

# UNIC

## Mini Crawler Cranes

# URW 547

## (4.0t x 2.7m)

*Extended reach with a maximum lifting height of 18.6m at 4 tonne.*

- ▶ Capacity 4.0t x 2.7m
- ▶ Total width 1.4m
- ▶ Max working radius 17.83m
- ▶ Max boom length 18.02m
- ▶ Diesel powered optional mains electric
- ▶ Zero length increase with electric option
- ▶ Operator control of outrigger extension
- ▶ Intelligent voice warning system
- ▶ Radio remote control as standard
- ▶ Working area limitation
- ▶ Slew limitation (optional)
- ▶ Intelligent throttle activation for economy and ecology



### CRANE SPECIFICATIONS

|                        |                        |  |
|------------------------|------------------------|--|
| Crane capacity         | Capacity:              | 4.0t x 2.7m  |
| Max working radius     | Max:                   | 17.83m   |
| Max lifting height     | Approx:                | 18.6m  |
| Rope length            | Approx:                | 21.75m (4 fall), 43.5m (2 fall), 87m (1 fall)                        |
| Dimensions             | Folded:                | 4955mm (l) x 1400mm (w) x 1980mm (h)                                 |
| Weight                 | Unladen:               | 5010kg   |
| Hook speed             | approx:                | 17m/min (with 4 layers and 4 falls)                                  |
| Telescopic system      | Boom length:           | 3.99 - 18.02m  |
|                        | telescoping speed:     | 11.78m/35 seconds  |
|                        | boom type:             | 7 section hydraulically telescoping boom, hexagonal box construction |
| Derricking angle/speed | approx:                | 0 - 80°/18 seconds   |
| Slewing angle/speed    | approx:                | 360° (continuous) 2.5min <sup>-1</sup> (rpm)                         |
| Traction system        | drive:                 | hydrostatic 2 speed  |
|                        | gradability:           | 23°  |
|                        | travel speed:          | 0 - 3km/h  |
|                        | track ground length:   | 1750mm   |
|                        | track ground pressure: | 47.1kPa (0.46kg/cm <sup>2</sup> )                                    |
|                        | track width:           | 300mm  |
| Engine                 | manufacturer:          | Mitsubishi   |
|                        | fuel:                  | Diesel (electric dual power option)                                  |
|                        | maximum output:        | 18kW (24.5PS) / 2100min <sup>-1</sup> (rpm)                          |
|                        | starting method:       | Electric   |
|                        | tank capacity:         | 40 litres  |
|                        | power:                 | 7.5kW  |
|                        | voltage:               | 400v AC 50/60Hz  |

**Standard equipment** Computer controlled moment limiter (safe load indicator), computer controlled intelligent voice warning system, overload warning lamps, radio remote control, intelligent throttle activation

**Optional equipment** 2 fall hook block, 1 fall hook block, LPG dual power, mains electric dual power (400v), diesel engine, low marking tracks, slew limitation, Rayco - Wylie i3000 SLI



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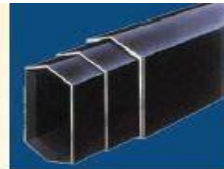
## (4.0t x 2.7m)

*Extended reach with a maximum lifting height of 18.6m at 4 tonne.*

| Second stage extended: 3.99m—7.7m boom length  |                    |           |       |       |       |       |       |       |       |       |       |       |       |       |       |
|--|--------------------|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Outriggers                                     | Working radius (m) | Up to 2.5 | 2.7   | 3     | 3.5   | 4     | 4.5   | 5     | 5.5   | 6     | 7     | 7.25  | 7.51  |       |       |
|  | Max-extended kg    | 4,000     | 4,000 | 3,500 | 3,000 | 2,550 | 2,250 | 2,000 | 1,800 | 1,630 | 1,350 | 1,350 | 1,300 |       |       |
|  | Mid-extended kg    | 4,000     | 4,000 | 3,500 | 3,000 | 2,550 | 2,200 | 1,850 | 1,630 | 1,400 | 1,010 | 1,010 | 850   |       |       |
|  | Min-extended kg    | 4,000     | 4,000 | 3,500 | 3,000 | 2,550 | 2,100 | 1,640 | 1,320 | 1,080 | 750   | 750   | 620   |       |       |
| Third stage extended: 7.7—10.66m boom length   |                    |           |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Outriggers                                     | Working radius (m) | Up to 3.5 | 4     | 5     | 6     | 7     | 8     | 9     | 10    | 10.2  | 10.47 |       |       |       |       |
|  | Max-extended kg    | 3,000     | 2,550 | 2,000 | 1,650 | 1,350 | 1,100 | 850   | 600   | 600   | 520   |       |       |       |       |
|  | Mid-extended kg    | 3,000     | 2,550 | 1,850 | 1,400 | 1,100 | 830   | 630   | 490   | 490   | 430   |       |       |       |       |
|  | Min-extended kg    | 3,000     | 2,550 | 1,650 | 1,150 | 840   | 620   | 460   | 350   | 350   | 300   |       |       |       |       |
| Forth stage extended: 10.66-13.57m boom length |                    |           |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Outriggers                                     | Working radius (m) | Up to 4   | 4.5   | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12    | 13    | 13.1  | 13.38 |       |
|  | Max-extended kg    | 2,200     | 1,900 | 1,700 | 1,370 | 1,150 | 1,000 | 900   | 800   | 660   | 500   | 410   | 410   | 800   |       |
|  | Mid-extended kg    | 2,200     | 1,800 | 1,600 | 1,300 | 1,050 | 850   | 700   | 550   | 450   | 360   | 290   | 290   | 260   |       |
|  | Min-extended kg    | 2,200     | 1,800 | 1,600 | 1,150 | 800   | 650   | 520   | 400   | 320   | 250   | 190   | 190   | 170   |       |
| Fifth stage extended: 13.57—16.48m boom length |                    |           |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Outriggers                                     | Working radius (m) | Up to 5   | 5.5   | 6     | 7     | 8     | 9     | 10    | 11    | 12    | 13    | 14    | 15    | 16    | 16.29 |
|  | Max-extended kg    | 1,100     | 950   | 880   | 730   | 620   | 570   | 520   | 460   | 410   | 350   | 290   | 230   | 180   | 170   |
|  | Mid-extended kg    | 1,100     | 950   | 880   | 700   | 600   | 520   | 450   | 400   | 350   | 300   | 250   | 190   | 150   | 140   |
|  | Min-extended kg    | 1,100     | 950   | 850   | 700   | 500   | 420   | 390   | 340   | 290   | 230   | 180   | 140   | 100   | 100   |
| Sixth stage extended: 16.48—18.02m boom length |                    |           |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Outriggers                                     | Working radius (m) | Up to 6   | 7     | 8     | 9     | 10    | 11    | 12    | 13    | 14    | 15    | 16    | 17    | 17.83 |       |
|  | Max-extended kg    | 300       | 250   | 230   | 200   | 170   | 160   | 150   | 140   | 130   | 120   | 110   | 80    | 50    |       |
|  | Mid-extended kg    | 300       | 250   | 230   | 200   | 170   | 160   | 150   | 140   | 130   | 120   | 110   | 80    | 50    |       |
|  | Min-extended kg    | 300       | 250   | 230   | 200   | 170   | 160   | 150   | 140   | 130   | 120   | 110   | 80    | 50    |       |



Optional low marking tracks



Hexagonal boom minimises sway



Optional searcher hook

# UNIC

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## (4.0t x 2.7m)

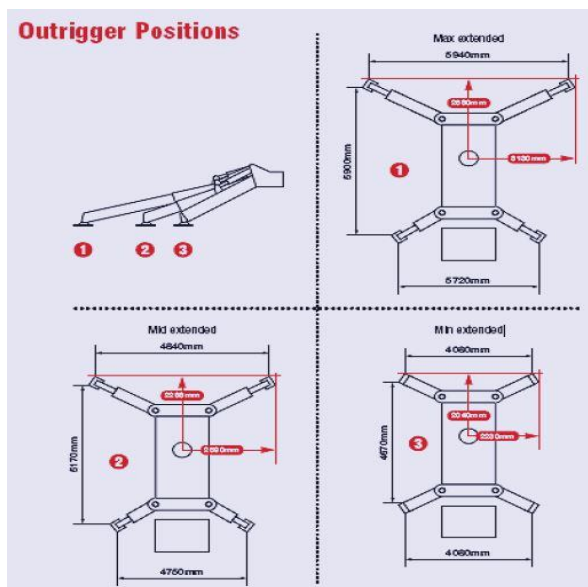
*Extended reach with a maximum lifting height of 18.6m at 4 tonne.*

### Searcher Hook Net Rated Loads - Boom up to 16.48m

| RADIUS RATED     | SEARCHER HOOK NET RATED LOADS (kg) |                         |                         |
|------------------|------------------------------------|-------------------------|-------------------------|
| WORKING RADIUS m | OUTRIGGERS MAX-EXTENDED            | OUTRIGGERS MID-EXTENDED | OUTRIGGERS MIN-EXTENDED |
| 3.0              | 500                                | 500                     | 500                     |
| 4.0              | 500                                | 500                     | 500                     |
| 5.0              | 500                                | 500                     | 500                     |
| 6.0              | 500                                | 500                     | 500                     |
| 7.0              | 400                                | 350                     | 320                     |
| 8.0              | 330                                | 280                     | 220                     |
| 9.0              | 270                                | 230                     | 180                     |
| 10.0             | 220                                | 190                     | 130                     |
| 11.0             | 180                                | 160                     | 100                     |
| 12.0             | 150                                | 130                     | PROHIBITED              |
| 13.0             | 130                                | 100                     |                         |
| 14.0             | 120                                |                         |                         |
| 15.0             | 110                                |                         |                         |
| 16.0             | 100                                |                         |                         |

|                         |  |
|-------------------------|--|
| <b>Lifting capacity</b> | 500kg                                      |
| <b>Length</b>           | 800mm                                      |
| <b>Weight</b>           | 20kg (excluding bracket and first section) |
| <b>Tilt angles</b>      | 0°, 20°, 40°, 60°                          |

### Outrigger Positions



# UNIC Mini Crawler Crane – URW-547 Point Loadings

All calculations below include the Tare weight of the 2 sheave hook block of 50KGS

| Working Radius - 1400mm<br>Rated Load - 4000kg<br>Number of Booms - 1 |      |      |      |      |
|---|------|------|------|------|
| Angle   | OR1  | OR2  | OR3  | OR4  |
| 0   | 2995 | 2100 | 2100 | 2995 |
| 5   | 3050 | 2160 | 2045 | 2930 |
| 10  | 3100 | 2230 | 1990 | 2865 |
| 15  | 3145 | 2300 | 1945 | 2795 |
| 20  | 3185 | 2375 | 1905 | 2720 |
| 25  | 3220 | 2450 | 1875 | 2645 |
| 30  | 3245 | 2530 | 1850 | 2565 |
| 35  | 3265 | 2610 | 1830 | 2485 |
| 40  | 3275 | 2690 | 1815 | 2400 |
| 45  | 3280 | 2775 | 1810 | 2320 |
| 50  | 3280 | 2855 | 1815 | 2235 |
| 55  | 3270 | 2940 | 1825 | 2155 |
| 60  | 3255 | 3020 | 1840 | 2075 |
| 65  | 3230 | 3100 | 1865 | 1995 |
| 70  | 3200 | 3175 | 1895 | 1920 |
| 75  | 3160 | 3245 | 1930 | 1845 |
| 80  | 3120 | 3315 | 1975 | 1775 |
| 85  | 3070 | 3380 | 2025 | 1710 |
| 90  | 3015 | 3440 | 2080 | 1650 |
| 95  | 2955 | 3495 | 2140 | 1595 |
| 100   | 2890 | 3545 | 2205 | 1545 |
| 105   | 2820 | 3590 | 2275 | 1505 |
| 110   | 2745 | 3625 | 2345 | 1465 |
| 115   | 2670 | 3655 | 2420 | 1435 |
| 120   | 2595 | 3680 | 2500 | 1415 |
| 125   | 2510 | 3695 | 2580 | 1395 |
| 130   | 2430 | 3705 | 2660 | 1385 |
| 135   | 2350 | 3710 | 2745 | 1385 |
| 140   | 2265 | 3705 | 2830 | 1390 |
| 145   | 2185 | 3690 | 2910 | 1400 |
| 150   | 2100 | 3670 | 2990 | 1420 |
| 155   | 2025 | 3645 | 3070 | 1445 |
| 160   | 1945 | 3615 | 3145 | 1480 |
| 165   | 1870 | 3575 | 3220 | 1520 |
| 170   | 1800 | 3530 | 3290 | 1565 |
| 175   | 1735 | 3475 | 3360 | 1615 |
| 180   | 1675 | 3420 | 3420 | 1675 |
| Max   | 3280 | 3710 | 3420 | 2995 |

| Working Radius -3000mm<br>Rated Load - 3750kg<br>Number of Booms - 1+2 |      |      |      |      |
|--|------|------|------|------|
| Angle  | OR1  | OR2  | OR3  | OR4  |
| 0  | 3640 | 1295 | 1295 | 3640 |
| 5  | 3760 | 1425 | 1180 | 3510 |
| 10   | 3865 | 1565 | 1070 | 3375 |
| 15   | 3960 | 1710 | 975  | 3225 |
| 20   | 4040 | 1865 | 895  | 3075 |
| 25   | 4110 | 2025 | 825  | 2915 |
| 30   | 4165 | 2190 | 775  | 2750 |
| 35   | 4205 | 2355 | 735  | 2580 |
| 40   | 4230 | 2525 | 710  | 2410 |
| 45   | 4240 | 2700 | 700  | 2240 |
| 50   | 4235 | 2870 | 705  | 2065 |
| 55   | 4215 | 3040 | 725  | 1895 |
| 60   | 4180 | 3205 | 755  | 1730 |
| 65   | 4130 | 3370 | 805  | 1565 |
| 70   | 4065 | 3530 | 870  | 1410 |
| 75   | 3990 | 3680 | 945  | 1255 |
| 80   | 3900 | 3825 | 1035 | 1115 |
| 85   | 3800 | 3955 | 1140 | 980  |
| 90   | 3685 | 4080 | 1255 | 855  |
| 95   | 3560 | 4195 | 1380 | 740  |
| 100  | 3425 | 4300 | 1515 | 640  |
| 105  | 3280 | 4390 | 1655 | 550  |
| 110  | 3130 | 4465 | 1805 | 470  |
| 115  | 2970 | 4530 | 1965 | 410  |
| 120  | 2810 | 4580 | 2130 | 360  |
| 125  | 2640 | 4615 | 2295 | 325  |
| 130  | 2470 | 4630 | 2465 | 305  |
| 135  | 2300 | 4635 | 2635 | 300  |
| 140  | 2130 | 4625 | 2810 | 310  |
| 145  | 1955 | 4600 | 2980 | 335  |
| 150  | 1790 | 4560 | 3145 | 375  |
| 155  | 1625 | 4510 | 3310 | 430  |
| 160  | 1465 | 4440 | 3470 | 495  |
| 165  | 1310 | 4360 | 3625 | 580  |
| 170  | 1165 | 4265 | 3770 | 675  |
| 175  | 1025 | 4155 | 3910 | 780  |
| 180  | 900  | 4040 | 4040 | 900  |
| Max  | 4240 | 4635 | 4040 | 3640 |

# UNIC Mini Crawler Crane – URW-547 Point Loadings

All calculations below include the Tare weight of the 2 sheave hook block of 50KGS

| Working Radius - 6000mm<br>Rated Load - 2500kg<br>Number of Booms - 1+2+3 |      |      |      |      |
|---|------|------|------|------|
| Angle   | OR1  | OR2  | OR3  | OR4  |
| 0   | 3865 | 290  | 290  | 3865 |
| 5   | 4035 | 470  | 125  | 3690 |
| 10  | 4210 | 630  | 0    | 3465 |
| 15  | 4475 | 705  | 0    | 3130 |
| 20  | 4705 | 805  | 0    | 2800 |
| 25  | 4895 | 930  | 0    | 2480 |
| 30  | 5050 | 1085 | 0    | 2175 |
| 35  | 5160 | 1265 | 0    | 1880 |
| 40  | 5230 | 1470 | 0    | 1610 |
| 45  | 5260 | 1695 | 0    | 1355 |
| 50  | 5245 | 1945 | 0    | 1120 |
| 55  | 5190 | 2210 | 0    | 910  |
| 60  | 5095 | 2490 | 0    | 725  |
| 65  | 4955 | 2790 | 0    | 565  |
| 70  | 4780 | 3095 | 0    | 435  |
| 75  | 4565 | 3415 | 0    | 330  |
| 80  | 4310 | 3745 | 0    | 255  |
| 85  | 4090 | 4010 | 65   | 145  |
| 90  | 3895 | 4220 | 195  | 0    |
| 95  | 3560 | 4535 | 210  | 0    |
| 100   | 3230 | 4825 | 255  | 0    |
| 105   | 2905 | 5075 | 330  | 0    |
| 110   | 2585 | 5290 | 435  | 0    |
| 115   | 2275 | 5470 | 565  | 0    |
| 120   | 1980 | 5605 | 725  | 0    |
| 125   | 1695 | 5700 | 910  | 0    |
| 130   | 1430 | 5760 | 1120 | 0    |
| 135   | 1185 | 5770 | 1355 | 0    |
| 140   | 960  | 5740 | 1610 | 0    |
| 145   | 755  | 5670 | 1880 | 0    |
| 150   | 575  | 5560 | 2175 | 0    |
| 155   | 420  | 5410 | 2480 | 0    |
| 160   | 290  | 5220 | 2800 | 0    |
| 165   | 190  | 4990 | 3130 | 0    |
| 170   | 120  | 4725 | 3465 | 0    |
| 175   | 75   | 4425 | 3810 | 0    |
| 180   | 30   | 4125 | 4125 | 30   |
| Max   | 5260 | 5770 | 4125 | 3865 |

| Working Radius - 9000mm<br>Rated Load - 1200kg<br>Number of Booms - 1+2+3+4 |      |      |      |      |
|---|------|------|------|------|
| Angle   | OR1  | OR2  | OR3  | OR4  |
| 0   | 3205 | 140  | 140  | 3205 |
| 5   | 3340 | 290  | 5    | 3055 |
| 10  | 3585 | 325  | 0    | 2770 |
| 15  | 3805 | 385  | 0    | 2495 |
| 20  | 3995 | 465  | 0    | 2220 |
| 25  | 4155 | 575  | 0    | 1955 |
| 30  | 4280 | 700  | 0    | 1705 |
| 35  | 4370 | 850  | 0    | 1460 |
| 40  | 4430 | 1020 | 0    | 1235 |
| 45  | 4455 | 1205 | 0    | 1025 |
| 50  | 4440 | 1410 | 0    | 830  |
| 55  | 4395 | 1630 | 0    | 660  |
| 60  | 4315 | 1860 | 0    | 505  |
| 65  | 4200 | 2110 | 0    | 375  |
| 70  | 4055 | 2365 | 0    | 265  |
| 75  | 3880 | 2630 | 0    | 175  |
| 80  | 3670 | 2900 | 0    | 115  |
| 85  | 3430 | 3170 | 0    | 80   |
| 90  | 3230 | 3385 | 65   | 0    |
| 95  | 2955 | 3650 | 80   | 0    |
| 100   | 2680 | 3885 | 115  | 0    |
| 105   | 2410 | 4095 | 175  | 0    |
| 110   | 2145 | 4275 | 265  | 0    |
| 115   | 1890 | 4420 | 375  | 0    |
| 120   | 1645 | 4535 | 505  | 0    |
| 125   | 1410 | 4615 | 660  | 0    |
| 130   | 1190 | 4660 | 830  | 0    |
| 135   | 990  | 4670 | 1025 | 0    |
| 140   | 800  | 4645 | 1235 | 0    |
| 145   | 635  | 4590 | 1460 | 0    |
| 150   | 485  | 4495 | 1705 | 0    |
| 155   | 355  | 4370 | 1955 | 0    |
| 160   | 250  | 4215 | 2220 | 0    |
| 165   | 165  | 4025 | 2495 | 0    |
| 170   | 105  | 3805 | 2770 | 0    |
| 175   | 70   | 3555 | 3055 | 0    |
| 180   | 30   | 3310 | 3310 | 30   |
| Max   | 4455 | 4670 | 3310 | 3205 |

# UNIC Mini Crawler Crane – URW-547 Point Loadings

All calculations below include the Tare weight of the 2 sheave hook block of 50KGS

| Working Radius - 10000mm<br>Rated Load - 700kg<br>Number of Booms - 1+2+3+4+5 |      |      |      |      |
|---|------|------|------|------|
| Angle   | OR1  | OR2  | OR3  | OR4  |
| 0   | 2680 | 350  | 350  | 2680 |
| 5   | 2785 | 460  | 245  | 2570 |
| 10  | 2875 | 580  | 155  | 2450 |
| 15  | 2960 | 710  | 70   | 2325 |
| 20  | 3035 | 840  | 0    | 2185 |
| 25  | 3150 | 920  | 0    | 1990 |
| 30  | 3245 | 1015 | 0    | 1795 |
| 35  | 3315 | 1125 | 0    | 1615 |
| 40  | 3360 | 1250 | 0    | 1445 |
| 45  | 3380 | 1395 | 0    | 1285 |
| 50  | 3370 | 1545 | 0    | 1140 |
| 55  | 3335 | 1710 | 0    | 1010 |
| 60  | 3275 | 1885 | 0    | 895  |
| 65  | 3190 | 2070 | 0    | 795  |
| 70  | 3080 | 2265 | 0    | 715  |
| 75  | 2985 | 2420 | 45   | 610  |
| 80  | 2910 | 2545 | 120  | 485  |
| 85  | 2820 | 2665 | 210  | 365  |
| 90  | 2720 | 2770 | 310  | 260  |
| 95  | 2610 | 2870 | 420  | 160  |
| 100   | 2495 | 2960 | 535  | 70   |
| 105   | 2360 | 3050 | 650  | 0    |
| 110   | 2160 | 3185 | 715  | 0    |
| 115   | 1970 | 3295 | 795  | 0    |
| 120   | 1785 | 3380 | 895  | 0    |
| 125   | 1610 | 3440 | 1010 | 0    |
| 130   | 1445 | 3475 | 1140 | 0    |
| 135   | 1290 | 3480 | 1285 | 0    |
| 140   | 1150 | 3465 | 1445 | 0    |
| 145   | 1020 | 3420 | 1615 | 0    |
| 150   | 910  | 3350 | 1795 | 0    |
| 155   | 815  | 3255 | 1990 | 0    |
| 160   | 735  | 3135 | 2185 | 0    |
| 165   | 655  | 3010 | 2375 | 20   |
| 170   | 530  | 2930 | 2500 | 100  |
| 175   | 410  | 2835 | 2620 | 195  |
| 180   | 295  | 2735 | 2735 | 295  |

| Working Radius -14000mm<br>Rated Load - 500kg<br>Number of Booms - 1+2+3+4+5+6 |      |      |      |      |
|--|------|------|------|------|
| Angle  | OR1  | OR2  | OR3  | OR4  |
| 0  | 2795 | 110  | 110  | 2795 |
| 5  | 2920 | 230  | 0    | 2660 |
| 10   | 3130 | 260  | 0    | 2415 |
| 15   | 3315 | 315  | 0    | 2180 |
| 20   | 3480 | 385  | 0    | 1945 |
| 25   | 3615 | 475  | 0    | 1720 |
| 30   | 3720 | 585  | 0    | 1505 |
| 35   | 3800 | 710  | 0    | 1300 |
| 40   | 3850 | 855  | 0    | 1105 |
| 45   | 3870 | 1015 | 0    | 925  |
| 50   | 3860 | 1190 | 0    | 760  |
| 55   | 3820 | 1375 | 0    | 610  |
| 60   | 3750 | 1575 | 0    | 480  |
| 65   | 3655 | 1785 | 0    | 365  |
| 70   | 3530 | 2005 | 0    | 275  |
| 75   | 3375 | 2230 | 0    | 200  |
| 80   | 3200 | 2460 | 0    | 150  |
| 85   | 2995 | 2695 | 0    | 115  |
| 90   | 2835 | 2865 | 70   | 40   |
| 95   | 2635 | 3055 | 115  | 0    |
| 100  | 2405 | 3255 | 150  | 0    |
| 105  | 2170 | 3435 | 200  | 0    |
| 110  | 1945 | 3590 | 275  | 0    |
| 115  | 1730 | 3715 | 365  | 0    |
| 120  | 1520 | 3810 | 480  | 0    |
| 125  | 1320 | 3880 | 610  | 0    |
| 130  | 1130 | 3915 | 760  | 0    |
| 135  | 955  | 3925 | 925  | 0    |
| 140  | 795  | 3905 | 1105 | 0    |
| 145  | 655  | 3855 | 1300 | 0    |
| 150  | 525  | 3780 | 1505 | 0    |
| 155  | 415  | 3670 | 1720 | 0    |
| 160  | 325  | 3535 | 1945 | 0    |
| 165  | 255  | 3375 | 2180 | 0    |
| 170  | 205  | 3185 | 2415 | 0    |
| 175  | 175  | 2975 | 2660 | 0    |
| 180  | 85   | 2825 | 2825 | 85   |