

Mechanical Data

| Function | Hoist Type | Speed vs Weight | 2-part | | | | 4-part | | | | Motor (hp) | Motor (kW) | Rope Length (ft) |
|----------|-----------------------|-----------------|---------------|---------------|---------------|--------------|--------------|---------------|---------------|---------------|------------|------------|------------------|
| | | | 1st Gear | 2nd Gear | 3rd Gear | 4th Gear | 1st Gear | 2nd Gear | 3rd Gear | 4th Gear | | | |
| Hoist | 108 LBR 50 small drum | ft/min lbs | 126 22,046 | 197 14,330 | 315 8,598 | 500 4,850 | 63 44,092 | 99 28,660 | 158 17,196 | 250 9,700 | 108 | 79 | 1,017 |
| | 108 LBR 50 large drum | ft/min lbs | 106 22,046 | 164 14,330 | 263 8,598 | 418 4,850 | 53 44,092 | 82 28,660 | 130 17,196 | 209 9,700 | 108 | 79 | 2,247 |
| | 166 LBR 50 | ft/min lbs | 150 22,046 | 237 18,298 | 378 10,803 | 591 6,393 | 79 44,092 | 119 36,597 | 189 21,605 | 296 13,007 | 166 | 122 | 1,017 |
| Trolley | DV - 7.5 | ft/min | 280 | | | | | | | | 12 | 9.0 | |
| Swing | OR - 16.5 | rpm | 1.00 | | | | | | | | 3 x 8.9 | 3 x 6.6 | |

Power Requirements: 480 V (+6% or -10%) 60 Hz measured at turn table.
 Amperage: 108 LBR 50: 230 Amp (3 phase service with ground)
 Amperage: 166 LBR 50: 274 Amp (3 phase service with ground)

Note: Values given under "Rope Length" are for drum spooling capacity only.



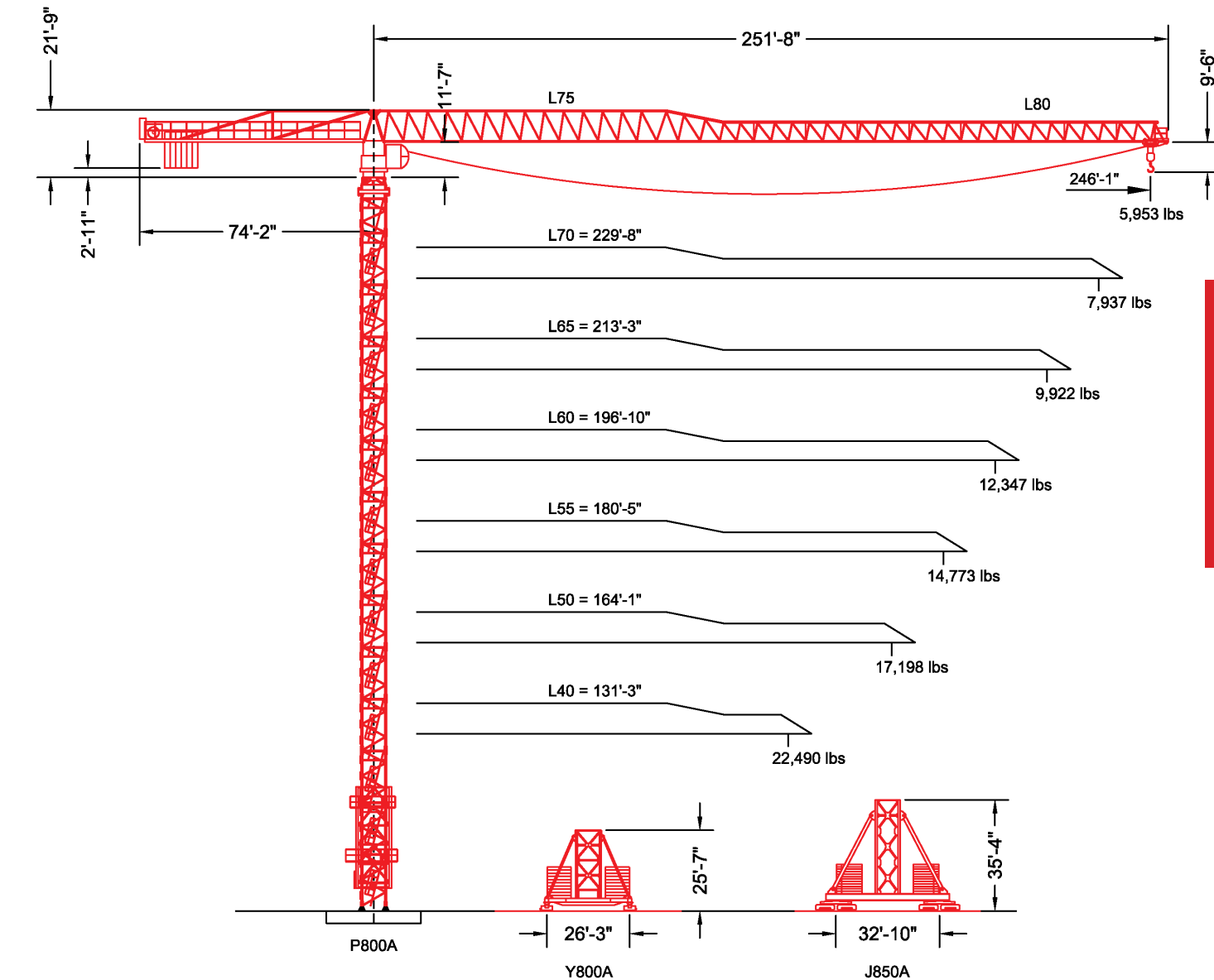
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MDT412-L20

Maximum Capacity = 44,092 lbs



Note: Tip capacities are dependent on certain trolley types.

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MDT412-L20



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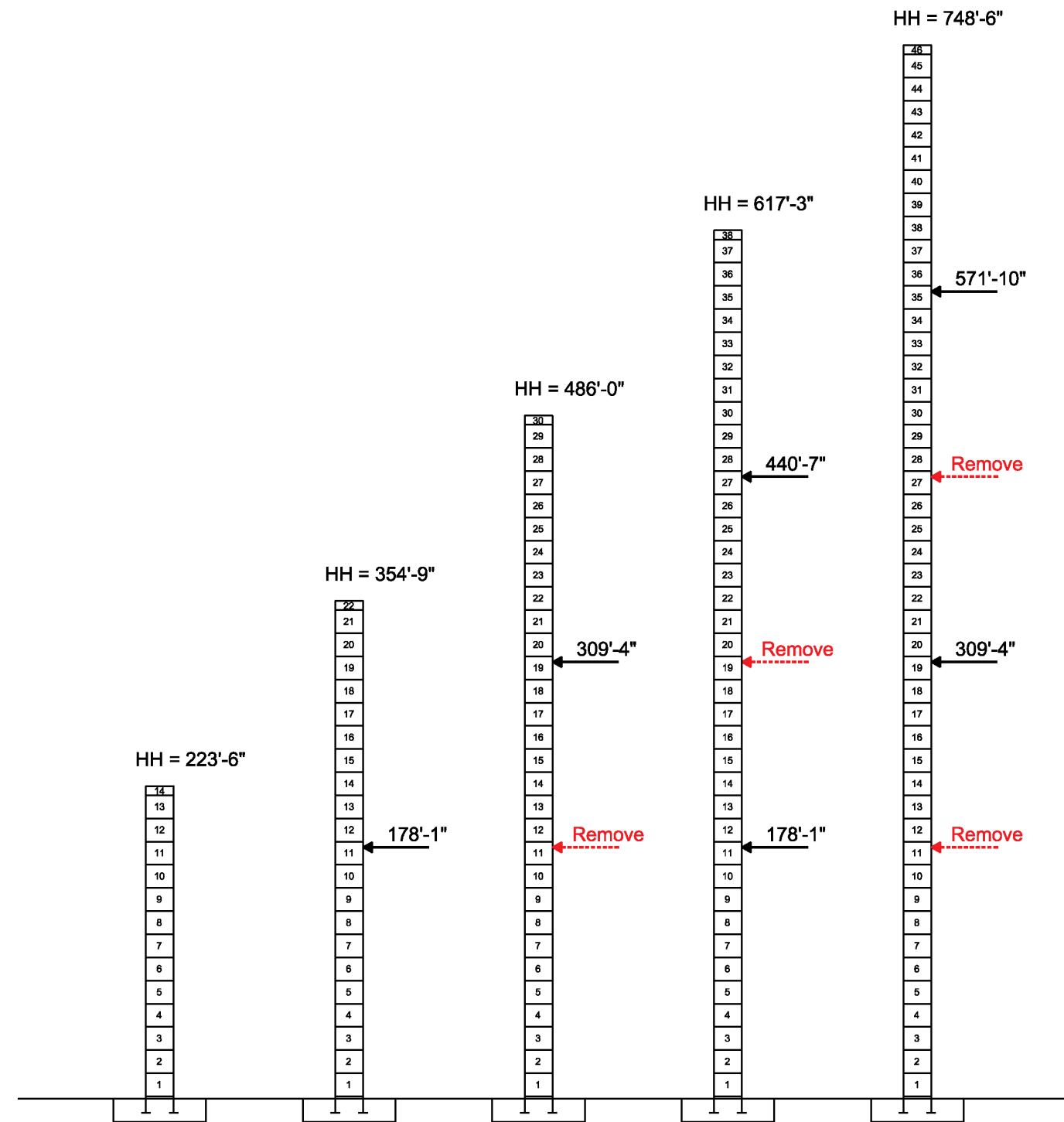
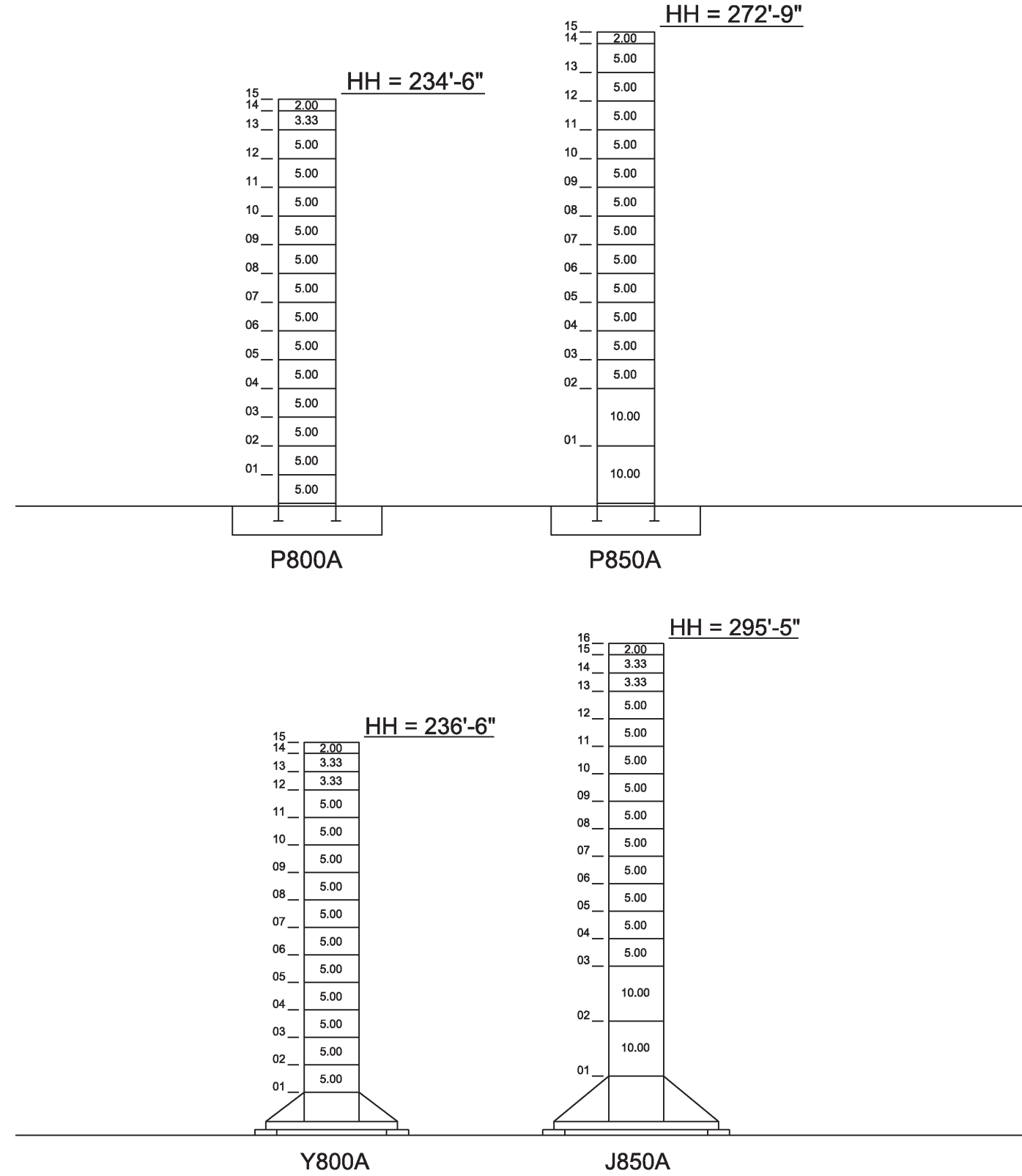


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Maximum Free-Standing Hook Heights

External Climbing

Rated Load Chart



| Hook Radius | Capacity (lbs) | | | | | | |
|-------------|----------------|---------|---------|----------|---------|---------|---------|
| | 246'-1" | 229'-8" | 213'-3" | 196'-10" | 180'-5" | 164'-1" | 131'-3" |
| 20'-0" | 44,090 | 44,090 | 44,090 | 44,090 | 44,090 | 44,090 | 44,090 |
| 30'-0" | 44,090 | 44,090 | 44,090 | 44,090 | 44,090 | 44,090 | 44,090 |
| 40'-0" | 44,090 | 44,090 | 44,090 | 44,090 | 44,090 | 44,090 | 44,090 |
| 50'-0" | 44,090 | 44,090 | 44,090 | 44,090 | 44,090 | 44,090 | 44,090 |
| 60'-0" | 36,120 | 41,430 | 44,090 | 44,090 | 44,090 | 44,090 | 44,090 |
| 70'-0" | 30,190 | 34,700 | 38,220 | 42,050 | 44,090 | 44,090 | 44,090 |
| 80'-0" | 25,820 | 29,740 | 32,800 | 36,120 | 38,400 | 39,640 | 39,730 |
| 90'-0" | 22,460 | 25,920 | 28,630 | 31,570 | 33,580 | 34,680 | 34,750 |
| 100'-0" | 19,800 | 22,900 | 25,330 | 27,960 | 29,770 | 30,750 | 30,810 |
| 110'-0" | 17,640 | 20,450 | 22,640 | 25,030 | 26,670 | 27,560 | 27,620 |
| 120'-0" | 15,850 | 18,420 | 20,420 | 22,600 | 24,100 | 24,910 | 24,970 |
| 130'-0" | 14,340 | 16,710 | 18,560 | 20,560 | 21,940 | 22,690 | 22,740 |
| 131'-3" | 14,172 | 16,514 | 18,345 | 20,334 | 21,698 | 22,439 | 22,490 |
| 140'-0" | 13,060 | 15,250 | 16,960 | 18,820 | 20,100 | 20,790 | |
| 150'-0" | 11,950 | 13,990 | 15,580 | 17,320 | 18,510 | 19,150 | |
| 160'-0" | 10,980 | 12,890 | 14,380 | 16,010 | 17,120 | 17,720 | |
| 164'-1" | 10,622 | 12,485 | 13,941 | 15,523 | 16,609 | 17,198 | |
| 170'-0" | 10,130 | 11,920 | 13,330 | 14,850 | 15,900 | | |
| 180'-0" | 9,370 | 11,070 | 12,390 | 13,830 | 14,820 | | |
| 180'-5" | 9,342 | 11,031 | 12,353 | 13,788 | 14,773 | | |
| 190'-0" | 8,700 | 10,300 | 11,560 | 12,920 | | | |
| 196'-10" | 8,279 | 9,825 | 11,034 | 12,347 | | | |
| 200'-0" | 8,090 | 9,620 | 10,810 | | | | |
| 210'-0" | 7,550 | 9,000 | 10,130 | | | | |
| 213'-3" | 7,382 | 8,807 | 9,922 | | | | |
| 220'-0" | 7,050 | 8,430 | | | | | |
| 229'-8" | 6,616 | 7,937 | | | | | |
| 230'-0" | 6,600 | | | | | | |
| 240'-0" | 6,190 | | | | | | |
| 246'-1" | 5,953 | | | | | | |

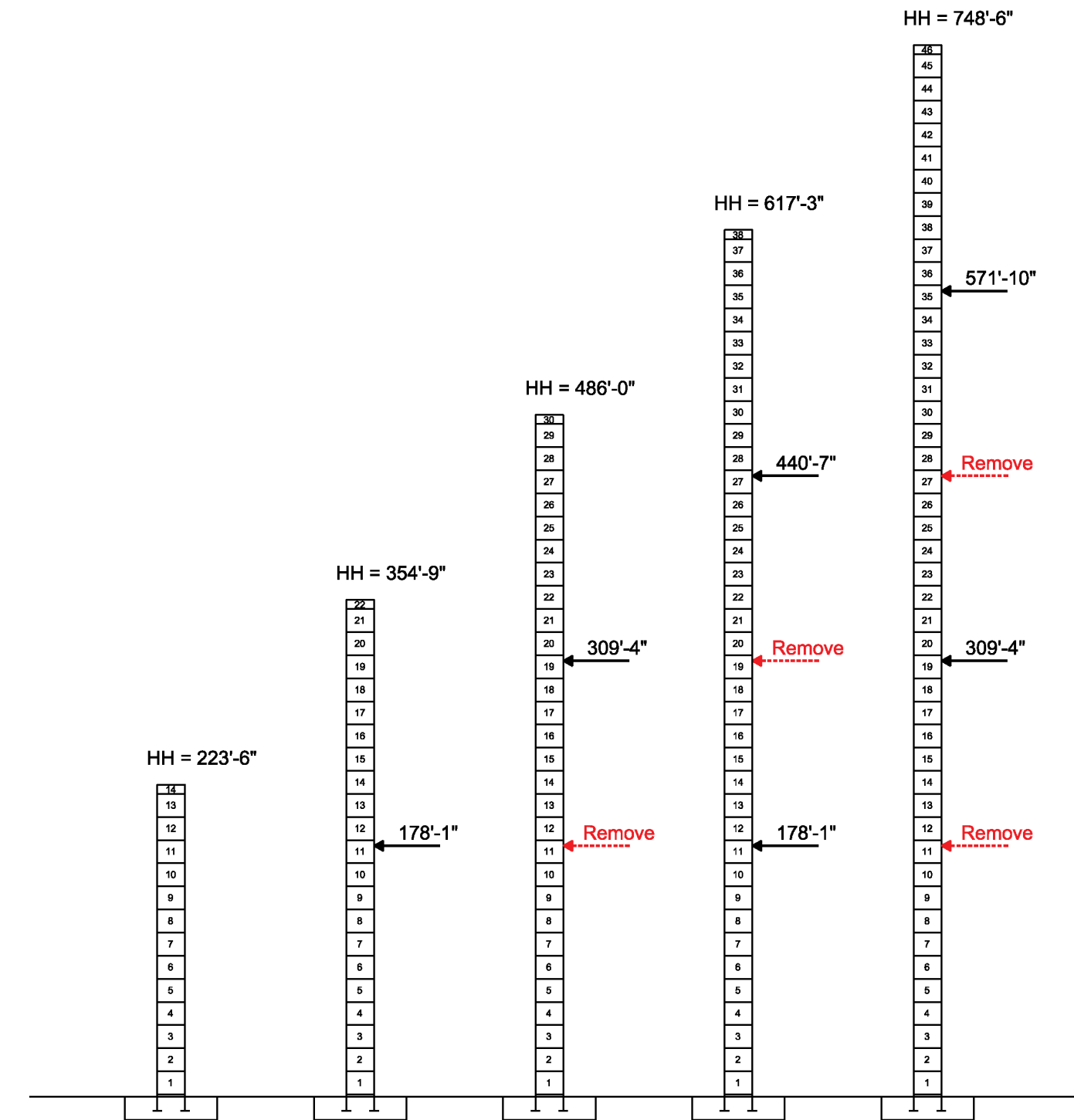
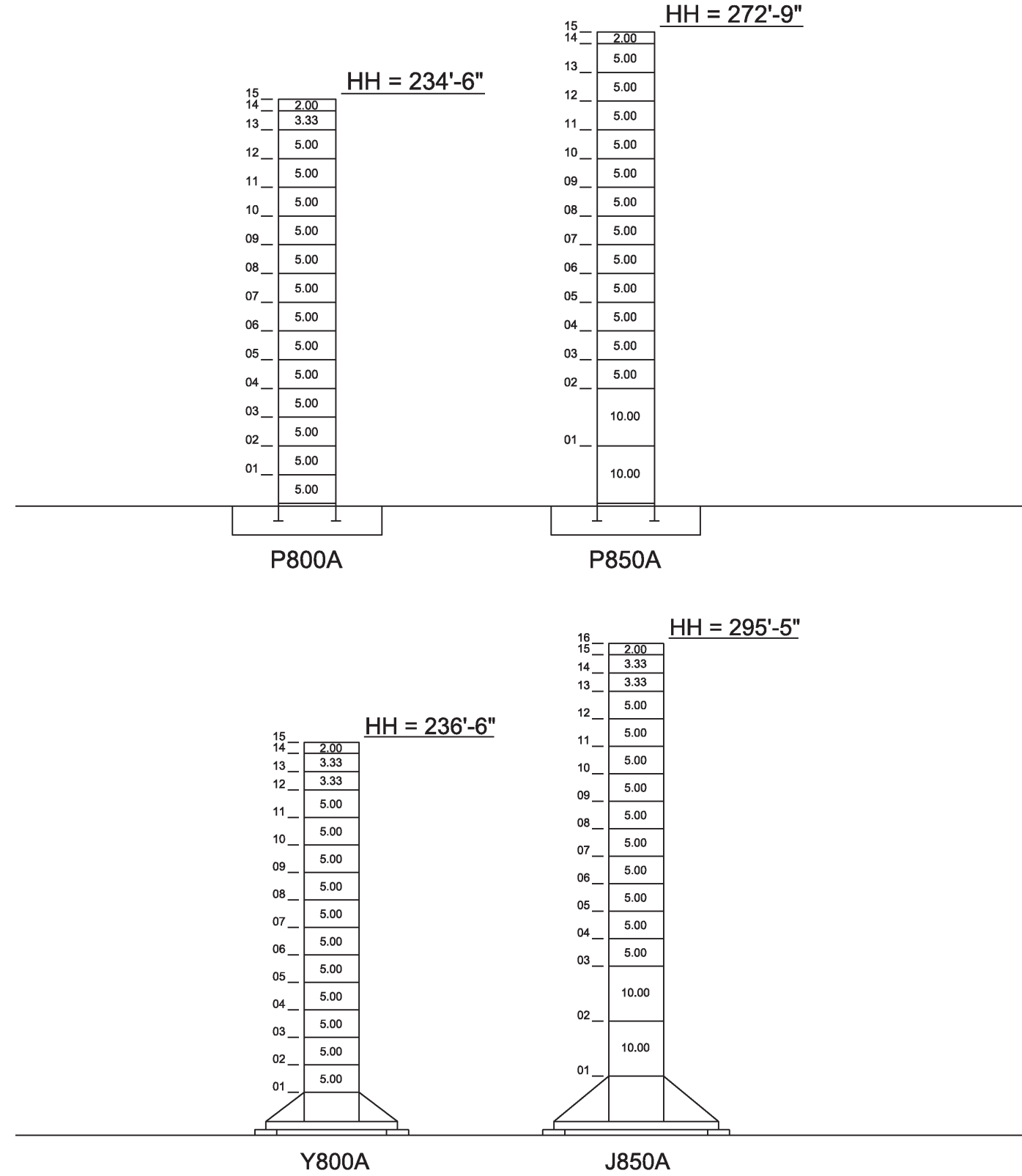
| Max. Load Radius | | | | | | | |
|------------------|--------|---------|--------|--------|---------|---------|---------|
| From | 9'-10" | 9'-10" | 9'-10" | 9'-10" | 9'-10" | 9'-10" | 9'-10" |
| To | 50'-6" | 56'-10" | 61'-9" | 67'-1" | 70'-10" | 72'-10" | 72'-11" |

- Notes:
- The above load chart was calculated using the SM-DM trolley system.
 - Values above the red line can be achieved with 4-part line configuration only.

Maximum Free-Standing Hook Heights

External Climbing

Rated Load Chart



| Hook Radius | Capacity (lbs) | | | | | | |
|-------------|----------------|---------|---------|----------|---------|---------|---------|
| | 246'-1" | 229'-8" | 213'-3" | 196'-10" | 180'-5" | 164'-1" | 131'-3" |
| 20'-0" | 44,090 | 44,090 | 44,090 | 44,090 | 44,090 | 44,090 | 44,090 |
| 30'-0" | 44,090 | 44,090 | 44,090 | 44,090 | 44,090 | 44,090 | 44,090 |
| 40'-0" | 44,090 | 44,090 | 44,090 | 44,090 | 44,090 | 44,090 | 44,090 |
| 50'-0" | 44,090 | 44,090 | 44,090 | 44,090 | 44,090 | 44,090 | 44,090 |
| 60'-0" | 36,120 | 41,430 | 44,090 | 44,090 | 44,090 | 44,090 | 44,090 |
| 70'-0" | 30,190 | 34,700 | 38,220 | 42,050 | 44,090 | 44,090 | 44,090 |
| 80'-0" | 25,820 | 29,740 | 32,800 | 36,120 | 38,400 | 39,640 | 39,730 |
| 90'-0" | 22,460 | 25,920 | 28,630 | 31,570 | 33,580 | 34,680 | 34,750 |
| 100'-0" | 19,800 | 22,900 | 25,330 | 27,960 | 29,770 | 30,750 | 30,810 |
| 110'-0" | 17,640 | 20,450 | 22,640 | 25,030 | 26,670 | 27,560 | 27,620 |
| 120'-0" | 15,850 | 18,420 | 20,420 | 22,600 | 24,100 | 24,910 | 24,970 |
| 130'-0" | 14,340 | 16,710 | 18,560 | 20,560 | 21,940 | 22,690 | 22,740 |
| 131'-3" | 14,172 | 16,514 | 18,345 | 20,334 | 21,698 | 22,439 | 22,490 |
| 140'-0" | 13,060 | 15,250 | 16,960 | 18,820 | 20,100 | 20,790 | 20,840 |
| 150'-0" | 11,950 | 13,990 | 15,580 | 17,320 | 18,510 | 19,150 | 19,200 |
| 160'-0" | 10,980 | 12,890 | 14,380 | 16,010 | 17,120 | 17,720 | 17,770 |
| 164'-1" | 10,622 | 12,485 | 13,941 | 15,523 | 16,609 | 17,198 | 17,248 |
| 170'-0" | 10,130 | 11,920 | 13,330 | 14,850 | 15,900 | 16,450 | 16,500 |
| 180'-0" | 9,370 | 11,070 | 12,390 | 13,830 | 14,820 | 15,370 | 15,420 |
| 180'-5" | 9,342 | 11,031 | 12,353 | 13,788 | 14,773 | 15,323 | 15,373 |
| 190'-0" | 8,700 | 10,300 | 11,560 | 12,920 | 13,910 | 14,460 | 14,510 |
| 196'-10" | 8,279 | 9,825 | 11,034 | 12,347 | 13,337 | 13,887 | 13,937 |
| 200'-0" | 8,090 | 9,620 | 10,810 | 12,140 | 13,130 | 13,680 | 13,730 |
| 210'-0" | 7,550 | 9,000 | 10,130 | 11,520 | 12,510 | 13,060 | 13,110 |
| 213'-3" | 7,382 | 8,807 | 9,922 | 11,313 | 12,303 | 12,853 | 12,903 |
| 220'-0" | 7,050 | 8,430 | 9,550 | 10,900 | 11,890 | 12,440 | 12,490 |
| 229'-8" | 6,616 | 7,937 | 9,116 | 10,490 | 11,480 | 12,030 | 12,080 |
| 230'-0" | 6,600 | 7,915 | 9,095 | 10,468 | 11,458 | 12,008 | 12,058 |
| 240'-0" | 6,190 | 7,505 | 8,685 | 10,058 | 11,048 | 11,598 | 11,648 |
| 246'-1" | 5,953 | 7,268 | 8,448 | 9,821 | 10,811 | 11,361 | 11,411 |

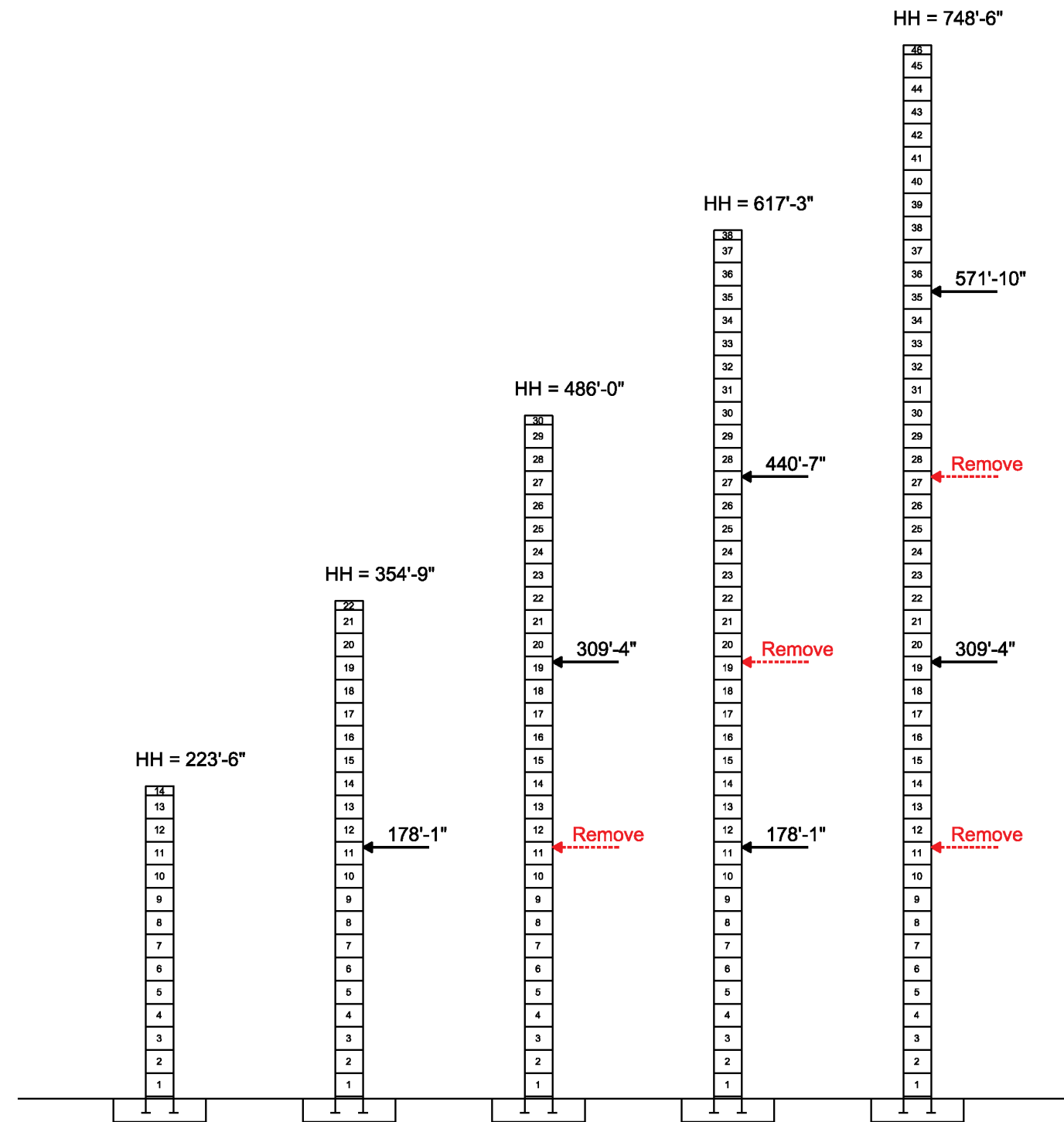
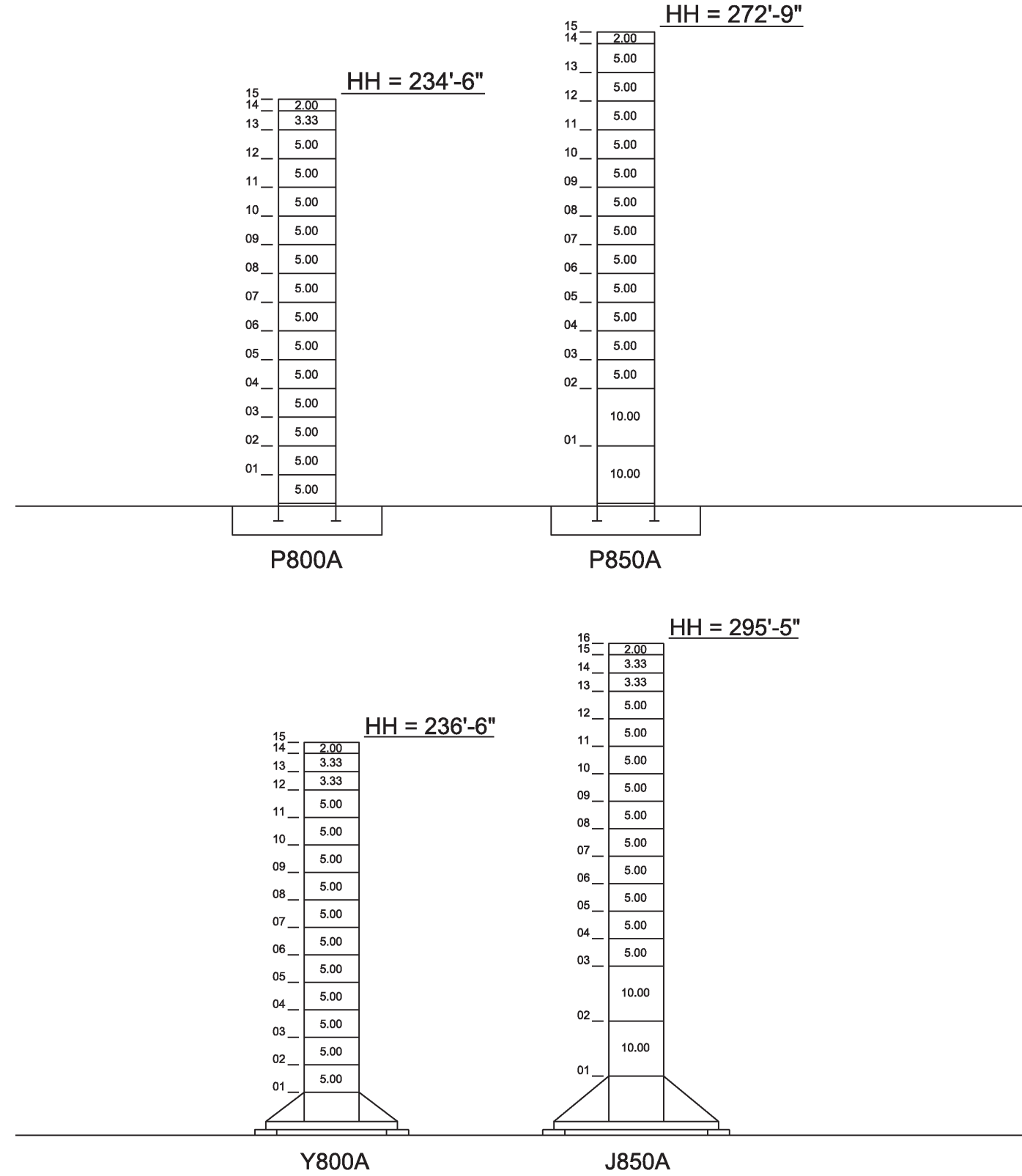
| Max. Load Radius | | | | | | | |
|------------------|--------|---------|--------|--------|---------|---------|---------|
| From | 9'-10" | 9'-10" | 9'-10" | 9'-10" | 9'-10" | 9'-10" | 9'-10" |
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- Notes:
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| 20'-0" | 44,090 | 44,090 | 44,090 | 44,090 | 44,090 | 44,090 | 44,090 |
| 30'-0" | 44,090 | 44,090 | 44,090 | 44,090 | 44,090 | 44,090 | 44,090 |
| 40'-0" | 44,090 | 44,090 | 44,090 | 44,090 | 44,090 | 44,090 | 44,090 |
| 50'-0" | 44,090 | 44,090 | 44,090 | 44,090 | 44,090 | 44,090 | 44,090 |
| 60'-0" | 36,120 | 41,430 | 44,090 | 44,090 | 44,090 | 44,090 | 44,090 |
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| 80'-0" | 25,820 | 29,740 | 32,800 | 36,120 | 38,400 | 39,640 | 39,730 |
| 90'-0" | 22,460 | 25,920 | 28,630 | 31,570 | 33,580 | 34,680 | 34,750 |
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| 110'-0" | 17,640 | 20,450 | 22,640 | 25,030 | 26,670 | 27,560 | 27,620 |
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 - Values above the red line can be achieved with 4-part line configuration only.

Mechanical Data

| Function | Hoist Type | Speed vs Weight | 2-part | | | | 4-part | | | | Motor (hp) | Motor (kW) | Rope Length (ft) |
|----------|-----------------------|-----------------|---------------|---------------|---------------|--------------|--------------|---------------|---------------|---------------|------------|------------|------------------|
| | | | 1st Gear | 2nd Gear | 3rd Gear | 4th Gear | 1st Gear | 2nd Gear | 3rd Gear | 4th Gear | | | |
| Hoist | 108 LBR 50 small drum | ft/min lbs | 126 22,046 | 197 14,330 | 315 8,598 | 500 4,850 | 63 44,092 | 99 28,660 | 158 17,196 | 250 9,700 | 108 | 79 | 1,017 |
| | 108 LBR 50 large drum | ft/min lbs | 106 22,046 | 164 14,330 | 263 8,598 | 418 4,850 | 53 44,092 | 82 28,660 | 130 17,196 | 209 9,700 | 108 | 79 | 2,247 |
| | 166 LBR 50 | ft/min lbs | 150 22,046 | 237 18,298 | 378 10,803 | 591 6,393 | 79 44,092 | 119 36,597 | 189 21,605 | 296 13,007 | 166 | 122 | 1,017 |
| Trolley | DV - 7.5 | ft/min | 280 | | | | | | | | 12 | 9.0 | |
| Swing | OR - 16.5 | rpm | 1.00 | | | | | | | | 3 x 8.9 | 3 x 6.6 | |

Power Requirements: 480 V (+6% or -10%) 60 Hz measured at turn table.
 Amperage: 108 LBR 50: 230 Amp (3 phase service with ground)
 Amperage: 166 LBR 50: 274 Amp (3 phase service with ground)

Note: Values given under "Rope Length" are for drum spooling capacity only.



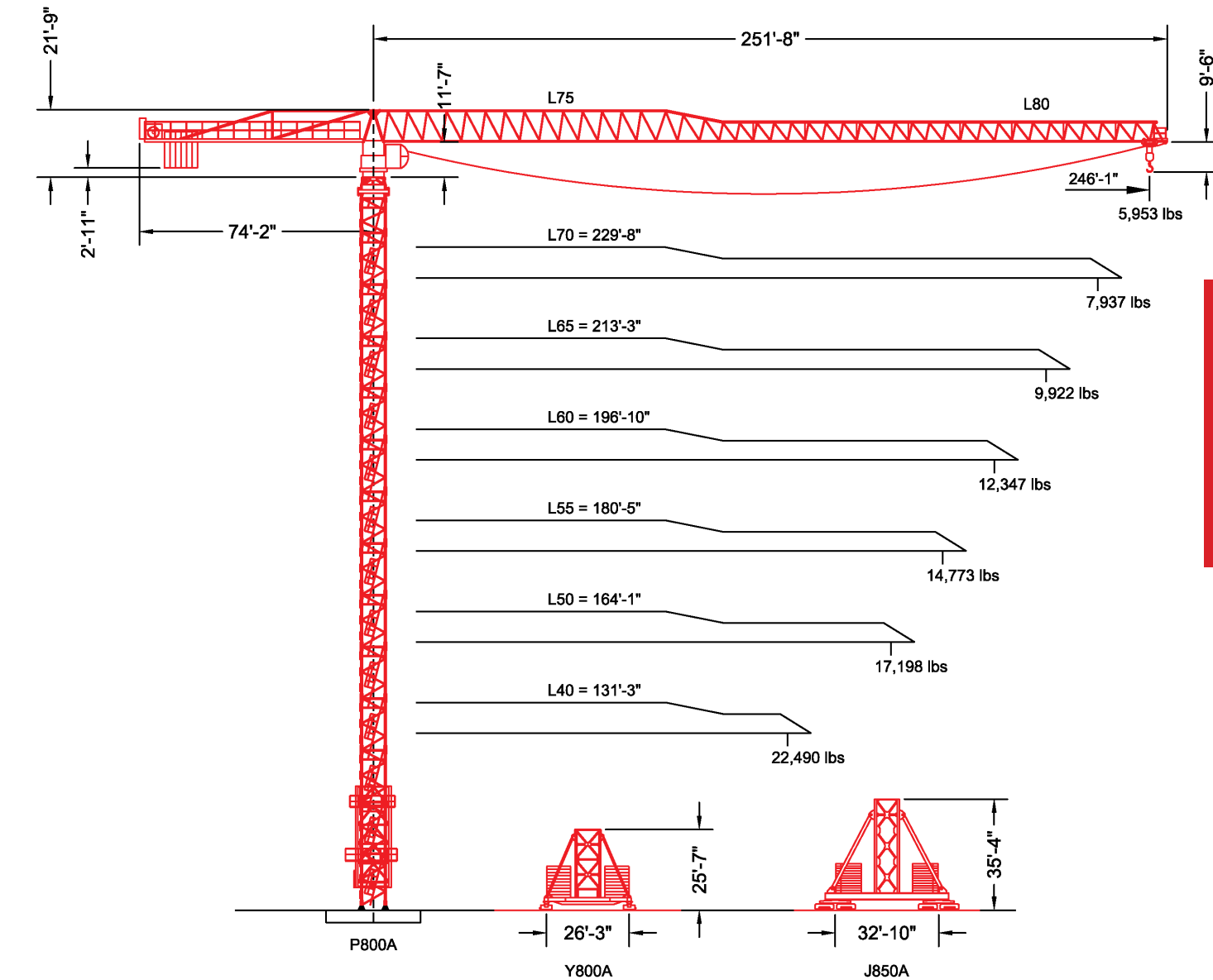
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MDT412-L20

Maximum Capacity = 44,092 lbs



Note: Tip capacities are dependent on certain trolley types.

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|----------|-----------------------|-----------------|---------------|---------------|---------------|--------------|--------------|---------------|---------------|---------------|------------|------------|------------------|
| | | | 1st Gear | 2nd Gear | 3rd Gear | 4th Gear | 1st Gear | 2nd Gear | 3rd Gear | 4th Gear | | | |
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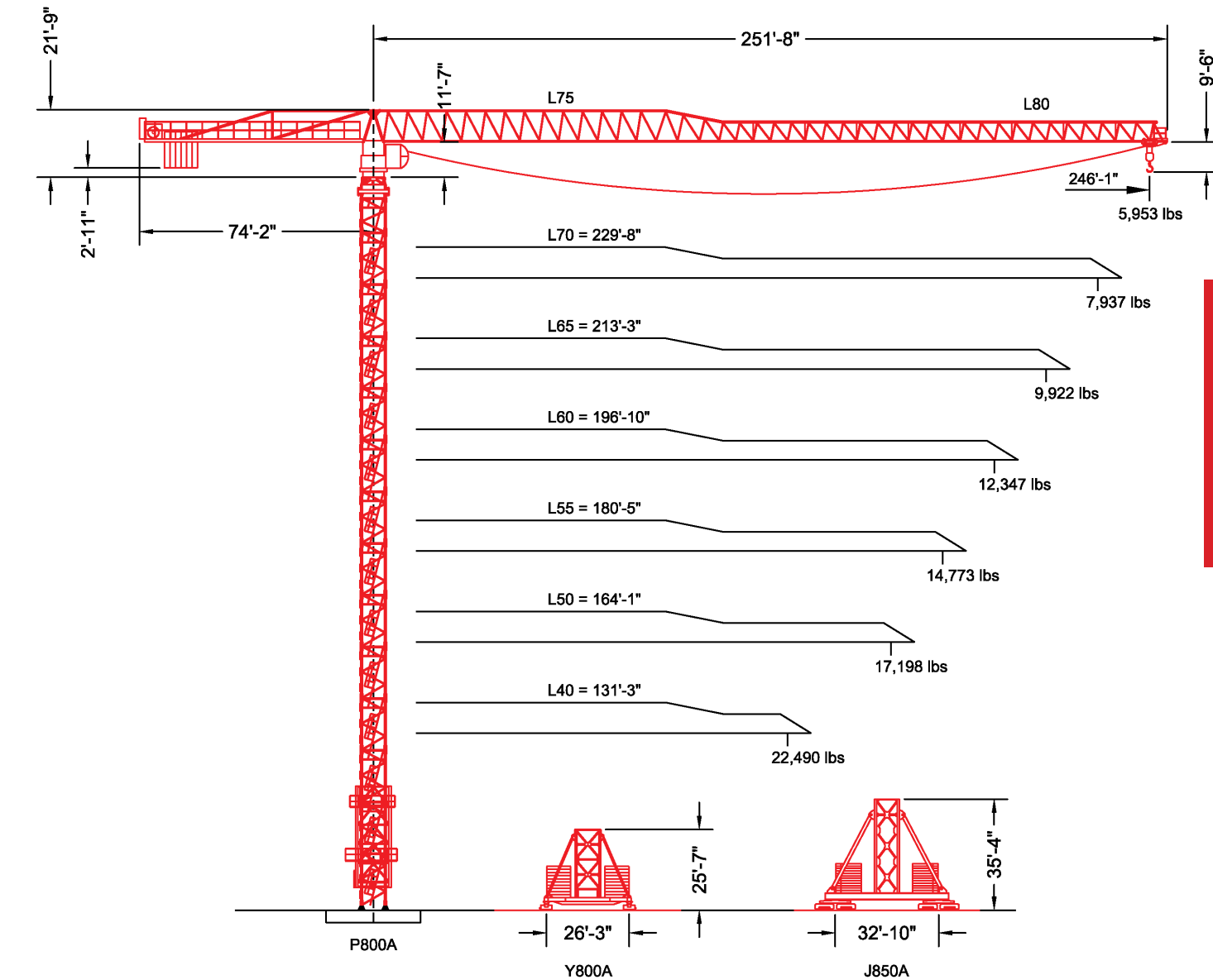
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