

IC^e-80-A Electric

Carry-Deck Industrial Crane

The IC^e-80 is a battery electric powered industrial carry deck crane designed for heavy lifting in constrained environments, where zero-emissions is required or preferred. The

IC^e-80 is designed with performance in mind and can keep pace with the speed and hydraulic capabilities that the IC^e-80 is known for.

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)



DMC[®] BRODERSON[®]
Manufacturing Corp.

www.broderson.com

IC^e-80-A Electric SPECIFICATIONS

GENERAL

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

BATTERY

700 VDC Lithium ion battery pack. Battery pack features internal recirculated air cooling system and an independent battery management system. Battery capacity sized for 8 hour day crane operating duty cycle. Dual voltage battery charging system 8 hour charge time at 120VAC / 4 hour charge time at 240VAC.

ELECTRIC DRIVE MOTOR

73 kW Permanent Magnet Synchronous motor and inverter drive. Both motor and inverter have liquid cooling system. Forward and reverse: Infinitely variable speed control up to 17 MPH maximum speed on flat surface.

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.

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.

LED MACHINE INTERFACE

Includes battery status indicator showing % charge, voltage and temperature. Drive motor status and drive direction and speed. Hydraulic Motor status and speed. Controls for optional heater and air conditioning. System diagnostics and fault codes. Battery charging status.

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

50kW Permanent Magnet Synchronous Motor and inverter drive. Both motor and inverter have liquid cooling system. Silent Plus series tandem hydraulic pump rated at 16 and 32 GPM at rated RPM (61 L/min and 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

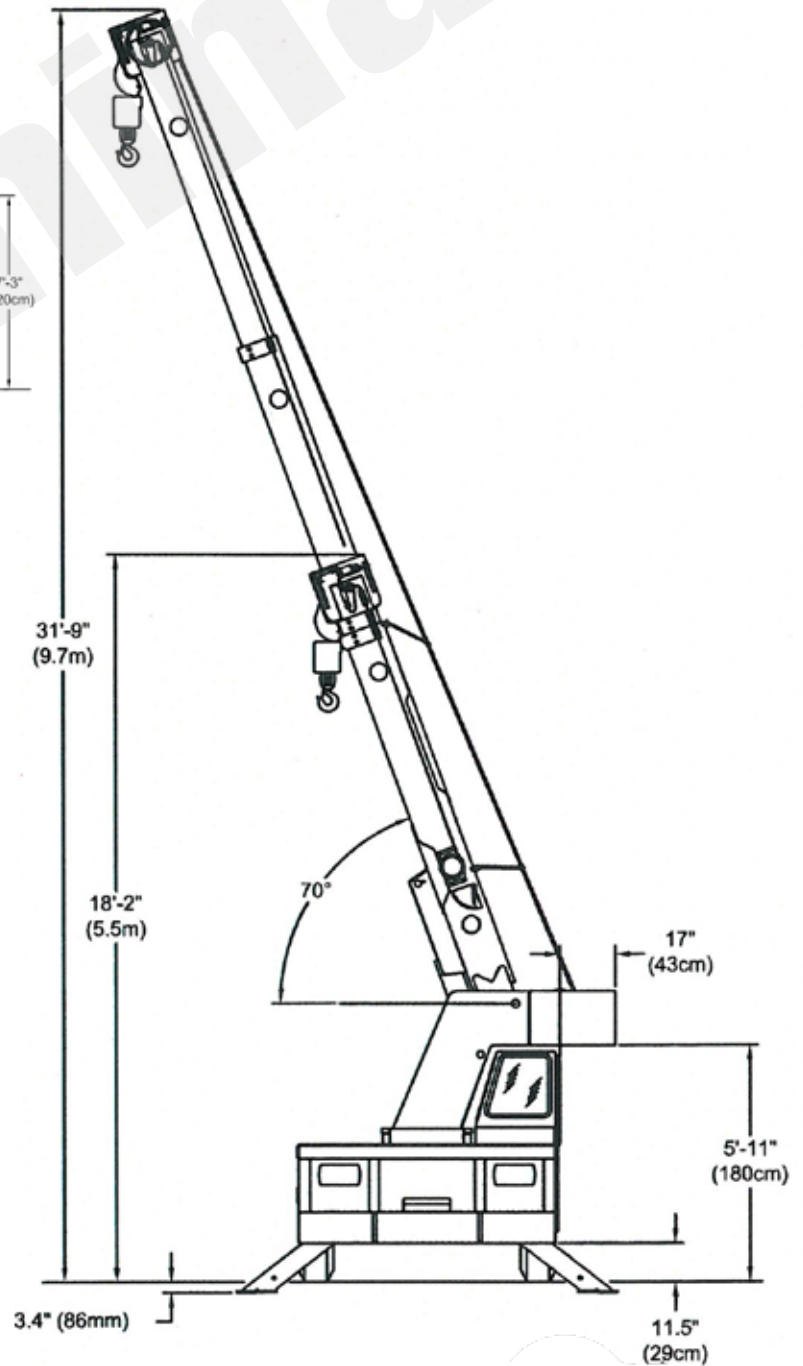
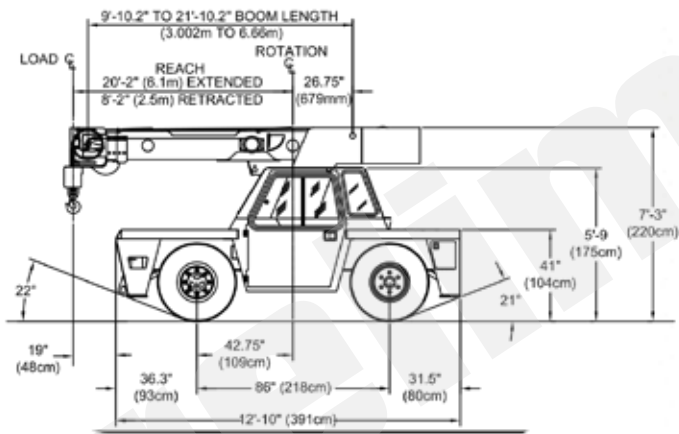
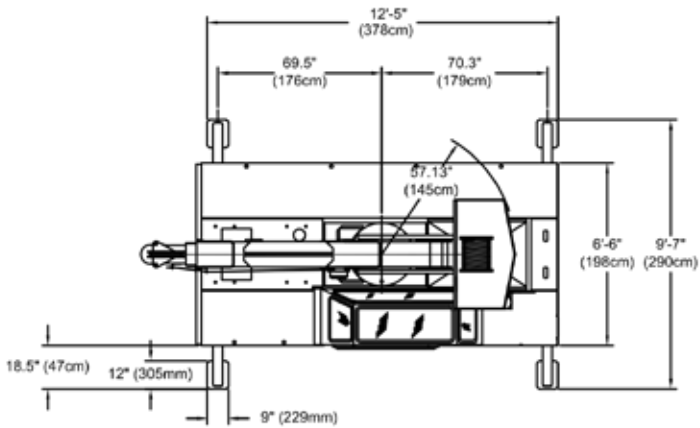
Provides tactile feedback to operator when hoist drum is rotating.

OTHER

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

IC^e-80-A Electric

SPECIFICATIONS





Main Features

ZERO EMISSIONS

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**

ELECTRIC MOTORS
Drive & Hydraulic Systems

Additional Features

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.
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

CONSULT THE IC[®]-80-A ENGINEERING SPEC FOR ADDITIONAL INFORMATION.

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.**

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



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