IC-250-3B

Tech Spec

Broderson’s Largest Industrial Crane

- Rated Capacity Limiter ... Standard
- Capacity on Outriggers ... 36,000 lbs.
- Pick and Carry Capacity ... up to 18,500 lbs.
- Height ... 7’ 11”
- Width ... 7’ 10”
- Boom Rotation ... 360 Degree, Continuous
- Sheave Height ... up to 79’ 6”
- Horizontal Reach ... up to 70’
- Tight Turning Radius
- 4-Wheel Steer ... Standard
- 4-Wheel Drive ... Optional
- Powershift Transmission ... Standard
- Fully Hydraulic Controls for Smooth Precise Operation
- Independent Outrigger Controls
- Dual Fuel Standard, Diesel Optional
GENERAL:
- Boom Movement: Rotation 0° to 75°, Elevation Continuous, Extension 34° 6°
- Boom Speeds: 2.0 RPM 24 sec., 53 sec. *(with synchronized hoist cable)
- Weight:
  - Total: 37,700 lbs.
  - Front Axle: 17,400 lbs.
  - Rear Axle: 20,300 lbs.
  - Gradeability: 62%
- Turning Radius: 14' 9”

ENGINE:
- Make: GM*
- Model: 5.7L V-8 B4.5-C
- Type: EFI*
- No. Cyl.: 8
- Displacement: 5.7L
- HP @ Gov. Speed: 126 H.P.
- Fuel Tank Capacity: 30 Gallons

TRANSMISSION:
- Powershift transmission with 4-speeds forward & reverse. Provides power shifts at any engine speed in any gear. All shifting is done with a single lever electrical control mounted on the steering column. Equipped with torque converter & transmission oil cooler. Torque converter has stall ratio of 2.2:1.
- Gear Ratio:
  - First: 5.72:1
  - Second: 3.23:1
  - Third: 1.77:1
  - Fourth: 1.00:1

AXLES:
- Front Axle: Planetary drive/steer front axle with 15.78 to 1 ratio. Differential equipped with “limited slip” feature. Front axle mounted rigidly to frame.
- Gear:
  - Travel Speed
    - First: 3 MPH
    - Second: 5 MPH
    - Third: 10 MPH
    - Fourth: 18 MPH
  - Drawbar Pull*
    - 20,000*
    - 11,000*
    - 6,000*
    - 3,500*
- Rear Axle: Standard (2-Wheel Drive):
- Gear:
  - Travel Speed
    - First: 3 MPH
    - Second: 5 MPH
    - Third: 10 MPH
    - Fourth: 18 MPH
- Optional (4-Wheel Drive):
- Planetary drive/steer axle with 24.98 to 1 ratio. Differential is not “limited slip” in rear axle. 1-1/2 degree oscillation in either direction. Axle ratio compatible with 4-wheel drive transmission output for front axle match. Transmission equipped with electro-hydraulic control for shifting between 2-wheel drive & 4-wheel drive.

STEERING:
- Hydraulic steering unit with two cylinders attached to each axle. Rear axle is the primary steer. An electric switch on the operators compartment is used to select rear-wheel steering, four-wheel steering round steer or crab steering. Electronic sensors & control box automatically align the steering when a new mode is selected.

TIRES:
- 385/65D22.5, 16-ply, high-traction on/off road tread.

CHASSIS:
- CARGO DECK:
  - 80 sq. ft. of deck area. 17,000 lbs. capacity on deck when load is centered over or between axles.
- 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 9” x 9”.
- ACCESSORY STORAGE BOX:
  - Storage box is 14” deep x 12-1/2” long x 36-1/2” wide, located in front cargo deck.
- 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 & bubble level.

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:
  - Fuel, ammeter, oil pressure, water temperature, transmission oil temperature gauges. All gauges are lighted. Hourmeter records hours only during actual engine operation. Also included are warning lights for low transmission pressure, turn signals, high beams, hazard lights, park brake & four-wheel drive.
- Back-Up Alarm:
  - Provides pulsating sound when transmission is in reverse.
- Outrigger Alarm System:
  - Two-tone alarm is activated when “outrigger down” or “outrigger out” controls are operated.

HYDRAULIC SYSTEM:
- Tandem pump, direct-driven by engine crankshaft, rated at 29 & 34 GPM at rated RPM. Hydraulic oil tank capacity of 54 gallons.

BOOM ASSEMBLY:
- Four-section boom assembly equipped with bearing pads, double-acting hydraulic cylinder & chain system telescopes boom proportionally. Telescope & boom elevation cylinders equipped with cylinder-mounted holding valves. Boom angle indicator on 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 planetary gear hoist hydraulically powered with a bare drum line pull of 12,000 lbs. & a line speed of 100 FPM. Includes downhaul weight, swivel hook & sheave block for 4-part line & 320 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.
- Rated Capacity Limiter:
  - Warns operator of impending overload with audible & visual signals. Prevents overload by stopping boom functions that cause overloads.
Listed below are brief descriptions of each option available for the IC-250-3B Industrial Crane. Consult the IC-250-3B Engineering Spec for additional information on each option.

**MODEL:**
IC-250-3B Industrial Crane with 15’ 7”-50’ 1” Boom

**ENGINE OPTIONS:**
- Diesel Engine
  Cummins Turbo-B4.5-C
- 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.
- Ether Injection System
  Ether starting aid controlled by switch in operator compartment and injects ether directly into intake manifold.
- Engine Shut Down Gauges
  Shuts engine off when high water temperature or low engine oil pressure occurs. (Diesel Only)

**AXLE & STEERING OPTIONS:**
- 4-Wheel Steer & 2-Wheel Drive
- 4-Wheel Steer & 4-Wheel Drive

**TIRE OPTIONS:**
- Non-Marking Tires
- Foam Filling of Tires
- Spare Tire & Wheel

**CHASSIS OPTIONS:**
- Auxiliary Winch
  Mounted behind front bumper, hydraulically driven with control in operator’s console.
- Pintle Hook:
  Pintle Hook, Rear
  Pintle Hook, Front
- Rearview Mirrors
  One mounted on right-hand deck stake and one mounted on left-hand deck stake.
- Outrigger Shoes
  Steel outrigger shoes, 18 x 18 in. octagonal shape with storage posts on rear bumper.

**OPERATOR COMPARTMENT OPTIONS:**
- Operator Guard
  Tubular steel weldment with heavy expanded steel mesh top section.
- Operator Guard Cover
  Clear vinyl cover over Operator Guard, for inclement weather.
- Operator Guard Door
  Hinged door covers operator compartment side opening.
- All Weather Cab
  Rigid-mounted canopy section and 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 Only
  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 cover and side panels of foam backed vinyl for noise reduction.
- Air Conditioning
  Air Conditioner with R 134 coolant.

**ELECTRICAL OPTIONS:**
- Strobe Lights
  Yellow strobe light mounted on each side of turret weight box.
- Amber Rotating Beacons
  Amber rotating beacon 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.

**BOOM ATTACHMENTS:**
- Boom Extension, 20 Ft., Offset
  Boom stowable. Boom extension is offsettable to 3 different positions; 0 degree (inline), 15 degree and 30 degree offset.
- Searcher Hook:
  Nose Mount

Should you, as an end user, require an option or special equipment on your IC-250-3B that is not listed on our sales literature, please contact your dealer salesperson or the factory to receive a special quoted price.