

AMEKILAN MUYEL YLIU LIFIITVG LKATVE KAIITVG－TAMMEKTEAY IIF

| $\begin{gathered} \text { 敦 } \\ \hline \end{gathered}$ | $\frac{19}{4}$ |  | 部霽 | $\frac{8}{2} \frac{8}{2} \frac{2}{2}$ |
| :---: | :---: | :---: | :---: | :---: |
| $70^{\prime}$ | $\begin{aligned} & 16 \\ & 20 \\ & 25 \\ & 30 \\ & 35 \\ & 40 \\ & 50 \\ & 60 \\ & 70 \\ & \hline \end{aligned}$ | $\begin{aligned} & 63 \\ & 80 \\ & 75 \\ & 71 \\ & 67 \\ & 62 \\ & 52 \\ & 41 \\ & 26 \end{aligned}$ | $\begin{array}{\|c\|} \hline 272,010 \\ 189,820 \\ 137,030 \\ 106,690 \\ 86,980 \\ 73,140 \\ 54,970 \\ 43,560 \\ 35,700^{*} \\ \hline \end{array}$ | $\begin{aligned} & 300,000 \\ & 231,070 \\ & 162,500 \\ & 124,730 \\ & 100,810 \\ & 84,290 \\ & 62,940 \\ & 49,730 \\ & 40,720 \end{aligned}$ |
| $80^{\prime}$ | 17 20 25 30 35 40 50 60 70 80 | $\begin{aligned} & 83 \\ & 81 \\ & 77 \\ & 74 \\ & 70 \\ & 66 \\ & 58 \\ & 49 \\ & 38 \\ & 24 \end{aligned}$ | 245,390 189,570 136,750 106,390 86,670 72,830 54,660 43,260 35,420 $29,670^{\circ}$ | $\begin{array}{\|c\|} \hline 300,000 \\ 230,890 \\ 162,270 \\ 124,470 \\ 100,530 \\ 84,000 \\ 62,650 \\ 49,440 \\ 40,450 \\ 33,910^{*} \end{array}$ |
| $90^{\prime}$ | $\begin{aligned} & 18 \\ & 20 \\ & 25 \\ & 30 \\ & 35 \\ & 40 \\ & 50 \\ & 60 \\ & 70 \\ & 80 \\ & 90 \end{aligned}$ | $\begin{aligned} & 83 \\ & 82 \\ & 79 \\ & 75 \\ & 72 \\ & 69 \\ & 62 \\ & 54 \\ & 46 \\ & 36 \\ & 22 \end{aligned}$ | 223,330 159,320 136,460 106,080 86,350 72,500 54,330 42,920 35,090 29,360 $24,980 *$ | $\begin{aligned} & 276,920 \\ & 230,690 \\ & 162,010 \\ & 124,180 \\ & 100,230 \\ & 63,690 \\ & 62,330 \\ & 49,120 \\ & 40,130 \\ & 33,610 \\ & 28,190 * \end{aligned}$ |
| $100^{\prime}$ | 19 20 25 30 35 40 50 60 70 80 90 100 | $\begin{aligned} & 83 \\ & 83 \\ & 80 \\ & 77 \\ & 74 \\ & 71 \\ & 65 \\ & 58 \\ & 51 \\ & 43 \\ & 34 \\ & 21 \\ & \hline \end{aligned}$ | 204,720 189,070 136,160 105,760 86,020 72,160 53,980 42,570 34,740 29,020 24,650 $21,190 *$ | 251,570 230,500 161,750 123,890 99,910 83,360 61,990 48,780 39,800 33,280 28,330 $23,460^{\circ}$ |
| $110^{\prime}$ | 21 25 30 35 40 50 60 70 80 90 100 110 | $\begin{aligned} & 83 \\ & 61 \\ & 78 \\ & 75 \\ & 73 \\ & 67 \\ & 61 \\ & 55 \\ & 49 \\ & 41 \\ & 32 \\ & 20 \\ & \hline \end{aligned}$ | 175,300 135,860 105,430 85,670 71,800 53,620 42,210 34,380 28,660 24,300 20,360 $18,050 *$ | 212,380 <br> 161,490 <br> 123,580 <br> 99,590 <br> 83,030 <br> 61,650 <br> 48,430 <br> 39,440 <br> 32,930 <br> 27,980 <br> 24,090 <br> $19,550 *$ |
| $120^{\prime}$ | 22 25 30 35 40 50 60 70 80 90 100 110 120 | $\begin{aligned} & 83 \\ & 81 \\ & 79 \\ & 77 \\ & 74 \\ & 69 \\ & 64 \\ & 59 \\ & 53 \\ & 46 \\ & 39 \\ & 31 \\ & 19 \end{aligned}$ | 163,250 135,550 105,100 85,330 71,450 53,250 41,840 34,000 28,290 23,930 20,500 17,700 $15,390 *$ | 196,740 161,220 123,290 99,270 82,690 61,290 48,070 39,080 32,560 27,620 23,740 20,600 $17,990 *$ |
| $130^{\prime}$ | 23 25 30 35 40 50 60 70 50 90 100 110 120 130 | 19 82 80 78 75 71 66 61 56 50 44 38 30 18 | 152,600 135,250 104,770 34,980 71,090 52,880 41,460 33,630 27,910 23,560 20,120 17,340 15,030 $13,080 *$ | 183,100 160,950 122,930 98,940 82,350 60,930 47,700 38,700 32,190 27,250 23,370 20,230 $17,640 *$ $15,460^{*}$ |


| $8$ | $y_{6}^{5}$ |  | 轉曹 | $\frac{i t}{2}+\frac{8}{2}$ |
| :---: | :---: | :---: | :---: | :---: |
| $140^{\prime *}$ | $\begin{aligned} & 24 \\ & 25 \\ & 30 \\ & 35 \\ & 40 \\ & 50 \\ & 60 \\ & 70 \\ & 80 \\ & 90 \\ & 100 \\ & 110 \\ & 120 \\ & 130 \\ & 140 \end{aligned}$ | $\begin{aligned} & 83 \\ & 83 \\ & 81 \\ & 79 \\ & 76 \\ & 72 \\ & 68 \\ & 63 \\ & 59 \\ & 54 \\ & 49 \\ & 43 \\ & 36 \\ & 28 \\ & 18 \end{aligned}$ | $\begin{array}{r} 143,130 \\ 134,940 \\ 104,430 \\ 64,630 \\ 70,730 \\ 52,500 \\ 41,060 \\ 33,240 \\ 27,530 \\ 23,170 \\ 19,740 \\ 16,960 \\ 14,660 \\ 12,720 \\ 11,050 \end{array}$ | $\begin{array}{r} 171,080 \\ 160,680 \\ 122,680 \\ 98,610 \\ 82,000 \\ 60,570 \\ 47,330 \\ 38,330 \\ 31,810 \\ 26,870 \\ 22,990 \\ 19,860 \\ 17,270 \\ 15,100 \\ 13,240 \end{array}$ |
| $150{ }^{\circ}$ | $\begin{aligned} & 26 \\ & 30 \\ & 35 \\ & 40 \\ & 50 \\ & 60 \\ & 70 \\ & 80 \\ & 90 \\ & 100 \\ & 110 \\ & 120 \\ & 130 \\ & 140 \\ & 150 \end{aligned}$ | $\begin{aligned} & 83 \\ & 81 \\ & 79 \\ & 77 \\ & 73 \\ & 69 \\ & 65 \\ & 61 \\ & 57 \\ & 52 \\ & 47 \\ & 41 \\ & 35 \\ & 27 \\ & 17 \end{aligned}$ | $\begin{array}{r} 127,270 \\ 104,100 \\ 84,270 \\ 70,360 \\ 52,120 \\ 40,690 \\ 32,850 \\ 27,130 \\ 22,780 \\ 19,350 \\ 16,570 \\ 14,270 \\ 12,340 \\ 10,690 \\ 9,240 \end{array}$ | $\begin{array}{r} 151,130 \\ 122,370 \\ 98,280 \\ 81,660 \\ 60,200 \\ 46,950 \\ 37,950 \\ 31,430 \\ 26,480 \\ 22,600 \\ 19,470 \\ 16,890 \\ 14,730 \\ 12,880 \\ 11,270 \end{array}$ |
| $160^{\prime *}$ | 27 30 35 40 50 60 70 80 90 100 110 120 130 140 130 160 | $\begin{aligned} & 83 \\ & 82 \\ & 80 \\ & 78 \\ & 75 \\ & 71 \\ & 67 \\ & 63 \\ & 59 \\ & 55 \\ & 50 \\ & 45 \\ & 40 \\ & 34 \\ & 27 \\ & 17 \end{aligned}$ | $\begin{array}{r} 120,310 \\ 103,760 \\ 83,920 \\ 70,000 \\ 51,740 \\ 40,300 \\ 32,460 \\ 26,740 \\ 22,380 \\ 18,950 \\ 16,170 \\ 13,8180 \\ 11,950 \\ 10,300 \\ 8,870 \\ 7,610 \end{array}$ | $\begin{array}{r} 142,530 \\ 122,060 \\ 97,950 \\ 81,310 \\ 59,840 \\ 46,580 \\ 37,570 \\ 31,040 \\ 26,090 \\ 22,210 \\ 19,080 \\ 16,500 \\ 14,340 \\ 12,500 \\ 10,900 \\ 9,500 \end{array}$ |
| 170＇＊ | 28 30 35 40 50 60 70 80 90 100 110 120 130 140 150 160 170 | $\begin{aligned} & 83 \\ & 82 \\ & 81 \\ & 79 \\ & 75 \\ & 72 \\ & 68 \\ & 65 \\ & 61 \\ & 57 \\ & 53 \\ & 48 \\ & 44 \\ & 39 \\ & 33 \\ & 26 \\ & 16 \end{aligned}$ | 113,960 103,430 83,570 69,630 51,360 39,910 32,060 26,340 21,980 18,550 15,770 13,480 11,550 99,910 8,490 7,240 6,130 | $\begin{array}{r} 134,740 \\ 121,750 \\ 97,620 \\ 30,960 \\ 59,470 \\ 46,200 \\ 37,180 \\ 30,650 \\ 25,700 \\ 21,820 \\ 18,690 \\ 16,110 \\ 13,950 \\ 12,110 \\ 10,520 \\ 9,130 \\ 7,590 \end{array}$ |
| $180^{\prime *}$ | 29 30 35 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 | 83 83 81 80 76 73 70 66 63 59 55 51 47 42 37 32 25 16 | 108,130 103,090 83,210 69,260 50,980 39,520 31,660 25,940 21,580 18,150 15,370 13,080 11,150 9,510 8,090 6,850 5,750 4,760 | $\begin{array}{r} 127,640 \\ 121,440 \\ 97,280 \\ 80,610 \\ 59,100 \\ 45,820 \\ 36,790 \\ 30,260 \\ 25,300 \\ 21,580 \\ 18,150 \\ 15,370 \\ 13,080 \\ 11,150 \\ 9,510 \\ 8,090 \\ 6,650 \\ 5,750 \end{array}$ |


| 4 4 | $\frac{8}{4}$ | 輷婁等 |  |  |
| :---: | :---: | :---: | :---: | :---: |
| $190^{\prime *}$ | 30 | 83 | 102，750 | 121，130 |
|  | 35 | 82 | 82，860 | 96，950 |
|  | 40 | 80 | 68，900 | 80，260 |
|  | 50 | 77 | 50，600 | 58，730 |
|  | 80 | 74 | 39，130 | 45，430 |
|  | 70 | 71 | 31，270 | 36，400 |
|  | 30 | 68 | 25，540 | 29，860 |
|  | 90 | 64 | 21，170 | 24，910 |
|  | 100 | 61 | 17，740 | 21，020 |
|  | 110 | 57 | 14，960 | 17，890 |
|  | 120 | 54 | 12，670 | 15，310 |
|  | 130 | 50 | 10，750 | 13，150 |
|  | 140 | 46 | 9.100 | 11，310 |
|  | 150 | 41 | 7，690 | 9.730 |
|  | 160 | 36 | 6，450 | 3，340 |
|  | 170 | 31 | 5，350 | 7，120 |
|  | 180 | 24 | 4，380 | 6，040 |
|  | 190 | 15 | 3，500 | 5.060 |
| $200{ }^{\prime}$ | 32 | 83 | 93，510 | 109，940 |
|  | 35 | 82 | 82，500 | 96，620 |
|  | 40 | 81 | 68，530 | 79.910 |
|  | 50 | 78 | 50,210 | 58，360 |
|  | 60 | 75 | 38.730 | 45，050 |
|  | 70 | 72 | 30，870 | 36，010 |
|  | 50 | 69 | 25，130 | 29，460 |
|  | 90 | 66 | 20，770 | 24，510 |
|  | 100 | 62 | 17，330 | 20，620 |
|  | 110 | 59 | 14，550 | 17，490 |
|  | 120 | 56 | 12，260 | 14．910 |
|  | 130 | 52 | 10，340 | 12，750 |
|  | 140 | 48 | 8，700 | 10，910 |
|  | 150 | 44 | 7，280 | 9,320 |
|  | 160 | 40 | 6，040 | 7.940 |
|  | 170 | 35 | 4，950 | 0,730 |
|  | 180 | 30 | 3，980 | 5，656 |
|  | 190 | 24 | 3，110 | 4，680 |
|  | 200 | 15 | 2，310 | 3，790 |
| $210^{\prime *}$ | 33 | 83 | 89，220 | 104，820 |
|  | 35 | 82 | 82，150 | 96，280 |
|  | 40 | 81 | 68，160 | 79，560 |
|  | 50 | 78 | 49，830 | 57，990 |
|  | 60 | 75 | 38，340 | 44，660 |
|  | 70 | 73 | 30，470 | 35.620 |
|  | 50 | 70 | 24，730 | 29，070 |
|  | 90 | 87 | 20，360 | 24，100 |
|  | 100 | 64 | 16.920 | 20，210 |
|  | 110 | 61 | 14，140 | 17，080 |
|  | 120 | 58 | 11，850 | 14，500 |
|  | 130 | 54 | 9.930 | 12，340 |
|  | 140 | 51 | 8，290 | 10，500 |
|  | 150 | 47 | 6，370 | 8，920 |
|  | 160 | 43 | 5，630 | 7，540 |
|  | 170 | 39 | 4，550 | 0.320 |
|  | 180 | 35 | 3，590 | 5，240 |
|  | 190 | 29 | 2，710 | 4，280 |
|  | 200 | 23 | 1.930 | 3，400 |
|  | 210 | 14 | 1，200 | 2，600 |
| $220{ }^{\circ}$ | 34 | 83 | 85，200 | 100，060 |
|  | 35 | 83 | 81，790 | 95，950 |
|  | 40 | 81 | 67，790 | 79，210 |
|  | 50 | 79 | 49，440 | 57，620 |
|  | 60 | 76 | 37，950 | 44，280 |
|  | 70 | 73 | 30，060 | 35，220 |
|  | 50 | 71 | 24，320 | 28，670 |
|  | 90 | 88 | 19，950 | 23，700 |
|  | 100 | 65 | 16，510 | 19，800 |
|  | 110 | 62 | 13，730 | 16，670 |
|  | 120 | 59 | 11，440 | 14，090 |
|  | 130 | 56 | 9.510 | 11，930 |
|  | 140 | 53 | 7，870 | 10，090 |
|  | 150 | 50 | 6，460 | 8，500 |
|  | 160 | 46 | 5，220 | 7，130 |
|  | 170 | 42 | 4，130 | 5，920 |
|  | 180 | 38 | 3，170 | 4，840 |
|  | 190 | 34 | 2，300 | 3，880 |
|  | 200 | 29 | 1，520 | 3，000 |
|  | 210 | 23 | － | 2，220 |
|  | 220 | 14 | － | 1，200 |

Pave 2

| \％ 8 | $\frac{3}{4}$ |  |  |  |  | 彦 | 輷娄 |  | 新童娄 | 85 | $\frac{3}{4}$ |  |  | 言童娄 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $230^{\prime *}$ | 35 | 83 | 81，440 | 95，610 | $230{ }^{\prime}$＊ | 160 | 48 | 4，800 | 6，720 | 240＇＊ | 90 | 70 | 19，130 | 22，890 |
|  | 40 | 82 | 67，420 | 73，860 |  | 170 | 45 | 3.720 | 5，500 |  | 100 | 67 | 15，690 | 18，990 |
|  | 50 | 79 | 49，060 | 57，240 |  | 180 | 41 | 2.760 | 4，430 |  | 110 | 65 | 12，900 | 15，850 |
|  | 60 | 77 | 37，550 | 43，890 |  | 190 | 37 33 | 1,890 | 3.470 |  | 120 | 62 | 10，610 | 13，270 |
|  | 70 | 74 | 29，660 | 34，830 |  | 200 210 | 33 <br> 28 <br> 8 | 1，120 | 2,600 1,820 1,100 |  | 130 | 59 | 8，680 | 11，100 |
|  | 50 | 72 | 23，920 | 28，270 |  | 220 | 22 | － | 1.100 |  | 140 | 56 | 7，040 | 9,270 |
|  | 90 | 69 | 19，540 | 23，300 |  |  |  |  |  |  | 150 | 54 | 5，630 | 7，680 |
|  | 100 | 66 | 16，100 | 19，400 | 240＇＊ |  |  |  |  |  | 160 | 50 | 4，390 | 6，300 |
|  | 110 | 63 | 13，320 | 16，260 |  | 36 40 | 83 | 77,890 67,050 | 91，450 |  | 170 | 47 | 3，310 | 5，090 |
|  | 120 | 61 | 11，020 | 13，680 |  | 40 | 82 | 47，050 | 78,500 56,870 |  | 180 | 44 | 2，340 | 4，020 |
|  | 130 | 58 | 9，100 | 11，520 |  | 60 | 77 | 37，150 | 43，510 |  | 190 | 40 | 1，480 | 3，060 |
|  | 140 | 55 | 7，460 | 9，680 |  | 70 | 75 | 29，260 | 34，430 |  | 200 | 37 | － | 2，190 |
|  | 150 | 52 | 6，040 | 8，100 |  | 80 | 72 | 23，500 | 27，870 |  | 210 | 32 | － | 1.410 |

Load ratings do not exceed $75 \%$ of tipping with crate manding leved on firs uniformbly wopporting surface．Sate loads depend on argund conditions，boom imto cenvidiur of eperative and proper handling，air of \＃wich must be ciken base levet from center pia to a verticat tise through the center of fravity of the suspended load．Blocks，slings，buckets and orher lowd carrying devices art considered part of the load．
240 f．Boom plem 20 ft Ne .9 扫 240 th Hoom plut 20 ft No． 9 go 230 ft Boom plus

300 fi．Hoom plan 20 ft ．No 15 fb


Karings indicated in inalic represent boom positions which，whoue load，pro vide feas than sandard beckward atability，Machine should be oe firm level ground when working in these boom positions．
Ratings marked（＊）requite tetractable Alrame is fully raised position．
Crans，with tide trames catended and G－D－E－F counterweight，will self erect 260 fL main boom with hammerhead lew jib or：
 240 ft Boom piut 45 hi No． 9 HL ．${ }^{2} \mathrm{~F}$

220 f．Booms plus 60 ft ．No． 9 H1 ．jit


AMERICAN MODEL 9270 LIFTING CRANE RATINGS－TAPERED TIP

| $\begin{aligned} & 5 \frac{5}{6} \\ & \frac{1}{2} \\ & \hline 1 \end{aligned}$ | $\begin{aligned} & \frac{5}{8} \\ & \frac{8}{y} \end{aligned}$ |  | $\frac{8}{4} \frac{8}{2}$ | $\frac{8}{2} \frac{8}{4} \frac{7}{4}$ |
| :---: | :---: | :---: | :---: | :---: |
| $100^{\prime}$ | $\begin{array}{\|c\|} \hline 21 \\ 25 \\ 30 \\ 35 \\ 40 \\ 50 \\ 60 \\ 70 \\ 80 \\ 90 \\ 100 \end{array}$ | 81 78 76 73 70 63 57 50 40 32 18 | $\begin{array}{r} 178,070 \\ 138,700 \\ 108,330 \\ 88,610 \\ 74,760 \\ 56,600 \\ 45,210 \\ 37,390 \\ 31,680 \\ 27,320 \\ 23,870 \end{array}$ | 194,000 <br> 164，250 <br> 126,430 <br> 102，480 <br> 85，950 <br> 64,600 <br> 51,400 <br> 42，430 <br> 35，930 <br> 30，990 <br> 27，090＊ |
| $110^{\prime}$ | 22 25 30 35 40 50 60 70 80 90 100 110 | $\begin{aligned} & 81 \\ & 80 \\ & 77 \\ & 74 \\ & 71 \\ & 66 \\ & 60 \\ & 54 \\ & 47 \\ & 39 \\ & 30 \\ & 17 \end{aligned}$ | $\begin{array}{r} 166,130 \\ 138,490 \\ 108,100 \\ 88,360 \\ 74,510 \\ 56,340 \\ 44,950 \\ 37,130 \\ 31,420 \\ 27,070 \\ 23,630 \\ 20,440 \end{array}$ | 194，000 <br> 164,080 <br> 126．230 <br> 102,260 <br> 85，720 <br> 64，360 <br> 51,160 <br> 42，180 <br> 35，680 <br> 30，740 <br> 26，860 <br> $23,710^{*}$ |
| $120^{\prime}$ | 24 25 30 35 40 50 60 70 80 90 100 110 120 | $\begin{aligned} & 81 \\ & 60 \\ & 78 \\ & 76 \\ & 73 \\ & 68 \\ & 63 \\ & 57 \\ & 51 \\ & 45 \\ & 38 \\ & 29 \\ & 17 \end{aligned}$ | $\begin{array}{r} 146,440 \\ 138,270 \\ 107,860 \\ 88,110 \\ 74,250 \\ 56,070 \\ 44,670 \\ 36,850 \\ 31,150 \\ 26,800 \\ 23,370 \\ 20,580 \\ 18,270 \end{array}$ | $\begin{aligned} & 174,280 \\ & 163,900 \\ & 126,020 \\ & 102,030 \\ & 85,480 \\ & 64,100 \\ & 50,900 \\ & 41,920 \\ & 35,410 \\ & 30,480 \\ & 26,600 \\ & 23,470 \\ & 20,870 \end{aligned}$ |
| $130^{\prime}$ | $\begin{aligned} & 25 \\ & 30 \\ & 35 \\ & 40 \\ & 50 \\ & 60 \\ & 70 \\ & 80 \\ & 90 \end{aligned}$ | $\begin{aligned} & 81 \\ & 79 \\ & 77 \\ & 74 \\ & 70 \\ & 65 \\ & 60 \\ & 53 \\ & 49 \end{aligned}$ | $\begin{array}{r} 138,060 \\ 107,620 \\ 87,853 \\ 73,980 \\ 55,800 \\ 44,390 \\ 36,570 \\ 30,860 \\ 26,520 \end{array}$ | $\begin{array}{r} 163,730 \\ 125,810 \\ 101,800 \\ 85,230 \\ 63,840 \\ 50,630 \\ 41,650 \\ 35,140 \\ 30,200 \end{array}$ |


| $\begin{aligned} & \text { g\% } \\ & 8 . \end{aligned}$ |  |  | $\frac{8}{4} \frac{8}{2}$ | 轉 |
| :---: | :---: | :---: | :---: | :---: |
| 130＇ | $\begin{aligned} & 100 \\ & 110 \\ & 120 \\ & 130 \end{aligned}$ | $\begin{aligned} & 43 \\ & 36 \\ & 28 \\ & 16 \end{aligned}$ | $\begin{aligned} & 23,090 \\ & 20,310 \\ & 18,010 \\ & 16,070 \end{aligned}$ | $\begin{aligned} & 26,330 \\ & 23,200 \\ & 20,620 \\ & 18,440^{\circ} \end{aligned}$ |
| $140^{\prime *}$ | $\begin{array}{r} 27 \\ 30 \\ 35 \\ 40 \\ 50 \\ 60 \\ 70 \\ 80 \\ 90 \\ 100 \\ 110 \\ 120 \\ 130 \\ 140 \end{array}$ | $\begin{aligned} & 81 \\ & 80 \\ & 78 \\ & 76 \\ & 71 \\ & 67 \\ & 62 \\ & 58 \\ & 53 \\ & 47 \\ & 41 \\ & 35 \\ & 27 \\ & 15 \end{aligned}$ | $\begin{array}{r} 123,870 \\ 107,370 \\ 87,590 \\ 73,710 \\ 55,510 \\ 44,100 \\ 36,280 \\ 30,570 \\ 26,230 \\ 22,800 \\ 20,030 \\ 17,730 \\ 15,800 \\ 14,140 \end{array}$ | $\begin{array}{r} 146,000 \\ 125,600 \\ 101,570 \\ 84,980 \\ 63,580 \\ 50,350 \\ 41,370 \\ 34,360 \\ 29,920 \\ 26,050 \\ 22,930 \\ 20,350 \\ 18,180 \\ 16,330 \end{array}$ |
| $150^{\prime *}$ | $\begin{array}{r} 29 \\ 30 \\ 35 \\ 40 \\ 50 \\ 60 \\ 70 \\ 80 \\ 90 \\ 100 \\ 110 \\ 120 \\ 130 \\ 140 \\ 150 \end{array}$ | $\begin{aligned} & 81 \\ & 80 \\ & 78 \\ & 77 \\ & 73 \\ & 69 \\ & 64 \\ & 60 \\ & 56 \\ & 51 \\ & 46 \\ & 40 \\ & 34 \\ & 26 \\ & 15 \end{aligned}$ | $\begin{array}{r} 112,140 \\ 107,130 \\ 87,330 \\ 73,440 \\ 55,230 \\ 43,320 \\ 35,990 \\ 30,280 \\ 25,930 \\ 22,500 \\ 19,730 \\ 17,440 \\ 15,520 \\ 13,870 \\ 12,430 \end{array}$ | 131，550 <br> 125．380 <br> 101,330 <br> 84，730 <br> 63,310 <br> 50,080 <br> 41,080 <br> 34，570 <br> 29，640 <br> 25.760 <br> 22，040 <br> 20,060 <br> 17.900 <br> 16,060 <br> 14,460 |
| $160^{\prime *}$ | 30 35 40 50 60 70 80 90 100 110 120 130 | $\begin{aligned} & 81 \\ & 79 \\ & 77 \\ & 74 \\ & 70 \\ & 66 \\ & 62 \\ & 58 \\ & 54 \\ & 49 \\ & 44 \\ & 39 \end{aligned}$ | $\begin{array}{r} 106,880 \\ 87,070 \\ 73,170 \\ 54,940 \\ 43,520 \\ 35,490 \\ 29,980 \\ 25,630 \\ 22,200 \\ 19,430 \\ 17,150 \\ 15,220 \end{array}$ | $\begin{array}{r} 125,170 \\ 101,090 \\ 84,480 \\ 63,040 \\ 49,790 \\ 40,300 \\ 34,280 \\ 29,340 \\ 25,470 \\ 22,350 \\ 19,770 \\ 17,610 \end{array}$ |


| $\begin{aligned} & 5 \frac{5}{6} \\ & 4 \\ & \hline \end{aligned}$ | $\begin{aligned} & \frac{3}{4} \\ & \frac{1}{4} \end{aligned}$ |  | $\frac{27}{2 \frac{7}{2}} \frac{8}{2}$ | $\frac{8}{2} \frac{8}{4} \frac{7}{4}$ |
| :---: | :---: | :---: | :---: | :---: |
| $160^{4} *$ | $\begin{aligned} & 140 \\ & 150 \\ & 160 \end{aligned}$ | $\begin{aligned} & 33 \\ & 25 \\ & 14 \end{aligned}$ | $\begin{aligned} & 13,580 \\ & 12,160 \\ & 10,900 \end{aligned}$ | $\begin{aligned} & 15,770 \\ & 14,180 \\ & 12,790 \end{aligned}$ |
| $170^{\prime *}$ | 32 35 40 50 60 70 80 90 100 110 120 130 140 150 160 170 | $\begin{aligned} & 81 \\ & 80 \\ & 78 \\ & 75 \\ & 71 \\ & 68 \\ & 64 \\ & 60 \\ & 56 \\ & 52 \\ & 47 \\ & 43 \\ & 37 \\ & 32 \\ & 24 \\ & 14 \end{aligned}$ | 97,770 <br> 36， 300 <br> 72，180 <br> 54，650 <br> 43，230 <br> 35，390 <br> 29，680 <br> 25，330 <br> 21,900 <br> 19,130 <br> 16,840 <br> 14，920 <br> 13,280 <br> 11,860 10.620 <br> 9，520 | $\begin{array}{r} 114,120 \\ 100,850 \\ 84,220 \\ 62,770 \\ 49,510 \\ 40,510 \\ 33,590 \\ 29,050 \\ 25,170 \\ 22,050 \\ 19,480 \\ 177,320 \\ 15,480 \\ 13,900 \\ 12,510 \\ 11,280 \end{array}$ |
| $180^{\prime *}$ | 33 35 40 50 60 70 60 90 100 110 120 130 140 150 160 170 180 | $\begin{aligned} & 81 \\ & 80 \\ & 79 \\ & 76 \\ & 72 \\ & 69 \\ & 65 \\ & 62 \\ & 58 \\ & 54 \\ & 50 \\ & 46 \\ & 41 \\ & 36 \\ & 31 \\ & 24 \\ & 14 \end{aligned}$ | 93，580 <br> 86，540 <br> 72，620 <br> 54,360 <br> 42,930 <br> 35，090 <br> 25，020 <br> 21,590 <br> 18．820 <br> 16,540 <br> 14,610 <br> 12．980 <br> 11,560 <br> 10，320 <br> 8,230 8,250 | $\begin{array}{r} 109,110 \\ 100,610 \\ 83,970 \\ 62,490 \\ 49,220 \\ 40,210 \\ 33,690 \\ 28,750 \\ 24,870 \\ 21,750 \\ 19,170 \\ 17,020 \\ 15,180 \\ 13,600 \\ 12,220 \\ 11,000 \\ 9,910 \end{array}$ |
| 190＇＊ | $\begin{array}{r} 35 \\ 40 \\ 50 \\ 60 \\ 70 \\ 10 \\ 90 \\ 100 \\ 110 \end{array}$ | $\begin{aligned} & 81 \\ & 79 \\ & 76 \\ & 73 \\ & 70 \\ & 67 \\ & 63 \\ & 60 \\ & 56 \end{aligned}$ | $\begin{aligned} & 36,270 \\ & 72,340 \\ & 54,070 \\ & 42,630 \\ & 34,780 \\ & 29,060 \\ & 24,710 \\ & 21,280 \\ & 18,510 \end{aligned}$ | $\begin{array}{r} 100,370 \\ 83,710 \\ 62,210 \\ 48,940 \\ 39,920 \\ 33,390 \\ 28,450 \\ 24,570 \\ 21,440 \end{array}$ |



|  | $\begin{aligned} & \frac{7}{4} \\ & \frac{1}{2} \end{aligned}$ |  | $\frac{i}{4} \frac{i}{4}$ |  |
| :---: | :---: | :---: | :---: | :---: |
| $190^{\prime}$＊ | $\begin{aligned} & 120 \\ & 130 \\ & 140 \\ & 150 \\ & 160 \\ & 170 \\ & 180 \\ & 190 \end{aligned}$ | $\begin{aligned} & 53 \\ & 49 \\ & 45 \\ & 40 \\ & 35 \\ & 30 \\ & 23 \\ & 13 \end{aligned}$ | 16,230 14,300 12,670 11,250 10,020 8,930 7,960 7,080 | 18.870 <br> 16,710 <br> 14，880 <br> 13,300 <br> 11.920 <br> 10,700 <br> 9,620 <br> 8，650 |
| 200＇＊ | 36 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 | $\begin{aligned} & 81 \\ & 80 \\ & 77 \\ & 74 \\ & 71 \\ & 68 \\ & 65 \\ & 62 \\ & 58 \\ & 55 \\ & 51 \\ & 48 \\ & 44 \\ & 39 \\ & 34 \\ & 29 \\ & 22 \\ & 13 \end{aligned}$ | 82,840 72,060 53,780 42,330 34,480 28,750 24,400 20,970 18,200 15,910 13,990 12,350 10,940 9,710 8,620 7,660 6,790 6,000 | 96,320 <br> 83,450 <br> 61,940 <br> 8.850 <br> 48．650 <br> 39．620 <br> 33,090 28,140 <br> 24，260 <br> 21,130 <br> 18，560 <br> 16,400 14,570 <br> 12.990 <br> 11,610 10,400 <br> 9,320 <br> 8,360 7,480 |
| $210^{\prime *}$ | 18 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 | $\begin{aligned} & 81 \\ & 80 \\ & 78 \\ & 75 \\ & 72 \\ & 69 \\ & 66 \\ & 63 \\ & 60 \\ & 57 \\ & 53 \\ & 50 \\ & 46 \\ & 42 \\ & 38 \\ & 34 \\ & 28 \\ & 22 \\ & 13 \end{aligned}$ | 76,830 71,730 53,490 42,030 34,170 28,440 24,090 20,660 17,850 15,600 13,680 12,040 10,630 9,400 8,310 7,350 6,490 5,700 4,990 | 69，210 <br> 83,200 <br> 61，660 <br> 48,360 39,330 <br> 32，790 <br> 27,840 <br> 23,950 20,820 <br> 18，250 <br> 16,090 <br> 12,680 12,80 <br> 11,300 10,090 <br> 9.020 <br> $\mathbf{8}, 060$ 7.190 <br> 6，390 |
| $220{ }^{\prime \prime}$ | 39 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 | $\begin{aligned} & 41 \\ & 41 \\ & 78 \\ & 76 \\ & 73 \\ & 70 \\ & 67 \\ & 64 \\ & 62 \\ & 59 \\ & 55 \\ & 52 \\ & 49 \\ & 45 \\ & 41 \\ & 37 \\ & 33 \\ & 28 \\ & 21 \\ & 12 \end{aligned}$ | 73,950 71,500 53,190 41,720 33,860 28,130 23,770 20,340 17,570 15,280 13,360 11,720 10,310 9,080 8,000 7,030 6,170 5,400 4,690 4,040 | 85,850 82,940 <br> 61，380 <br> 48，070 <br> 39,030 <br> 32,490 27,530 <br> 23,640 20,510 <br> 17，940 <br> 15,780 13,950 <br> 12,370 <br> 10,990 9,780 <br> 8,710 7,750 6,880 6,100 5,380 |
| 230 ＊ | $\begin{aligned} & 41 \\ & 50 \\ & 60 \\ & 70 \\ & 80 \end{aligned}$ | $\begin{aligned} & 81 \\ & 79 \\ & 76 \\ & 74 \\ & 71 \end{aligned}$ | $\begin{aligned} & 68,910 \\ & 52,900 \\ & 41,420 \\ & 33,550 \\ & 27,820 \end{aligned}$ | 79,940 61,100 47,780 38,730 32,180 |


|  | $\frac{3}{5}$ |  |  | 言轉婁 |
| :---: | :---: | :---: | :---: | :---: |
| 230 ${ }^{\prime}$ | 90 | 68 | 23，460 | 27，220 |
|  | 100 | 66 | 20，020 | 23，330 |
|  | 110 | 63 | 17，250 | 20，200 |
|  | 120 | 60 | 14，960 | 17.620 |
|  | 130 | 57 | 13，040 | 15，470 |
|  | 140 | 54 | 11，400 | 13，630 |
|  | 150 | 51 | 9，990 | 12，050 |
|  | 160 | 48 | 8，760 | 10，670 |
|  | 170 | 44 | 7，680 | 9，470 |
|  | 180 | 40 | 6,720 | 8，390 |
|  | 190 | 36 | 5，860 | 7，440 |
|  | 200 | 32 | 5，080 | 6，570 |
|  | 210 | 27 | 4，380 | 5，790 |
|  | 220 | 21 | 3，740 | 5，080 |
|  | 230 | 12 | 3，140 | 4，420 |
| 240＇＊ | 43 | 81 | 64，390 | 74，660 |
|  | 50 | 79 | 52，610 | 60，820 |
|  | 60 | 77 | 41，120 | 47，490 |
|  | 70 | 74 | 33，240 | 38，430 |
|  | 80 | 72 | 27，510 | 31，880 |
|  | 90 | 69 | 23，140 | 26，910 |
|  | 100 | 67 | 19，700 | 23，020 |
|  | 110 | 64 | 16，930 | 19，890 |
|  | 120 | 61 | 14，640 | 17，310 |
|  | 130 | 59 | 12.720 | 15，150 |
|  | 140 | 56 | 11，080 | 13，310 |
|  | 150 | 53 | 9,670 | 11，730 |
|  | 160 | 50 | 8，440 | 10,360 |
|  | 170 | 47 | 7，360 | 9.150 |
|  | 180 | 43 | 6，400 | 8，080 |
|  | 190 | 40 | 5，540 | 7，120 |
|  | 200 | 36 | 4，770 | 6，260 |
|  | 210 | 31 | 4，070 | 5，480 |
|  | 220 | 25 | 3,430 | 4，770 |
|  | 230 | 20 | 2.840 | 4，120 |
|  | 240 | 12 | 2，290 | 3，520 |
| 250＇＊ | 44 | 31 | 62，150 | 67，240 |
|  | 50 | 00 | 52，210 | 60，540 |
|  | 60 | 77 | 40，810 | 47，190 |
|  | 70 | 75 | 32，930 | 38，130 |
|  | 80 | 73 | 27，190 | 31，570 |
|  | 90 | 70 | 22，820 | 26，600 |
|  | 100 | 68 | 19，380 | 22，710 |
|  | 110 | 85 | 16，610 | 19，570 |
|  | 120 | 83 | 14，320 | 16，990 |
|  | 130 | 60 | 12，390 | 14，830 |
|  | 140 | 57 | 10，760 | 13，000 |
|  | 150 | 55 | 9，350 | 11，410 |
|  | 160 | 52 | B， 120 | 10，040 |
|  | 170 | 49 | 7，040 | 8，830 |
|  | 180 | 46 | 6,080 | 7，760 |
|  | 190 | 42 | 5，220 | 6，800 |
|  | 200 | 39 | 4，450 | 5，940 |
|  | 210 | 35 | 3，750 | 5，170 |
|  | 220 | 31 | 3.110 | 4，460 |
|  | 230 | 26 | 2.530 | 3，810 |
|  | 240 | 20 | 1，990 | 3，220 |
| 260＇＊ | 46 | 81 | 58.250 | 61，170 |
|  | 50 | 80 | 52.020 | 60，260 |
|  | 60 | 78 | 40，510 | 46，900 |
|  | 70 | 76 | 32，620 | 37，830 |
|  | 80 | 73 | 26，880 | 31，260 |
|  | 90 | 71 | 22，500 | 26，290 |
|  | 100 | 69 | 19，060 | 22，390 |
|  | 110 | 66 | 16，290 | 19，260 |
|  | 120 | 64 | 13，990 | 16，680 |
|  | 130 | 61 | 12，070 | 14，510 |
|  | 140 | 59 | 10，430 | 12，680 |
|  | 150 | 56 | 9.020 | 11，090 |
|  | 160 | 53 | 7.790 | 9，720 |


| $\begin{aligned} & \text { E } \\ & \frac{5}{8} \\ & \frac{2}{8} \end{aligned}$ | $\frac{8!}{9} \frac{8}{8!}$ |  | $\frac{8}{2} \frac{8}{2}$ | $\frac{4}{4} \frac{8}{2} \frac{8}{2}$ |
| :---: | :---: | :---: | :---: | :---: |
| $260^{\prime *}$ | $\begin{aligned} & 170 \\ & 180 \\ & 190 \\ & 200 \\ & 210 \\ & 220 \\ & 230 \\ & 240 \end{aligned}$ | $\begin{aligned} & 51 \\ & 48 \\ & 45 \\ & 41 \\ & 38 \\ & 34 \\ & 30 \\ & 25 \end{aligned}$ | $\begin{aligned} & 6,710 \\ & 5,751 \\ & 4,890 \\ & 4,120 \\ & 3,430 \\ & 2,790 \\ & 2,210 \\ & 1,680 \end{aligned}$ | $\begin{aligned} & 3,510 \\ & 7,4140 \\ & 6,480 \\ & 5,630 \\ & 4,850 \\ & 4,140 \\ & 3,500 \\ & 2,900 \end{aligned}$ |
| $270{ }^{\prime *}$ | 47 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 | 81 <br> 80 <br> 78 <br> 76 <br> 74 <br> 72 <br> 69 <br> 67 <br> 65 <br> 62 <br> 60 <br> 58 <br> 55 <br> 52 <br> 50 <br> 47 <br> 44 <br> 41 <br> 37 <br> 34 <br> 30 | 55,020 51,720 <br> 40.200 <br> 32，310 <br> 26，560 <br> 22,190 <br> 18,740 <br> 15,960 <br> 13,870 <br> 11,750 <br> 10,110 <br> 8,700 7,470 <br> 6，390 <br> 5,430 <br> 4，570 <br> 3，800 <br> 3.100 2.470 <br> 1，590 <br> 1,360 | $\begin{array}{r} 55,020 \\ 53,630 \\ 46,610 \\ 37,530 \\ 30,960 \\ 25,980 \\ 22,080 \\ 18,940 \\ 16,360 \\ 14,190 \\ 12,360 \\ 10,770 \\ 9,400 \\ 8,190 \\ 7,120 \\ 6,160 \\ 5,300 \\ 4,530 \\ 3,820 \\ 3,180 \\ 2,590 \end{array}$ |
| 280＇＊ | 49 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 | 81 <br> 81 <br> 79 <br> 77 <br> 74 <br> 72 <br> 70 <br> 68 <br> 66 <br> 63 <br> 61 <br> 59 <br> 56 <br> 54 <br> 51 <br> 49 <br> 46 <br> 43 <br> 40 <br> 37 <br> 33 | 50,190 49,550 39,900 32,000 26,240 21,870 18,420 15,640 13,350 11,420 9,780 8,370 7,140 6,060 5,100 4,240 3,470 2,780 2,140 1,570 1,030 | 50,190 49,550 43,940 37,230 30,650 25,670 21,770 18,620 16,040 13,870 12,030 10,450 9,070 7,870 6,790 5,840 4,980 4,200 3,500 2,060 2,270 |
| 290＊＊ | 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 | $\begin{aligned} & 31 \\ & 79 \\ & 77 \\ & 75 \\ & 73 \\ & 71 \\ & 69 \\ & 67 \\ & 64 \\ & 62 \\ & 60 \\ & 58 \\ & 55 \\ & 53 \\ & 50 \\ & 48 \\ & 45 \\ & 42 \\ & 39 \\ & 36 \\ & \hline \end{aligned}$ | 45,250 39,590 <br> 31，690 <br> 25,930 <br> 18，100 <br> 15,320 <br> 13,020 <br> 11,100 9,460 <br> 8，040 <br> 6,810 <br> 5，730 <br> 3，920 <br> 3，150 <br> 2，450 <br> 1，240 | 45,250 40,550 36,340 30,340 25,360 21,450 18,310 15,720 13,550 11,710 10,130 8,750 7,540 6,470 5,510 4,660 3,880 3,180 2,540 1,950 |

taad ratimus do not esceed 75 of sipping with crane unading level on uni－ formly supporting surface．Safe loads depend se gound conditions，boom lenath，radius of operation and poper handfling，alt of which mint te takem isto coosideration of user，＂Madius in feen＂is the hotimontal distance at crant bate level from center pin so a vertical lise through the oenter of gravity of the suspended load Blocks slings，bockers and other load－carrying devices are Bations indiratet in iralic resi

200 h．Hioom plas 20 ft ．Na． 9 Jis
26．h．Hoom plos 30 fi ．Na． 9 Jib


280 ft ．Moom plus 20 ft ．No． 15 Jib 2 mf f．Hoom plus 30 fL Na．is Jib 270 f ．Boom plus 40 f ．No． 15 Jib
（ieis than sandard backwant stability，Machise should be on firm level ground when working in these boom poution．
Hanger btock is resuled for ralings over 55,000 Ibs，Deduct 000 Ibs．from aboy rating when hanger block is in place．
Ratings marked（＊）require retractable A－frame in fally raised position
Crane，with side frames catended and G－D－E－F counterweigh，will self－erec
290 f．，main boom with tapered sip less jb，or：
270 fi．Boom plas 50 fI ．Na． 15 Jlb 290 h．Boven plus 40 上，Na． 9 HL J．Jo

2e9 ft Boom plas 69 ft ．No．9HL Nb


| NO. 9 JIB RATINGS |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 20 ft . Jib | 30 ft . Jib | 40 ft . Jib | 50 ft . Jib |
| 0 to 6 ft . | 18,000 | 18,000 | 14,500 | 10,500 |
| 9 ft . | 18,000 | 17,300 | 14,100 | 10,250 |
| 12 ft | 18,000 | 15,300 | 12,400 | 10,000 |
| 15 ft . | - | 13,500 | 10,750 | 8,800 |
| 18 ft | - | - | 10,000 | 8, 150 |
| 21 ft . | - | - | - | 7,750 |
| Effective Jib Weight at |  |  |  |  |
| Boom Point ....... | 1,550 | 2,100 | 2,800 | 3,600 |

Na. 9 Jib ratings are hated on 100 f , minimuen boom lengily with tubular chent boom with hammer: head and ise fi, minimum boem lengit with tabular chosd hoom with tapered tige.

| NO. 15 JIB RATINGS |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $20 \mathrm{ft.Jib}$ | 30 ft . Jib | 40 ft Jib | 50 ft . Jib |
| 0 to 6 ft . | 30,000 | 30,000 | 21,000 | 16,500 |
| 9 ft . | 30,000 | 28,250 | 21,000 | 16,500 |
| 12 ft . | 30,000 | 23,400 | 17,500 | 14,000 |
| 15 ft . | - | 18,500 | 15,000 | 12,000 |
| 18 ft . | - | - | 13,250 | 11,000 |
| 21 ft . | - | - | - | 10,000 |
| Effective Jib Weight at |  |  |  |  |
| Boom Point .............. | 1.900 | 2,250 | 2,800 | 3,600 |

Na. 15 ith ratings arr loased oe 120 fe. misimum boom lenpth with tubular cherd hoom with laminerhat and 150 ft . minimust boom lenyith with thbular cterd boom with taperced ifi.


[^0] tip of hamertiead.


Jib ratings are based on the minimum boom length specified above. For ratings on shorter booms consult factory. The jib load rating is the lesser of: (a) the maximum jib rating, of (b) the main boom rating at the jib working radius, reduced by the effective jib weight and by the weight of all suspended loadcarrying devices. The main boom rating with jib in place must be reduced by the effective jib weight, the weight of main fall blocks and slings, and twice the weight of jib tackle.

## GENERAL DIMENSIONS


A - Width of Cab ..... $11^{*} 0^{-}$
$A_{1}$ - Width over Counterweight ..... $13^{*} 2^{\prime \prime}$
B - Height Over Cab ..... 13' $74 / 4^{\prime \prime}$
C - Tailswing ..... $17^{*} 14^{*}$
D - Center of Pivot to Center of Boom Foot ..... $.574=$
E - Ground to Center Boom Foot ..... $6^{\circ} 9 \mathrm{M}=$
F - Height Over A-Frame, Lowered ..... $14^{\circ} 674^{=}$
$\mathrm{F}_{1}$ - Height Over A-Frame, Raised ..... 24 . $64=$
G - Ground to Bottom of Counterweight ..... 4. $41 \mathrm{k}^{*}$H - Minimum Ground Clearance Under
Crawler Base .....  $1^{\prime} 9^{\prime \prime}$
1 - Crawler Bearing Length ..... $21^{\prime} 0^{\prime \prime}$
1 - Center to Center Crawler Tumblers ..... $19^{\prime} 8^{\prime}$
K - Overall Length of Crawlers ..... $23^{\prime \prime}{ }^{-1}$
M - Width of Tread Shoes (Standard) ..... 44*
$M_{1}$ - Width of Tread Shoes (Optional) ..... 38-
$\mathrm{M}_{2}$ - Width of Tread Shoes (Optional) ..... $50^{\circ}$
N - Overall Width Over Crawlers - Extended (with $38^{\prime \prime}$ shoes) ..... $18^{\prime \prime}$
Overall Width Over Crawlers - Extended (with $44^{\prime \prime}$ shoes) ..................... $18^{\prime} 9^{\prime \prime}$Overall Width Over Crawlers -Extended (with $50^{\circ}$ shoes)$.19{ }^{\prime \prime}$
$\mathrm{N}_{1}$ - Overall Width Over Crawlen -
Retracted (with $38^{\circ}$ shoes) ..... $15 * 9^{*}$
verall Width Over Crawlers
Retracted (with $44^{*}$ shoes)$.16 \cdot 3=$
Overall Width Over Crawlers -
Retracted (with $50^{\circ}$ shoes) ..... $16^{\prime} 9^{*}$

## UPPER MACHINERY

## STANDARD ENGINE:

CUMMINS MODEL NT-855-P-310 diesel engine with three stage torque converter; six cylinder, $51 / 2^{\prime \prime}$ bore, $6^{\text {n }}$ stroke, 855 cu in . displacement, rated 289 hp (2) 2100 rpm converter input; 24 volt electric starting; battery charging alternator, variable speed engine and torque converter governor; glow plug starting: heavy duty dry type air cleaner.

## ALTERNATE ENGINES RECOMMENDED FOR EXCAVATOR OR LIFT CRANE SERVICE.

Alternate Engines with Single Stage Torque Converter: (Delete Controlled Load Lowering)
CUMMINS Model NT-855-P-310 diesel engine with single stage torque converter, six cylinder, $51 / 2^{\prime \prime}$ bore, $6^{-}$stroke, 855 cu in. displacement, rated $289 \mathrm{hp} @ 2100 \mathrm{rpm}$ converter input; 24 volt electric starting; battery charging alternator; variable speed engine and torque converter governor; glow plug starting: heavy duty dry type air cleaner.

CATERPILLAR Model D.343-A diesel engine with single stage torque converter; six cylinder, turbo-charged, $5.4^{-}$bore, $6.5^{\prime \prime}$ stroke, 893 cu in . displacement; rated 305 hp (a) 2050 rpm converter input; 24 volt electric starting; battery charging generator; variable speed engine and torque converter governor; heavy duty dry type air cleaner.

## Alternate Engines with Three Stage Torque Converter:

CATERPILLAR Model D-343-A diesel engine with three stage torque converter; six cylinder, turbo-charged $5.4^{*}$ bore, $6.5^{5}$ stroke, 893 cu in. displacement; rated $289 \mathrm{hp} @ 2000 \mathrm{rpm}$ converter input; 24 volt electric starting; battery charging generator; variable speed engine and torque converter governor; heavy duty dry type air cleaner.

GENERAL MOTORS Model 12V-71 diesel engine with three stage torque converter; twelve cylinder, $414^{*}$ bore, $5^{\prime \prime}$ stroke, 852 cu in. displacement, two valve; two cyele; rated 310 hp © 2000 rpm converter input; 24 volt electric starting: battery charging alternator; variable speed engine and torque converter governor; ether starting kit; heavy duty dry type air cleaner.

## ALTERNATE ENGINE RECOMMENDED FOR LIFT CRANE SERVICE ONLY.

GENERAL MOTORS Model 8 V - $71-\mathrm{N}$ diesel engine with three stage torque converter; eight cylinder, $414^{-7}$ bore, $5^{\prime \prime}$ stroke, 568 cu in. displacement; four valve; two cycle; rated 284 hp (a) 2100 rpm converter input; 24 volt electric starting; battery charging alternator; variable speed engine and torque converter governor; ether starting kit; heavy duty dry type air cleaner.

## ALTERNATE ELECTRIC POWER: (Delete Controlled Load Lowering)

$150 \mathrm{hp}, 220 / 440$ volt, 3-phase, 60 cycle, 1800 rpm , open, squirrel cage electric motor with control equipment (across-the-line start); connection for outside power supply; collector rings at center pin.

FUEL TANK: 190 gallon capacity.
POWER TRANSMISSION: Multiple roller chain transmits power from engine to operating machinery; completely enclosed, running in oil for long trouble-free service.

COUNTERWEIGHT: "G-D-E-F," $96,000 \mathrm{lbs}$ made up of basic hollow casting with inserts and overlays; securely bolted to machinery base; reduced for duty cyele service (drag, elam, grapple, hoe, magnet) to 59.000 lbs by removal of $\mathrm{D}_{3}, \mathrm{E}_{1}$ and $\mathrm{E}_{2}$ overlays and F counterweight insert.

ROTATING MACHINERY BASE: Tapered deep girder construction extending straight through from boom foot to engine base and counterweight support; boom foot, shaft pillow blocks, A-frame and counterweight connections fall directly over girder for utmost simplicity and strength; girders wide spaced for wide boom foot and wide drum laggings; electric welded steel plate construction with bored and drilled holes located by jigs and fixtures to insure proper alignment.

LOAD AND HOOK ROLLERS: Large tapered toad rollers transmit downward loads to machined upper roller path on carbody; tapered hook rollers transmit uplift loads to lower roller path on carbody; two sets double equalizing load rollers and two sets double equalizing hook rollers in front; two sets double equalizing hook rollers and two single load rollers in rear; rollers mounted on anti-friction bearings; adjustment for wear by means of eccentric hook roller axle.

DRIVE SHAFT ASSEMBLY: Independent primary drive shaft consists of forged alloy steel shaft with integral cut steel pinion; ductile iron roller chain sprocket with steel hub insert splined to shaft; shaft mounted in pressure grease lubricated anti-friction bearinge. This shaft assembly has a single purpose of speed reduction and is not compromised by mounting clutches for other functions.

TRAVEL/SWING ASSEMBLY: Main clutch shaft is heattreated alloy steel mounted in anti-friction bearings and splined to clutch spiders and cut tooth driving spur gear; bevel pinions are cut tooth hardened alloy steel, oil lubricated; bevel pinions on anti-friction bearings mounted in case; air controlled, tandem band, internal reversing clutches have extra thick moulded liners for long service life and stable operation; smooth operation for swing and travel assured by high responsive variable pressure air control. Vertical swing shaft is heat-treated alloy steel, mounted on bronze bushings in machinery base cover casting and gear case lower casting; swing pinion is cut tooth alloy steel, accurately matched with revolving bullgear; alloy cast iron brake wheel and cast steel jaw clutch are mounted on accurately cut splines; horizontal cut tooth spur gear is bronze bushed, running in oil; air controlled shifter for swing-travel jaw clutches. Vertical reverse shaft is heat-treated alloy steel, pressed into main swing clutch housing with lower end supported by bore in machinery base; hardened alloy steel integral cut tooth bevel gear and spur pinion is mounted on tapered roller bearings and running in oil; design insures permanent accurate alignment of mating bevel and spur gears; easily removed as a unit with main swing clutch shaft assembly.

## INDEPENDENT SWING - AIR CONTROLLED <br> FOR ERECTION CRANE SERVICE ONLY:

Smaller, moderate speed, internal air controlled tandem band clutches; all gears mounted in anti-friction bearings and running in oil; independent swing clutches connected to swing gearing at all times; main swing clutches may be used for independent travel when this arrangement is provided or may also be used for heavy duty swinging by operation of swing-travel shifter; foot operated contracting band swing brake on independent swing clutch ring.

INDEPENDENT SWING - HYDROSTATIC: (Optional) Variable displacement hydraulic swing motor supplied with constantly available high pressure oil by hydraulic accumulator
system; swing torque control in direct relation to swing lever; completely independent of other operations and engine speed; no slippage, hence no heat loss; plugging energy is stored in accumulator and used for accelerating in next cycle; as accumulator system stores swinging energy only a small pump is required; leaving more horsepower available for hoisting operation; hydraulic motor is flange-mounted at top of an inclined drive structure housing a double cut spur reduction and external air-controlled swing brake; ties into same lower bevel gear set as air-controlled independent swing; hydraulic motor is servocontrolled and feel of the load is built in through springs in control linkage.

MAIN DRUM ASSEMBLY: Twin alloy cast iron drums with integral brake and clutch surfaces, drums mounted in anti-friction bearings; drums skeleton type with split cast steel laggings bolted in place; alloy steet drum shaft mounted in anti-friction bearings in machinery base; elutch spiders and spur gear splined to drum shaft; air controlled clutches with tandem internal expanding bands with thick moulded liners; smooth operation assured by high responsive variable pressure air controts; large external contracting band drum brakes with extra thick moulded liners; raised cooling flange on brake drum for efficient, even dissipation of heat; brake foot pedal operated from operator's position; fully compensated air booster cylinder begins to energize at moderate brake pedal force to reduce effort without affecting the sensitive feel required for slipping loads; brake shafts and pins mounted on anti-friction bearings for responsive operation with minimum effort: brake and clutch surfaces stress relieved for smooth operation without scoring.

CONTROLLED LOAD LOWERING: Available for either or both main drums; drum is roller chain driven from clutch shaft forward of and below main drums; air operated internal expanding tandem band clutches controlled by forward motion of drum clutch lever; clutches and clutch shaft mounted on anti-friction bearings; in combination with three-stage torque converter permits lowering loads continuously under full control by engine throttle; can be used in combination with third drum with all controls completely independent whether one or both drums are equipped with load lowering. Controlled load lowering for one drum included as standard equipment; optional on second drum.

THIRD DRUM: (Optional) Mounted on dead shaft at shovel boom foot location forward of cab; roller chain driven from clutch shaft forward of and below main drum shaft; air operated internal expanding tandem band clutch and manual contracting band brake; clutch and clutch shaft mounted in anti-friction bearings; involute splines; may be used in combination with controlled load lowering with controls completely independent.

TUBULAR CHORD CRANE BOOM: Lightweight, pin-connected, deep section crane boom with chords of tubular T-1 steel and with tubular lattice; boom is $77^{\circ}$ cross section and can be extended to 290 feet; the basic inner section is 30 ft long: a 40 ft long tapered intermediate section can be fitted either with a five sheave pin-connected hammerhead or with a 30 ft two sheave pin-connected outer section; the hammerhead is for heavy lifts; the tapered outer section is for long boom operations and has a second sheave for an auxiliary load line or for clamshell service; tapered tip is closed throat design; a hanger block is included for multiple reeving of the load line with the tapered tip; center sections are available in 20 ft and 50 ft lengths, pinconnected; boom sections have built-in camber and belly lines are not required for long booms; boom suspension arrangement consists of two double 15 " diameter pendant suspension cabtes extending from the outer bail to the boom point with thirteen part boom hoist line; pendants are added or removed for boom length changes; boom lengths of 250 ft or more require not less than three 50 ft center sections.

JIBS: Three different jibs are offered for single load line operation; the No. 9 and No. 15 jibs are baxic 20 ft , two piece afloy steel chord angle construction with tubular lattice; both can be extended to 50 ft maximum length with the addition of 10 ft inserts; the lightweight No. 9HL Jib is constructed with T-1 tubular chords and tubular lattice; basic length is 40 ft two piece which can be extended to 80 ft with the addition of 10 ft and 20 ft inserts.

SAFETY BOOM STOPS: Telescoping pipe safety boom stops for any length boom prevent overhoisting and backward boom motion due to failure of boisting line or hoisting tackle; standard on all machines.

BOOM HOIST SAFETY SHUT OFF: Prevents the operator from over hoisting the boom; located at the bottom of boom and actuated when the boom reaches a predetermined angle; when actuated this valve cuts off air supply to boom hoist clutch and sets the boom hoist brake.

RETRACTABLE A-FRAME: Is raised or lowered by means of bail rigging with no special equipment required; standard on all machines, the counterweight is easily removed without outside assistance.

INDEPENDENT BOOM HOIST: Cast steel drum and integral cut steel spur gear operate on bronze bushings; boom holst drum shaft is high carbon stee1, mounted in bored holes in machinery base; single boom hoist drum with spring set, air released locking pawl provided to hold boom during operation or when machine is standing idle; integral cut tooth spur gear and clutch ring are mounted on anti-friction bearings on elutch shaft; shaft is high carbon steel and operates in bronze bushings pressed into machinery deck; clutch spider and pinion splined to clutch shaft. Boom hoist clutch is air controlled, internal expanding band; alloy cast iron brake wheel is keyed to shaft to facilitate removal; brake is spring set and air released with single valve control for both hoisting and lowering.

CONTROLLED BOOM LOWERING: Boom lowering speed limited by speed of engine; rapid, safe boom handling: slower boom lowering by reduced engine speed; overrunning sprag clutch mechanism mounted on independent shaft engages positively and smoothly; disconnect provided for reversed gear operations; shifter interlocked with boom brake to prevent "live boom."

CAB: Fully enclosed with glazed doors and windows; all safety glass windows mounted in rubber; removable windows in operator's cab; operator's compartment totally enclosed, shielding him from engine and machinery noise; door at rear of operator's compartment provides direct access to machinery: sliding doors on sides and rear; hinged door on operator's cab roof for vision; ladder to roof at left front; running boards standard; elevated operator's cab optional.

## LOWER MACHINERY

CARBODY: Heavy duty cast alloy steel carbody of deep box construction; through-bored for accurate alignment of crawler axles and horizontal travel shaft; alloy cast steel bullgear and roller path welded to machined top of carbody; double tapered roller path is accurately machined to roller contour.

CENTER PIVOT TUBE: Cast steel center pivot tube integral with carbody; pressure lubricated bronze pivot bushings in rotating machinery base; horizontal load only - no uplift.

TRAVEL AND STEERING: Three section borizontal travel shaft for easy assembly and removal; bevel gearing and sliding jaw clutches fully enclosed and running in oil; single lever air control provides engaged, neutral and locked position of each multiple jaw clutch permitting straight ahead, long radius and short radius turns; interlock keeps one clutch engaged at all times eliminating danger of machine running away on a grade.

TRAVEL LOCK: Ratchet arrangement, air controlled from operator's position; permits travel in one direction while preventing movement in opposite direction; lock may also be set to prevent travel in either direction.

CRAWLER SIDE FRAMES: Cast steel tumbler yokes and axle sleeves electrically welded to rolled steel shapes form righd crawler side frames; axle sleeves accurately bored for mounting to crawler axle.

CRAWLER ROLLERS: Large hardened cast steel crawler rollers mounted on heavy bronze bushings; spaced close together to prevent any possibitity of tread shoes buckling up between rollers; axles drilled for pressure grease lubrication.

CRAWLER SHOES: Heavy, double wall, box section alloy steel castings for maximum strength and long wear; selfcleaning design prevents shoe breakage; 45 shoes on each side frame: $44^{-}$width standard; $38^{*}$ or $50^{\circ}$ width optional; through hardened pins, loaded in multiple shear.

CRAWLER DRIVE: Heavy cast steel drive tumblers, splined to drive sprocket axies; self-cleaning design; self-cleaning idler tumblers bronze bushed with pressure grease fubrication; stationary shafts mounted in side frames; alloy steel drive sprocket axles, splined to drive tumblers and sprockets; axles mounted in pressure grease lubricated bronze bushings: crawler chain is heavy alloy roller chain; cast steel self-cieaning sprockets, mounted outside crawler side frames for easy maintenance; unnecestary to brake chain when removing side frames.

CRAWLER DRIVE ADJUSTMENT: Drive chain and crawler shoe adjustment by means of hydraulic jack; rigid holding and positioning by shims; motion and wear between sprocket and crawler side frame eliminated; positive alignment of sprockets; hydraulic jack carried in tool box.

CRAWLER WIDTH ADJUSTMENT: Removable cast steel jaw clutch torque tubes are furnished between the carbody and side frames; in retracted position the side frame jaw clutch directly engages the jaw clutch at side of carbody; machine can be operated in narrow position under restricted conditions or in extended position with full crane ratings.

## general

CONTROLS: Graduated air controls, pioneered by AMER1CAN, put "feel" at every operator's finger-tips, insure higher production, more accurate control; air line alcohol dispenser, to absorb excess moisture in air system due to condensation.

MATERIALS: Gear and pinions are beat-treated alloy or high carbon steel; cut teeth on all gears except rotating ring gear which has accurately moulded teeth.

Involute splines are used throughout machine for maximum tooth strength through minimum diameter where needed; self centering; equalized bearing and stresses among all teeth; smooth tooth surface; casy interchangeability of parts.

Anti-friction bearings are used on all main or high speed shafts and wherever practical to provide friction-free, smooth operation with minimum maintenance.

LUBRICATION: All anti-frietion bearings and bronze bushings requiring short period lubrication are provided with pressure greave fittings; swing deck gears are provided with oil bath lubrication; drum gear train and the swing bullgear are arranged for grease lubrication.

ATTACHMENTS: Attachments for duty cycle work in combination with lift crane service are available for 9270 . Counterweight must be reduced to $59,000 \mathrm{Jbs}$.

Dragline attachment includes full revolving fairlead, dirtguard under dragline drum, drum lagging, $116^{-1}$ boist line and 1\%" dragline.

Clamshell attachment for clam or grapple work includes Rud-O-Matic tagline winder mounted in boom, drum lagging. $11 / \pi^{*}$ hotding line and $15 \pi^{2}$ " closing line.

## PERFORMANCE

| Rated Travel Speed: | 0.8 MPH |
| :---: | :---: |
| Rated Swing Speed: | 2.28 RPM |
| Single Line Speed: |  |
| Crane-Clam Hoist | . 165 FPM |
| Magnet, Drag Hoist | . 200 FPM |
| Drag Pull-In | 145 FPM |
| Third Drum | . 192 FPM |
| OR | . 142 FPM |
| Line Pull: |  |
| Crane-Clam Hoist | 40,000 LBS SLP |
| Magnet, Drag Hoist | 33,000 LBS SLP |
| Drag Pull-In | 45,000 LBS SL.P |
| Third Drum | 15,000 LBS SLP |
| OR | 21,000 LBS SLP |
| Weight: Basic 9270 Lift Crane (70 FT Boom With |  |
| Ground Pressure | . 13.5 PSI |
| Components removable for shipment: |  |
| Counterweight | 96,000 LBS |
| Crane block | 3,025 LBS |
| Hammerhead | 4,600 LBS |
| Boom outer | 2,325 LBS |
| Boom inner | . 4,000 LBS |
| Telescopic boom stops | . 300 LBS |
| Outer bail axsembly | 2,450 L.BS |
| A-frame | 3,900 LBS |
| Side frames (2) | 63,760 LBS |
| Crawler axles (4) | 11,680 LBS |
| Torque tubes (2) | 920 LBS |
| Carbody | . 24,200 L.8S |

NOTE: In accordance with varying material situations and the Company's policy of constant product improvement these specifications subject to change without notice and without incurring responsibility to units previously sold.

| Beem <br> length | Redivs in Feet | Beam <br> Angle <br> Degrees | Liffing <br> Crane <br> Eatiog | Clamahell <br> 4 Magnet <br> Reting | Draglins Rationg |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $100^{\prime}$ | 21 25 30 35 40 50 60 70 80 90 100 | $\begin{aligned} & 81 \\ & 78 \\ & 76 \\ & 73 \\ & 70 \\ & 63 \\ & 57 \\ & 50 \\ & 41 \\ & 32 \\ & 18 \end{aligned}$ | $\begin{array}{r} 168,270 \\ 128,320 \\ 98,580 \\ 79,740 \\ 66,730 \\ 49,930 \\ 39,540 \\ 32,480 \\ 27,350 \\ 23,450 \\ 20,370 \end{array}$ | $\begin{aligned} & 28,000 \\ & 28,000 \\ & 28,000 \\ & 28,000 \\ & 28,000 \\ & 28,000 \\ & 28,000 \\ & 28,000 \\ & 24,620 \\ & 21,110 \\ & 18,330 \end{aligned}$ | $\begin{aligned} & 27,000 \\ & 27,000 \\ & 27,000 \\ & 27,000 \\ & 27,000 \\ & 27,000 \\ & 27,000 \\ & 27,000 \\ & 27,000 \\ & 23,450 \\ & 20,370 \end{aligned}$ |
| $110^{\prime}$ | $\begin{array}{r} 23 \\ 25 \\ 30 \\ 35 \\ 40 \\ 50 \\ 60 \\ 70 \\ 80 \\ 90 \\ 100 \\ 110 \end{array}$ | 81 <br> 80 <br> 77 <br> 74 <br> 71 <br> 66 <br> 60 <br> 54 <br> 47 <br> 39 <br> 30 <br> 17 | $\begin{array}{r} 145,530 \\ 128,150 \\ 98,380 \\ 79,520 \\ 66,500 \\ 49,690 \\ 39,290 \\ 32,220 \\ 27,100 \\ 23,200 \\ 20,140 \\ 17,650 \end{array}$ | $\begin{aligned} & 28,000 \\ & 28,000 \\ & 28,000 \\ & 28,000 \\ & 28,000 \\ & 28,000 \\ & 28,000 \\ & 28,000 \\ & 24,390 \\ & 20,880 \\ & 18,130 \\ & 15,890 \end{aligned}$ | 27,000 <br> 27,000 <br> 27,000 <br> 27,000 <br> 27,000 <br> 27,000 <br> 27,000 <br> 27,000 <br> 27,000 <br> 23,200 <br> 20,140 <br> 17,650 |
| $120^{\prime}$ | 24 25 30 35 40 50 60 70 80 90 100 110 120 | 81 <br> 80 <br> 78 <br> 76 <br> 73 <br> 68 <br> 63 <br> 57 <br> 51 <br> 45 <br> 38 <br> 29 <br> 17 | $\begin{array}{r} 136,140 \\ 127,980 \\ 98,170 \\ 79,290 \\ 66,260 \\ 49,440 \\ 39,030 \\ 31,960 \\ 26,830 \\ 22,940 \\ 19,880 \\ 17,410 \\ 15,350 \end{array}$ | $\begin{aligned} & 28,000 \\ & 28,000 \\ & 28,000 \\ & 28,000 \\ & 28,000 \\ & 28,000 \\ & 28,000 \\ & 28,000 \\ & 23,740 \\ & 20,650 \\ & 17,890 \\ & 15,670 \\ & 13,820 \end{aligned}$ | $\begin{aligned} & 27,000 \\ & 27,000 \\ & 27,000 \\ & 27,000 \\ & 27,000 \\ & 27,000 \\ & 27,000 \\ & 27,000 \\ & 26,830 \\ & 22,940 \\ & 19,880 \\ & 17,410 \\ & 15,350 \end{aligned}$ |
| $130^{\prime}$ | $\begin{aligned} & 26 \\ & 30 \\ & 35 \end{aligned}$ | $\begin{aligned} & 81 \\ & 79 \\ & 77 \end{aligned}$ | $\begin{array}{r} 120,530 \\ 97,960 \\ 79,060 \end{array}$ | $\begin{aligned} & 28,000 \\ & 28,000 \\ & 28,000 \end{aligned}$ |  |

[^1]| Beam <br> Langth | Radius in Fent | Beam <br> Angle <br> Degrees | Lifins <br> Crane <br> Reting | Clamshell <br> a Maynet <br> Rating | Dragline Reting |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $130^{\prime}$ | $\begin{array}{r} 40 \\ 50 \\ 60 \\ 70 \\ 80 \\ 90 \\ 100 \\ 110 \\ 120 \\ 130 \end{array}$ | $\begin{aligned} & 74 \\ & 70 \\ & 65 \\ & 60 \\ & 55 \\ & 49 \\ & 43 \\ & 36 \\ & 28 \\ & 16 \end{aligned}$ | $\begin{aligned} & 66,020 \\ & 49,170 \\ & 38,770 \\ & 31,690 \\ & 26,560 \\ & 22,670 \\ & 19,610 \\ & 17,140 \\ & 15,100 \\ & 13,370 \end{aligned}$ | $\begin{aligned} & 28,000 \\ & 28,000 \\ & 28,000 \\ & 28,000 \\ & 23,900 \\ & 20,400 \\ & 17,650 \\ & 15,430 \\ & 13,590 \\ & 12,030 \end{aligned}$ |  |
| $140^{\prime *}$ | 27 30 35 40 50 60 70 80 90 100 110 120 130 140 | 81 <br> 80 <br> 78 <br> 76 <br> 71 <br> 67 <br> 62 <br> 58 <br> 53 <br> 47 <br> 41 <br> 35 <br> 27 <br> 15 | $\begin{array}{r} 113,810 \\ 97,750 \\ 78,830 \\ 65,770 \\ 48,910 \\ 38,490 \\ 31,410 \\ 26,280 \\ 22,390 \\ 19,330 \\ 16,860 \\ 14,830 \\ 13,110 \\ 11,640 \end{array}$ | $\begin{aligned} & 28,000 \\ & 28,000 \\ & 28,000 \\ & 28,000 \\ & 28,000 \\ & 28,000 \\ & 28,000 \\ & 23,650 \\ & 20,150 \\ & 17,400 \\ & 15,140 \\ & 13,350 \\ & 11,800 \\ & 10,480 \end{aligned}$ |  |
| 150'* | 29 30 35 40 50 60 70 80 90 100 110 120 130 140 150 | 81 <br> 80 <br> 78 <br> 77 <br> 73 <br> 69 <br> 64 <br> 60 <br> 56 <br> 51 <br> 46 <br> 40 <br> 34 <br> 26 <br> 15 | $\begin{array}{r} 102,390 \\ 97,530 \\ 78,590 \\ 65,520 \\ 48,640 \\ 38,210 \\ 31,130 \\ 25,990 \\ 22,100 \\ 19,040 \\ 16,580 \\ 14,540 \\ 12,830 \\ 11,370 \\ 10,100 \end{array}$ |  |  |

Maximam recomenended dragline boom length is 100 ft . For duty cycle service (dragline, clamshell, grapple, backhoe, magnet, etc.) coumterweight must be reduced to $59,000 \mathrm{tb}$, by removing $\mathrm{D}_{3}, \mathrm{E}_{1}$ and $E_{2}$ overlays and $F$ counterweight insert.


[^0]:    No. जHL. Jib ratines are baned on 160 fi. minimum boom lengit wah tuhulat chord booe with tapered

[^1]:    Rating marked (*) require retractable A-Frame in fully raised pontion.

    Crane ratings do not exceed $75 \%$ of tipping load with side frames extended.

