

Tech Spec

IC-250-3A



- * Capacity on outriggers...
36,000 lbs.
- * Pick and carry capacity...
up to 18,500 lbs
- * Height...7' 11"
- * Width...7' 10"
- * Sheave height...up to 79' 6"
- * Horizontal reach...up to 70'
- * Tight turning radius
- * 4-Wheel steer standard
- * 4-Wheel drive optional
- * Powershift transmission
- * Fully hydraulic controls for
smooth precise operation
- * Independent outrigger
controls

★ HIGH REACH INC. ★

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DMC BRODERSON[®]
Manufacturing Corp.

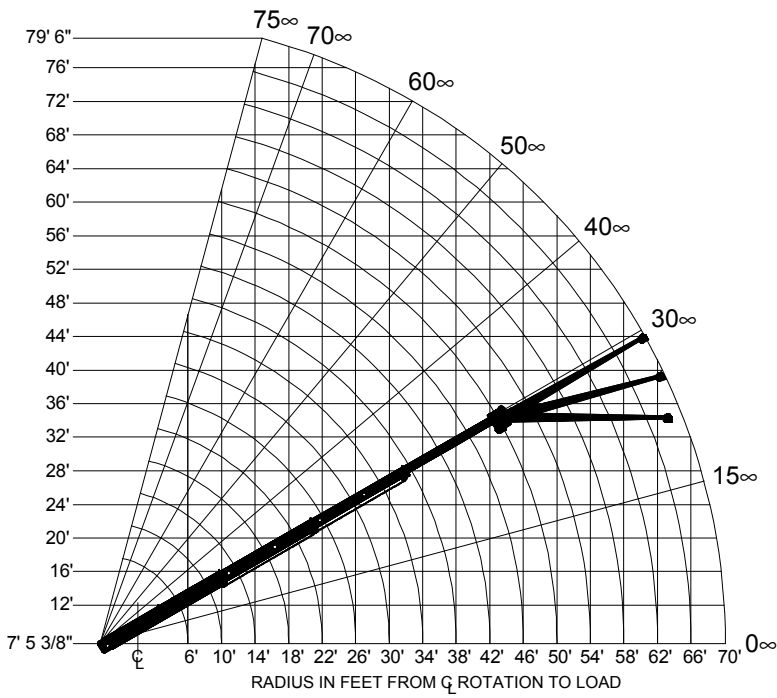
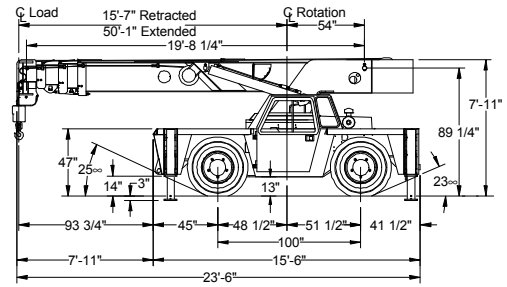
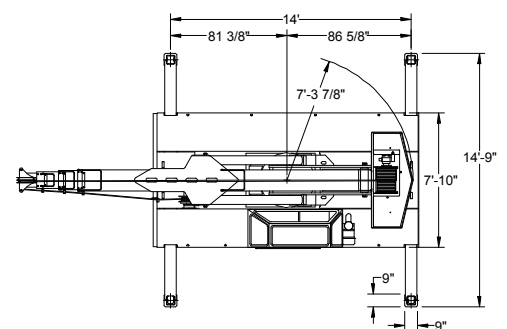
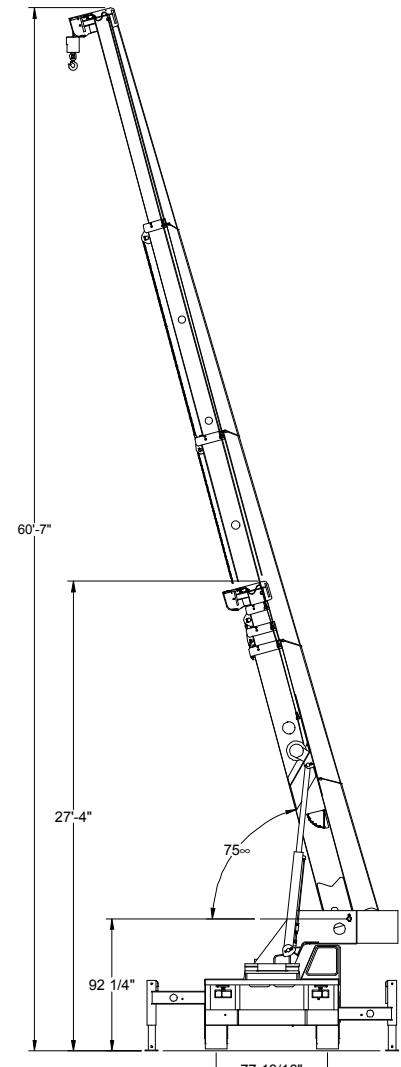
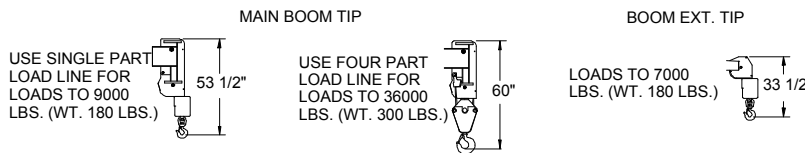
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IC-250-3A

CAPACITIES ARE IN POUNDS AND APPLY TO OPERATION ON FIRM LEVEL SURFACE

LOAD RADIUS FEET	MAIN BOOM		MAIN BOOM OR BOOM EXTENSION					
	ON RUBBER 360° ROTATION	ON RUBBER OVER FRONT	O/R'S IN & DOWN 360° ROTATION	O/R'S IN & DOWN OVER FRONT	O/R'S OUT & DOWN 360° ROTATION			
6	16400	18500	30000	36000	36000			
8	13000	15000	25050	30400	30400			
10	10800	12350	20300	25000	25000			
12	9000	10450	15600	20800	20800			
14	7550	9000	12100	18700	18700			
16	6450	7800	9700	16700	16700			
18	5600	6850	8050	14900	14900			
20	4800	6100	6800	13500	13500			
22	4150	5400	5800	12100	12100			
24	3600	4650	5000	10900	10900			
26	3100	4000	4350	9850	9850			
28	2700	3500	3800	8950	8950			
30	2350	3050	3350	8200	8200			
32	2000	2650	2850	7500	7500			
34	1750	2300	2500	6900	6900			
38	1300	1750	1950	5700	5700			
42	900	1400	1500	4800	4800			
46	600	1100	1150	4100	4100			
50	350	900	900	3500	3500			
54	---	---	---	---	3200			
58	---	---	---	---	2800			
62	---	---	---	---	2400			
66	---	---	---	---	2100			
70	---	---	---	---	1800			
BOOM EXT. ANGLE	BOOM EXTENSION CAPACITY- STRAIGHT OR OFFSET							
	MAIN BOOM ANGLE							
0°	15°	30°	40°	50°	60°	70°	75°	
10°	2600	2750	3000	3400	4100	5100	6200	7000
15°	---	2500	2600	2700	2900	3300	4300	4800
30°	---	---	2300	2400	2500	2700	3200	3400

BOOM EXTENSION MAY ONLY CARRY LOADS WITH OUTRIGGERS DOWN.
BOOM EXTENSION LOADS MUST NOT EXCEED MAIN BOOM CAPACITY.
CAPACITIES ON OUTRIGGERS ARE 85% OF TIPPING LOADS. CAPACITIES ON RUBBER ARE 75% OF TIPPING LOADS. CAPACITIES BELOW BOLD LINE ARE LIMITED BY TIPPING. OTHER CAPACITIES ARE LIMITED BY STRUCTURAL OR HYDRAULIC CAPABILITY.



GENERAL:

Boom Movement:	Rotation	Elevation	Extension*
	Continuous	0° to 75°	34ft 6in
Boom Speeds:	2.0 RPM	24 sec.	53 sec.
	*(with synchronized hoist cable)		
Weight:			
Total	37,300 lbs.		
Front Axle	17,115 lbs.		
Rear Axle	20,185 lbs.		
Gradeability:	52%		
Turning Radius:	14ft 9in		

ENGINE:	<u>Standard</u>	<u>Optional</u>
Make	GM	Cummins
Model	4.3L V-6	4BT3.9
Type	EFI*	Turbo-Diesel
No. Cyl.	6	4
Displacement	262 CID	239 CID
HP @ Gov.		
Speed	110 H.P.	110 H.P.
Fuel Tank Capacity	30 Gallons	

* Electronic Fuel Injection with Dual Fuel

TRANSMISSION:

Powershift transmission with 4-speeds forward and 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 convertor and transmission oil cooler. Torque convertor has stall ratio of 2.2:1.

Gear Ratio:

First	5.72:1	Third	1.77:1
Second	3.23:1	Fourth	1.00:1

AXLES:

Front Axle:

Planetary drive/steer front axle with 15.78 to 1.0 ratio. Differential equipped with limited slip feature. Front axle mounted rigidly to frame.

<u>Gear</u>	<u>Travel Speed</u>	<u>Drawbar Pull*</u>
First	3 MPH	18,000*
Second	6 MPH	10,000*
Third	11 MPH	5,700*
Fourth	19 MPH	3,000*

*Drawbar pull is calculated for GM 4.3L engine.

Rear Axle:

Standard (2-Wheel Drive):

Steering axle with 1-1/2 degree oscillation in either direction.

Optional (4-Wheel Drive):

Planetary drive/steer axle with 24.98 to 1.0 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 and 4-wheel drive.

STEERING:

Full hydraulic steering unit with two 3-inch 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 or four-wheel steering.

BRAKES:

Service:	Split-system, 4-wheel hydraulic-boosted multiple-plate wet disc brakes.
Parking:	Hand lever actuated disc-type parking brake on transmission.

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 and 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 9ft x 9ft.

ACCESSORY STORAGE BOX:

Storage box is 14ft deep x 12-1/2ft long x 36-1/2ft 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 and crane functions. Includes adjustable operator's seat, retracting seat belts, fire extinguisher and 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 and four-wheel drive.

Back-Up Alarm:

Provides pulsating sound when transmission is in reverse.

HYDRAULIC SYSTEM:

Tandem pump, direct-driven by engine crankshaft, rated at 29 and 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 booms proportionally. Telescope & boom elevation cylinders equipped with cylinder-mounted holding valves. Boom angle indicator on each 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 12,000 lbs. and a line speed of 100 FPM. Includes downhill weight, swivel hook & sheave block for 4-part line and 320 ft. of 9/16ft hoist rope.

Anti-Two-Block Device:

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

IC-250-3A

Listed below are brief descriptions of each option available for the IC-250-3A Industrial Crane.
Consult the IC-250-3A Engineering Spec for additional information on each option.

MODEL:

IC-250-3A Industrial Crane
with 15' 7"-50' 1" Boom

ENGINE OPTIONS:

Diesel Engine

Cummins Turbo-4BT3.9

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

Electronic Directional Steering

Three steering modes instead of the standard two with the added feature of electronic realignment of the front and rear wheels when changing from one mode to another. The steering modes are round, crab and 2-wheel rear steering.

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

CHASSIS OPTIONS: (Cont'd)

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 operations.

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:

Outrigger Alarm System

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

Strobe Lights

Yellow strobe light mounted on each side of turret weight box.

ELECTRICAL OPTIONS: (Cont'd)

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 Work Lights and Beacons

Boom work lights and amber rotating beacons installed.

Boom Work Lights and Strobes

Boom work lights and strobe lights installed.

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.

Sheave Block - Two-Part Line

Searcher Hook:

Nose Mount

Link Under Tip

Load Moment Indicator

Warns operator of impending overload with audible and visual signals. Prevents overload by stopping boom functions that cause overloads. Readouts for load, boom angle, boom length and load radius.

Load Indicator

Includes 3-sheave load sensor on top of boom and readout box on top of instrument panel.

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

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