

IC-80-3K Industrial Crane

4-WHEEL DRIVE IC-80 VARIANT

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-80-3K

SPECIFICATIONS

GENERAL

	ROTATION	ELEVATION	EXTENSION
Boom Movement	Continuous	0° to 70°	18' 5" (564 cm) Hyd.
Boom Speeds	2 RPM.	10 sec.	21 sec.
Weight Total	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)		
Gradeability	63% (32°)		

ENGINE

Make	Cummins (Diesel only)
Model	B 3.3L EPA (Tier 4i)
Type	Diesel
Cylinder	4
Displacement	199 CID (3.3L)
HP @ Gov. Speed	74HP (55 kW)
Fuel Tank Capacity	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.

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

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 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 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.

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

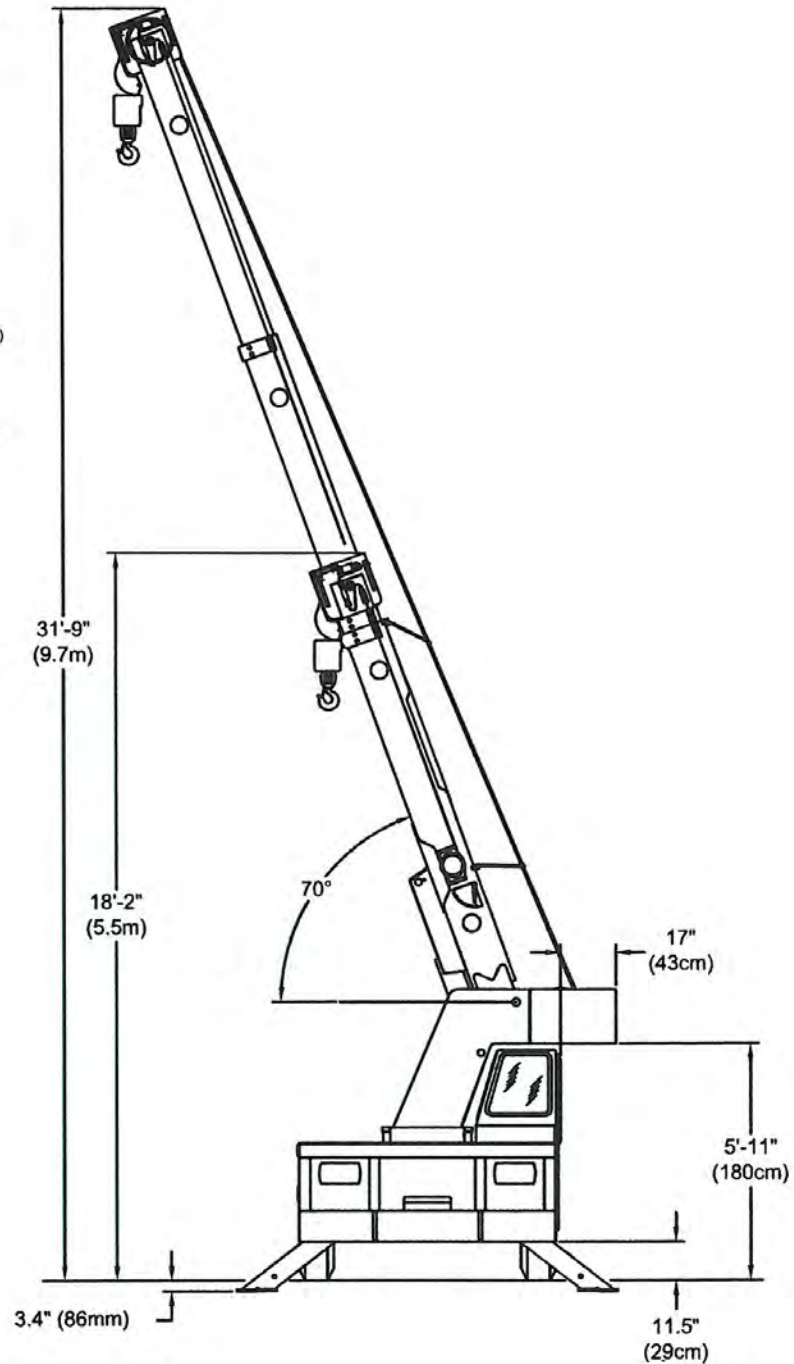
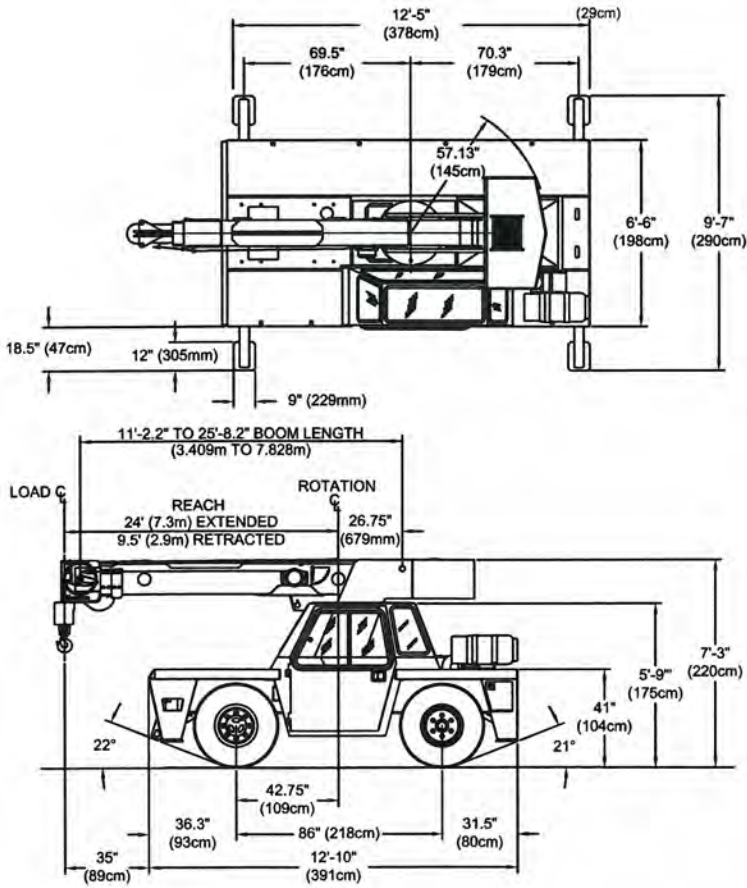
Provides tactile feedback to operator when hoist drum is rotating.

OTHER

Shorter boom models **IC-80-1K**, **IC-80-2K** available.
2-wheel Drive Available. (**IC-80-J series**)

IC-80-3K

SPECIFICATIONS



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 DRIVE
Standard

POWERSHIFT TRANSMISSION
Standard

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

**INDEPENDENT OUTRIGGER
CONTROLS**

DIESEL ONLY

Options

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

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.

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.

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

Broderson Cranes are designed and built to ISO 9001:2008 certified standards and have a market leading reputation for quality and reliability. Broderson 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 Broderson 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.

