

Block Overhaul Weights



Caution: Using insufficient block weights for a combination may result in the hoist line overhauling the load block or inability to lower block.

Block weight and wire rope is considered part of lifted load. Using excessive block weight will reduce load below the hook.

Observe the following:

- Minimum weight required for block lowering is listed in Tables 1 and 2.
- Lengths shown are the total combined length. If a combined length is not shown, round up to the nearest total combined length.
- Refer to capacity chart for configurations that require additional weight suspended from boom or jib due to boom or jib overhaul.
Recommended block weight may not be sufficient for boom or jib stability.
- Not all reevings shown in Tables 1 and 2 may be utilized. Refer to Wire Rope Specifications for recommended maximum parts of load hoist line and drum spooling.
- Block overhaul weight may be affected by temperature, wear, rope manufacturer, rope cleanliness, and method of calculation.
Crane operator judgement must be used to compensate for additional factors.

Table 1

Tandem Drum Operation																		
Total Combined Length	m (ft)	30,0 (98.4)	36,0 (118.1)	42,0 (137.8)	48,0 (157.5)	54,0 (177.2)	60,0 (196.9)	66,0 (216.5)	72,0 (236.2)	78,0 (255.9)	84,0 (275.6)	90,0 (295.3)	96,0 (315.0)	102,0 (334.6)	108,0 (354.6)	114,0 (374.0)	120,0 (393.7)	126,0 (413.4)
Total Parts of Line		Weight of Hook Block kg (lb)																
4		670 (1,470)	780 (1,720)	890 (1,960)	1 000 (2,210)	1 110 (2,450)	1 220 (2,690)	1 340 (2,940)	1 450 (3,180)	1 560 (3,430)	1 670 (3,670)	1 780 (3,910)	1 890 (4,160)	2 000 (4,400)	2 110 (4,650)	2 220 (4,890)	2 330 (5,130)	2 440 (5,380)
6		960 (2,100)	1 120 (2,470)	1 290 (2,840)	1 460 (3,210)	1 630 (3,580)	1 800 (3,950)	1 960 (4,320)	2 130 (4,690)	2 300 (5,060)	2 470 (5,430)	2 630 (5,800)	2 800 (6,170)	2 970 (6,540)	3 140 (6,910)	3 300 (7,280)	3 470 (7,650)	3 640 (8,020)
8		1 250 (2,740)	1 470 (3,240)	1 700 (3,740)	1 930 (4,240)	2 150 (4,740)	2 380 (5,230)	2 600 (5,730)	2 830 (6,230)	3 050 (6,730)	3 280 (7,230)	3 510 (7,720)	3 730 (8,220)	3 960 (8,720)	4 180 (9,220)	4 410 (9,720)	4 640 (10,210)	4 860 (10,710)
10		1 540 (3,400)	1 830 (4,030)	2 120 (4,660)	2 400 (5,290)	2 690 (5,910)	2 970 (6,540)	3 260 (7,170)	3 540 (7,800)	3 830 (8,430)	4 110 (9,060)	4 440 (9,690)	4 680 (10,320)	4 970 (10,950)	5 250 (11,570)	5 540 (12,200)	5 820 (12,830)	6 110 (13,460)
12		1 850 (4,070)	2 190 (4,830)	2 540 (5,590)	2 890 (6,350)	3 230 (7,120)	3 580 (7,880)	3 920 (8,640)	4 270 (9,400)	4 610 (10,170)	4 960 (10,930)	5 310 (11,690)	5 650 (12,450)	6 000 (13,220)	6 340 (13,980)	6 690 (14,740)	7 040 (15,500)	7 380 (16,270)
14		2 160 (4,750)	2 560 (5 650)	2 970 (6,550)	3 380 (7,450)	3 790 (8,340)	4 200 (9,240)	4 600 (10,140)	5 010 (11,040)	5 420 (11,940)	5 830 (12,840)	6 230 (13,740)	6 640 (14,640)	7 050 (15,530)	7 460 (16,430)	7 860 (17,330)	8 270 (18,230)	8 680 (19,130)
16		2 470 (5,440)	2 940 (6,480)	3 410 (7,520)	3 880 (8,560)	4 360 (9,600)	4 830 (10,630)	5 300 (11,670)	5 770 (12,710)	6 240 (13,750)	6 710 (14,790)	7 180 (15,820)	7 650 (16,860)	8 120 (17,900)	8 590 (18,940)	9 060 (19,970)	9 530 (21,010)	10 000 (22,050)

Block Overhaul Weights



Table 2

Single Drum Operation																											
Total Combined Length	m (ft)	30,0 (98.4)	36,0 (118.1)	42,0 (137.8)	48,0 (157.5)	54,0 (177.2)	60,0 (196.9)	66,0 (216.5)	72,0 (236.2)	78,0 (255.9)	84,0 (275.6)	90,0 (295.3)	96,0 (315.0)	102,0 (334.6)	108,0 (354.6)	114,0 (374.0)	120,0 (393.7)	126,0 (413.4)	132,0 (433.1)	138,0 (452.8)	144,0 (472.4)	150,0 (492.1)	156,0 (511.8)	162,0 (531.5)	168,0 (551.2)	174,0 (570.9)	180,0 (590.6)
Total Parts of Line		Weight of Hook and Block kg (lb)																									
1		260 (570)	290 (630)	320 (700)	350 (760)	380 (820)	400 (880)	430 (950)	460 (1,010)	490 (1,070)	520 (1,140)	550 (1,200)	570 (1,260)	600 (1,320)	630 (1,390)	660 (1,450)	690 (1,510)	720 (1,580)	750 (1,640)	770 (1,700)	800 (1,760)	830 (1,830)	860 (1,890)	890 (1,950)	920 (2,020)	950 (2,080)	970 (2,140)
2		410 (890)	460 (1,020)	520 (1,140)	580 (1,270)	640 (1,400)	690 (1,530)	750 (1,650)	810 (1,780)	870 (1,910)	920 (2,030)	980 (2,160)	1 040 (2,290)	1 100 (2,410)	1 160 (2,540)	1 210 (2,670)	1 270 (2,800)	1 330 (2,920)	1 390 (3,050)	1 440 (3,180)	1 500 (3,300)	1 560 (3,430)	1 620 (3,560)	1 670 (3,680)	1 730 (3,810)	1 790 (3,940)	1 850 (4,070)
3		550 (1,220)	640 (1,410)	730 (1,600)	820 (1,790)	900 (1,990)	990 (2,180)	1 080 (2,370)	1 170 (2,560)	1 250 (2,760)	1 340 (2,950)	1 430 (3,140)	1 520 (3,330)	1 600 (3,530)	1 690 (3,720)	1 780 (3,910)	1 860 (4,100)	1 950 (4,300)	2 040 (4,490)	2 130 (4,680)	2 210 (4,870)	2 300 (5,070)	2 390 (5,260)	2,480 (5,450)	2 560 (5,640)	2 650 (5,840)	2 740 (6,030)
4		710 (1,550)	820 (1,810)	940 (2,070)	1 060 (2,330)	1 180 (2,590)	1 290 (2,850)	1 410 (3,110)	1 530 (3,370)	1 650 (3,630)	1 760 (3,880)	1 880 (4,140)	2 000 (4,400)	2 120 (4,660)	2 240 (4,920)	2 350 (5,180)	2 470 (5,440)	2 590 (5,700)	2 710 (5,960)	2 820 (6,220)	2 940 (6,480)	3 060 (6,740)	3 180 (7,000)	3 290 (7,250)	3 410 (7,510)	3 530 (7,770)	3 650 (8,030)
5		860 (1,890)	1 010 (2,220)	1 160 (2,550)	1 310 (2,870)	1 450 (3,200)	1 600 (3,530)	1 750 (3,860)	1 900 (4,180)	2 050 (4,510)	2 220 (4,840)	2 350 (5,170)	2 490 (5,490)	2 640 (5,820)	2 790 (6,150)	2 940 (6,480)	3 090 (6,800)	3240 (7,130)	3 390 (7,460)	3 530 (7,790)	3 680 (8,110)	3 830 (8,440)	3 980 (8,770)	4 130 (9,090)	4 280 (9,420)	4 430 (9,750)	4 570 (10,080)
6		1 020 (2,240)	1 200 (2,640)	1 380 (3,030)	1 560 (3,430)	1 740 (3,830)	1 920 (4,220)	2 100 (4,620)	2 280 (5,020)	2 460 (5,420)	2,640 (5,810)	2 820 (6,210)	3 000 (6,610)	3 180 (7,000)	3 360 (7,400)	3 540 (7,800)	3 720 (8,190)	3 900 (8,590)	4 080 (8,990)	4 260 (9,380)	4 440 (9,780)	4 620 (10,180)	4 800 (10,580)	4 980 (10,970)	5 160 (11,370)	5 340 (11,770)	5 520 (12,160)
7		1 180 (2,590)	1 390 (3,060)	1 600 (3,530)	1 820 (4,000)	2 030 (4,470)	2 240 (4,930)	2 450 (5,400)	2 670 (5,870)	2 880 (6,340)	3 090 (6,810)	3 300 (7,270)	3 510 (7,740)	3 730 (8,210)	3 940 (8,680)	4 150 (9,150)	4 360 (9,610)	4 580 (10,080)	4,790 (10,550)	5 000 (11,020)	5 210 (11,480)	5 420 (11,950)	5 640 (12,420)	5 850 (12,890)	6 060 (13,360)	6 270 (13,820)	6 490 (14,290)
8		1 340 (2,960)	1 590 (3,500)	1 830 (4,040)	2 080 (4,580)	2 320 (5,120)	2 570 (5,660)	2 810 (6,200)	3 060 (6,740)	3 300 (7,280)	3 550 (7,820)	3 790 (8,360)	4 040 (8,900)	4 280 (9,440)	4 530 (9,980)	4 780 (10,520)	5 020 (11,060)	5 270 (11,600)	5 510 (12,140)	5 760 (12,680)	6 000 (13,220)	6 250 (13,760)	6 490 (14,300)	6 740 (14,840)	6 980 (15,380)	7 230 (15,920)	7 470 (16,460)
9		1 510 (3,330)	1 790 (3,940)	2 070 (4,550)	2 350 (5,170)	2 630 (5,780)	2 900 (6,400)	3 180 (7,010)	3 460 (7,630)	3 740 (8,240)	4 020 (8,850)	4 300 (9,470)	4 580 (10,080)	4 850 (10,700)	5 130 (11,310)	5 410 (11,930)	5 690 (12,540)	5 970 (13,150)	6 250 (13,770)	6 530 (14,380)	6 800 (15,000)	7 080 (15,610)	7 360 (16,220)	7 640 (16,840)	7 920 (17,450)	8 200 (18,070)	8 480 (18,680)
10		1 680 (3,700)	2 000 (4,390)	2 310 (5,080)	2 620 (5,770)	2 930 (6,460)	3 250 (7,150)	3 560 (7,840)	3 870 (8,530)	4 180 (9,220)	4 500 (9,910)	4 810 (10,600)	5120 (11,290)	5 440 (11,980)	5 750 (12,670)	6 060 (13,360)	6 370 (14,050)	6 690 (14,740)	7 000 (15,430)	7 310 (16,120)	7 630 (16,810)	7 940 (17,500)	8 250 (18,180)	8 560 (18,870)	8 880 (19,560)	9 190 (20,250)	9 500 (20,940)
11		1 860 (4,090)	2 200 (4,850)	2 550 (5,620)	2 900 (6,390)	3 250 (7,150)	3 600 (7,920)	3 940 (8,690)	4 290 (9,450)	4 640 (10,220)	4 990 (10,990)	5 330 (11,750)	5 680 (12,520)	6 030 (13,290)	6 380 (14,050)	6 720 (14,820)	7 070 (15,590)	7 420 (16,350)	7 770 (17,120)	8 120 (17,890)	8 460 (18,650)	8 810 (19,420)	9 160 (20,190)	9 510 (20,950)	9 850 (21,720)	10 200 (22,480)	10 550 (23,250)
12		2 030 (4,480)	2 420 (5,330)	2 800 (6,170)	3 180 (7,020)	3 570 (7,860)	3 950 (8,710)	4 330 (9,550)	4 720 (10,400)	5 100 (11,240)	5 480 (12,090)	5 870 (12,930)	6 250 (13,780)	6 630 (14,620)	7 020 (15,470)	7 400 (16,310)	7 780 (17,160)	8 170 (18,000)	8 550 (18,850)	8 930 (19,690)	9 320 (20,540)	9 700 (21,380)	10 080 (22,230)	10 470 (23,070)	10 850 (23,920)	11 230 (24,760)	11 620 (25,610)
13		2 220 (4,880)	2 640 (5,810)	3 060 (6,730)	3 480 (7,660)	3 900 (8,580)	4 310 (9,510)	4 730 (10,430)	5 150 (11,360)	5 570 (12,280)	5 990 (13,210)	6 410 (14,130)	6 830 (15,060)	7 250 (15,980)	7 670 (16,910)	8 090 (17,830)	8 510 (18,760)	8 930 (19,680)	9 350 (20,610)	9 770 (21,530)	10 190 (22,460)	10 610 (23,380)	11 030 (24,310)	11 450 (25,230)	11 870 (26,160)	12 290 (27,080)	12 710 (28,010)
14		2 400 (5,290)	2 860 (6,300)	3 320 (7,300)	3 770 (8,310)	4 230 (9,320)	4 690 (10,320)	5 140 (11,330)	5 600 (12,340)	6 060 (13,340)	6 510 (14,350)	6 970 (15,360)	7 430 (16,370)	7 880 (17,370)	8 340 (18,380)	8 800 (19,390)	9 250 (20,390)	9 710 (21,400)	10 170 (22,410)	10 620 (23,410)	11 080 (24,420)	11 540 (25,430)	11 990 (26,430)	12 450 (27,440)	12 910 (28,450)	13 360 (29,460)	13 820 (30,460)
15		2 590 (5,710)	3 090 (6,800)	3 580 (7,890)	4 070 (8,980)	4 570 (10,070)	5 060 (11,160)	5 560 (12,250)	6 050 (13,340)	6 550 (14,430)	7 040 (15,520)	7 540 (16,610)	8 030 (17,700)	8 530 (18,790)	9 020 (19,880)	9 520 (20,970)	10 010 (22,060)	10 500 (23,150)	11 000 (24,240)	11 490 (25,330)	11 990 (26,420)	12 480 (27,510)	12 980 (28,600)	13 470 (29,690)	13 970 (30,780)	14 460 (31,870)	14 960 (32,960)
16		2 780 (6,130)	3 320 (7,310)	3 850 (8,480)	4 380 (9,660)	4 920 (10,830)	5 450 (12,010)	5 980 (13,180)	6 520 (14,360)	7 050 (15,540)	7 580 (16,710)	8 120 (17,890)	8 650 (19,060)	9 180 (20,240)	9 720 (21,410)	10 250 (22,590)	10 780 (23,760)	11 310 (24,940)	11 850 (26,110)	12 380 (27,290)	12 910 (28,470)	13 450 (29,640)	13 980 (30,820)	14 510 (31,990)	15 050 (33,170)	15 580 (34,340)	16 110 (35,520)
17		2 980 (6,570)	3 550 (7,830)	4 130 (9,090)	4 700 (10,350)	5 270 (11,620)	5 840 (12,880)	6 420 (14,140)	6 990 (15,400)	7 560 (16,660)	8 130 (17,930)	8 710 (19,190)	9 280 (20,450)	9 850 (21,710)	10 420 (22,980)	11 000 (24,240)	11 570 (25,500)	12 140 (26,760)	12 710 (28,030)	13 290 (29,290)	13 860 (30,550)	14 430 (31,810)	15 010 (33,070)	15 580 (34,340)	16 150 (35,600)	16 720 (36,860)	17 300 (38,120)
18		3 180 (7,010)	3 790 (8,360)	4 410 (9,710)	5 020 (11,060)	5 630 (12,410)	6 250 (13,760)	6 860 (15,110)	7 470 (16,470)	8 080 (17,820)	8 700 (19,170)	9 310 (20,520)	9 920 (21,870)	10 540 (23,220)	11 150 (24,570)	11,760 (25,920)	12 370 (27,270)	12 990 (28,620)	13 600 (29,970)	14 210 (31,330)	14 820 (32,680)	15 440 (34,030)	16 050 (35,380)	16 660 (36,370)	17,280 (38,080)	17 890 (39,430)	18 500 (40,780)