

IC-400-A **Industrial Crane**

Broderson's long reach 25 US ton capacity carry deck crane, the IC-400 provides heavy duty capacity to take care of all your long reach light and heavy duty lifting needs.

Capacity

50,000 lbs. (22,700 kg)

Sheave Height

95' (28.96 m)

Horizontal Reach

84' 6" (25.76 m)

Height

9' 11" (2.96 m)

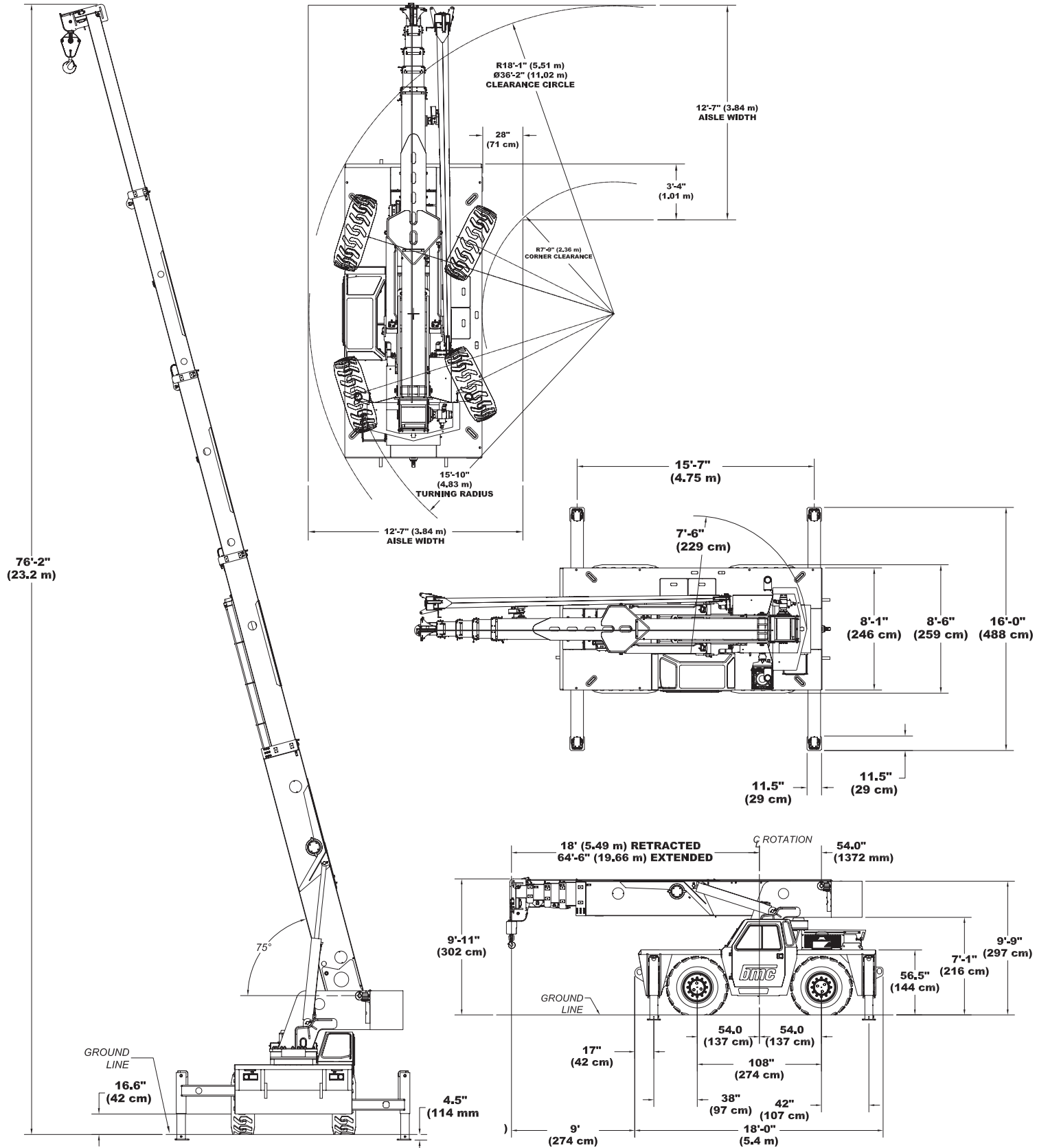
Width

8' 6" (2.59 m)



IC-400-A

SPECIFICATIONS



CONSULT THE IC-400-A ENGINEERING SPEC FOR ADDITIONAL INFORMATION.

Main Features

RATED CAPACITY LIMITER
Standard

CAPACITY ON OUTRIGGERS
50,000 lbs. (22,700 kg)

PICK AND CARRY CAPACITY
up to 24,400 lbs. (11,000 kg)

HEIGHT
9' 11" (2.96 m)

WIDTH
8' 6" (2.59 m)

BOOM ROTATION
360°

SHEAVE HEIGHT
up to 95' (28.96 m)

HORIZONTAL REACH
up to 84' 6" (25.76 m)

FOUR-WHEEL STEER
Standard

FOUR-WHEEL DRIVE
Standard

POWERSHIFT TRANSMISSION
Standard

TIGHT TURNING RADIUS

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

**INDEPENDENT OUTRIGGER
CONTROLS**

MODEL
IC-400-A Industrial Crane

ENGINE OPTIONS
Spark Arrester Muffler
Installed in addition to standard muffler.

TIRE OPTIONS
Spare Tire & Wheel

CHASSIS OPTIONS
Auxiliary Winch
Mounted on front outrigger bumper, hydraulically driven with control in operator's console.
Pintle Hook
Rear and Front
Rearview Mirrors
One mounted on right-hand deck stake and one mounted on left-hand deck stake.

OPERATOR COMPARTMENT
Floor Mat
Vinyl mat with foam backing.
Noise Reduction Kit
Includes floor mat, control valve cover and side panels of foam backed vinyl for noise reduction.
Sun Visor
Adjustable sun visor for reducing glare mounted in roof of cab.

ELECTRICAL OPTIONS
Strobe Lights
Yellow strobe light mounted on each side of turret weight box
Camera System
4-camera video system to assist operator with hard-to-see viewpoints
Boom Work Lights
One worklight mounted to boom to light boom tip, and one work light mounted to turret to light ground under boom tip.

BOOM ATTACHMENTS:
Boom Extension
20 ft. (6.1 m) Offset. Boom stowable. Boom extension is offsettable to 3 different positions; 0 degree (in line), 15 degree and 30 degree offset.

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.



IC-400-A

SPECIFICATIONS

GENERAL

	ROTATION	ELEVATION	EXTENSION
Boom Movement	Continuous	0° to 75°	46'6" (14.17m)
Weight Total	54,900 lbs. (24,900 kg.)		
Front Axle	29,400 lbs. (13,330 kg.)		
Rear Axle	25,500 lbs. (11,570 kg.)		
Gradeability	70% (34°)		
Turning Radius	15' 10" (4.83m)		

ENGINE

Make	Cummins
Model	QSB4.5 (US EPA Tier 3)
Type	Turbocharged-Diesel, charge air cooled
Cylinder	4
Displacement	4.5L
HP @ Gov. Speed	160HP
Fuel Tank Capacity	50 gal.

TRANSMISSION

POWERSHIFT TRANSMISSION with 6-speeds forward & 3-reverse. Provides power shifts at any engine speed in any gear. All shifting is done with a single lever electrical control. Equipped with torque convertor & transmission oil cooler. Torque convertor has stall ratio of 2.640:1.

FORWARD GEAR RATIOS & SPEEDS:

GEAR	RATIO	SPEED (MPH)
1st	8.20	2.7 (4.3km/h)
2nd	4.64	4.8 (7.7km/h)
3rd	3.53	6.3 (10.1 km/h)
4th	2.00	11.2 (18 im/h)
5th	1.41	15.8 (25 km/h)
6th	0.80	23.0 (37 km/h)

REVERSE GEAR RATIOS & SPEEDS:

GEAR	RATIO	SPEED (MPH)
1st	8.20	2.7 (4.3km/h)
2nd	3.53	6.3 (10.1 km/h)
3rd	1.41	15.8 (25 km/h)

AXLES

FRONT

Planetary drive/steer front axle with 16:42 to 1.0 ratio. Differential equipped with "limited slip" feature. Front axle mounted rigidly to frame.

REAR

Planetary drive/steer axle with 16.42 to 1.0 ratio. Rear axle mounted with rubber elements to allow oscillation.

STEERING

Hydraulic steering unit with two 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, 4-wheel steering or crab steering. Electronic sensors and control box automatically align the steering after a new mode is selected.

BRAKES

Service: 4-wheel hydraulic disc-type brakes

Parking: Spring-applied & hydraulically released disc-type parking brake on transmission.

TIRES

Standard:

17.5 x 25, 20-ply rating, mud lug.

CHASSIS

CARGO DECK

Forward Deck Area: 74 sq. ft. (6.94m²) of deck area. 20,000 lbs. (91,000kg) capacity on deck when load is centered over or between axles. (Side deck area not included in capacity.)

HEADLIGHT & TAILLIGHT GRILLES:

Steel protective grilles for headlights & taillights. Easily removable for replacing bulbs.

OUTRIGGERS

Four hydraulic out & down outriggers of box beam construction with direct-connected holding valves. Independent controls for each outrigger. **Outrigger pad dimension 11.5" (29cm) x 11.5" (29cm).**

ACCESSORY STORAGE BOX

One side deck compartment & one front deck compartment, each box has hinged lockable cover.

LIFTING RINGS

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

OPERATOR COMPARTMENT

Provides one-position access to all chassis & crane functions. Includes adjustable operator's seat, retracting seat belts, fire extinguisher, electronic level gauge & tilt steering wheel.

DRUM ROTATION INDICATOR

An indicator display light & joystick thumper indicates drum rotation.

ALL WEATHER CAB

Consists of rigid mounted canopy section and removable hinged door with safety glass. Rugged canopy structure with laminated glass front & top. Door is equipped with a keyed lock to protect operator's station. Standard integrated heater and A/C system for operator comfort. Includes defroster fan, dome light, heater with 2-speed fan & 12V electric windshield wiper and windshield washer.

CLIMATE CONTROL/OPERATOR COMFORT

Integrated heater and air conditioning standard.

RUBBER ISOLATORS

Reduce noise and vibrations.

ELECTRONIC CONTROLS

Two dual-axis joysticks provide control of boom motions and hoist.

ELECTRICAL (12-VOLT SYSTEM)

LIGHTING PACKAGE

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

INSTRUMENT PACKAGE:

Located on the dashboard at the operator's station is the key pad for outrigger operation, an engine display unit, rocker switches for various functions, and indicator lights. Included with the engine display are simulated gages displaying real-time values for engine RPM, battery voltage, engine hours, fuel level, oil pressure, and coolant temperature. Additional warning lamps monitor vitals like engine status, low fuel, low battery, low oil pressure, and high hydraulic fluid temperature.

BACK-UP ALARM

Provides pulsating sound from 102dB alarm when transmission is in reverse.

OUTRIGGER ALARM SYSTEM:

Two-tone alarm is activated when "jack down" or "beam out" controls are operated.

EMERGENCY STOP SWITCH:

A two-position push button switch located on the top left-hand of the dash panel. Designed to stop the engine & shut down the hydraulic system.

HYDRAULIC

TRIPLE VANE PUMP delivers 13, 25 & 40 GPM (53, 106 & 151 L/min) at rated 3,000 PSI (207 bar) and 2,500 RPM engine speed. Hydraulic oil tank capacity of 81 gallons (307 L).

BOOM ASSEMBLY

Five-section, high-strength steel construction, equipped with bearing pads for efficient support and extension. Second stage uses a double-acting hydraulic cylinder to telescope sequentially. Double-acting hydraulic cylinder and chain system telescopes boom sections 3, 4, & 5 proportionally. The telescope cylinders and the double-acting boom elevation cylinders are equipped with cylinder-mounted holding valves. Boom angle indicator is on cab side of boom.

BOOM ROTATION

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

BOOM HOIST

Turret-mounted 2-speed planetary gear hoist, is hydraulically powered to provide a low speed bare-drum line pull of 17,850 lbs(8100kg) and a speed of 123 ft/min(37m/min) and a high speed bare-drum line pull of 7,400 lbs(3350kg) and a speed of 300 ft/min(91m/min). Hoist drum is a grooved 10 5/8-inch(270mm) diameter by 17-1/8 in(435mm) long. The hoist includes 370 ft(113m) of 5/8in(16mm) wire rope, cable tensioner, downhaul weight and swivel hook.

ANTI-TWO-BLOCK DEVICE

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

RATED CAPACITY LIMITER

Warns operator of impending overload with audible & visual signals, stopping boom functions that will cause overloads.

FOUR-PART-LINE SHEAVE BLOCK:

Double-sheave block for 4-part-line requirements. Downhaul weight and hook included as standard