic cylinders with direct-connected holding valves & boom angle indicator on driver's 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 lbs (4,536 kg) at a speed of 110 FPM (34 m/min). Includes down-haul weight, swivel hook & sheave block for 2-part line and 125 ft (38 m) of 9/16" (14 mm) 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.

DRUM ROTATION INDICATOR

Provides tactile feedback to operator when hoist drum is rotating.

OTHER

Shorter boom models IC-80-1L, IC-80-2L available.

CONSULT THE IC-80 ENGINEERING SPEC FOR ADDITIONAL INFORMATION.

Main Features

RATED CAPACITY LIMITER
Standard

CAPACITY ON OUTRIGGERS
18,000 lbs. (8,165 kg)

PICK AND CARRY CAPACITY
up to 11,400 lbs. (5,170 kg)

HEIGHT
7' 3" (2.2 m)

WIDTH
6' 6" (2.0 m)

BOOM ROTATION
360° Continuous

SHEAVE HEIGHT
up to 46' 8" (14.2 m)

HORIZONTAL REACH
up to 40' (12.1 m)

4-WHEEL STEER
Standard

4-WHEEL OR 2-WHEEL DRIVE
Standard

POWERSHIFT TRANSMISSION
Standard

**FULLY HYDRAULIC CONTROLS FOR
SMOOTH, PRECISE OPERATIONS**

**INDEPENDENT OUTRIGGER
CONTROLS**

DUAL FUEL OR DIESEL AVAILABLE

ENGINE

Spark Arrester Muffler

Installed in addition to standard muffler

Catalytic Converter

Reduces engine emissions

Engine Heater

Coolant heater installed to circulate warm water through engine. Plugs into 120 volt AC, 1,500 watts

Cold Weather Package

TIRE

Mining & Industrial

10 x 15, 193 lbs. (88 kg.)

Mining & Industrial Non-Marking

10 x 15, 193 lbs. (88 kg.)

Solid Rubber Tires

8.25 x 15

Foam Filled Tires

All four 900 lbs. (408 kg.)

Spare Tire & Wheel

Mounted

CHASSIS

Auxiliary Winch

Mounted behind front bumper, hydraulically driven with controls.

Pintle Hook:

Pintle Hook, Rear

Pintle Hook, Front

Rearview Mirrors

One mounted on right & left-hand deck stake

OPERATOR COMPARTMENT

Operator Guard

Tubular steel weldment with heavy expanded steel mesh top section.

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.

Options

Cab Heater

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 and side panels of foam backed vinyl for noise reduction.

Air Conditioning

Air Conditioner with R134 coolant.

ELECTRICAL

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.

RCL Light Bar

3 color light bar for external indication of load status

BOOM ATTACHMENTS

Boom Extension

10ft. (3m), Boom stowable.

Boom Extension

10ft. (3m), Offsettable.

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

Searcher Hook

Nose Mount

Broderon Cranes are manufactured to ISO 9001:2015 certified standards and have a market leading reputation for quality and reliability. Broderon Cranes are engineered for operating efficiency and are easy to operate and maintain.

An extensive network of full-service dealers offer parts and service support by factory-trained technicians.

For additional options or special equipment not listed, please consult your dealer salesperson or contact Broderon Manufacturing Corp.

BRODERSON[®]
Manufacturing Corp.
14741 West 106th Street
Lenexa, KS 66215 USA

(913) 888-0606
www.BMCcranes.com

Dimensions and values shown
are for reference purposes
only. Specifications subject
to change.

