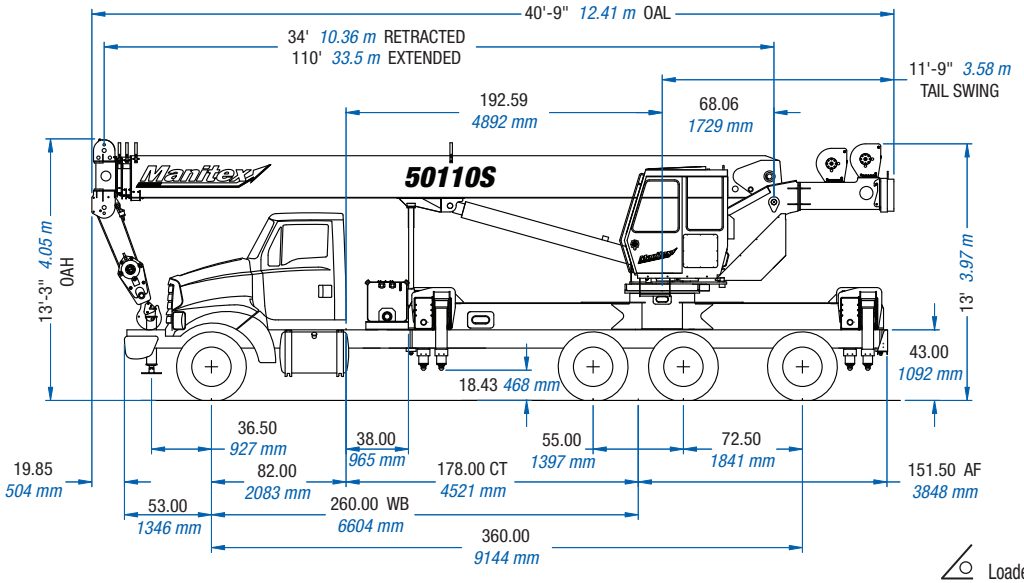
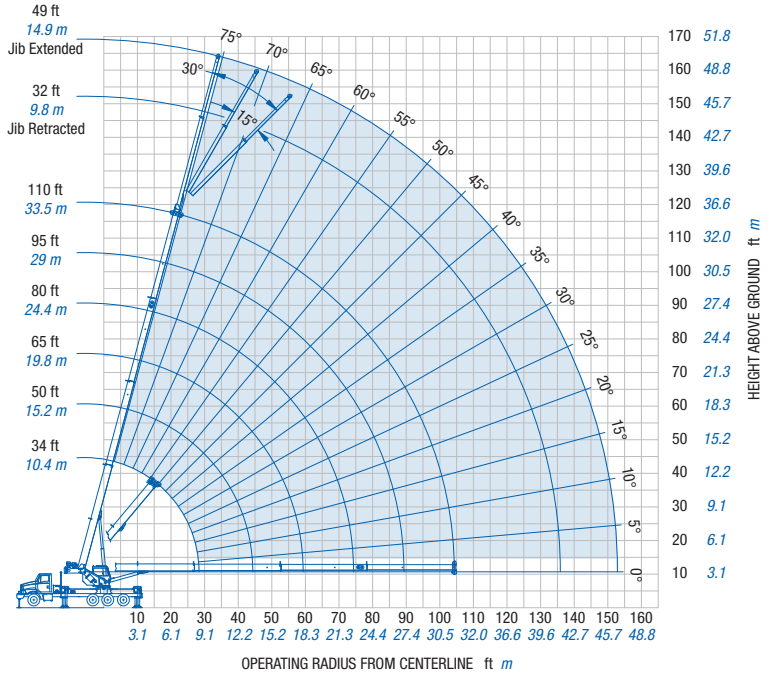
# MODEL 50110S




Loaded boom Angle




## FULLY EXTENDED OUTRIGGER SPREAD: MODEL 50110S

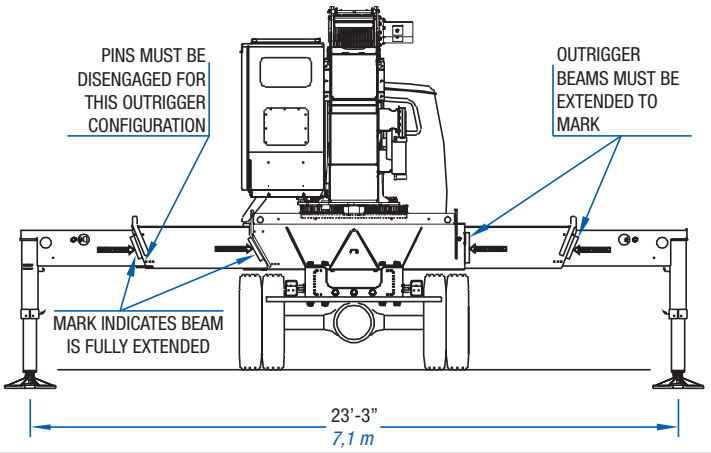
## MAIN BOOM LOAD RATINGS

| Operating Radius | | Boom Length 34 Feet 10.36 Meters | | | | | A 50 Feet 15.24 Meters | | | | | B 65 Feet 19.81 Meters | | | | | C 80 Feet 24.38 Meters | | | | | D 95 Feet 28.96 Meters | | | | | E 110 Feet 33.53 Meters | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Over Rear | | Full 360° | | | Over Rear | | Full 360° | | | Over Rear | | Full 360° | | | Over Rear | | Full 360° | | | Over Rear | | Full 360° | | | Over Rear | | Full 360° | |
| Feet | Meter | ∠ | lb | kg | | kg | ∠ | lb | kg | lb | kg | ∠ | lb | kg | lb | kg | ∠ | lb | kg | lb | kg | ∠ | lb | kg | lb | kg | ∠ | lb | kg | lb | kg |
| 6 | 1.83 | 71 | 100000 | 45359 | 100000 | 45359 | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | 2.44 | 67.5 | 88100 | 39961 | 88100 | 39961 | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | 3.05 | 63.5 | 77900 | 35335 | 77900 | 35335 | 73 | 51000 | 23133 | 51000 | 23133 | | | | | | | | | | | | | | | | | | | |
| 12 | 3.66 | 60 | 69900 | 31706 | 69900 | 31706 | 70.5 | 51000 | 23133 | 51000 | 23133 | | | | | | | | | | | | | | | | | | | |
| 15 | 4.57 | 53.5 | 60400 | 27397 | 60400 | 27397 | 67 | 51000 | 23133 | 51000 | 23133 | 73 | 40000 | 18144 | 40000 | 18144 | | | | | | | | | | | | | | |
| 20 | 6.10 | 42 | 46100 | 20911 | 46100 | 20911 | 60.5 | 46400 | 21047 | 46400 | 21047 | 68.5 | 38810 | 17604 | 38810 | 17604 | 73.5 | 28230 | 12805 | 28230 | 12805 | | | | | | | | | |
| 25 | 7.62 | 26.5 | 35800 | 16239 | 35670 | 16180 | 53.5 | 36600 | 16601 | 36600 | 16601 | 63.5 | 33150 | 15037 | 33150 | 15037 | 69.5 | 24350 | 11045 | 24350 | 11045 | 73.5 | 20000 | 9072 | 20000 | 9072 | | | | | |
| 30 | 9.14 | | | | | | 45.5 | 29670 | 13458 | 25590 | 11607 | 58.5 | 29000 | 13154 | 26150 | 11861 | 65.5 | 21280 | 9652 | 21280 | 9652 | 70.5 | 18680 | 8473 | 18680 | 8473 | 74 | 15500 | 7031 | 15500 | 7031 |
| 35 | 10.67 | | | | | | 36.5 | 23130 | 10492 | 18980 | 8609 | 53 | 23610 | 10709 | 19500 | 8845 | 61.5 | 19000 | 8618 | 19000 | 8618 | 67.5 | 16580 | 7521 | 16850 | 7521 | 71.5 | 14660 | 6650 | 14660 | 6650 |
| 40 | 12.19 | | | | | | 25 | 18360 | 8328 | 14680 | 6659 | 47 | 18850 | 8550 | 15190 | 6890 | 57.5 | 16870 | 7652 | 15470 | 7017 | 64 | 14820 | 6722 | 14820 | 6722 | 69 | 13270 | 6019 | 13270 | 6019 |
| 45 | 13.72 | | | | | | | | | | | 40.5 | 15440 | 7003 | 12160 | 5516 | 53 | 15120 | 6858 | 12440 | 5643 | 60.5 | 13330 | 6046 | 12610 | 5720 | 66 | 11960 | 5425 | 11960 | 5425 |
| 50 | 15.24 | | | | | | | | | | | 32.5 | 12870 | 5838 | 9920 | 4500 | 48 | 13130 | 5956 | 10190 | 4622 | 57 | 12050 | 5466 | 10360 | 4699 | 63 | 10850 | 4921 | 10480 | 4754 |
| 55 | 16.76 | | | | | | | | | | | 22.5 | 10860 | 4926 | 8170 | 3706 | 43 | 11140 | 5053 | 8460 | 3837 | 53 | 10920 | 4953 | 8620 | 3910 | 60 | 9950 | 4513 | 8740 | 3964 |
| 60 | 18.29 | | | | | | | | | | | | | | | | 37 | 9540 | 4327 | 7080 | 3211 | 49 | 9700 | 4400 | 7250 | 3289 | 56.5 | 9210 | 4178 | 7360 | 3338 |
| 65 | 19.81 | | | | | | | | | | | | | | | | 30 | 8220 | 3729 | 5950 | 2699 | 44.5 | 8390 | 3806 | 6120 | 2776 | 53.5 | 8410 | 3815 | 6240 | 2830 |
| 70 | 21.34 | | | | | | | | | | | | | | | | 21 | 7110 | 3225 | 5010 | 2272 | 40 | 7290 | 3307 | 5190 | 2354 | 50 | 7400 | 3357 | 5300 | 2404 |
| 75 | 22.86 | | | | | | | | | | | | | | | | | | | | | 34.5 | 6360 | 2885 | 4410 | 2000 | 46 | 6470 | 2935 | 4520 | 2050 |
| 80 | 24.38 | | | | | | | | | | | | | | | | | | | | | 28 | 5560 | 2522 | 3730 | 1692 | 42 | 5670 | 2572 | 3850 | 1746 |
| 85 | 25.91 | | | | | | | | | | | | | | | | | | | | | 20 | 4860 | 2204 | 3140 | 1424 | 37.5 | 4980 | 2259 | 3260 | 1479 |
| 90 | 27.43 | | | | | | | | | | | | | | | | | | | | | | | | | | 33 | 4380 | 1987 | 2750 | 1247 |
| 95 | 28.96 | | | | | | | | | | | | | | | | | | | | | | | | | | 27 | 3840 | 1742 | 2300 | 1043 |
| 100 | 30.48 | | | | | | | | | | | | | | | | | | | | | | | | | | 19 | 3350 | 1520 | 1900 | 862 |

PRELIMINARY

## OUTRIGGERS - FULL SPREAD

**THE PRELIMINARY CHARTS SHOWN APPLY ONLY WHEN ALL OUTRIGGER BEAMS ARE FULLY EXTENDED AND THE JACK CYLINDERS ARE PROPERLY SET TO LEVEL THE CRANE**

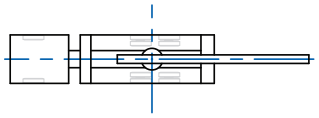



Meets ANSI B30.5 Requirements
Do Not operate crane or accessories within 10' *(3.05 m)* of live power lines.
NOTICE: This chart is for reference only and must not be used for lifting purposes. Consult factory for other boom options.

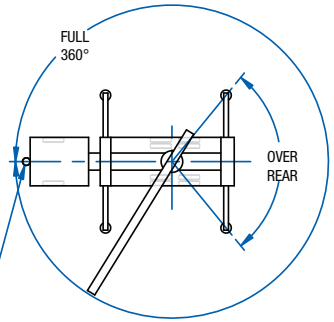
## AREAS OF OPERATION

### ON TIRES

WHEN LIFTING ON TIRES, THE BOOM MUST BE CENTERED OVER THE REAR OF THE CRANE WITH THE SWING BRAKE AND THE HOUSELOCK ENGAGED.



### ON OUTRIGGERS




THE FRONT BUMPER STABILIZER MUST BE SET IN ACCORDANCE TO THE OPERATORS MANUAL BEFORE WORKING IN THE THE "FULL 360°" AREA.

Loaded boom Angle

## CHASSIS DATA

| CHASSIS DATA | 50110S |
|---|---|
| Wheelbase (WB) | 260" *6 604 mm* |
| Cab to Tandem (CT) | 178" *4 521 mm* |
| Cab to End of Frame (BC-EOF) | 329.50" *8 369 mm* |
| Front Axle to Tag Axle * | 360" *9 144 mm* |
| Frame Section Modulus | 27.0 in3 110,000 psi *758,423 kPa* |
| Front Axle Gross Weight Rating | 20,000 lb *9 071 kg* |
| Rear Axle Gross Weight Rating | 40,000 lb *18 143 kg* |
| Minimum Truck Axle Weight - Front ** | 8,950 lb *4 060 kg* |
| Minimum Truck Axle Weight - Rear ** | 10,550 lb *4 785 kg* |
| Nominal Frame Width | 34" *864 mm* |

* Overall wheelbase for federal bridge law (62000 GVW)
** Minimum chassis weight is necessary to meet 85% stability requirements
Chassis date is minimum recommended, not for engineering

## FULLY EXTENDED OUTRIGGER SPREAD: MODEL 50110S

### 32 FT RETRACTED JIB CAPACITIES

| Operating Radius | | 0° OFFSET | | | | | 15° OFFSET | | | | | 30° OFFSET | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | ∠ | OVER REAR | | FULL 360° | | ∠ | OVER REAR | | FULL 360° | | ∠ | OVER REAR | | FULL 360° | |
| Feet | *Meter* | | lb | *kg* | lb | *kg* | | lb | *kg* | lb | *kg* | | lb | *kg* | lb | *kg* |
| 40 | *12.19* | 74.5 | 7800 | *3538* | 7800 | *3538* | | | | | | | | | | |
| 45 | *13.72* | 72.5 | 7800 | *3538* | 7800 | *3538* | | | | | | | | | | |
| 50 | *15.24* | 70.5 | 7380 | *3348* | 7380 | *3348* | 73.5 | 6880 | *3121* | 6880 | *3121* | | | | | |
| 55 | *16.76* | 68.5 | 6980 | *3166* | 6980 | *3166* | 71.5 | 6500 | *2948* | 6500 | *2948* | 74 | 6100 | *2767* | 6100 | *2767* |
| 60 | *18.29* | 66.5 | 6600 | *2994* | 6600 | *2994* | 69.5 | 6120 | *2776* | 6120 | *2776* | 72 | 5750 | *2608* | 5750 | *2608* |
| 65 | *19.81* | 64 | 6230 | *2826* | 6230 | *2826* | 67 | 5780 | *2622* | 5780 | *2622* | 69.5 | 5450 | *2472* | 5450 | *2472* |
| 70 | *21.34* | 62 | 5870 | *2663* | 5280 | *2395* | 65 | 5450 | *2472* | 5450 | *2472* | 67 | 5160 | *2341* | 5160 | *2341* |
| 75 | *22.86* | 59.5 | 5530 | *2508* | 4480 | *2032* | 62.5 | 5160 | *2341* | 4890 | *2218* | 64.5 | 4900 | *2223* | 4900 | *2223* |
| 80 | *24.38* | 57 | 5110 | *2318* | 3800 | *1724* | 60 | 4880 | *2214* | 4170 | *1891* | 62 | 4670 | *2118* | 4470 | *2028* |
| 85 | *25.91* | 54.5 | 4690 | *2127* | 3200 | *1451* | 57.5 | 4630 | *2100* | 3530 | *1601* | 59.5 | 4450 | *2018* | 3800 | *1724* |
| 90 | *27.43* | 52 | 4280 | *1941* | 2690 | *1220* | 54.5 | 4400 | *1996* | 2980 | *1352* | 56.5 | 4250 | *1928* | 3210 | *1456* |
| 95 | *28.96* | 49 | 3740 | *1696* | 2230 | *1012* | 51.5 | 4000 | *1814* | 2500 | *1134* | 53.5 | 4070 | *1846* | 2700 | *1225* |
| 100 | *30.48* | 46 | 3260 | *1479* | 1830 | *830* | 48.5 | 3490 | *1583* | 2060 | *934* | 50.5 | 3660 | *1660* | 2230 | *1012* |
| 105 | *32.00* | 43 | 2830 | *1284* | 1470 | *667* | 45.5 | 3030 | *1374* | 1670 | *757* | 47 | 3170 | *1438* | 1810 | *821* |
| 110 | *33.53* | 39.5 | 2440 | *1107* | 1140 | *517* | 42 | 2620 | *1188* | 1320 | *599* | 43.5 | 2730 | *1238* | 1440 | *653* |
| 115 | *35.05* | 35.5 | 2090 | *948* | 850 | *386* | 38 | 2240 | *1016* | 1000 | *454* | 39 | 2330 | *1057* | 1090 | *494* |
| 120 | *36.58* | 31.5 | 1770 | *803* | | | 34 | 1890 | *857* | | | 34.5 | 1950 | *885* | 760 | *345* |
| 125 | *38.10* | 26.5 | 1480 | *671* | | | 29 | 1570 | *712* | | | 29 | 1600 | *726* | | |
| 130 | *39.62* | 20.5 | 1210 | *549* | | | 22 | 1270 | *576* | | | 20 | 1250 | *567* | | |
| 135 | *41.15* | 10 | 950 | *431* | | | | | | | | | | | | |
| 140 | *42.67* | | | | | | | | | | | | | | | |
| 145 | *44.20* | | | | | | | | | | | | | | | |
| 150 | *45.72* | | | | | | | | | | | | | | | |

### 49 FT EXTENDED JIB CAPACITIES

| 0° OFFSET | | | | | 15° OFFSET | | | | | 30° OFFSET | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ∠ | OVER REAR | | FULL 360° | | ∠ | OVER REAR | | FULL 360° | | ∠ | OVER REAR | | FULL 360° | |
| | lb | *kg* | lb | *kg* | | lb | *kg* | lb | *kg* | | lb | *kg* | lb | *kg* |
| | | | | | | | | | | | | | | |
| 75 | 5700 | *2585* | 5700 | *2585* | | | | | | | | | | |
| 73.5 | 5700 | *2585* | 5700 | *2585* | | | | | | | | | | |
| 71.5 | 5700 | *2585* | 5700 | *2585* | 75 | 4700 | *2132* | 4700 | *2132* | | | | | |
| 69.5 | 5530 | *2508* | 5530 | *2508* | 73.5 | 4480 | *2032* | 4480 | *2032* | | | | | |
| 68 | 5230 | *2372* | 5230 | *2372* | 71.5 | 4280 | *1941* | 4280 | *1941* | 75 | 3520 | *1597* | 3520 | *1597* |
| 66 | 4930 | *2236* | 4930 | *2236* | 69.5 | 4100 | *1860* | 4100 | *1860* | 73.5 | 3410 | *1547* | 3410 | *1547* |
| 64 | 4660 | *2114* | 4660 | *2114* | 67.5 | 3940 | *1787* | 3940 | *1787* | 71 | 3310 | *1501* | 3310 | *1501* |
| 62 | 4410 | *2000* | 4410 | *2000* | 65.5 | 3790 | *1719* | 3790 | *1719* | 69 | 3210 | *1456* | 3210 | *1456* |
| 60 | 4170 | *1891* | 3810 | *1728* | 63.5 | 3650 | *1656* | 3650 | *1656* | 67 | 3130 | *1420* | 3130 | *1420* |
| 57.5 | 3950 | *1792* | 3290 | *1492* | 61.5 | 3520 | *1597* | 3520 | *1597* | 64.5 | 3050 | *1383* | 3050 | *1383* |
| 55.5 | 3750 | *1701* | 2820 | *1279* | 59 | 3400 | *1542* | 3250 | *1474* | 62 | 2980 | *1352* | 2980 | *1352* |
| 53 | 3560 | *1615* | 2420 | *1098* | 57 | 3290 | *1492* | 2800 | *1270* | 59.5 | 2910 | *1320* | 2910 | *1320* |
| 50.5 | 3380 | *1533* | 2050 | *930* | 54.5 | 3190 | *1447* | 2400 | *1089* | 57 | 2860 | *1297* | 2680 | *1216* |
| 48 | 3010 | *1365* | 1720 | *780* | 52 | 3050 | *1383* | 2030 | *921* | 54.5 | 2810 | *1275* | 2280 | *1034* |
| 45.5 | 2660 | *1207* | 1420 | *644* | 49 | 2920 | *1324* | 1700 | *771* | 51.5 | 2760 | *1252* | 1920 | *871* |
| 42.5 | 2330 | *1057* | 1150 | *522* | 46 | 2580 | *1170* | 1400 | *635* | 48.5 | 2730 | *1238* | 1580 | *717* |
| 39.5 | 2040 | *925* | 910 | *413* | 43 | 2260 | *1025* | 1130 | *513* | 45 | 2400 | *1089* | 1280 | *581* |
| 36 | 1770 | *803* | | | 39.5 | 1960 | *889* | 870 | *395* | 41 | 2070 | *939* | 990 | *449* |
| 32 | 1520 | *689* | | | 35.5 | 1680 | *762* | | | 36.5 | 1760 | *798* | | |
| 28 | 1290 | *585* | | | 31 | 1410 | *640* | | | 31 | 1460 | *662* | | |
| 22.5 | 1070 | *485* | | | 25 | 1160 | *526* | | | | | | | |
| 15 | 870 | *395* | | | 15.5 | 910 | *413* | | | | | | | |

PRELIMINARY