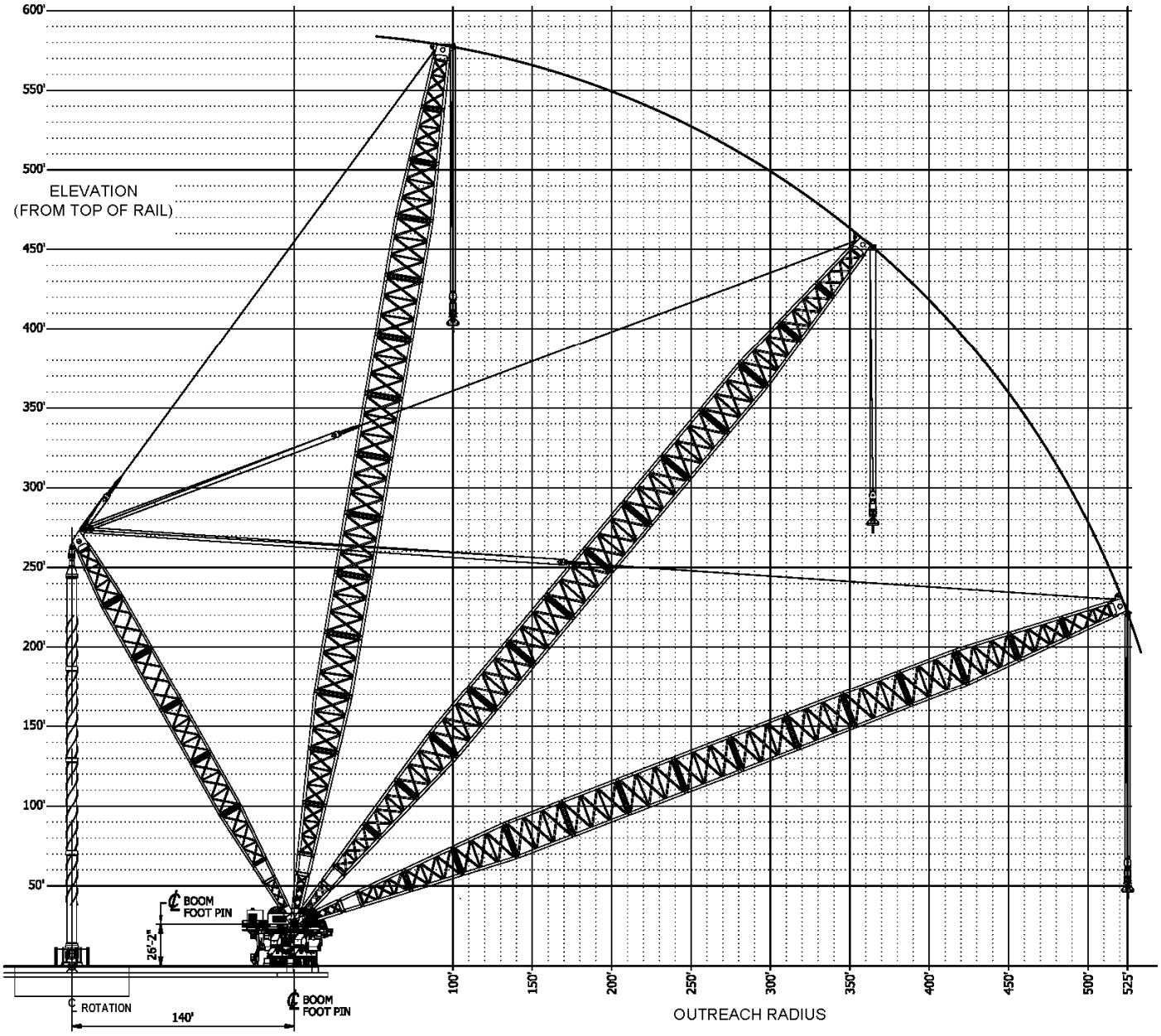
BIGGE 125D

STANDARD BOOM RANGE DIAGRAM

SERIAL NUMBER: Bigge125D-2009-BPC2285 & BPC2286



LOAD CHART GENERAL NOTES

1. The lifted load shall not exceed the Structure/Tipping Load Chart and Hoist Machinery Load Chart capacities. For the Structural/Tipping Load Chart comparison, the lifted load shall be defined as the suspended load (below the hook load), the load lines below the boom head, and load block. For the Hoist Machinery Load Chart comparison, the lifted load shall be defined as the suspended load and load block only.
2. These load charts apply only to machines with the indicated serial numbers.
3. Chart capacities are based on a maximum operating wind speed of 40 mph (3 second gust) measured at the boom or mast heads, whichever is highest. Capacities also include an allowance for horizontal wind on the suspended load equal to 2% of the load chart capacity. If the calculated wind load exceeds this value due to large surface areas, the manufacturer should be consulted prior to making the lift. Wind load calculations should be based on site specific conditions and applicable regional design codes such as ASCE 7 – *Minimum Design Loads for Buildings and Other Structures*.
4. The machine is rated for 100% capacity in an outside temperature range of 0°F to 120°F. Reduced capacities may be possible outside this range. Consult the manufacturer for more information.
5. The load chart does not account for reduction in capacity due to ice accumulation on the structure. The manufacturer should be consulted for operations during an icing event.
6. Linear interpolation between the published values is permitted. The interpolated value (LC) at a specific radius (R) is given by the equation LC = [(LC2-LC1)/(R2-R1)]x(R-R1)+LC1 where LC1 is the published capacity at radius R1 and LC2 is the published capacity at radius R2.

BIGGE 125D

STRUCTURAL/TIPPING LOAD CHART[1]
STANDARD BOOM CONFIGURATION
SERIAL NUMBER: Bigge125D-2009-BPC2285 & BPC2286

Operating Radius - ft (m)				Load Capacity Short Tons (Metric Tons)
Outreach[2]	Centerline[3]	Boom Angle (°)	Boom Sheave Height[4] - ft (m)	
100 (30.5)	240 (73.2)	80.3	577 (175.9)	4,000 (3,629)
105 (32.0)	245 (74.7)	79.8	576 (175.6)	3,877 (3,517)
110 (33.5)	250 (76.2)	79.3	575 (175.3)	3,754 (3,406)
115 (35.1)	255 (77.7)	78.8	574 (175.0)	3,632 (3,295)
120 (36.6)	260 (79.2)	78.2	573 (174.7)	3,509 (3,183)
125 (38.1)	265 (80.8)	77.7	572 (174.4)	3,386 (3,072)
130 (39.6)	270 (82.3)	77.2	571 (174.0)	3,263 (2,960)
135 (41.1)	275 (83.8)	76.7	570 (173.6)	3,140 (2,849)
140 (42.7)	280 (85.3)	76.1	568 (173.3)	3,018 (2,738)
145 (44.2)	285 (86.9)	75.6	567 (172.9)	2,895 (2,626)
150 (45.7)	290 (88.4)	75.1	566 (172.4)	2,772 (2,515)
155 (47.2)	295 (89.9)	74.5	564 (172.0)	2,712 (2,460)
160 (48.8)	300 (91.4)	74.0	563 (171.6)	2,652 (2,405)
165 (50.3)	305 (93.0)	73.5	561 (171.1)	2,591 (2,351)
170 (51.8)	310 (94.5)	72.9	560 (170.6)	2,531 (2,296)
175 (53.3)	315 (96.0)	72.4	558 (170.1)	2,471 (2,241)
180 (54.9)	320 (97.5)	71.9	556 (169.6)	2,411 (2,187)
185 (56.4)	325 (99.1)	71.3	555 (169.1)	2,350 (2,132)
190 (57.9)	330 (100.6)	70.8	553 (168.5)	2,290 (2,078)
195 (59.4)	335 (102.1)	70.2	551 (168.0)	2,230 (2,023)
200 (61.0)	340 (103.6)	69.7	549 (167.4)	2,170 (1,968)
205 (62.5)	345 (105.2)	69.1	547 (166.8)	2,133 (1,935)
210 (64.0)	350 (106.7)	68.6	545 (166.2)	2,097 (1,903)
215 (65.5)	355 (108.2)	68.0	543 (165.6)	2,061 (1,870)
220 (67.1)	360 (109.7)	67.5	541 (164.9)	2,025 (1,837)
225 (68.6)	365 (111.3)	66.9	539 (164.3)	1,989 (1,804)
230 (70.1)	370 (112.8)	66.4	537 (163.6)	1,953 (1,771)
235 (71.6)	375 (114.3)	65.8	535 (162.9)	1,916 (1,739)
240 (73.2)	380 (115.8)	65.2	532 (162.2)	1,880 (1,706)
245 (74.7)	385 (117.3)	64.7	530 (161.5)	1,844 (1,673)
250 (76.2)	390 (118.9)	64.1	527 (160.7)	1,808 (1,640)
255 (77.7)	395 (120.4)	63.5	525 (159.9)	1,778 (1,613)
260 (79.2)	400 (121.9)	62.9	522 (159.2)	1,748 (1,586)
265 (80.8)	405 (123.4)	62.4	520 (158.4)	1,718 (1,558)
270 (82.3)	410 (125.0)	61.8	517 (157.5)	1,688 (1,531)
275 (83.8)	415 (126.5)	61.2	514 (156.7)	1,658 (1,504)
280 (85.3)	420 (128.0)	60.6	511 (155.8)	1,627 (1,476)
285 (86.9)	425 (129.5)	60.0	508 (154.9)	1,597 (1,449)
290 (88.4)	430 (131.1)	59.4	505 (154.0)	1,567 (1,422)
295 (89.9)	435 (132.6)	58.8	502 (153.1)	1,537 (1,394)
300 (91.4)	440 (134.1)	58.2	499 (152.1)	1,507 (1,367)

Operating Radius - ft (m)		Boom Angle (°)	Boom Sheave Height[4] - ft (m)	Load Capacity Short Tons (Metric Tons)
Outreach[2]	Centerline[3]			
305 (93.0)	445 (135.6)	57.6	496 (151.1)	1,485 (1,348)
310 (94.5)	450 (137.2)	57.0	493 (150.1)	1,464 (1,328)
315 (96.0)	455 (138.7)	56.4	489 (149.1)	1,442 (1,308)
320 (97.5)	460 (140.2)	55.8	486 (148.1)	1,421 (1,289)
325 (99.1)	465 (141.7)	55.1	482 (147.0)	1,399 (1,269)
330 (100.6)	470 (143.3)	54.5	479 (145.9)	1,377 (1,250)
335 (102.1)	475 (144.8)	53.9	475 (144.8)	1,356 (1,230)
340 (103.6)	480 (146.3)	53.2	471 (143.6)	1,334 (1,210)
345 (105.2)	485 (147.8)	52.6	467 (142.4)	1,313 (1,191)
350 (106.7)	490 (149.4)	51.9	463 (141.2)	1,291 (1,171)
355 (108.2)	495 (150.9)	51.3	459 (140.0)	1,270 (1,152)
360 (109.7)	500 (152.4)	50.6	455 (138.7)	1,250 (1,134)
365 (111.3)	505 (153.9)	49.9	451 (137.4)	1,229 (1,115)
370 (112.8)	510 (155.4)	49.3	447 (136.1)	1,209 (1,096)
375 (114.3)	515 (157.0)	48.6	442 (134.8)	1,188 (1,078)
380 (115.8)	520 (158.5)	47.9	438 (133.4)	1,167 (1,059)
385 (117.3)	525 (160.0)	47.2	433 (131.9)	1,147 (1,040)
390 (118.9)	530 (161.5)	46.5	428 (130.5)	1,126 (1,022)
395 (120.4)	535 (163.1)	45.8	423 (129.0)	1,106 (1,003)
400 (121.9)	540 (164.6)	45.0	418 (127.4)	1,085 (984)
405 (123.4)	545 (166.1)	44.3	413 (125.9)	1,062 (963)
410 (125.0)	550 (167.6)	43.5	408 (124.2)	1,038 (942)
415 (126.5)	555 (169.2)	42.8	402 (122.6)	1,015 (920)
420 (128.0)	560 (170.7)	42.0	397 (120.9)	991 (899)
425 (129.5)	565 (172.2)	41.2	391 (119.1)	968 (878)
430 (131.1)	570 (173.7)	40.5	385 (117.3)	944 (856)
435 (132.6)	575 (175.3)	39.6	379 (115.5)	921 (835)
440 (134.1)	580 (176.8)	38.8	373 (113.6)	897 (814)
445 (135.6)	585 (178.3)	38.0	366 (111.6)	874 (792)
450 (137.2)	590 (179.8)	37.1	360 (109.6)	850 (771)
455 (138.7)	595 (181.4)	36.3	353 (107.5)	820 (744)
460 (140.2)	600 (182.9)	35.4	346 (105.3)	790 (717)
465 (141.7)	605 (184.4)	34.5	338 (103.1)	760 (689)
470 (143.3)	610 (185.9)	33.5	331 (100.8)	730 (662)
475 (144.8)	615 (187.5)	32.6	323 (98.4)	700 (635)
480 (146.3)	620 (189.0)	31.6	315 (95.9)	670 (608)
485 (147.8)	625 (190.5)	30.6	306 (93.3)	640 (581)
490 (149.4)	630 (192.0)	29.6	297 (90.6)	610 (553)
495 (150.9)	635 (193.5)	28.5	288 (87.8)	580 (526)
500 (152.4)	640 (195.1)	27.4	278 (84.8)	550 (499)
505 (153.9)	645 (196.6)	26.2	268 (81.7)	500 (454)
510 (155.4)	650 (198.1)	25.0	257 (78.5)	450 (408)
515 (157.0)	655 (199.6)	23.7	246 (75.0)	400 (363)
520 (158.5)	660 (201.2)	22.4	234 (71.3)	350 (318)
525 (160.0)	665 (202.7)	21.0	221 (67.4)	300 (272)

HOIST MACHINERY LOAD CHART[1]
STANDARD BOOM CONFIGURATION
SERIAL NUMBER: Bigge125D-2009-BPC2285 & BPC2286

# Load Line Hoists	Reeving Pattern (# of rope parts)	Capacity Short Tons (Metric Tons)	Block Speed fpm (m/min.)
2	14	1,000 (907)	14.28 (4.35)
		830 (753)	17.14 (5.22)
2	18	1,265 (1,148)	11.11 (3.39)
		1,050 (953)	13.33 (4.06)
2	22	1,520 (1,379)	9.09 (2.77)
		1,265 (1,148)	10.90 (3.32)
2	26	1,765 (1,601)	7.69 (2.34)
		1,470 (1,334)	9.23 (2.81)
2	30	2,005 (1,819)	6.66 (2.03)
		1,670 (1,515)	8.00 (2.44)
4	28	2,000 (1,814)	7.14 (2.18)
		1,660 (1,506)	8.57 (2.61)
4	36	2,530 (2,295)	5.55 (1.69)
		2,100 (1,905)	6.66 (2.03)
4	44	3,040 (2,758)	4.54 (1.38)
		2,530 (2,295)	5.45 (1.66)
4	52	3,535 (3,207)	3.84 (1.17)
		2,940 (2,667)	4.61 (1.41)
4	60	4,000 (3,629)	3.33 (1.01)
		3,340 (3,030)	4.00 (1.22)

Load Chart Footnotes:

[1]Capacities are based on a full (4) load line hoist system boom head sheave configuration of (32) running and (8) directional sheaves (all sheaves not necessarily utilized)

[2]Measured horizontally from boom foot pin to hook centerline

[3]Measured horizontally from center of rotation to hook centerline

[4]Measured vertically from top of rail to boom head sheave centerline

1 Short Ton = 2,000 lbs. 1 Metric Ton = 2,204.6 lbs.

SUMMARY LOAD CHART DATA:

Maximum Lifted Load:	4,000	Short Tons			
Maximum Load Moment (outreach radius):	126,054	mT-meters	at	275 (83.82)	ft (m)
Maximum Load Moment (centerline radius):	265,487	mT-meters	at	240 (73.15)	ft (m)