

models **38100S** ■ **38124S** ■ **38100SHL** ■ **38124SHL** ■

features

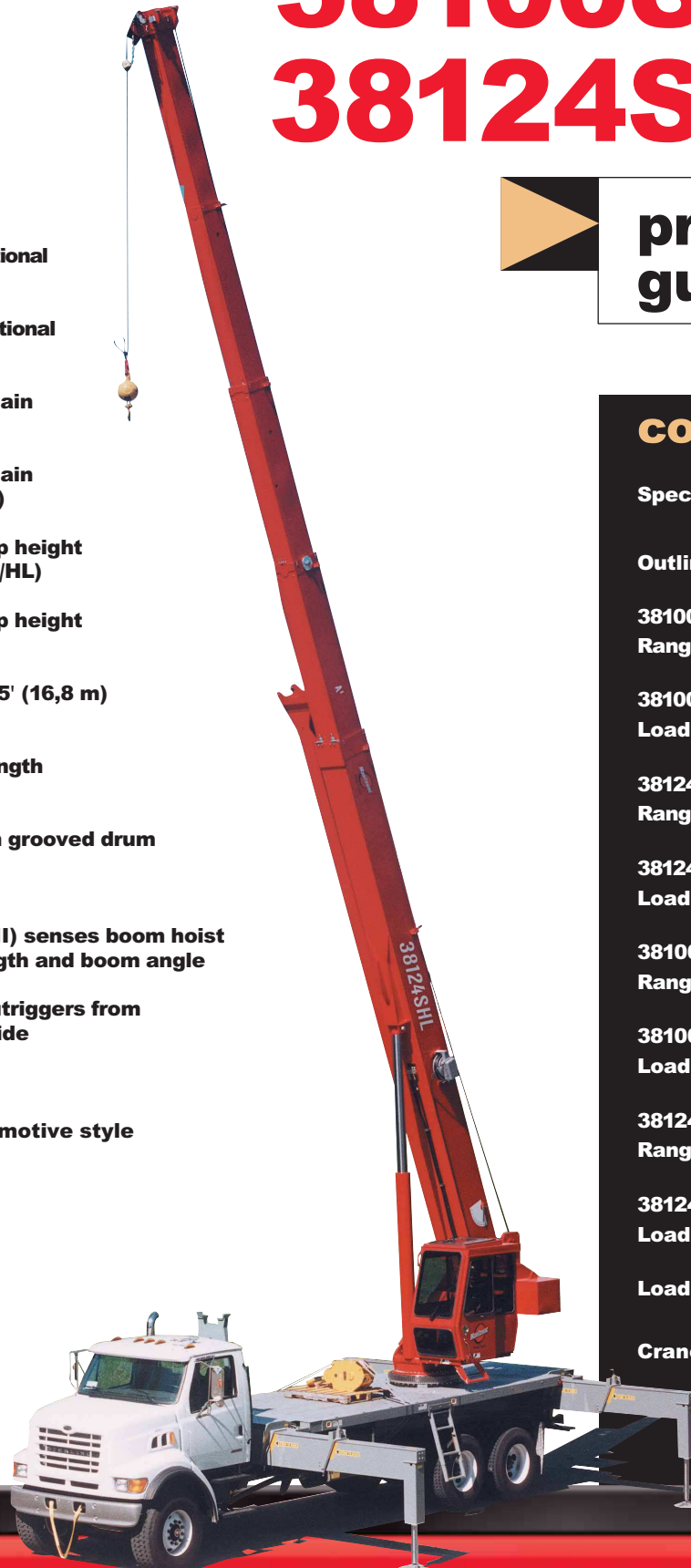
- 38 ton (42 mton) capacity
- 4-section, 100' (30,5 m) proportional booms (38100S/HL)
- 5-section, 124' (37,8 m) proportional booms (38124S/HL)
- 109' 2" (33,3 m) maximum main boom tip height (38100S/HL)
- 132' 4" (40,3 m) maximum main boom tip height (38124S/HL)
- 164' 8" (50,2 m) maximum tip height with telescoping jib (38100S/HL)
- 163' 7" (49,9 m) maximum tip height with fixed jib (38124S/HL)
- 2-section, 30' 5" (9,3 m) to 55' (16,8 m) telescopic jib (38100S/HL)
- 1-section, 31' (9,5 m) fixed length jib (38124S/HL)
- 2-speed planetary hoist with grooved drum
- Anti-two-block system
- Load Moment Indicator (LMI) senses boom hoist cylinder pressure, boom length and boom angle
- Adjustable Out-and-Down outriggers from 7' 2" (2,2 m) to 22' (6,7 m) wide
- System pressure gauge
- Rugged, weatherproof, automotive style electrical system
- Manitowoc CraneCARESM comprehensive support



product guide

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Manitowoc Boom Trucks

specifications

models 38100S, 38124S, 38100SHL, 38124SHL



2

Upperworks

Boom

Booms – Inverted T-cross section. 4- or 5-section telescoping type, extended and retracted proportionally by double-acting hydraulic cylinder and cable-crowd system. Easily replaceable and adjustable high-density nylon slide pads. **38100S** – 4-section 30' 6" (9,3 m) to 100' 0" (30,5 m). Maximum tip height 109' 2" (33,3 m). 2-section, 31' (9,5 m) to 55' (16,8 m) jib. Maximum tip height 164' 8" (50,2 m). **38124S** – 5-Section 31' 1" (9,5 m) to 124' 0" (37,8 m). Maximum tip height 132' 4" (40,3 m). 1-section, 31' (9,5 m) fixed jib. Maximum tip height 163' 7" (49,9 m). **38100SHL** – 4-section 30' 6" (9,3 m) to 100' 0" (30,5 m). Maximum tip height 109' 2" (33,3 m). 2-section, 31' (9,5 m) to 55' (16,8 m) jib. Maximum tip height 164' 8" (50,2 m). **38124SHL** – 5-Section 31' 1" (9,5 m) to 124' 0" (37,8 m). Maximum tip height 132' 4" (40,3 m). 1-section, 31' (9,5 m) fixed jib. Maximum tip height 163' 7" (49,9 m).

Quick Reeve Boom Point – Five high-density nylon sheaves mounted on heavy-duty roller bearings. Two removable pin-type rope guards.

Boom Elevation – Double-acting hydraulic cylinder. Working range from 6° below horizontal to 80° above.

Hoist

Hoist – Theoretical maximum line speed 425 fpm (129,5 mpm). Maximum theoretical bottom-layer line pull 14,300 lb (6 486 kg). Two-speed planetary reducer. Spring-applied, pressure-released internal brake.

Wire Rope – 380' (115,8 m) of 5/8" (16 mm) rotation-resistant wire rope.

Swing System

Externally mounted, double-reduction planetary driven by hydraulic motor. Maximum swing speed 1.5 rpm. Spring-applied hydraulically-released parking brake. Ball-bearing swing circle with external gear. Continuous rotation is standard.

Outriggers

Fully extended, intermediate extension and fully retracted positions. Out-and-Down type with double-acting hydraulic cylinders operated independently for precise leveling. Bubble level located near outrigger controls.

Mounting

Mounting – Lower frame is mounted to chassis by threaded rods and clamp plates. No welding to truck chassis is required.

Lower Frame – Torsion resistant, rigid 4-plate design with integrated outrigger and pedestal.

Rear Underride Protection – Supplied on factory mounted cranes. Fabricated structure mounted under rear of carrier. Complies with Bureau of Motor Carrier Safety Standard 393.86.

Boom Rest – Heavy-duty, removable.

Control System

Single operator platform and seat mounted to turret. Four single-axis crane controls, bubble level and system pressure gauge arranged to ANSI B30.5 standards. The operator station includes engine start/stop, air foot throttle, signal horn, load moment indicator console, boom angle indicator, swing limit indicator, load chart and range diagram.

Hydraulics

Hydraulic System – A 3-section vane pump direct-mounted to power take-off on truck transmission provides 43 gpm (163 lpm) to the hoist, 28 gpm (106 lpm) to the boom hoist and telescope circuit, and 12 gpm (45 lpm) to the swing and outrigger circuit. 100-gallon (379-liter) baffled reservoir includes two 25-micro filters in the return lines. Ball-type shutoff valve and strainer are provided in suction line. All fittings are ORS type and SAE.

Hydraulic Cylinders – All load-holding cylinders are equipped with integral holding valves.

Warning Systems

Anti-Two-Block System – Audible warning and shutoff functions prevent hook from contacting boom point.

Load Moment Indicator (LMI) – Senses boom hoist cylinder pressure, boom length and boom angle. Audio-visual warning indicates overload conditions and overload shutoff feature prevents continuing overload. Operator can access all relative crane configuration and load conditions via display at the operator station.

Back-Up Alarm – Electronic audible motion alarm activated when truck transmission is in reverse gear.

specifications



General

Electrical – State-of-the-art, weather-resistant components throughout. Automotive style electrical system for easy installation. Designed to withstand high pressure washing and varying climates.

Design/Welding – Design conforms to ANSI B30.5. Welding conforms to AWS D1.1. Tested to SAE 1063 and SAE 765.

Manuals – Operator, service and parts manuals depict correct crane operation, maintenance procedures, and parts listing.

Warranty – 12-month warranty covers parts and labor resulting from defects in material and workmanship.

Warning

1. The operator must read and understand the owner's manual before operating this crane
2. Positioning or operation of crane beyond areas shown on this chart is not intended or approved except where specified in owner's manual.
3. Loaded boom angles at specified boom lengths give only an approximation of the operating radius. The boom angle before loading should be greater to account for deflections. Do not exceed the operating radius for rated loads.
4. The operating radius shown in the jib rating chart is for fully extended boom only. When boom is not fully extended, use only loaded boom angle to determine load rating of jib.
5. For boom angles shown on jib load rating chart, use rating of next lower boom angle.
6. For boom lengths not shown, use rating of next shorter or longer boom length, whichever is less. For radii not shown, use rating of next longer radius.
7. Crane load ratings on outriggers are based on freely suspended loads with the machine leveled and standing on a firm, uniform supporting surface. No attempt shall be made to move a load horizontally on the ground in any direction.
8. Practical working loads depend on supporting surface, wind, and other factors affecting stability such as hazardous surroundings, experience of personnel, and proper handling, all of which must be taken into account by the operator.
9. The maximum load which may be telescoped is limited by hydraulic pressure, boom angle, and boom lubrication. It is safe to attempt to telescope any load within the limits of the load rating chart.

10. Lifting off the main boom point while the swing-around jib is erected is not intended or approved.

11. All load ratings above the heavy line are based on machine structural competence and do not exceed 85% of tipping. Load ratings below are stability limited and do not exceed 85% of tipping.

12. Do not operate a Manitowoc truck-mounted crane or accessories within 10' (3,05 m) of live power lines.

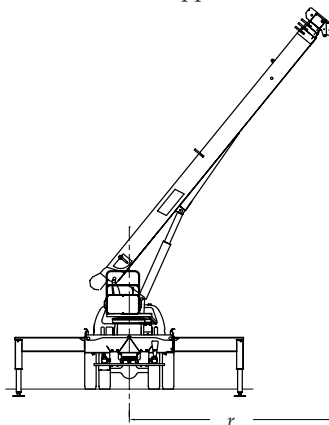
13. This capacity chart is for reference only and must not be used for specific serial number cranes.

Information

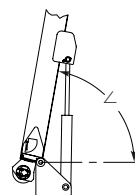
1. Deductions must be made from rated loads for stowed jib, optional attachments, hooks, and loadblocks (see deduction chart). Weights of slings and all other load-handling devices shall be considered a part of the load.
2. Load ratings above the heavy line are structurally limited capacities and do not exceed 85% of tipping. Load ratings below the heavy line are limited by stability and do not exceed 85% of tipping.

Definitions

1. Operating radius (r) is the horizontal distance from the axis of rotation to the center of the vertical hoist line or tackle with load applied (see below).



2. Loaded boom angle (\angle), as shown in the load chart columns headed by \angle , is the included angle between the horizontal and longitudinal axes of the boom base after lifting rated load at rated radius (see below).



NOTE: Due to continuing improvements, Manitowoc Boom Trucks reserves the right to change product specifications without notice.

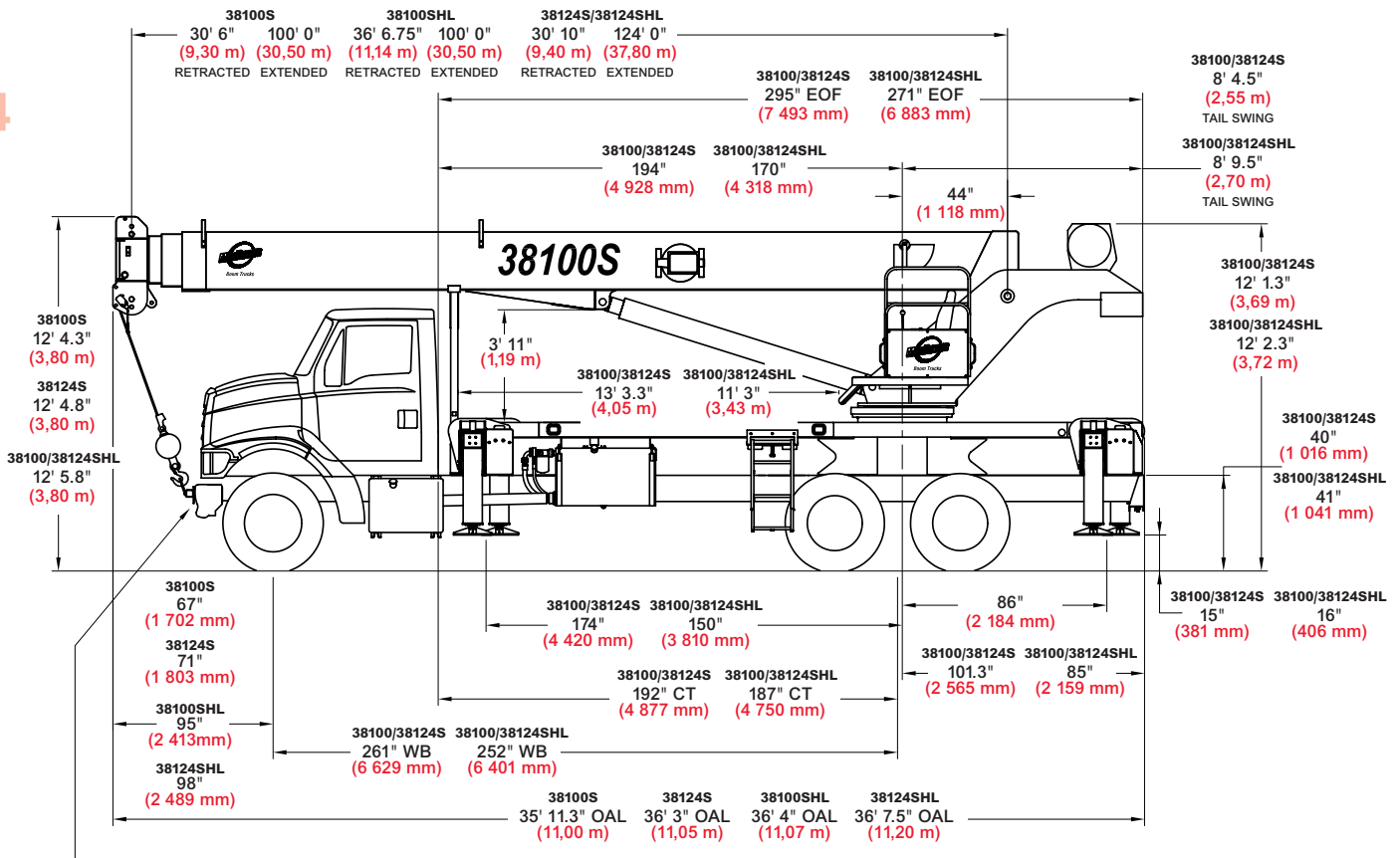
3

models 38100S, 38124S, 38100SHL, 38124SHL



outline dimensions

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A front center stabilizer is required on installations equipped with the short sub frame (38100SHL & 38124SHL)

Chassis Data

| Minimum Truck Requirements | 38100S | 38124S | 38100SHL | 38124SHL |
|---|--|--|--|--|
| Wheelbase (WB) | 261" (6 629 mm) | 261" (6 629 mm) | 252" (6 401 mm) | 252" (6 401 mm) |
| Cab to Tandem (CT) | 192" (4 877 mm) | 192" (4 877 mm) | 187" (4 750 mm) | 187" (4 750 mm) |
| Cab to End of Frame (EOF) | 295" (7 493 mm) | 295" (7 493 mm) | 271" (6 883 mm) | 271" (6 883 mm) |
| Frame Section Modulus | 25.0 in ³ 110,000 psi (758 422 kPa) | 25.0 in ³ 110,000 psi (758 422 kPa) | 25.0 in ³ 110,000 psi (758 422 kPa) | 25.0 in ³ 110,000 psi (758 422 kPa) |
| Front Axle Gross Weight Rating | 18,000 lb (8 165 kg) | 18,000 lb (8 165 kg) | 20,000 lb (9 072 kg) | 20,000 lb (9 072 kg) |
| Rear Axle Gross Weight Rating | 40,000 lb (18 144 kg) | 40,000 lb (18 144 kg) | 44,000 lb (19 958 kg) | 44,000 lb (19 958 kg) |
| Minimum Truck Axle Weight - Front* | 8,000 lb (3 629 kg) | 9,200 lb (4 173 kg) | 9,800 lb (4 445 kg) | 9,800 lb (4 445 kg) |
| Minimum Truck Axle Weight - Back* | 8,300 lb (3 765 kg) | 8,300 lb (3 765 kg) | 8,000 lb (3 629 kg) | 8,000 lb (3 629 kg) |
| Nominal Frame Width | 34" (864 mm) | 34" (864 mm) | 34" (864 mm) | 34" (864 mm) |

*Minimum chassis weight is required to meet 85% stability requirements.

Chassis data is general – not for engineering. Some dimensions depend on truck selection.

OAH Overall Height
 CT Cab to Tandem
 CA Cab to Axle
 WB Wheel Base
 OAL Overall Length
 BBC Bumper to Back of Cab
 AF Afterframe
 EOF End of Frame

models 38100S, 38124S, 38100SHL, 38124SHL

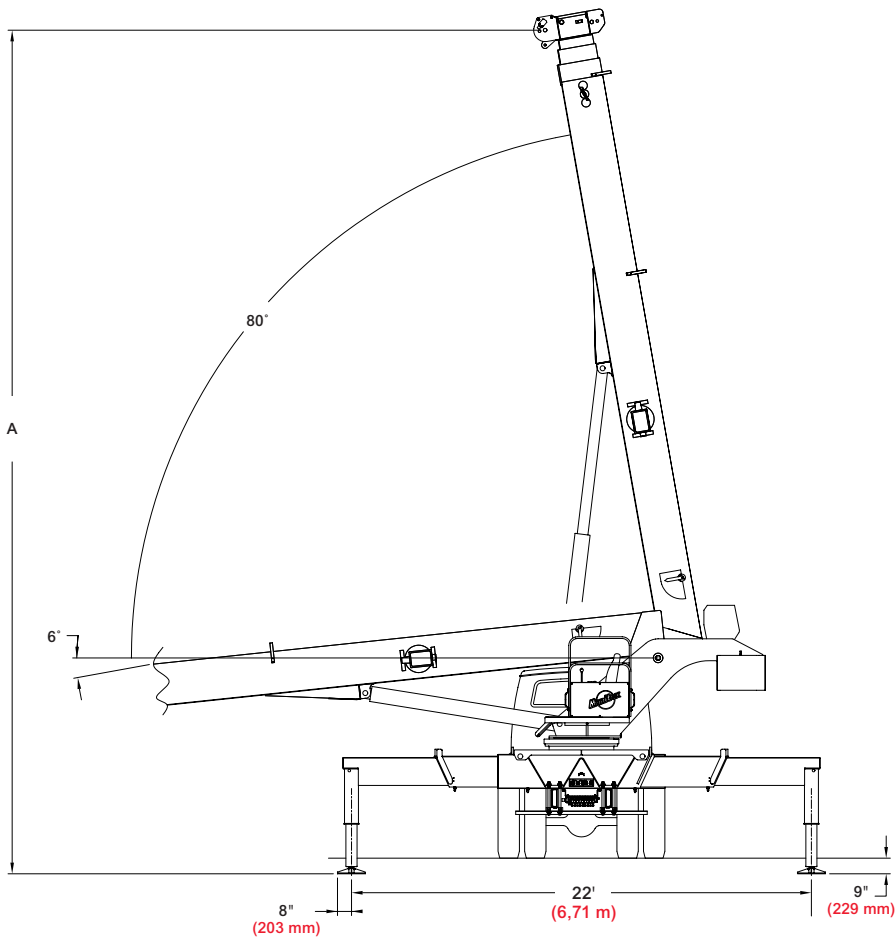


Manitowoc Boom Trucks

outline dimensions

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models 38100S, 38124S, 38100SHL, 38124SHL



Maximum Tip Height (A)

| Configuration | 38100S | 38124S | 38100SHL | 38124SHL |
|------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| | Boom 100' 0" (30,5 m) | Boom 124' 0" (37,8 m) | Boom 100' 0" (30,5 m) | Boom 124' 0" (37,8 m) |
| Extended Boom | 109' 2" (33,3 m) | 132' 4" (40,3 m) | 109' 2" (33,3 m) | 132' 4" (40,3 m) |
| Fixed or Retracted Jib | 140' 0" (42,7 m) | 163' 7" (49,9 m) | 140' 0" (42,7 m) | 163' 7" (49,9 m) |
| Extended Jib | 164' 8" (50,2 m) | - | 164' 8" (50,2 m) | - |

Weights

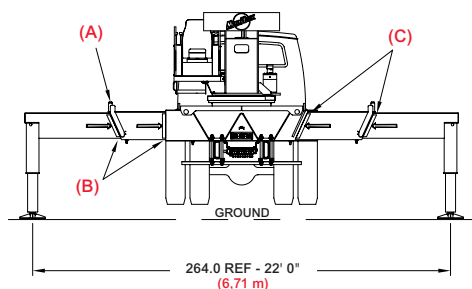
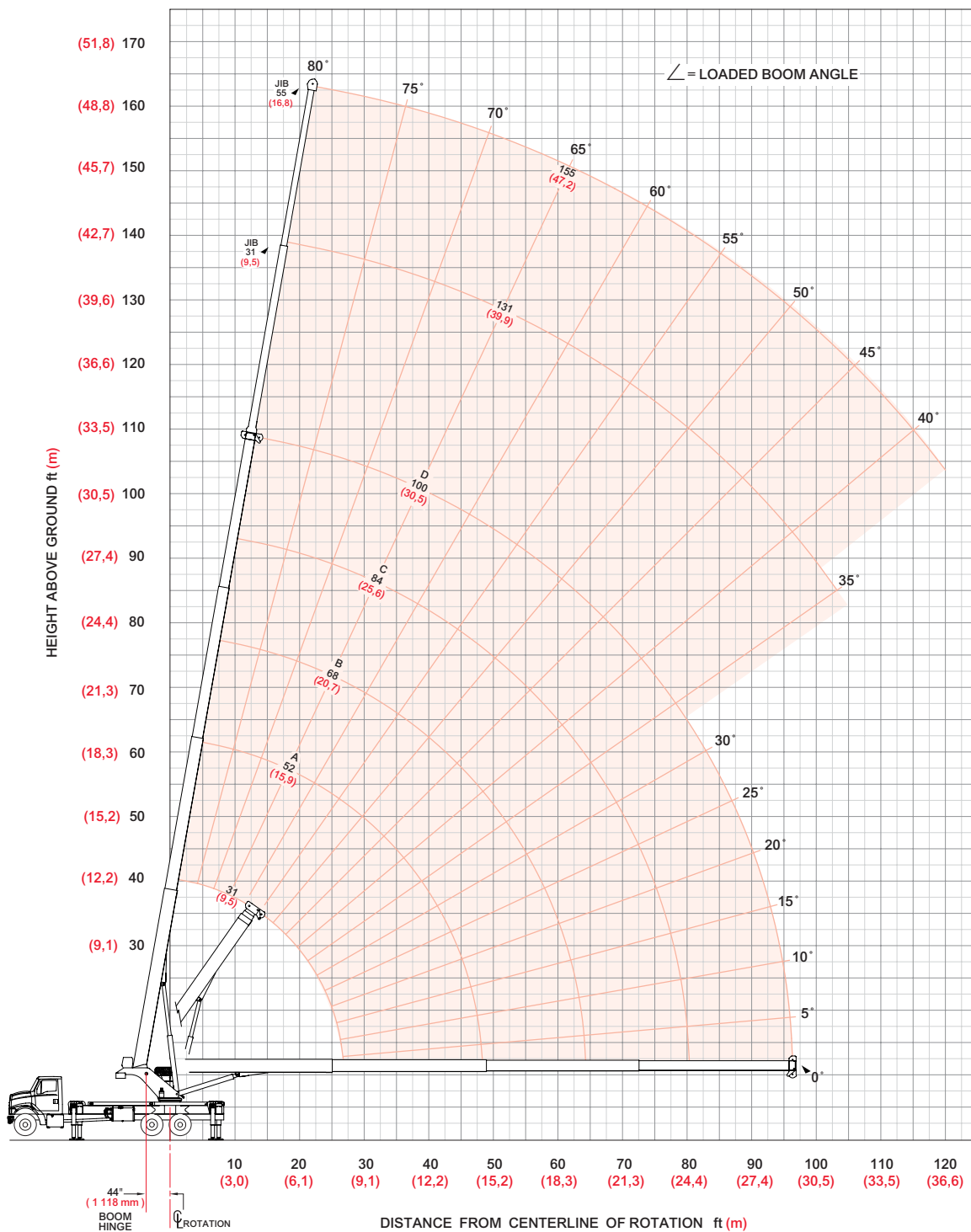
| | 38100S | 38124S | 38100SHL | 38124SHL |
|--|--------------------------|--------------------------|--------------------------|--------------------------|
| Cab Alone | 575 lb (261 kg) | 575 lb (261 kg) | 575 lb (261 kg) | 575 lb (261 kg) |
| Crane- With Out Cab | 29,733 lb (13 487 kg) | 31,329 lb (14 211 kg) | 35,826 lb (16 251 kg) | 37,246 lb (16 895 kg) |
| 10' (3,1 m) Flat Bed | 1000 lb (454 kg) | 1000 lb (454 kg) | - | - |
| 8' (2,4 m) Flat Bed | - | - | 750 lb (340 kg) | 750 lb (340 kg) |
| 30' 6" (9,3 m) Fixed Jib | 1,126 lb (511 kg) | - | 1,126 lb (511 kg) | - |
| 31' (9,5 m) Fixed Jib | - | 850 lb (386 kg) | - | 850 lb (386 kg) |
| 30' 6"-55' (9,3 m - 16,8 m) Telescopic Jib | 1,754 lb (796 kg) | - | 1,754 lb (796 kg) | - |



boom/jib range diagram

38100S Range Diagram - Fully Extended

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- (A) Pins must be disengaged for this outrigger configuration
- (B) These marks indicate when beams are fully extended
- (C) All outrigger beams must be extended to mark

NOTE: Use this chart only when all outriggers are fully extended.

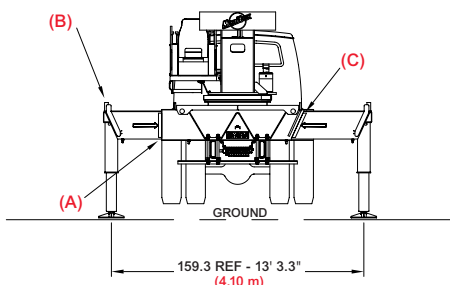
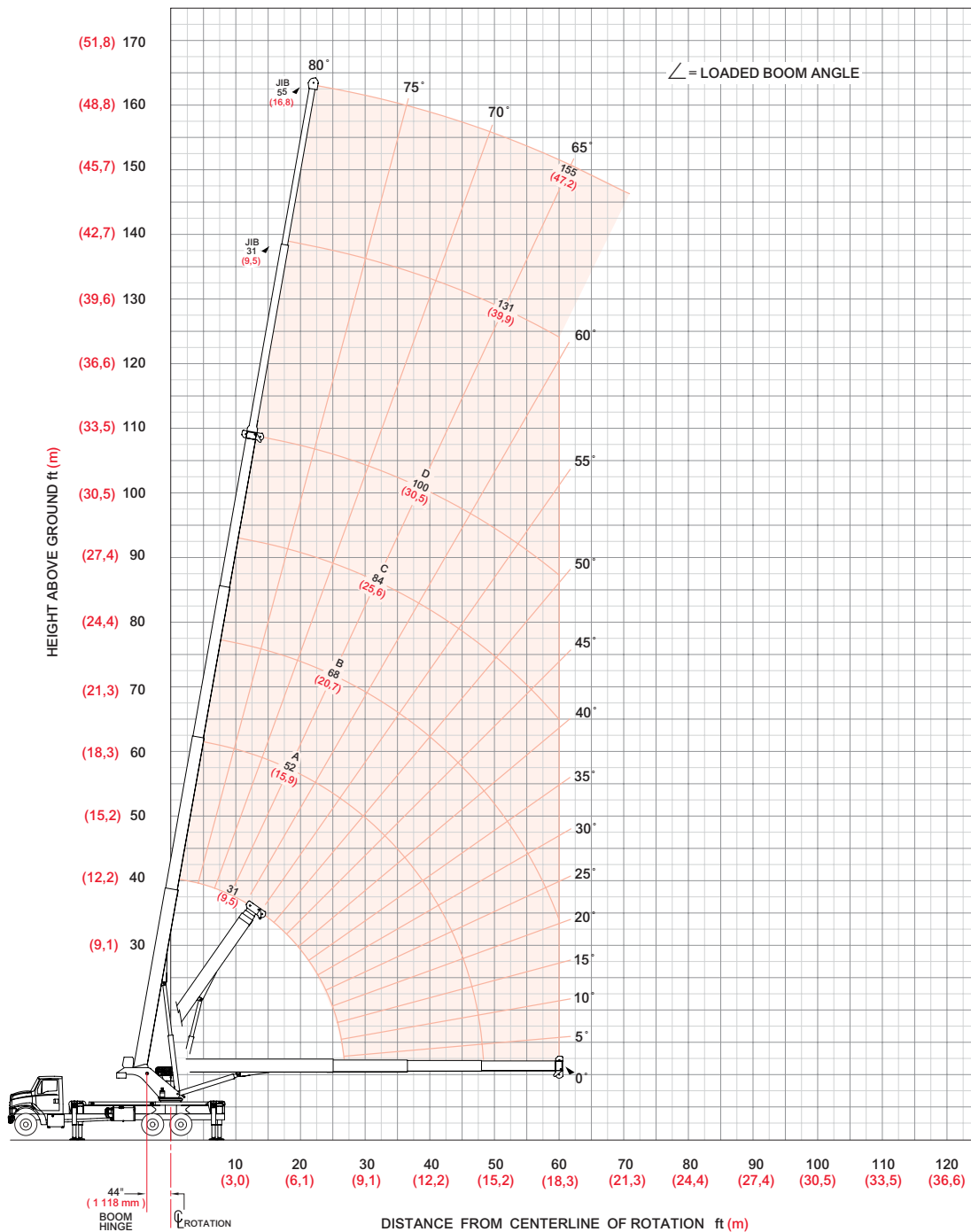
model 38100S



boom/jib range diagram

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38100S Range Diagram - Intermediate



- (A) Mark indicates beam is fully extended
- (B) Pins must be engaged in this outrigger configuration
- (C) All outrigger beams must be extended to mark

NOTE: Lifting personnel with crane in this outrigger configuration is strictly prohibited. Use only fully extended outrigger configuration when lifting personnel.

Use this chart only when all outriggers are in the intermediate position.

model 38100S



boom/jib load charts

38100S Load Ratings Intermediate Outrigger Spread

38100S Jib Load Ratings

| Boom/Jib ft (m) | A | | | | | B | | | | | C | | | | | D | | | | | Fixed Jib | | Telescopic Jib | | | Boom/Jib ft (m) | |
|--|-------------|--------------------|--------------|--------------------|---------------|--------------------|--------------|--------------------|--------------|--------------------|-------------|--------------------|--------------|--------------------|---------------|--------------------|--------------|--------------------|--------------|--------------------|-------------|--------------------|-------------------------------|--------------------|--|--------------------|--------------|
| | 31 (9,5) | 52 (15,9) | 68 (20,7) | 84 (25,6) | 100 (30,5) | 31 (9,5) | 52 (15,9) | 68 (20,7) | 84 (25,6) | 100 (30,5) | 31 (9,5) | 52 (15,9) | 68 (20,7) | 84 (25,6) | 100 (30,5) | 31 (9,5) | 52 (15,9) | 68 (20,7) | 84 (25,6) | 100 (30,5) | 31 (9,5) | 55 (16,8) | Operating Radius ft (m) | | | | |
| Operating Radius ft (m) | ∠ | lb (kg) | ∠ | lb (kg) | ∠ | lb (kg) | ∠ | lb (kg) | ∠ | lb (kg) | ∠ | lb (kg) | ∠ | lb (kg) | ∠ | lb (kg) | ∠ | lb (kg) | ∠ | lb (kg) | ∠ | lb (kg) | ∠ | lb (kg) | Operating Radius ft (m) | | |
| 5 (1,5) | 74° | 76,000 (34 473) | | | | | | | | | | | | | | | | | | | | | | | 5 (1,5) | | |
| 8 (2,4) | 68° | 61,000 (27 669) | | | | | | | | | | | | | | | | | | | | | | | 8 (2,4) | | |
| 10 (3,1) | 64° | 52,860 (23 977) | 76° | 31,500 (14 288) | | | | | | | | | | | | | | | | | | | | | 10 (3,1) | | |
| 12 (3,7) | 60° | 43,730 (19 836) | 73° | 31,500 (14 288) | 78° | 31,500 (14 288) | | | | | | | | | | | | | | | | | | | 12 (3,7) | | |
| 15 (4,6) | 53° | 26,300 (11 929) | 70° | 27,320 (12 392) | 76° | 27,650 (12 542) | 79° | 23,700 (10 750) | | | | | | | | | | | | | | | | | 15 (4,6) | | |
| 20 (6,1) | 40° | 14,620 (6 632) | 64° | 15,460 (7 013) | 71° | 15,730 (7 135) | 76° | 15,890 (7 208) | 79° | 14,000 (6 350) | | | | | | | | | | | | | | | 20 (6,1) | | |
| 25 (7,6) | 20° | 9,240 (4 191) | 58° | 10,060 (4 563) | 67° | 10,290 (4 667) | 72° | 10,430 (4 731) | 76° | 10,530 (4 776) | | | | | | | | | | | | | | | 25 (7,6) | | |
| 30 (9,1) | | | 51° | 6,960 (3 157) | 62° | 7,180 (3 257) | 69° | 7,310 (3 316) | 73° | 7,400 (3 357) | | | | | | | | | | | 77° | 7,300 (3 311) | 77° | 7,000 (3 175) | 30 (9,1) | | |
| 35 (10,7) | | | 43° | 4,950 (2 245) | 57° | 5,170 (2 345) | 65° | 5,290 (2 400) | 70° | 5,370 (2 436) | | | | | | | | | | | 75° | 5,710 (2 590) | 75° | 5,290 (2 400) | 78° | 4,000 (1 814) | 35 (10,7) |
| 40 (12,2) | | | 34° | 3,530 (1 601) | 52° | 3,750 (1 701) | 61° | 3,870 (1 755) | 67° | 3,950 (1 792) | | | | | | | | | | | 73° | 4,250 (1 928) | 73° | 3,830 (1 737) | 76° | 3,850 (1 746) | 40 (12,2) |
| 45 (13,7) | | | 22° | 2,470 (1 120) | 46° | 2,700 (1 225) | 57° | 2,820 (1 279) | 64° | 2,900 (1 315) | | | | | | | | | | | 71° | 3,180 (1 442) | 71° | 2,760 (1 252) | 74° | 3,540 (1 606) | 45 (13,7) |
| 50 (15,2) | | | | | 39° | 1 890 (857) | 52° | 2,010 (912) | 60° | 2,090 (948) | | | | | | | | | | | 69° | 2,360 (1 070) | 69° | 1 930 (875) | 73° | 2,690 (1 220) | 50 (15,2) |
| 55 (16,8) | | | | | 32° | 1,250 (567) | 48° | 1,370 (621) | 57° | 1,440 (653) | | | | | | | | | | | 66° | 1,700 (771) | 66° | 1,270 (576) | 71° | 2,020 (916) | 55 (16,8) |
| 60 (18,3) | | | | | 22° | 720 (327) | 43° | 850 (386) | 53° | 920 (417) | | | | | | | | | | | 64° | 1,170 (531) | 64° | 740 (336) | 69° | 1,470 (667) | 60 (18,3) |
| 65 (19,8) | | | | | | | | | | | | | | | | | | | | | | | | | 67° | 1,020 (463) | 65 (19,8) |
| 70 (21,3) | | | | | | | | | | | | | | | | | | | | | | | | | 65° | 640 (290) | 70 (21,3) |
| Deduction* | | 590 (268) | | 350 (159) | | 270 (122) | | 220 (100) | | 180 (82) | | | | | | | | | | | | | | | | | |
| Deduction** | | 890 (404) | | 530 (240) | | 400 (181) | | 330 (150) | | 280 (127) | | | | | | | | | | | | | | | | | |

*for stowed fixed jib

**for stowed telescopic jib

Meets ANSI B30.5 Requirements - Do not operate crane or accessories within 10' (3.05 m) of live power lines.
 NOTICE: This capacity chart is for reference only and must not be used for lifting purposes.

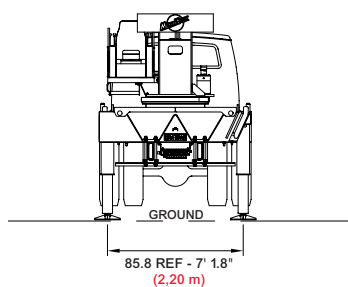
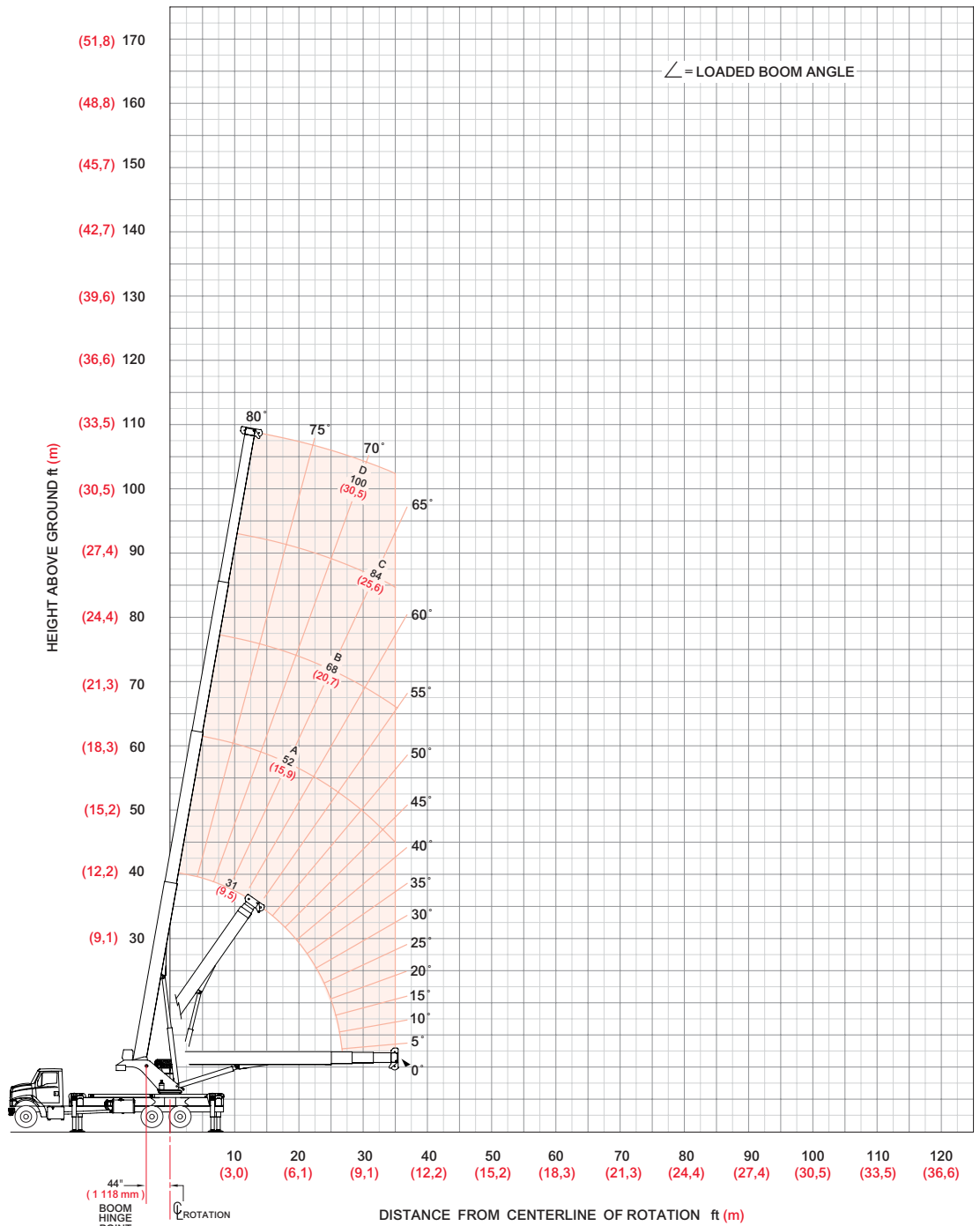
model 38100S



boom/jib range diagram

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38100S Range Diagram - Fully Retracted



NOTE: Lifting personnel with crane in this outrigger configuration is strictly prohibited. Use only fully extended outrigger configuration when lifting personnel.

Use this chart only when all outriggers are fully retracted.

model 38100S



boom/jib load charts

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38100S Load Ratings Fully Retracted Outrigger Spread

| Boom/Jib ft (m) | A | | B | | C | | D | |
|-------------------------------|-------------|--------------------|--------------|-------------------|---------------|-------------------|--------------|-------------------|
| | 31 (9,5) | 52 (15,9) | 68 (20,7) | 84 (25,6) | 100 (30,5) | | | |
| Operating Radius ft (m) | ∠ | lb (kg) | ∠ | lb (kg) | ∠ | lb (kg) | ∠ | lb (kg) |
| 5 (1,5) | 74° | 76,000 (34 473) | | | | | | |
| 8 (2,4) | 68° | 31,150 (14 129) | | | | | | |
| 10 (3,1) | 64° | 19,970 (9 058) | 76° | 20,890 (9 476) | | | | |
| 12 (3,7) | 60° | 14,080 (6 387) | 73° | 14,900 (6 759) | 78° | 15,170 (6 881) | | |
| 15 (4,6) | 53° | 9,110 (4 132) | 70° | 9,850 (4 468) | 76° | 10,080 (4 572) | 79° | 10,230 (4 640) |
| 20 (6,1) | 40° | 4,840 (2 195) | 64° | 5,520 (2 504) | 71° | 5,730 (2 599) | 76° | 5,850 (2 654) |
| 25 (7,6) | 20° | 2,510 (1 139) | 58° | 3,210 (1 456) | 67° | 3,400 (1 542) | 72° | 3,520 (1 597) |
| 30 (9,1) | | | 51° | 1,770 (803) | 62° | 1,960 (889) | 69° | 2,070 (939) |
| 35 (10,7) | | | 43° | 780 (354) | 57° | 970 (440) | 65° | 1,080 (490) |
| Deduction* | | 590 (268) | 350 (159) | 270 (123) | 220 (100) | 220 (100) | 180 (82) | 180 (82) |
| Deduction** | | 890 (404) | 530 (240) | 400 (181) | 330 (150) | 330 (150) | 280 (127) | 280 (127) |

*for stowed fixed jib

**for stowed telescopic jib

model 38100S

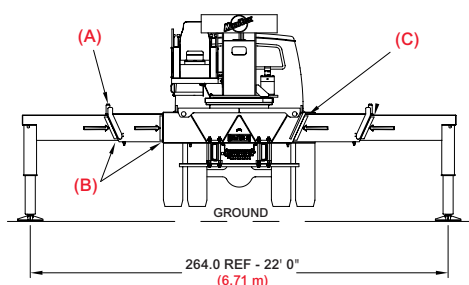
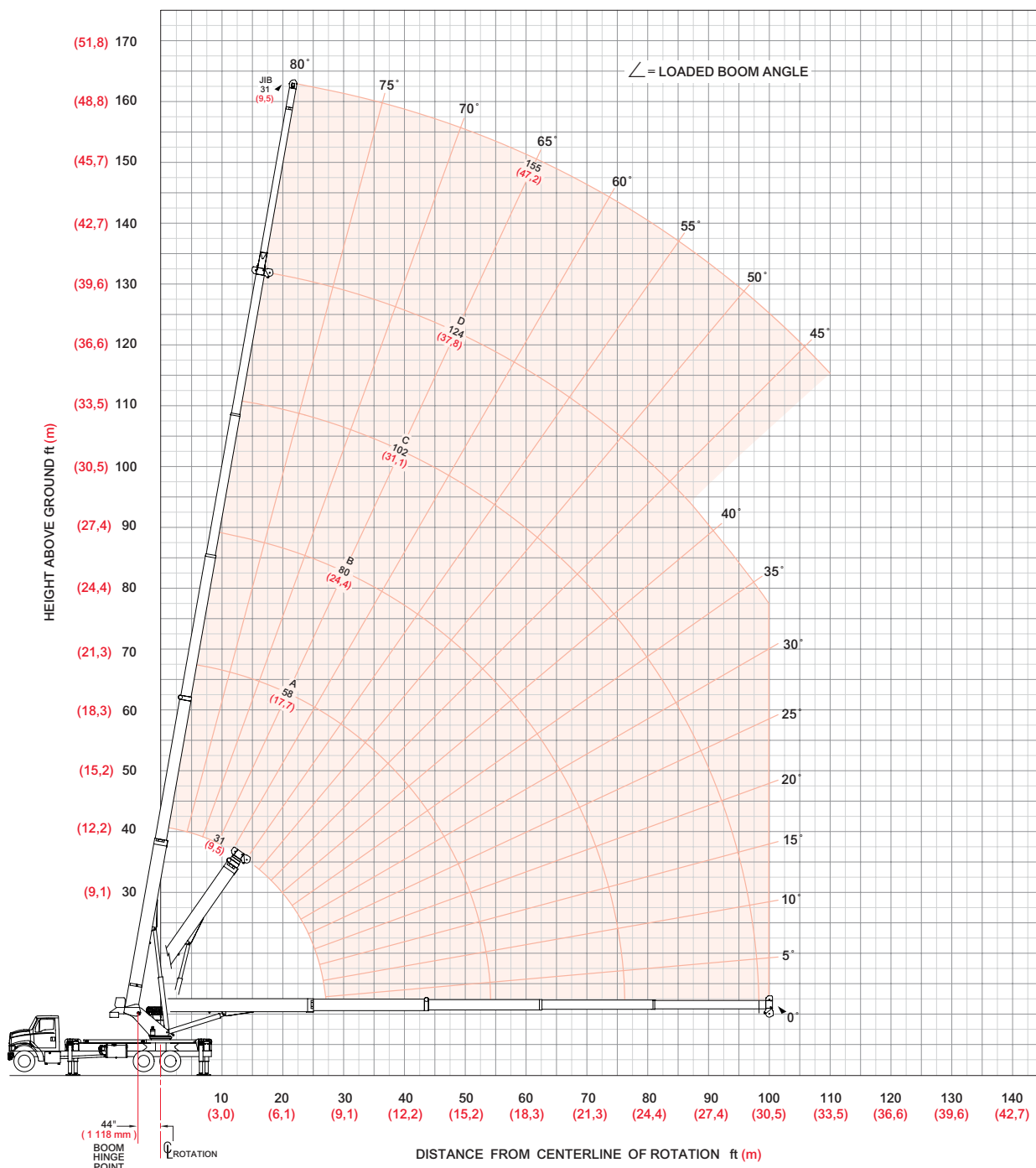
Meets ANSI B30.5 Requirements - Do not operate crane or accessories within 10' (3.05 m) of live power lines.
 NOTICE: This capacity chart is for reference only and must not be used for lifting purposes.



boom/jib range diagram

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38124S Range Diagram - Fully Extended



- (A) Pins must be disengaged for this outrigger configuration
- (B) These marks indicate when beams are fully extended
- (C) All outrigger beams must be extended to mark

NOTE: Use this chart only when all outriggers are fully extended.

model 38124S



boom/jib load charts

38124S Load Ratings Fully Extended Outrigger Spread

38124S Jib Load Ratings

| Boom/Jib ft (m) | A | | | | | B | | | | | C | | | | | D | | | | | Fixed Jib | | | | | | | | | | | | | | | |
|-------------------------------|-------------|--------------------|--------------|--------------------|---------------|-------------------|--------------|-------------------|---------------|------------------|-------------|------------------|--------------|---------------|---------------|-------------|--------------|--------------|---------------|---------------|-------------|--------------|--------------|---------------|---------------|-------------|--------------|--------------|---------------|---------------|--------------------|-------------------------------|------------|------------|-------------|---------------|
| | 31 (9,5) | 58 (17,7) | 80 (24,4) | 102 (31,1) | 124 (37,8) | 31 (9,5) | 58 (17,7) | 80 (24,4) | 102 (31,1) | 124 (37,8) | 31 (9,5) | 58 (17,7) | 80 (24,4) | 102 (31,1) | 124 (37,8) | 31 (9,5) | 58 (17,7) | 80 (24,4) | 102 (31,1) | 124 (37,8) | 31 (9,5) | 58 (17,7) | 80 (24,4) | 102 (31,1) | 124 (37,8) | 31 (9,5) | 58 (17,7) | 80 (24,4) | 102 (31,1) | 124 (37,8) | Boom/Jib ft (m) | Operating Radius ft (m) | | | | |
| Operating Radius ft (m) | ∠ | lb (kg) | ∠ | lb (kg) | ∠ | lb (kg) | ∠ | lb (kg) | ∠ | lb (kg) | ∠ | lb (kg) | ∠ | lb (kg) | ∠ | lb (kg) | ∠ | lb (kg) | ∠ | lb (kg) | ∠ | lb (kg) | ∠ | lb (kg) | ∠ | lb (kg) | ∠ | lb (kg) | ∠ | lb (kg) | ∠ | | lb (kg) | ∠ | lb (kg) | |
| 5 | 75° | 76,000 (34 473) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 5 (1,5) | | |
| 8 | 69° | 60,500 (27 442) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 8 (2,4) | |
| 10 | 64° | 52,550 (23 836) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 10 (3,1) | |
| 12 | 60° | 46,600 (21 137) | 75° | 25,000 (11 340) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 12 (3,7) | |
| 15 | 53° | 39,600 (17 962) | 73° | 25,000 (11 340) | 79° | 21,500 (9 752) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 15 (4,6) | |
| 20 | 40° | 30,300 (13 744) | 67° | 25,000 (11 340) | 75° | 19,700 (8 936) | 80° | 14,500 (6 577) | | | | | | | | | | | | | | | | | | | | | | | | | | | 20 (6,1) | |
| 25 | 22° | 23,070 (10 464) | 62° | 22,840 (10 360) | 71° | 18,200 (8 255) | 77° | 13,500 (6 123) | 80° | 8,450 (3 833) | | | | | | | | | | | | | | | | | | | | | | | | | 25 (7,6) | |
| 30 | | | 56° | 18,670 (8 649) | 67° | 16,250 (7 371) | 74° | 12,820 (5 815) | 78° | 8,150 (3 697) | 80° | 4,000 (1 814) | | | | | | | | | | | | | | | | | | | | | | | 30 (9,1) | |
| 35 | | | 49° | 14,450 (6 554) | 63° | 14,540 (6 595) | 71° | 11,380 (5 162) | 75° | 7,800 (3 538) | 78° | 3,850 (1 746) | | | | | | | | | | | | | | | | | | | | | | | | 35 (10,7) |
| 40 | | | 42° | 11,190 (5 076) | 59° | 11,490 (5 212) | 68° | 10,160 (4 608) | 72° | 7,280 (3 302) | 76° | 3,700 (1,678) | | | | | | | | | | | | | | | | | | | | | | | | 40 (12,2) |
| 45 | | | 34° | 8,820 (4 000) | 54° | 9,110 (4 132) | 65° | 9,250 (4 196) | 70° | 6,780 (3 075) | 74° | 3,550 (1 610) | | | | | | | | | | | | | | | | | | | | | | | | 45 (13,7) |
| 50 | | | 23° | 7,030 (3 189) | 50° | 7,340 (3 329) | 61° | 7,480 (3 393) | 67° | 6,160 (2 794) | 72° | 3,400 (1 542) | | | | | | | | | | | | | | | | | | | | | | | | 50 (15,2) |
| 55 | | | | | 44° | 5,970 (2 708) | 58° | 6,110 (2 771) | 65° | 5,540 (2 513) | 70° | 3,250 (1 474) | | | | | | | | | | | | | | | | | | | | | | | | 55 (16,8) |
| 60 | | | | | 39° | 4,880 (2 214) | 54° | 5,020 (2 277) | 62° | 5,000 (2 268) | 68° | 3,080 (1 397) | | | | | | | | | | | | | | | | | | | | | | | | 60 (18,3) |
| 65 | | | | | 32° | 3,980 (1 805) | 50° | 4,130 (1 873) | 59° | 4,200 (1 905) | 66° | 2,910 (1 320) | | | | | | | | | | | | | | | | | | | | | | | | 65 (19,8) |
| 70 | | | | | 24° | 3,230 (1 465) | 46° | 3,390 (1 538) | 56° | 3,460 (1 569) | 64° | 2,750 (1 247) | | | | | | | | | | | | | | | | | | | | | | | | 70 (21,3) |
| 75 | | | | | 12° | 2,580 (1 170) | 42° | 2,760 (1 252) | 53° | 2,830 (1 284) | 62° | 2,600 (1 179) | | | | | | | | | | | | | | | | | | | | | | | | 75 (22,9) |
| 80 | | | | | | | 37° | 2,220 (1 007) | 50° | 2,300 (1 043) | 60° | 2,460 (1 116) | | | | | | | | | | | | | | | | | | | | | | | | 80 (24,4) |
| 85 | | | | | | | 32° | 1,750 (794) | 47° | 1,840 (835) | 58° | 2,260 (1 025) | | | | | | | | | | | | | | | | | | | | | | | | 85 (25,9) |
| 90 | | | | | | | 25° | 1,340 (608) | 43° | 1,430 (649) | 55° | 1,850 (839) | | | | | | | | | | | | | | | | | | | | | | | | 90 (27,4) |
| 95 | | | | | | | 17° | 970 (440) | 40° | 1,070 (485) | 53° | 1,490 (676) | | | | | | | | | | | | | | | | | | | | | | | | 95 (29,0) |
| 100 | | | | | | | | | 35° | 750 (340) | 51° | 1,170 (531) | | | | | | | | | | | | | | | | | | | | | | | | 100 (30,5) |
| 105 | | | | | | | | | | | 48° | 880 (399) | | | | | | | | | | | | | | | | | | | | | | | | 105 (32,0) |
| 110 | | | | | | | | | | | 45° | 620 (281) | | | | | | | | | | | | | | | | | | | | | | | | 110 (33,5) |
| Deduction* | | 450 (204) | | 240 (109) | | 180 (82) | | 140 (64) | | 120 (54) | | | | | | | | | | | | | | | | | | | | | | | | | | |

*for stowed fixed jib

Meets ANSI B30.5 Requirements - Do not operate crane or accessories within 10' (3.05 m) of live power lines.
 NOTICE: This capacity chart is for reference only and must not be used for lifting purposes.

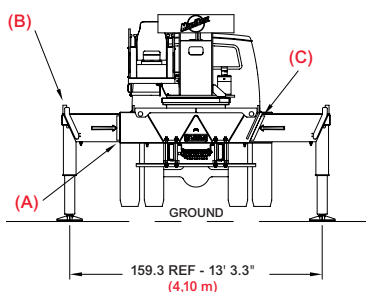
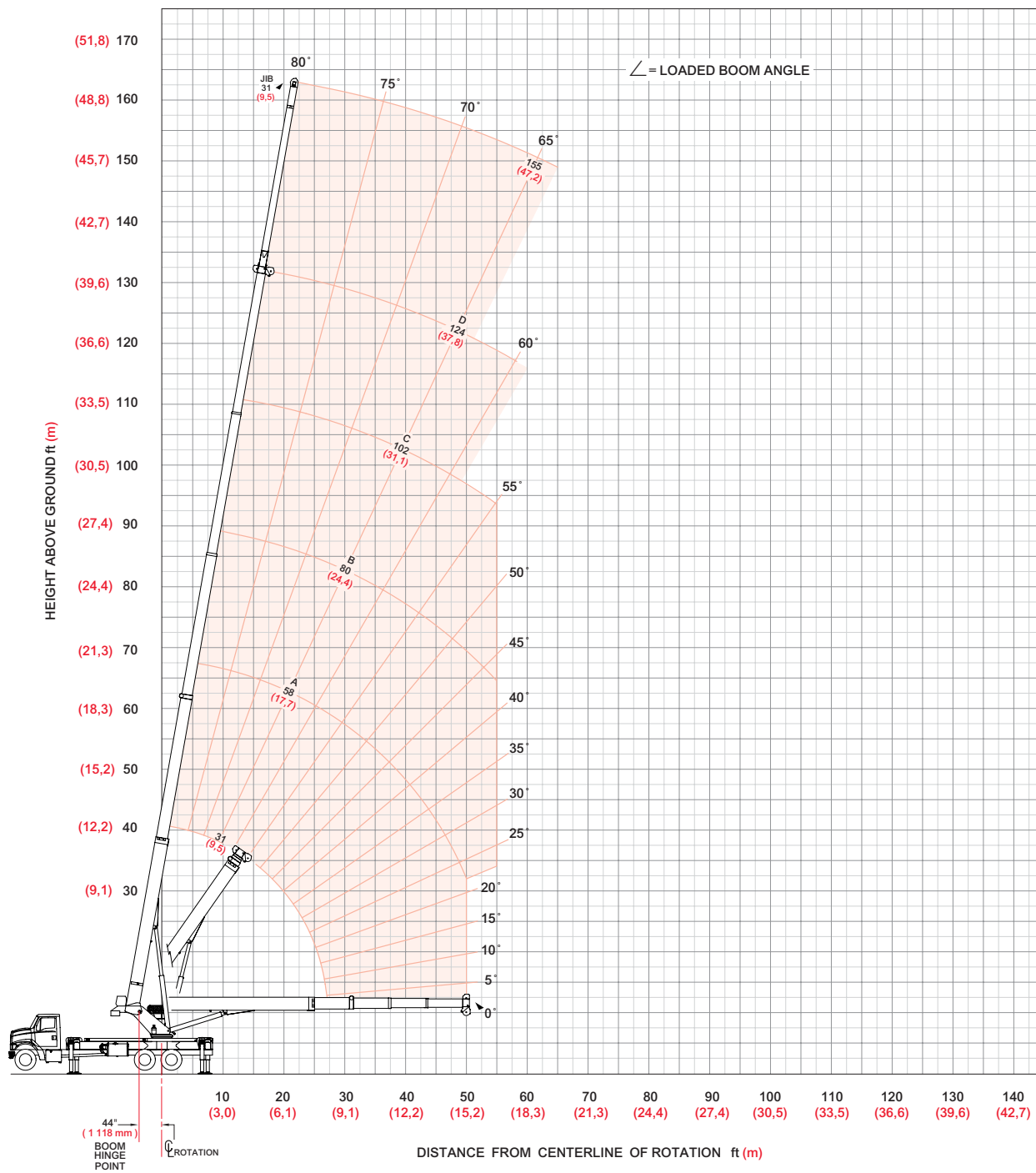
model 38124S



boom/jib range diagram

14

38124S Range Diagram - Intermediate



- (A) Mark indicates beam is fully extended
- (B) Pins must be engaged in this outrigger configuration
- (C) All outrigger beams must be extended to mark

NOTE: Lifting personnel with crane in this outrigger configuration is strictly prohibited. Use only fully extended outrigger configuration when lifting personnel.

Use this chart only when all outriggers are in the intermediate position.

model 38124S



boom/jib load charts

38124S Load Ratings Intermediate Outrigger Spread

38124S Jib Load Ratings

| Boom/Jib ft (m) | A | | | | | B | | | | | C | | | | | D | | | | | Fixed Jib | | |
|-------------------------------|-------------|--------------------|--------------|--------------------|---------------|-------------------|--------------|-------------------|---------------|------------------|-------------|------------------|--------------|---------------|---------------|-------------|--------------|--------------|---------------|---------------|-------------|--------------|-------------------------------|
| | 31 (9,5) | 58 (17,7) | 80 (24,4) | 102 (31,1) | 124 (37,8) | 31 (9,5) | 58 (17,7) | 80 (24,4) | 102 (31,1) | 124 (37,8) | 31 (9,5) | 58 (17,7) | 80 (24,4) | 102 (31,1) | 124 (37,8) | 31 (9,5) | 58 (17,7) | 80 (24,4) | 102 (31,1) | 124 (37,8) | 31 (9,5) | 58 (17,7) | |
| Operating Radius ft (m) | ∠ | lb (kg) | ∠ | lb (kg) | ∠ | lb (kg) | ∠ | lb (kg) | ∠ | lb (kg) | ∠ | lb (kg) | ∠ | lb (kg) | ∠ | lb (kg) | ∠ | lb (kg) | ∠ | lb (kg) | ∠ | lb (kg) | Operating Radius ft (m) |
| 5 (1,5) | 75° | 76,000 (34 473) | | | | | | | | | | | | | | | | | | | | | 5 (1,5) |
| 8 (2,4) | 69° | 60,500 (27 442) | | | | | | | | | | | | | | | | | | | | | 8 (2,4) |
| 10 (3,1) | 64° | 52,550 (23 836) | | | | | | | | | | | | | | | | | | | | | 10 (3,1) |
| 12 (3,7) | 60° | 46,340 (21 019) | 75° | 25,000 (11 340) | | | | | | | | | | | | | | | | | | | 12 (3,7) |
| 15 (4,6) | 53° | 27,730 (12 578) | 73° | 25,000 (11 340) | 79° | 21,500 (9 752) | | | | | | | | | | | | | | | | | 15 (4,6) |
| 20 (6,1) | 40° | 15,230 (6 908) | 67° | 16,300 (7 394) | 75° | 16,590 (7 525) | 80° | 14,500 (6 577) | | | | | | | | | | | | | | | 20 (6,1) |
| 25 (7,6) | 22° | 9,460 (4 291) | 62° | 10,520 (4 772) | 71° | 10,780 (4 890) | 77° | 10,920 (4 953) | 80° | 8,450 (3 833) | | | | | | | | | | | | | 25 (7,6) |
| 30 (9,1) | | | 56° | 7,210 (3 270) | 67° | 7,450 (3 379) | 74° | 7,580 (3 438) | 78° | 7,650 (3 470) | 80° | 4,000 (1 814) | | | | | | | | | | | 30 (9,1) |
| 35 (10,7) | | | 49° | 5,050 (2 291) | 63° | 5,300 (2 404) | 71° | 5,420 (2 458) | 75° | 5,480 (2 486) | 78° | 3,850 (1 746) | | | | | | | | | | | 35 (10,7) |
| 40 (12,2) | | | 42° | 3,540 (1 606) | 59° | 3,780 (1 715) | 68° | 3,900 (1 769) | 72° | 3,960 (1 796) | 76° | 3,700 (1 678) | | | | | | | | | | | 40 (12,2) |
| 45 (13,7) | | | 34° | 2,410 (1 093) | 54° | 2,660 (1 207) | 65° | 2,780 (1 261) | 70° | 2,840 (1 288) | 74° | 3,250 (1 474) | | | | | | | | | | | 45 (13,7) |
| 50 (15,2) | | | 23° | 1,530 (694) | 50° | 1,800 (816) | 61° | 1,910 (866) | 67° | 1,980 (898) | 72° | 2,370 (1 075) | | | | | | | | | | | 50 (15,2) |
| 55 (16,8) | | | | | 44° | 1,110 (503) | 58° | 1,230 (558) | 65° | 1,290 (585) | 70° | 1,680 (762) | | | | | | | | | | | 55 (16,8) |
| 60 (18,3) | | | | | | | | | 62° | 730 (331) | 68° | 1,110 (503) | | | | | | | | | | | 60 (18,3) |
| 65 (19,8) | | | | | | | | | | | 66° | 640 (290) | | | | | | | | | | | 65 (19,8) |
| Deduction* | | 450 (204) | | 240 (109) | | 180 (82) | | 140 (64) | | 120 (54) | | | | | | | | | | | | | |

*for stowed fixed jib

Meets ANSI B30.5 Requirements - Do not operate crane or accessories within 10' (3.05 m) of live power lines.
 NOTICE: This capacity chart is for reference only and must not be used for lifting purposes.

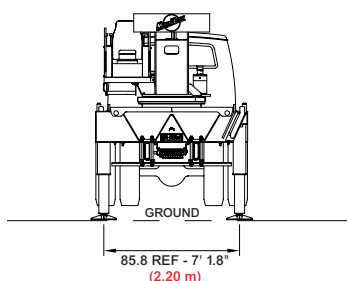
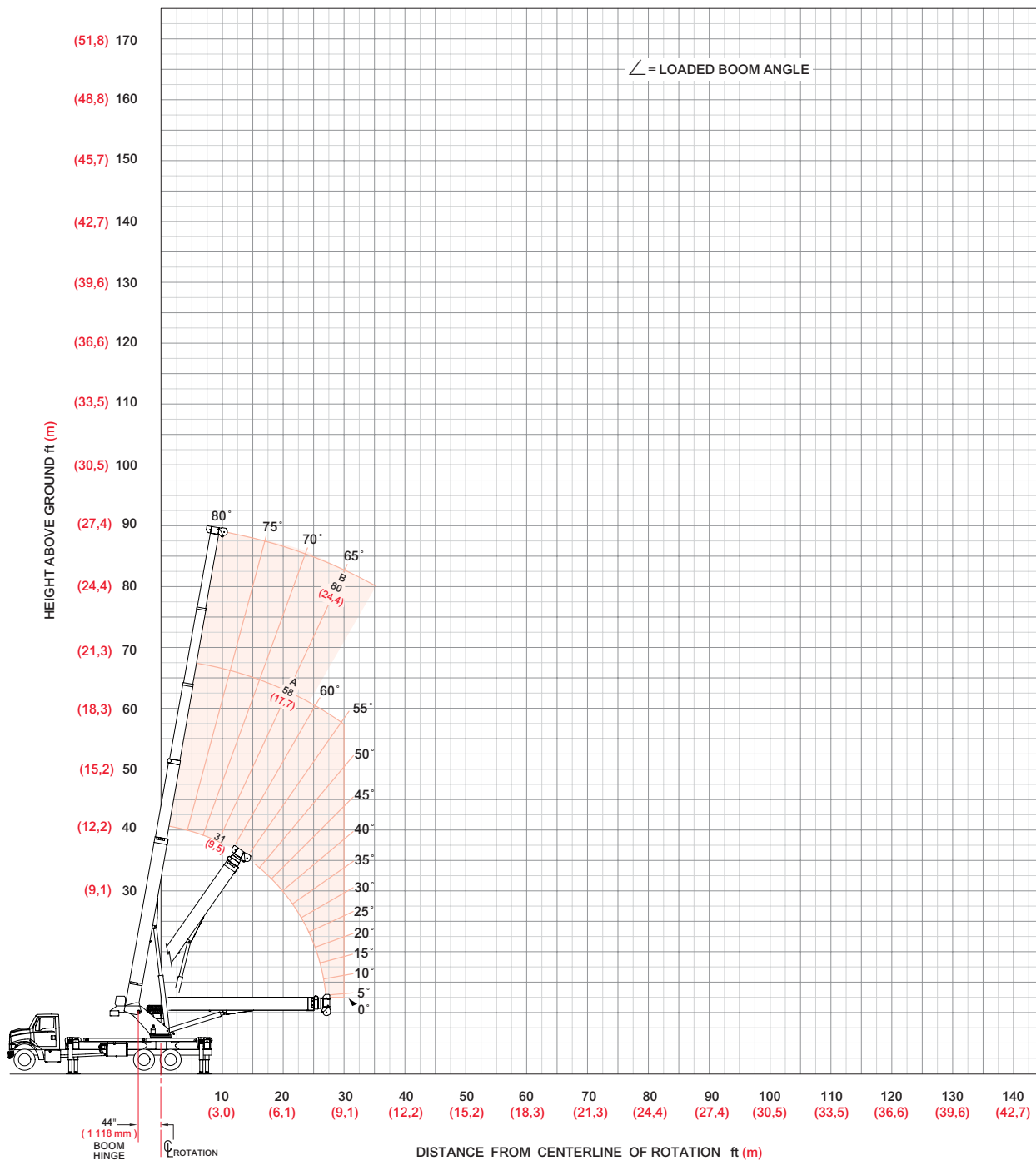
model 38124S



boom/jib range diagram

16

38124S Range Diagram - Fully Retracted



NOTE: Lifting personnel with crane in this outrigger configuration is strictly prohibited. Use only fully extended outrigger configuration when lifting personnel.

Use this chart only when all outriggers are fully retracted.

model 38124S



boom/jib load charts

17

38124S Load Ratings Fully Retracted Outrigger Spread

| Boom/Jib ft (m) | A | | B | | |
|-------------------------------|-------------|--------------------|--------------|-------------------|--------------|
| | 31 (9,5) | 58 (17,7) | 80 (24,4) | | |
| Operating Radius ft (m) | ∠ | lb (kg) | ∠ | lb (kg) | |
| 5 (1,5) | 75° | 76,000 (34 473) | | | |
| 8 (2,4) | 69° | 33,420 (15 159) | | | |
| 10 (3,1) | 64° | 21,320 (9 671) | | | |
| 12 (3,7) | 60° | 14,960 (6 786) | 75° | 15,960 (7 239) | |
| 15 (4,6) | 53° | 9,570 (4 341) | 73° | 10,480 (4 754) | |
| 20 (6,1) | 40° | 4,930 (2 236) | 67° | 5,800 (2 631) | |
| 25 (7,6) | 22° | 2,390 (1 084) | 62° | 3,290 (1 492) | |
| 30 (9,1) | | | 56° | 1,730 (785) | |
| 35 (10,7) | | | | 63° | 870 (395) |
| Deduction* | | 450 (204) | 240 (109) | 180 (82) | |

*for stowed fixed jib

Meets ANSI B30.5 Requirements - Do not operate crane or accessories within 10' (3.05 m) of live power lines.
 NOTICE: This capacity chart is for reference only and must not be used for lifting purposes.

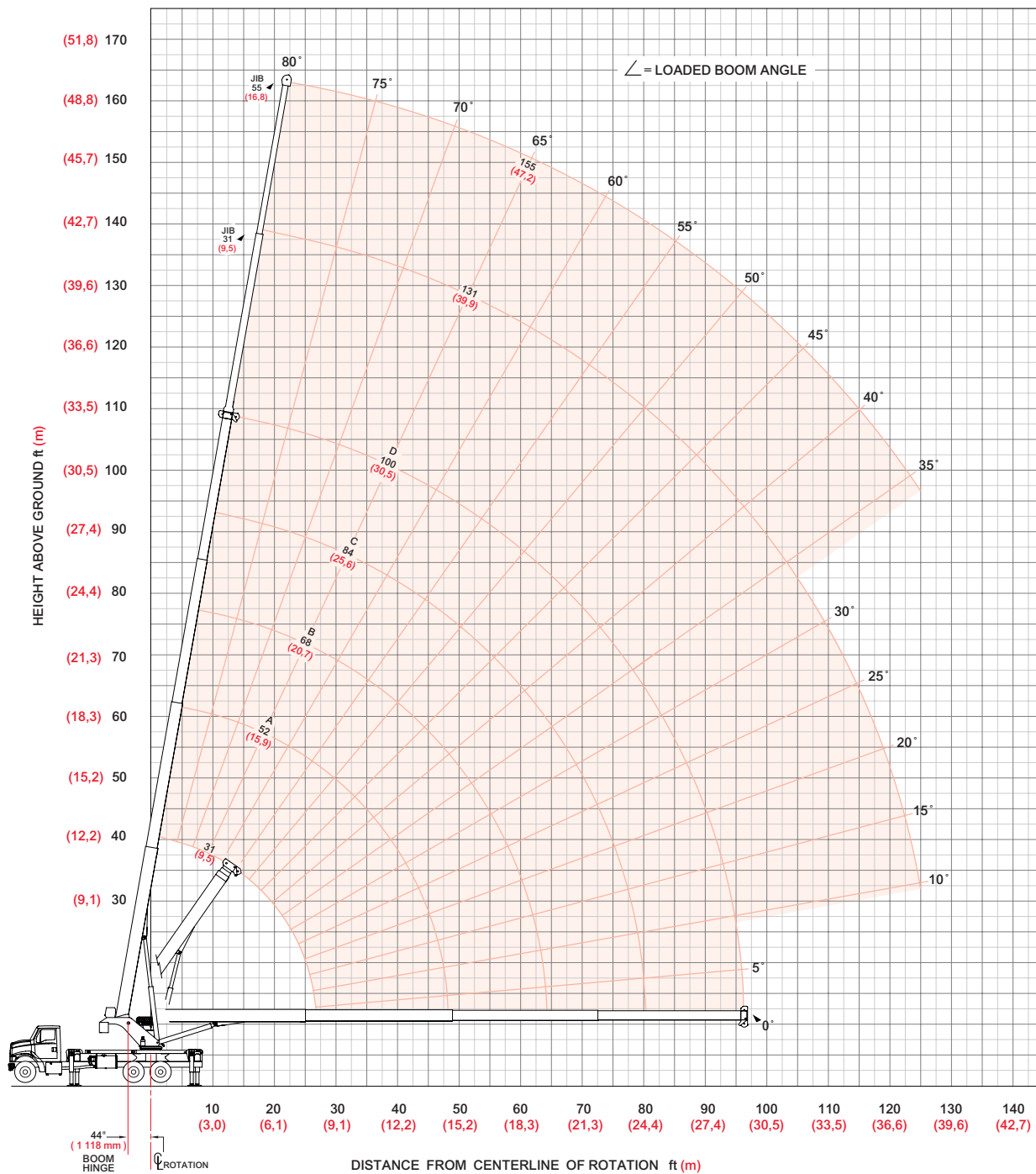
model 38124S



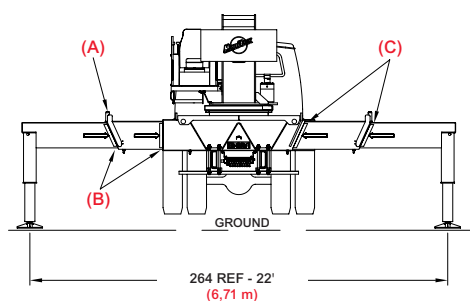
boom/jib range diagram

38100SHL Range Diagram - Fully Extended

18



model 38100SHL



- (A) Pins must be disengaged for this outrigger configuration
- (B) These marks indicate when beams are fully extended
- (C) All outrigger beams must be extended to mark

NOTE: Use this chart only when all outriggers are fully extended.

boom/jib load charts

19

38100SHL Load Ratings Fully Extended Outrigger Spread

38100SHL Jib Load Ratings

| Boom/Jib ft (m) | A | | | | | B | | | | | C | | | | | D | | | | | Fixed Jib | | Telescopic Jib | | | Boom/Jib ft (m) |
|--------------------|-------------|--------------------|--------------|--------------------|--------------|--------------------|--------------|--------------------|---------------|-------------------|-------------|------------------|-------------|------------------|--------------|------------------|-------------------------------|--|--|--|-----------|--|----------------|--|--|--------------------|
| | 31 (9,5) | | 52 (15,9) | | 68 (20,7) | | 84 (25,6) | | 100 (30,5) | | 31 (9,5) | | 31 (9,5) | | 55 (16,8) | | Operating Radius ft (m) | | | | | | | | | |
| | ∠ | lb (kg) | ∠ | lb (kg) | ∠ | lb (kg) | ∠ | lb (kg) | ∠ | lb (kg) | ∠ | lb (kg) | ∠ | lb (kg) | ∠ | lb (kg) | | | | | | | | | | |
| 5 (1,5) | 74° | 76,000 (34 473) | | | | | | | | | | | | | | | 5 (1,5) | | | | | | | | | |
| 8 (2,4) | 68° | 61,000 (27 669) | | | | | | | | | | | | | | | 8 (2,4) | | | | | | | | | |
| 10 (3,1) | 64° | 52,860 (23 977) | 76° | 31,500 (14 288) | | | | | | | | | | | | | 10 (3,1) | | | | | | | | | |
| 12 (3,7) | 60° | 47,000 (21 319) | 73° | 31,500 (14 288) | 78° | 31,500 (14 288) | | | | | | | | | | | 12 (3,7) | | | | | | | | | |
| 15 (4,6) | 53° | 40,280 (18 270) | 70° | 31,500 (14 288) | 76° | 31,500 (14 288) | 79° | 23,700 (10 750) | | | | | | | | | 15 (4,6) | | | | | | | | | |
| 20 (6,1) | 40° | 31,870 (14 456) | 64° | 28,680 (13 009) | 71° | 26,820 (12 165) | 76° | 20,600 (9 344) | 79° | 14,000 (6 350) | | | | | | | 20 (6,1) | | | | | | | | | |
| 25 (7,6) | 20° | 24,430 (11 081) | 58° | 23,830 (10 809) | 67° | 22,160 (10 052) | 72° | 18,300 (8 300) | 76° | 13,500 (6 123) | | | | | | | 25 (7,6) | | | | | | | | | |
| 30 (9,1) | | | 51° | 20,400 (9 253) | 62° | 19,080 (8 655) | 69° | 15,870 (7 199) | 73° | 12,820 (5 815) | 77° | 7,300 (3 311) | 77° | 7,000 (3 175) | | | 30 (9,1) | | | | | | | | | |
| 35 (10,7) | | | 43° | 15,980 (7 248) | 57° | 16,200 (7 348) | 65° | 13,950 (6 328) | 70° | 11,380 (5 162) | 75° | 7,100 (3 221) | 75° | 6,800 (3 084) | 78° | 4,000 (1 814) | 35 (10,7) | | | | | | | | | |
| 40 (12,2) | | | 34° | 12,890 (5 847) | 52° | 13,110 (5 947) | 61° | 12,350 (5 602) | 67° | 10,160 (4 608) | 73° | 6,620 (3 003) | 73° | 6,240 (2 830) | 76° | 3,850 (1 746) | 40 (12,2) | | | | | | | | | |
| 45 (13,7) | | | 22° | 10,610 (4 813) | 46° | 10,840 (4 917) | 57° | 10,960 (4 971) | 64° | 9,370 (4 250) | 71° | 6,060 (2 749) | 71° | 5,670 (2 572) | 74° | 3,700 (1 678) | 45 (13,7) | | | | | | | | | |
| 50 (15,2) | | | | | 39° | 9,090 (4 123) | 52° | 9,220 (4 182) | 60° | 8,430 (3 824) | 69° | 5,550 (2 517) | 69° | 5,150 (2 336) | 73° | 3,550 (1 610) | 50 (15,2) | | | | | | | | | |
| 55 (16,8) | | | | | 32° | 7,710 (3 497) | 48° | 7,830 (3 552) | 57° | 7,620 (3 456) | 66° | 5,100 (2 313) | 66° | 4,690 (2 127) | 71° | 3,310 (1 501) | 55 (16,8) | | | | | | | | | |
| 60 (18,3) | | | | | 22° | 6,580 (2 985) | 43° | 6,710 (3 044) | 53° | 6,790 (3 080) | 64° | 4,680 (2 123) | 64° | 4,210 (1 910) | 69° | 3,090 (1 402) | 60 (18,3) | | | | | | | | | |
| 65 (19,8) | | | | | | | 37° | 5,780 (2 622) | 49° | 5,860 (2 658) | 61° | 4,210 (1 910) | 61° | 3,740 (1 696) | 67° | 2,900 (1 315) | 65 (19,8) | | | | | | | | | |
| 70 (21,3) | | | | | | | 31° | 5,000 (2 268) | 45° | 5,070 (2 300) | 59° | 3,800 (1 724) | 59° | 3,330 (1 510) | 65° | 2,710 (1 229) | 70 (21,3) | | | | | | | | | |
| 75 (22,9) | | | | | | | 22° | 4,320 (1 960) | 40° | 4,410 (2 000) | 56° | 3,440 (1 560) | 56° | 2,970 (1 347) | 63° | 2,550 (1 157) | 75 (22,9) | | | | | | | | | |
| 80 (24,4) | | | | | | | 7° | 3,730 (1 692) | 35° | 3,830 (1 737) | 53° | 3,120 (1 415) | 53° | 2,660 (1 207) | 61° | 2,400 (1 089) | 80 (24,4) | | | | | | | | | |
| 85 (25,9) | | | | | | | | | 30° | 3,320 (1 506) | 50° | 2,840 (1 288) | 50° | 2,370 (1 075) | 59° | 2,270 (1 030) | 85 (25,9) | | | | | | | | | |
| 90 (27,4) | | | | | | | | | 22° | 2,880 (1 306) | 47° | 2,590 (1 175) | 47° | 2,120 (962) | 56° | 2,080 (943) | 90 (27,4) | | | | | | | | | |
| 95 (29,0) | | | | | | | | | 11° | 2,470 (1 120) | 43° | 2,350 (1 066) | 43° | 1,890 (857) | 54° | 1,890 (857) | 95 (29,0) | | | | | | | | | |
| 100 (30,5) | | | | | | | | | | | 40° | 2,150 (975) | 40° | 1,690 (767) | 52° | 1,710 (776) | 100 (30,5) | | | | | | | | | |
| 105 (32,0) | | | | | | | | | | | 36° | 1,960 (889) | 36° | 1,500 (680) | 49° | 1,540 (699) | 105 (32,0) | | | | | | | | | |
| 110 (33,5) | | | | | | | | | | | 32° | 1,760 (798) | 32° | 1,300 (590) | 46° | 1,390 (630) | 110 (33,5) | | | | | | | | | |
| 115 (35,1) | | | | | | | | | | | 27° | 1,500 (680) | 27° | 1,090 (494) | 43° | 1,250 (567) | 115 (35,1) | | | | | | | | | |
| 120 (36,6) | | | | | | | | | | | 21° | 1,270 (576) | 21° | 850 (386) | 40° | 1,120 (508) | 120 (36,6) | | | | | | | | | |
| 125 (38,0) | | | | | | | | | | | 13° | 1,040 (472) | 13° | 630 (286) | 37° | 1,000 (454) | 125 (38,0) | | | | | | | | | |
| Deduction* | | 590 (268) | 350 (159) | 270 (122) | 220 (100) | 180 (82) | | | | | | | | | | | | | | | | | | | | |
| Deduction** | | 890 (404) | 530 (240) | 400 (181) | 330 (150) | 280 (127) | | | | | | | | | | | | | | | | | | | | |

*for stowed fixed jib
**for stowed telescopic jib

Meets ANSI B30.5 Requirements - Do not operate crane or accessories within 10' (3.05 m) of live power lines.
NOTICE: This capacity chart is for reference only and must not be used for lifting purposes.

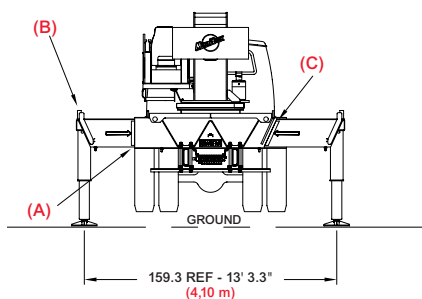
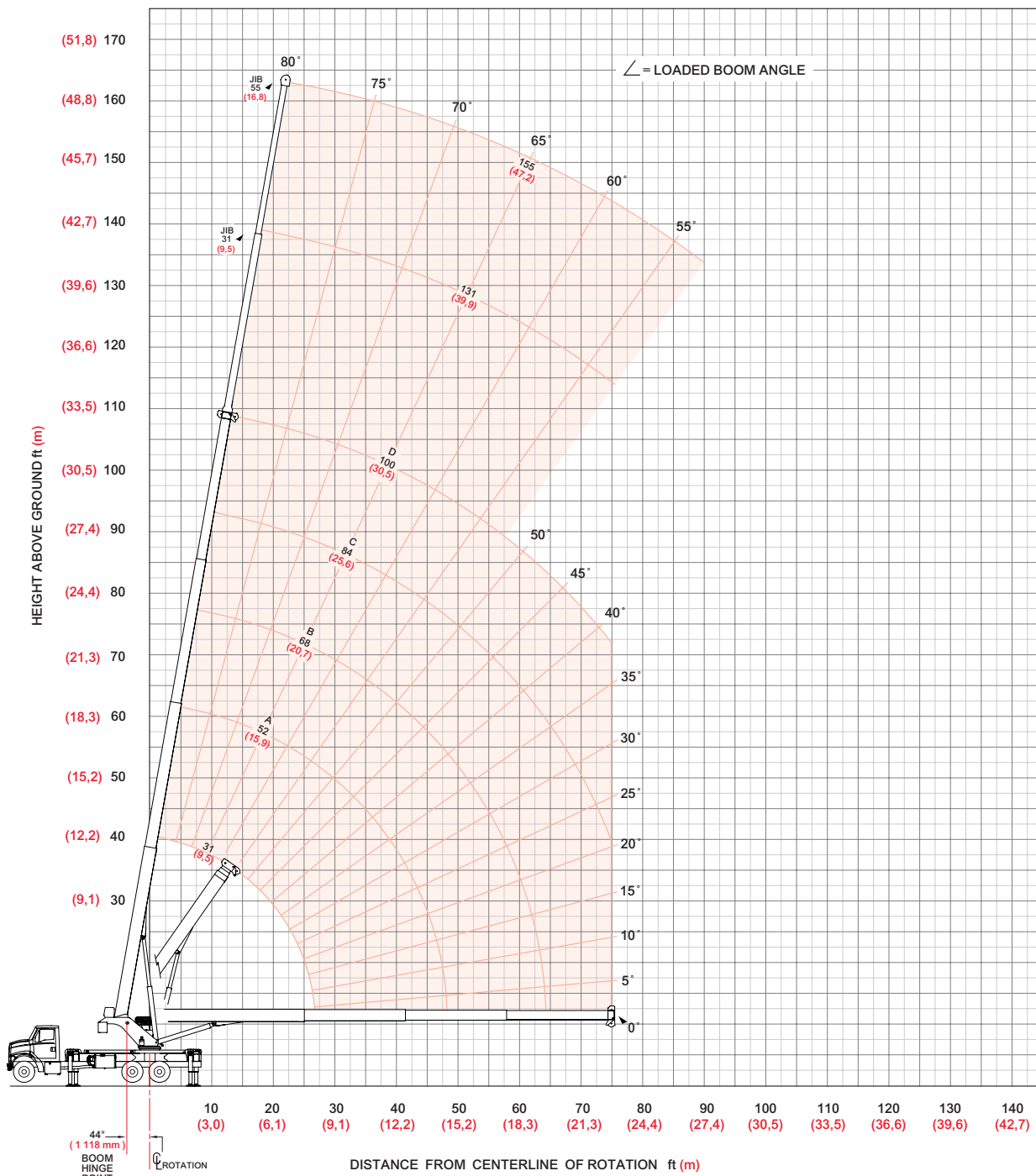


Manitowoc Boom Trucks

boom/jib range diagram

20

38100SHL Range Diagram - Intermediate



- (A) Mark indicates beam is fully extended
- (B) Pins must be engaged for this outrigger configuration
- (C) All outrigger beams must be extended to mark

NOTE: Lifting personnel with crane in this outrigger configuration is strictly prohibited. Use only fully extended outrigger configuration when lifting personnel.

Use this chart only when all outriggers are in the intermediate position.

model 38100SHL



boom/jib load charts

38100SHL Load Ratings Intermediate Outrigger Spread

38100SHL Jib Load Ratings

| 38100SHL Load Ratings Intermediate Outrigger Spread | | | | | | 38100SHL Jib Load Ratings | | | | | | | |
|---|-------------|--------------------|--------------|--------------------|---------------|---------------------------|-------------|--------------------|-------------|-------------------|----------------|------------------|-------------------------------|
| Boom/Jib ft (m) | A | | B | | C | | D | | Fixed Jib | | Telescopic Jib | | Boom/Jib ft (m) |
| | 31 (9,5) | 52 (15,9) | 68 (20,7) | 84 (25,6) | 100 (30,5) | 31 (9,5) | 31 (9,5) | 55 (16,8) | 31 (9,5) | 55 (16,8) | | | |
| Operating Radius ft (m) | ∠ | lb (kg) | ∠ | lb (kg) | ∠ | lb (kg) | ∠ | lb (kg) | ∠ | lb (kg) | ∠ | lb (kg) | Operating Radius ft (m) |
| 5 (1,5) | 74° | 76,000 (34 473) | | | | | | | | | | | 5 (1,5) |
| 8 (2,4) | 68° | 61,000 (27 669) | | | | | | | | | | | 8 (2,4) |
| 10 (3,1) | 64° | 52,860 (23 977) | 76° | 31,500 (14 288) | | | | | | | | | 10 (3,1) |
| 12 (3,7) | 60° | 46,980 (21 310) | 73° | 31,500 (14 288) | 78° | 31,500 (14 288) | | | | | | | 12 (3,7) |
| 15 (4,6) | 53° | 35,350 (16 034) | 70° | 31,500 (14 288) | 76° | 31,500 (14 288) | 79° | 23,700 (10 750) | | | | | 15 (4,6) |
| 20 (6,1) | 40° | 20,280 (9 199) | 64° | 21,130 (9 584) | 71° | 21,390 (9 702) | 76° | 20,600 (9 344) | 79° | 14,000 (6 350) | | | 20 (6,1) |
| 25 (7,6) | 20° | 13,360 (6 060) | 58° | 14,180 (6 432) | 67° | 14,410 (6 536) | 72° | 14,560 (6 604) | 76° | 13,500 (6 123) | | | 25 (7,6) |
| 30 (9,1) | | | 51° | 10,200 (4 627) | 62° | 10,420 (4 726) | 69° | 10,550 (4 785) | 73° | 10,640 (4 826) | 77° | 7,300 (3 311) | 30 (9,1) |
| 35 (10,7) | | | 43° | 7,620 (3 456) | 57° | 7,830 (3 552) | 65° | 7,960 (3 611) | 70° | 8,040 (3 647) | 75° | 7,100 (3 221) | 35 (10,7) |
| 40 (12,2) | | | 34° | 5,800 (2 631) | 52° | 6,020 (2 731) | 61° | 6,140 (2 785) | 67° | 6,220 (2 821) | 73° | 6,520 (2 957) | 40 (12,2) |
| 45 (13,7) | | | 22° | 4,450 (2 018) | 46° | 4,680 (2 123) | 57° | 4,790 (2 173) | 64° | 4,870 (2 209) | 71° | 5,150 (2 336) | 45 (13,7) |
| 50 (15,2) | | | | | 39° | 3,640 (1 651) | 52° | 3,760 (1 706) | 60° | 3,830 (1 737) | 69° | 4,100 (1 860) | 50 (15,2) |
| 55 (16,8) | | | | | 32° | 2,810 (1 275) | 48° | 2,940 (1 334) | 57° | 3,010 (1 365) | 66° | 3,270 (1 483) | 55 (16,8) |
| 60 (18,3) | | | | | 22° | 2,130 (966) | 43° | 2,270 (1 030) | 53° | 2,340 (1 061) | 64° | 2,590 (1 175) | 60 (18,3) |
| 65 (19,8) | | | | | | | 37° | 1,710 (776) | 49° | 1,780 (807) | 61° | 2,020 (916) | 65 (19,8) |
| 70 (21,3) | | | | | | | 31° | 1,240 (562) | 45° | 1,310 (594) | 59° | 1,550 (703) | 70 (21,3) |
| 75 (22,9) | | | | | | | 22° | 830 (376) | 40° | 910 (413) | 56° | 1,440 (517) | 75 (22,9) |
| 80 (24,4) | | | | | | | | | | | | | 80 (24,4) |
| 85 (25,9) | | | | | | | | | | | | | 85 (25,9) |
| 90 (27,4) | | | | | | | | | | | | | 90 (27,4) |
| Deduction* | | 590 (268) | 350 (159) | 270 (122) | 220 (100) | 180 (82) | | | | | | | |
| Deduction** | | 890 (404) | 530 (240) | 400 (181) | 330 (150) | 280 (127) | | | | | | | |

*for stowed fixed jib
**for stowed telescopic jib

model 38100SHL

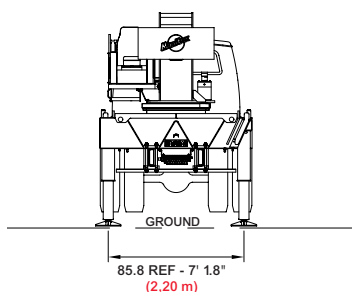
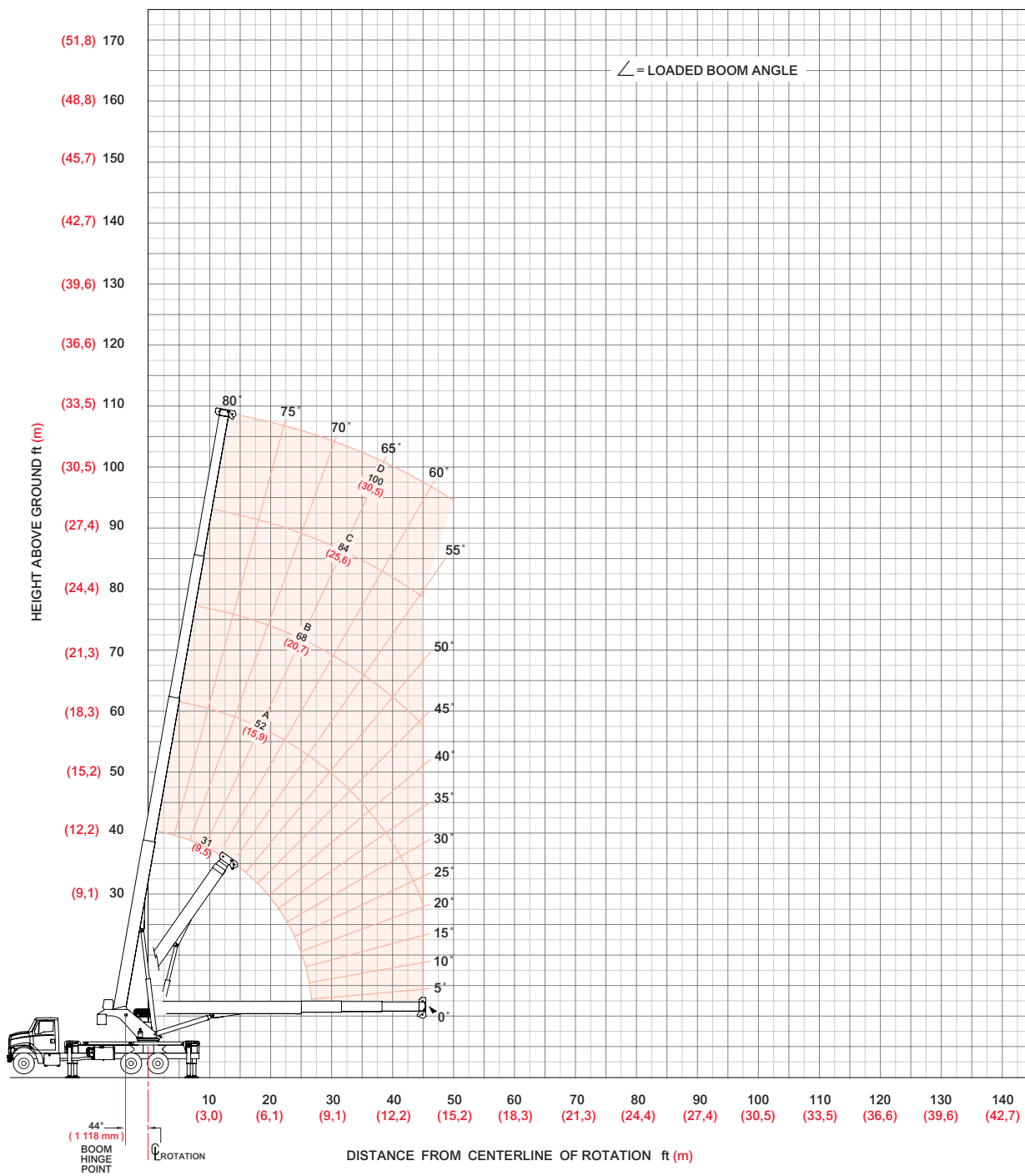
Meets ANSI B30.5 Requirements - Do not operate crane or accessories within 10' (3.05 m) of live power lines.
NOTICE: This capacity chart is for reference only and must not be used for lifting purposes.



boom/jib range diagram

22

38100SHL Range Diagram - Fully Retracted



NOTE: Lifting personnel with crane in this outrigger configuration is strictly prohibited. Use only fully extended outrigger configuration when lifting personnel.

Use this chart only when all outriggers are fully retracted.

model 38100SHL



boom/jib load charts

38100SHL Load Ratings Fully Retracted Outrigger Spread

| Boom/Jib ft (m) | A | | B | | C | | D | |
|-------------------------------|-------------|--------------------|--------------|--------------------|---------------|-------------------|--------------|-------------------|
| | 31 (9,5) | 52 (16,1) | 68 (20,7) | 84 (25,6) | 100 (30,5) | | | |
| Operating Radius ft (m) | ∠ | lb (kg) | ∠ | lb (kg) | ∠ | lb (kg) | ∠ | lb (kg) |
| 5 (1,5) | 74° | 76,000 (34 473) | | | | | | |
| 8 (2,4) | 68° | 44,230 (20 062) | | | | | | |
| 10 (3,1) | 64° | 28,970 (13 141) | 76° | 29,900 (13 562) | | | | |
| 12 (3,7) | 60° | 20,950 (9 503) | 73° | 21,770 (9 875) | 78° | 22,040 (9 997) | | |
| 15 (4,6) | 53° | 14,180 (6 432) | 70° | 14,910 (6 763) | 76° | 15,150 (6 872) | 79° | 15,290 (6 935) |
| 20 (6,1) | 40° | 8,360 (3 792) | 64° | 9,040 (4 100) | 71° | 9,250 (4 196) | 76° | 9,380 (4 255) |
| 25 (7,6) | 20° | 5,210 (2 362) | 58° | 5,910 (2 681) | 67° | 6,110 (2 771) | 72° | 6,220 (2 821) |
| 30 (9,1) | | | 51° | 3,960 (1 796) | 62° | 4,150 (1 882) | 69° | 4,260 (1 932) |
| 35 (10,7) | | | 43° | 2,620 (1 188) | 57° | 2,810 (1 275) | 65° | 2,920 (1 324) |
| 40 (12,1) | | | 34° | 1,640 (744) | 52° | 1,840 (835) | 61° | 1,950 (885) |
| 45 (13,7) | | | 22° | 890 (404) | 46° | 1,100 (499) | 57° | 1,210 (549) |
| 50 (15,2) | | | | | | | 60° | 690 (313) |
| Deduction* | | 590 (268) | 350 (159) | 270 (122) | 220 (100) | 220 (100) | 180 (82) | 180 (82) |
| Deduction** | | 890 (404) | 530 (240) | 400 (181) | 330 (150) | 330 (150) | 280 (127) | 280 (127) |

*for stowed fixed jib

**for stowed telescopic jib

Meets ANSI B30.5 Requirements - Do not operate crane or accessories within 10' (3.05 m) of live power lines.
 NOTICE: This capacity chart is for reference only and must not be used for lifting purposes.

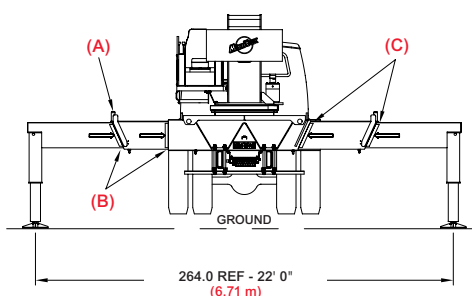
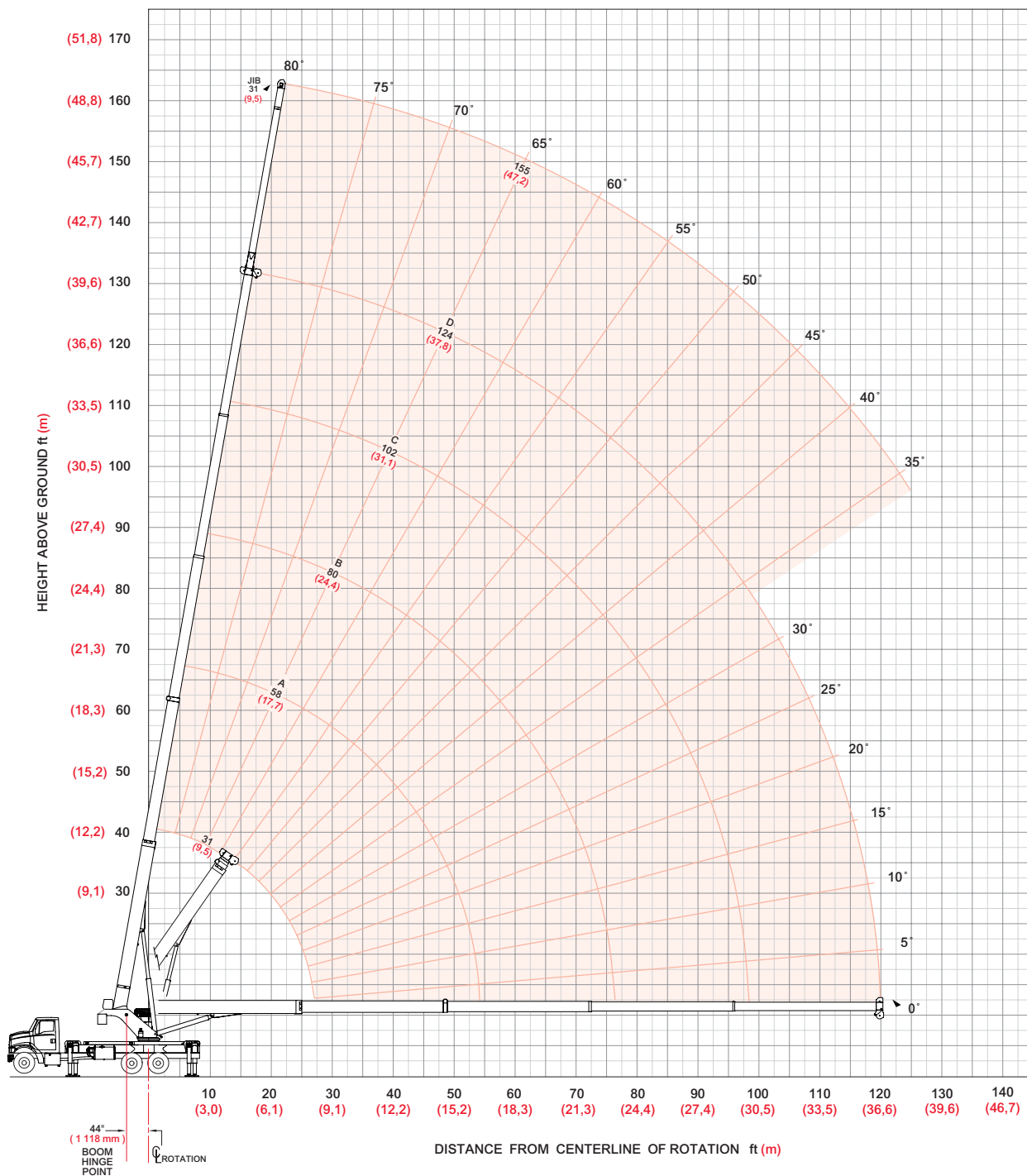
model 38100SHL



boom/jib range diagram

38124SHL Range Diagram - Fully Extended

24



- (A) Pins must be disengaged for this outrigger configuration
- (B) Mark indicates beam is fully extended
- (C) Outrigger beams must be extended to mark

NOTE: Use this chart only when all outriggers are fully extended.

model 38124SHL



boom/jib load charts

25

38124SHL Load Ratings Fully Extended Outrigger Spread

38124SHL Jib Load Ratings

| Boom/Jib ft (m) | A | | | | | B | | | | | C | | | | | D | | | | | Fixed Jib | | | | | | | | | | | | | |
|----------------------------|--------------|--------------------|--------------|--------------------|---------------|-------------------|--------------|-------------------|---------------|------------------|-------------|------------------|--------------|---------------|---------------|-------------|--------------|--------------|---------------|---------------|-------------|--------------|--------------|---------------|---------------|-------------|--------------|--------------|---------------|---------------|-------------|--------------|--------------|---------------|
| | 31 (9,5) | 58 (17,7) | 80 (24,4) | 102 (31,1) | 124 (37,8) | 31 (9,5) | 58 (17,7) | 80 (24,4) | 102 (31,1) | 124 (37,8) | 31 (9,5) | 58 (17,7) | 80 (24,4) | 102 (31,1) | 124 (37,8) | 31 (9,5) | 58 (17,7) | 80 (24,4) | 102 (31,1) | 124 (37,8) | 31 (9,5) | 58 (17,7) | 80 (24,4) | 102 (31,1) | 124 (37,8) | 31 (9,5) | 58 (17,7) | 80 (24,4) | 102 (31,1) | 124 (37,8) | 31 (9,5) | 58 (17,7) | 80 (24,4) | 102 (31,1) |
| Operating Radius ft (m) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 (1,5) | 75° | 76,000 (34 473) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 (2,4) | 69° | 60,500 (27 442) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 (3,1) | 64° | 52,550 (23 836) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 (3,7) | 60° | 46,600 (21 137) | 75° | 25,000 (11 340) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 (4,6) | 53° | 39,600 (17 962) | 73° | 25,000 (11 340) | 79° | 21,500 (9 752) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 20 (6,1) | 40° | 31,330 (14 211) | 67° | 25,000 (11 340) | 75° | 19,700 (8 936) | 80° | 14,500 (6 577) | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 25 (7,6) | 22° | 24,100 (10 932) | 62° | 22,840 (10 360) | 71° | 18,200 (8 255) | 77° | 13,500 (6 123) | 80° | 8,450 (3 833) | | | | | | | | | | | | | | | | | | | | | | | | |
| 30 (9,1) | | | 56° | 19,550 (8 868) | 67° | 16,250 (7 371) | 74° | 12,820 (5 815) | 78° | 8,150 (3 697) | 80° | 4,000 (1 814) | | | | | | | | | | | | | | | | | | | | | | |
| 35 (10,7) | | | 49° | 16,100 (7 303) | 63° | 14,540 (6 595) | 71° | 11,380 (5 162) | 75° | 7,800 (3 538) | 78° | 3,850 (1 746) | | | | | | | | | | | | | | | | | | | | | | |
| 40 (12,2) | | | 42° | 12,900 (5 851) | 59° | 13,070 (5 928) | 68° | 10,160 (4 608) | 72° | 7,280 (3 302) | 76° | 3,700 (1 678) | | | | | | | | | | | | | | | | | | | | | | |
| 45 (13,7) | | | 34° | 10,540 (4 781) | 54° | 10,800 (4 899) | 65° | 9,370 (4 250) | 70° | 6,780 (3 075) | 74° | 3,550 (1 610) | | | | | | | | | | | | | | | | | | | | | | |
| 50 (15,2) | | | 23° | 8,720 (3 955) | 50° | 9,000 (4 082) | 61° | 8,430 (3 824) | 67° | 6,160 (2 794) | 72° | 3,400 (1 542) | | | | | | | | | | | | | | | | | | | | | | |
| 55 (16,8) | | | | | 44° | 7,570 (3 434) | 58° | 7,620 (3 456) | 65° | 5,540 (2 513) | 70° | 3,250 (1 474) | | | | | | | | | | | | | | | | | | | | | | |
| 60 (18,3) | | | | | 39° | 6,400 (2 903) | 54° | 6,530 (2 962) | 62° | 5,000 (2 268) | 68° | 3,080 (1 397) | | | | | | | | | | | | | | | | | | | | | | |
| 65 (19,8) | | | | | 32° | 5,430 (2 463) | 50° | 5,570 (2 527) | 59° | 4,520 (2 050) | 66° | 2,910 (1 320) | | | | | | | | | | | | | | | | | | | | | | |
| 70 (21,3) | | | | | 24° | 4,610 (2 091) | 46° | 4,760 (2 159) | 56° | 4,090 (1 855) | 64° | 2,750 (1 247) | | | | | | | | | | | | | | | | | | | | | | |
| 75 (22,9) | | | | | 12° | 3,900 (1 769) | 42° | 4,060 (1 842) | 53° | 3,700 (1 678) | 62° | 2,600 (1 179) | | | | | | | | | | | | | | | | | | | | | | |
| 80 (24,4) | | | | | | | 37° | 3,470 (1 574) | 50° | 3,350 (1 520) | 60° | 2,460 (1 116) | | | | | | | | | | | | | | | | | | | | | | |
| 85 (25,9) | | | | | | | 32° | 2,940 (1 334) | 47° | 3,020 (1 370) | 58° | 2,320 (1 052) | | | | | | | | | | | | | | | | | | | | | | |
| 90 (27,4) | | | | | | | 25° | 2,480 (1 125) | 43° | 2,560 (1 161) | 55° | 2,170 (984) | | | | | | | | | | | | | | | | | | | | | | |
| 95 (29,0) | | | | | | | 17° | 2,060 (934) | 40° | 2,150 (975) | 53° | 1,930 (875) | | | | | | | | | | | | | | | | | | | | | | |
| 100 (30,5) | | | | | | | | | 35° | 1,790 (812) | 51° | 1,720 (780) | | | | | | | | | | | | | | | | | | | | | | |
| 105 (32,0) | | | | | | | | | 31° | 1,460 (662) | 48° | 1,530 (694) | | | | | | | | | | | | | | | | | | | | | | |
| 110 (33,5) | | | | | | | | | 25° | 1,160 (526) | 45° | 1,350 (612) | | | | | | | | | | | | | | | | | | | | | | |
| 115 (35,1) | | | | | | | | | 18° | 880 (399) | 43° | 1,200 (544) | | | | | | | | | | | | | | | | | | | | | | |
| 120 (36,6) | | | | | | | | | | | 40° | 1,020 (463) | | | | | | | | | | | | | | | | | | | | | | |
| 125 (38,0) | | | | | | | | | | | 36° | 800 (363) | | | | | | | | | | | | | | | | | | | | | | |
| Deduction* | 450 (204) | | 240 (109) | | 180 (82) | | 140 (64) | | 120 (54) | | | | | | | | | | | | | | | | | | | | | | | | | |

*for stowed fixed jib

Meets ANSI B30.5 Requirements - Do not operate crane or accessories within 10' (3.05 m) of live power lines.
 NOTICE: This capacity chart is for reference only and must not be used for lifting purposes.

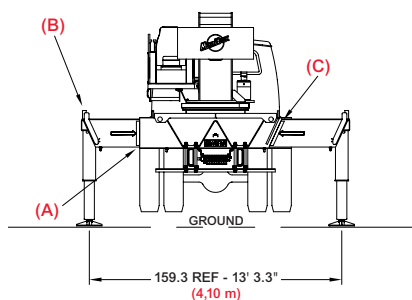
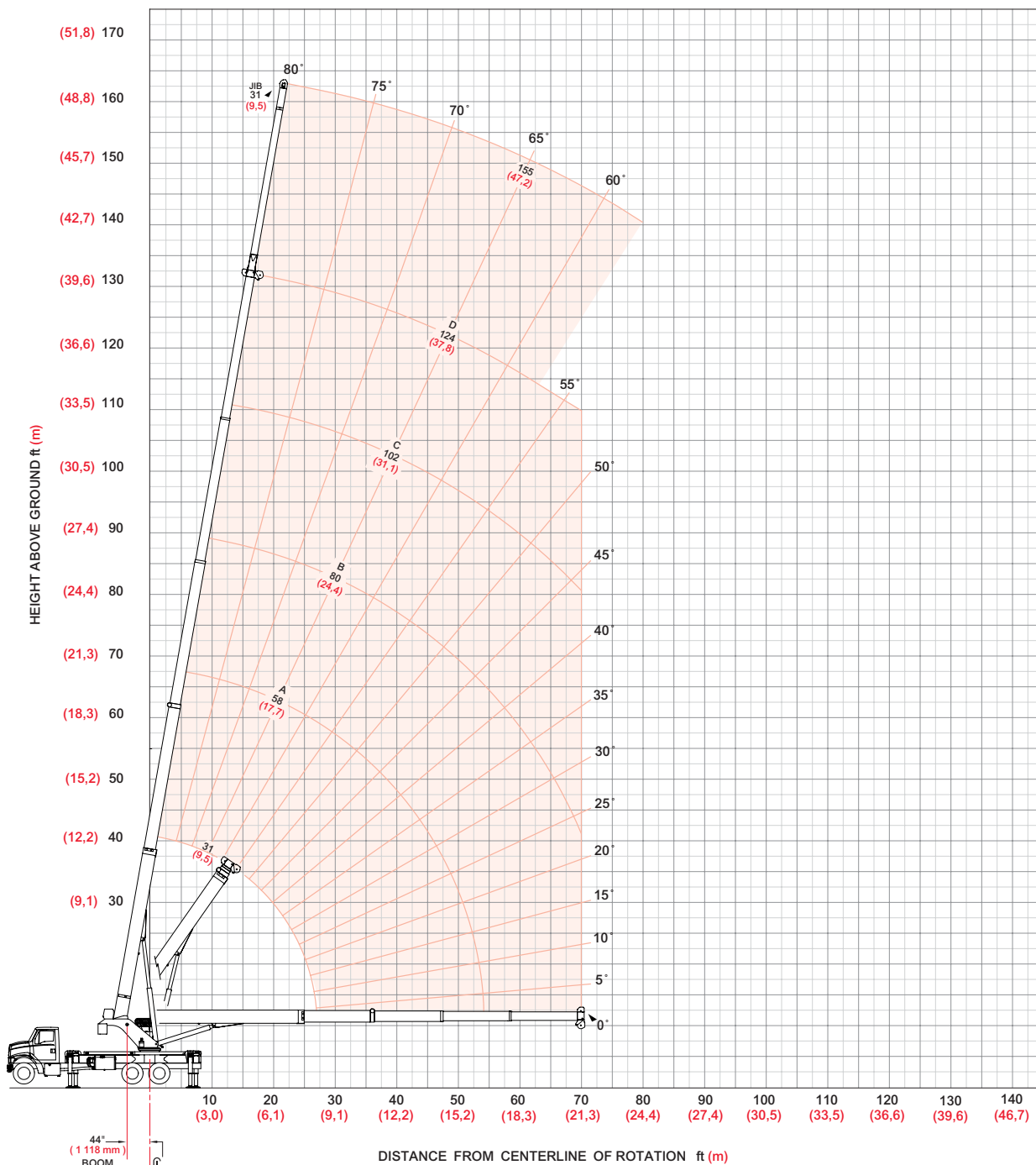


amodel 38124SHL

boom/jib range diagram

26

38124SHL Range Diagram - Intermediate



- (A) Mark indicates beam is fully extended
- (B) Pins must be engaged in this outrigger configuration
- (C) All outrigger beams must be extended to mark

NOTE: Lifting personnel with crane in this outrigger configuration is strictly prohibited. Use only fully extended outrigger configuration when lifting personnel.

Use this chart only when all outriggers are in the intermediate position.

model 38124SHL



boom/jib load charts

27

38124SHL Load Ratings Intermediate Outrigger Spread

38124SHL Jib Load Ratings

| | | A | | B | | C | | D | | Fixed Jib | |
|-------------------------------|-----|--------------------|------------------------|-----------------------|-----------------------|----------------------|---|------------|----------------------|-------------|-------------------------------|
| Boom/Jib ft (m) | | 31 (9,5) | 58 (17,7) | 80 (24,4) | 102 (31,1) | 124 (37,8) | | | | 31 (9,5) | Boom/Jib ft (m) |
| Operating Radius ft (m) | ∠ | lb (kg) | lb (kg) | lb (kg) | lb (kg) | lb (kg) | ∠ | lb (kg) | ∠ | lb (kg) | Operating Radius ft (m) |
| 5 (1,5) | 75° | 76,000 (34 473) | | | | | | | | | 5 (1,5) |
| 8 (2,4) | 69° | 60,500 (27 442) | | | | | | | | | 8 (2,4) |
| 10 (3,1) | 64° | 52,550 (23 836) | | | | | | | | | 10 (3,1) |
| 12 (3,7) | 60° | 46,600 (21 137) | 75° 25,000 (11 340) | | | | | | | | 12 (3,7) |
| 15 (4,6) | 53° | 36,000 (16 329) | 73° 25,000 (11 340) | 79° 21,500 (9 752) | | | | | | | 15 (4,6) |
| 20 (6,1) | 40° | 20,410 (9 258) | 67° 21,480 (9 743) | 75° 19,700 (8 936) | 80° 14,500 (6 577) | | | | | | 20 (6,1) |
| 25 (7,6) | 22° | 13,230 (6 001) | 62° 14,290 (6 482) | 71° 14,550 (6 600) | 77° 13,500 (6 123) | 80° 8,450 (3 833) | | | | | 25 (7,6) |
| 30 (9,1) | | | 56° 10,170 (4 613) | 67° 10,420 (4 726) | 74° 10,540 (4 781) | 78° 8,150 (3 697) | | | 80° 4,000 (1 814) | | 30 (9,1) |
| 35 (10,7) | | | 49° 7,490 (3 397) | 63° 7,740 (3 511) | 71° 7,860 (3 565) | 75° 7,800 (3 538) | | | 78° 3,850 (1 746) | | 35 (10,7) |
| 40 (12,2) | | | 42° 5,610 (2 545) | 59° 5,860 (2 658) | 68° 5,980 (2 712) | 72° 6,040 (2 740) | | | 76° 3,700 (1 678) | | 40 (12,2) |
| 45 (13,7) | | | 34° 4,220 (1 914) | 54° 4,470 (2 028) | 65° 4,580 (2 077) | 70° 4,650 (2 109) | | | 74° 3,550 (1 610) | | 45 (13,7) |
| 50 (15,2) | | | 23° 3,120 (1 415) | 50° 3,390 (1 538) | 61° 3,510 (1 592) | 67° 3,570 (1 619) | | | 72° 3,400 (1 542) | | 50 (15,2) |
| 55 (16,8) | | | | 44° 2,540 (1 152) | 58° 2,660 (1 207) | 65° 2,720 (1 234) | | | 70° 3,110 (1 411) | | 55 (16,8) |
| 60 (18,3) | | | | 39° 1,840 (835) | 54° 1,970 (894) | 62° 2,030 (921) | | | 68° 2,410 (1 093) | | 60 (18,3) |
| 65 (19,8) | | | | 32° 1,260 (572) | 50° 1,390 (630) | 59° 1,450 (658) | | | 66° 1,830 (830) | | 65 (19,8) |
| 70 (21,3) | | | | 24° 770 (349) | 46° 900 (408) | 56° 970 (440) | | | 64° 1,340 (608) | | 70 (21,3) |
| 75 (22,9) | | | | | | | | | 62° 920 (417) | | 75 (22,9) |
| 80 (24,3) | | | | | | | | | 60° 560 (254) | | 80 (24,3) |
| Deduction* | | 450 (204) | 240 (109) | 180 (82) | 140 (64) | 120 (54) | | | | | |

*for stowed fixed jib

model 38124SHL

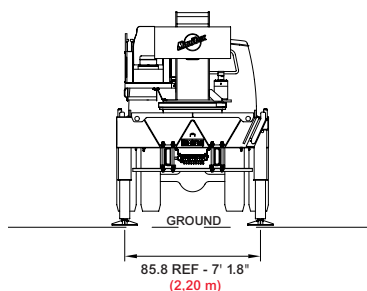
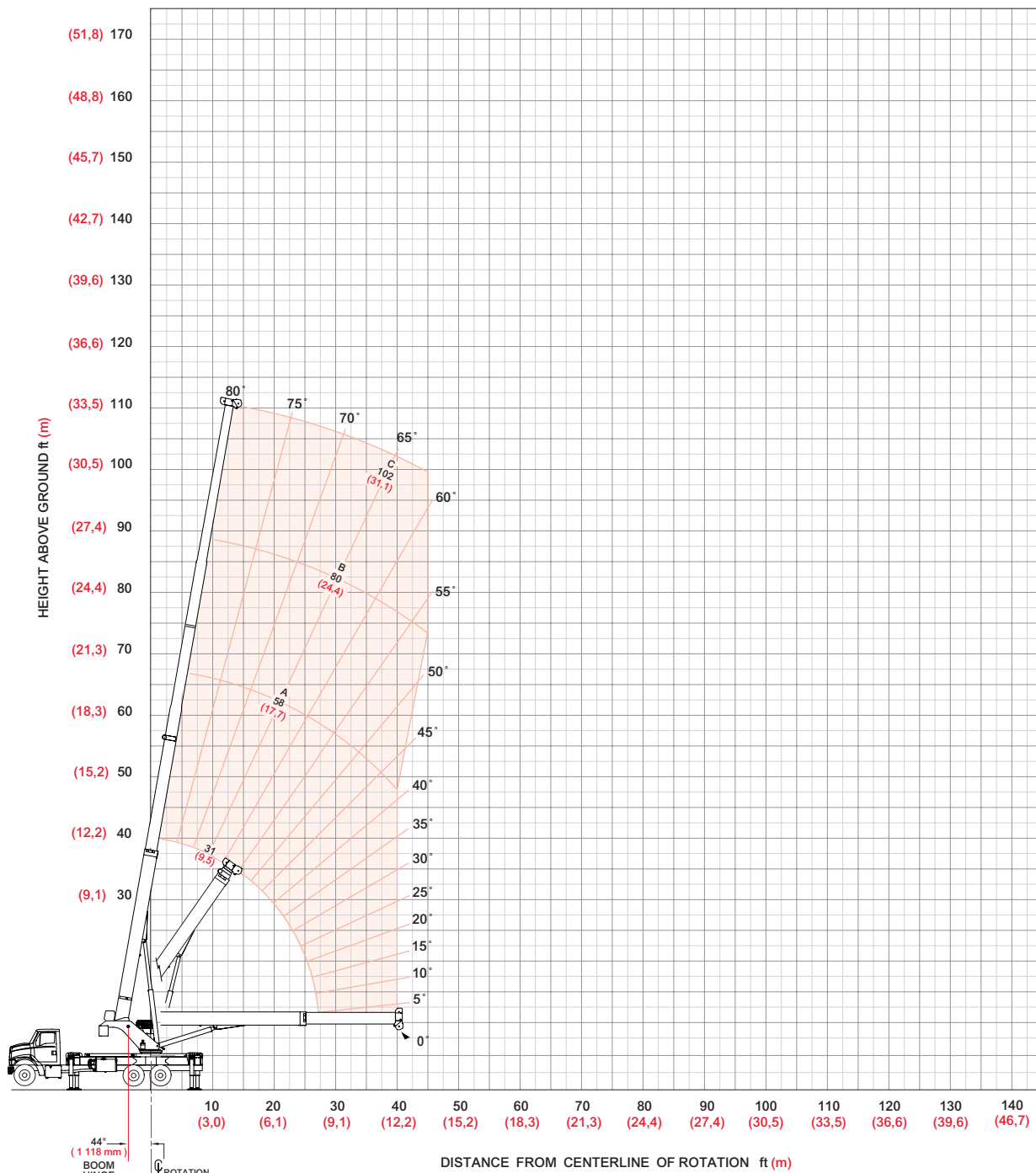
Meets ANSI B30.5 Requirements - Do not operate crane or accessories within 10' (3.05 m) of live power lines.
NOTICE: This capacity chart is for reference only and must not be used for lifting purposes.



boom/jib range diagram

28

38124SHL Range Diagram - Fully Retracted



NOTE: Lifting personnel with crane in this outrigger configuration is strictly prohibited. Use only fully extended outrigger configuration when lifting personnel.

Use this chart only when all outriggers are fully retracted.

model 38124SHL



boom/jib load charts

38124SHL Load Ratings Fully Retracted Outrigger Spread

| | | A | | B | | C | |
|-------------------------------|-----|--------------------|------------------------|-----------------------|----------------------|---------|--|
| Boom/Jib ft (m) | | 31 (9,5) | 58 (17,7) | 80 (24,4) | 102 (31,1) | | |
| Operating Radius ft (m) | ∠ | lb (kg) | | lb (kg) | | lb (kg) | |
| | | 5 (1,5) | 75° | 76,000 (34 473) | | | |
| 8 (2,4) | 69° | 45,710 (20 734) | | | | | |
| 10 (3,1) | 64° | 29,790 (13 513) | | | | | |
| 12 (3,7) | 60° | 21,410 (9 711) | 75° 22,420 (10 170) | | | | |
| 15 (4,6) | 53° | 14,330 (6 500) | 73° 15,250 (6 917) | 79° 15,500 (7 031) | | | |
| 20 (6,1) | 40° | 8,240 (3 738) | 67° 9,110 (4 132) | 75° 9,340 (4 237) | 80° 9,460 (4 291) | | |
| 25 (7,6) | 22° | 4,930 (2 236) | 62° 5,830 (2 644) | 71° 6,050 (2 744) | 77° 6,160 (2 794) | | |
| 30 (9,1) | | | 56° 3,790 (1 719) | 67° 4,000 (1 814) | 74° 4,110 (1 864) | | |
| 35 (10,7) | | | 49° 2,390 (1 084) | 63° 2,610 (1 184) | 71° 2,710 (1 229) | | |
| 40 (12,2) | | | 42° 1,370 (621) | 59° 1,590 (721) | 68° 1,690 (767) | | |
| 45 (13,7) | | | | 54° 820 (372) | 65° 920 (417) | | |
| Deduction* | | 450 (204) | 240 (109) | 180 (82) | 140 (64) | | |

*for stowed fixed jib

Meets ANSI B30.5 Requirements - Do not operate crane or accessories within 10' (3.05 m) of live power lines.
 NOTICE: This capacity chart is for reference only and must not be used for lifting purposes.

model 38124SHL



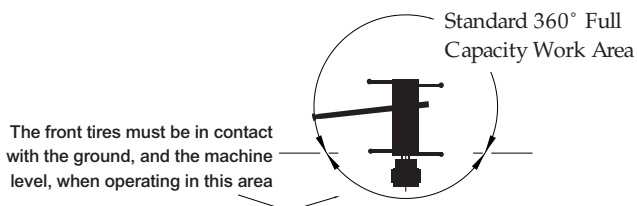
load chart data

30

Deductions

| | |
|--|------------------------------|
| Auxiliary Block | 50 lb (23 kg) |
| Overhaul Ball | See manufacturer's nameplate |
| 15 Ton Single Sheave Load Block | See manufacturer's nameplate |
| 40 Ton 4-Sheave Load Block | See manufacturer's nameplate |
| Hose Reel | 260 lb (118 kg) |
| Swing Around Jib (stowed) | See load rating chart |

Area of Operation



Allowable Line Pull

| 1 Part Line | 2 Part Line | 3 Part Line | 4 Part Line | 5 Part Line | 6 Part Line | 7 Part Line | 8 Part Line |
|-------------------------------|--------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|
| | | | | | | | |
| 9,080 lb (4 119 kg) | 18,160 lb (8 237 kg) | 27,240 lb (12 356 kg) | 36,320 lb (16 474 kg) | 45,400 lb (20 593 kg) | 54,480 lb (24 712 kg) | 63,560 lb (28 830 kg) | 72,640 lb (32 949 kg) |
| 9,500 lb (4 309 kg) | 19,000 lb (8 618 kg) | 28,500 lb (12 297 kg) | 38,000 lb (17 237 kg) | 47,500 lb (21 546 kg) | 57,000 lb (25 855 kg) | 66,500 lb (30 164 kg) | 76,000 lb (34 473 kg) |

5/8" 6 x 25 IWRC (3.5:1 SF) – 33,250 lb Min Breaking Strength
 5/8" Rotation Resistant (5.0:1 SF) – 45,400 lb Min Breaking Strength

Warning

Anti-two-block system must be in good operating condition before operating crane. Refer to the owner's manual. Keep at least three wraps of load line on the drum at all times.

models 38100S, 38124S, 38100SHL, 38124SHL



Manitowoc Boom Trucks

CraneCARESM

CraneCARE is Manitowoc Boom Trucks' complete service and support program. Incorporated into this program are service training, immediate parts availability, professional field service, and technical support and documentation. CraneCARE is available for every one of the thousands of cranes still operating all over the world.

That's dedication and devotion that you won't get anywhere else.

That's CraneCARE.

Service Training

A certified Manitowoc Boom Trucks service specialist works with you in your training facility or in the field to ensure that you know how to achieve maximum performance, dependability, and years from your cranes.

A reputable Manitowoc Boom Trucks Service technician comes to you to provide valuable training to all distributors on the crane's LMI system.

Parts Availability

Genuine Manitowoc Boom Trucks replacement parts may be obtained through your MBT distributor on a regular basis.

Hydraulic Test Kit with Case – Part No. 499792-9

- Small national O-ring kit
- Pressure gauges
- Fluke multi-meter
- Hydraulic flow meters
- Multi-load grease gun
- 6-drawer tool box
- 17-piece wrench set

Field Service

Factory-trained service experts are always ready to help maintain your crane's peak performance.

For a worldwide listing of dealer locations, please consult our website at: www.manitowocbt.com.

Technical Support

Manitowoc Boom Trucks' dealer network and factory personnel are available 24 hours a day, 7 days a week, 365 days a year to answer your technical questions and more.

For a worldwide listing of dealer locations, please consult our website at: www.manitowocbt.com.

Technical Documentation

Manitowoc Boom Trucks boast an extensive, easy-to-understand library of documentation.

A complete set of Operator's parts and service manuals are included with each crane.

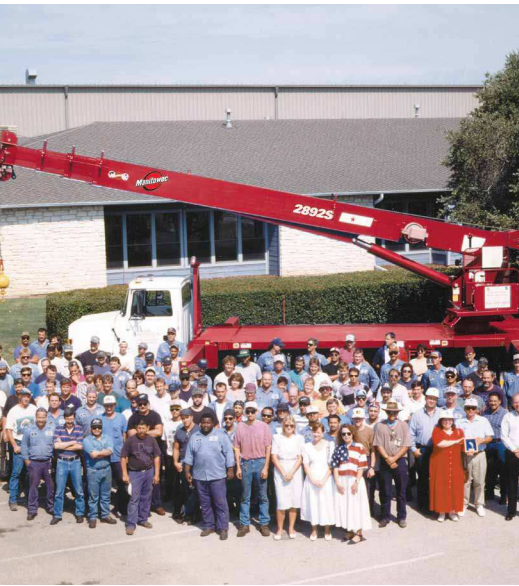
Additional copies are available through your Authorized Manitowoc Boom Trucks Distributor.



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models 38100S, 38124S, 38100SHL, 38124SHL





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Manitowoc Boom Trucks

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