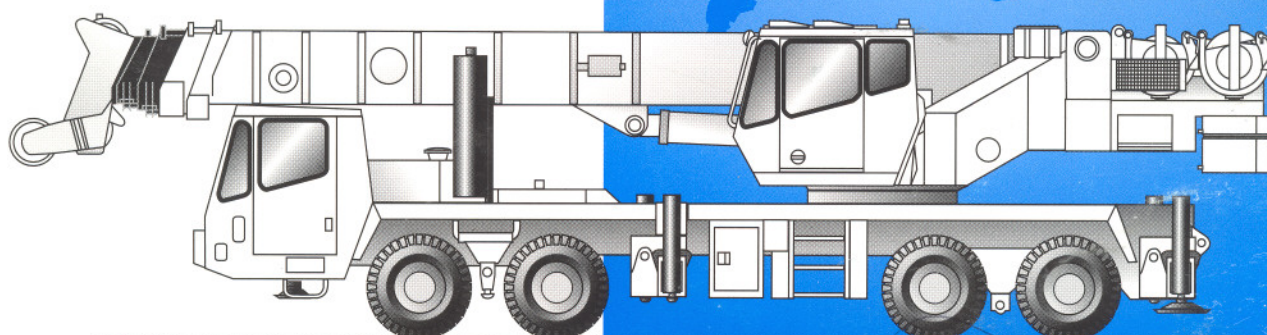




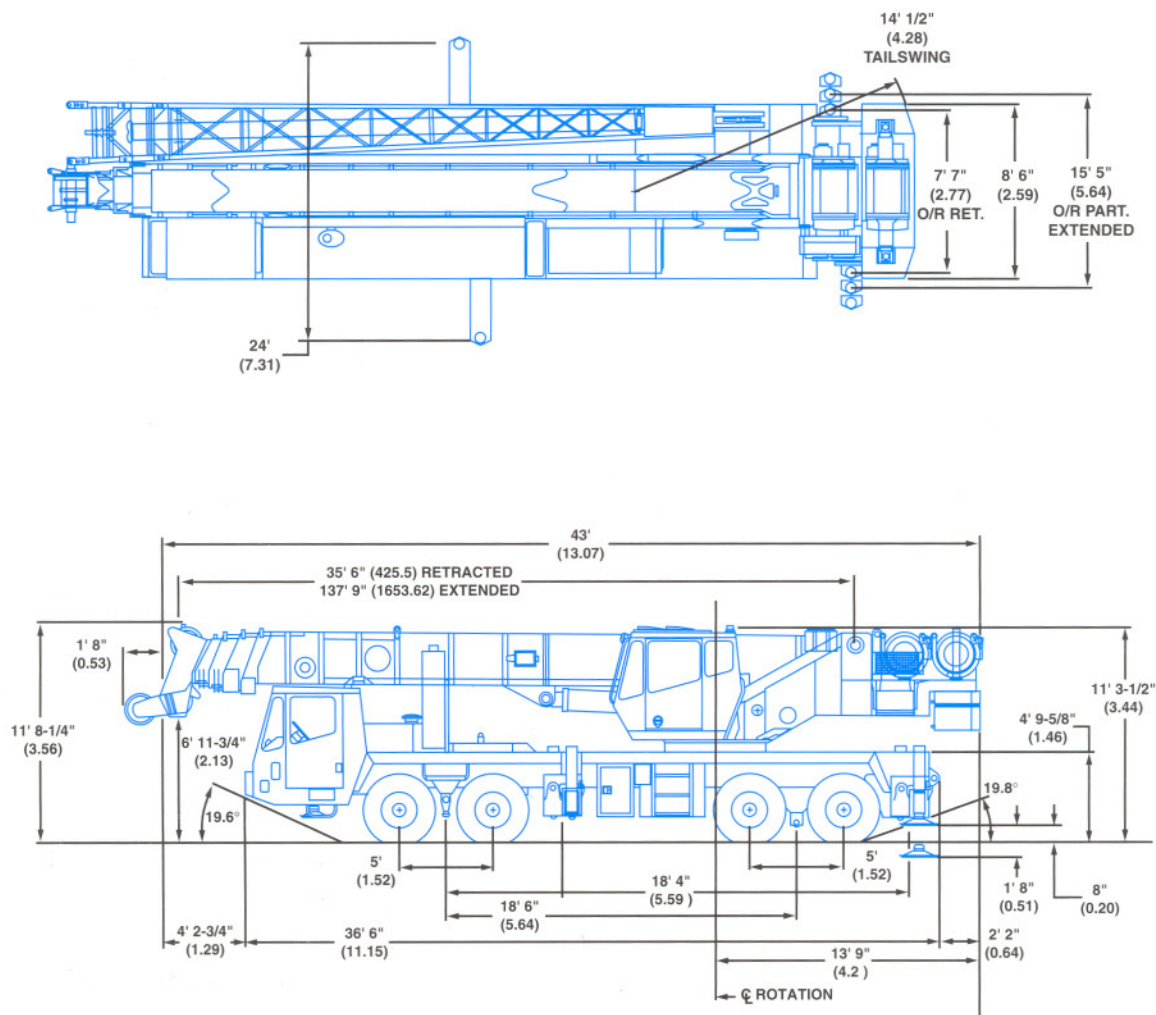
# TMS870 TTS870



**Truck Mounted Hydraulic Cranes**



## Dimensions



**Turning Radius:** TMS870 - 45' 1" (13.7 m)  
TTS870 - 29' 8" (9.04 m) (8 wheel)

**Curb Clearance:** TMS870 45' 9-9/16" (13.9 m)  
TTS870 29' 8" (9.04 m)

Note: ( ) Reference in meters.



# Working Range



36 - 110 ft.  
(10.9 - 33.5 m)



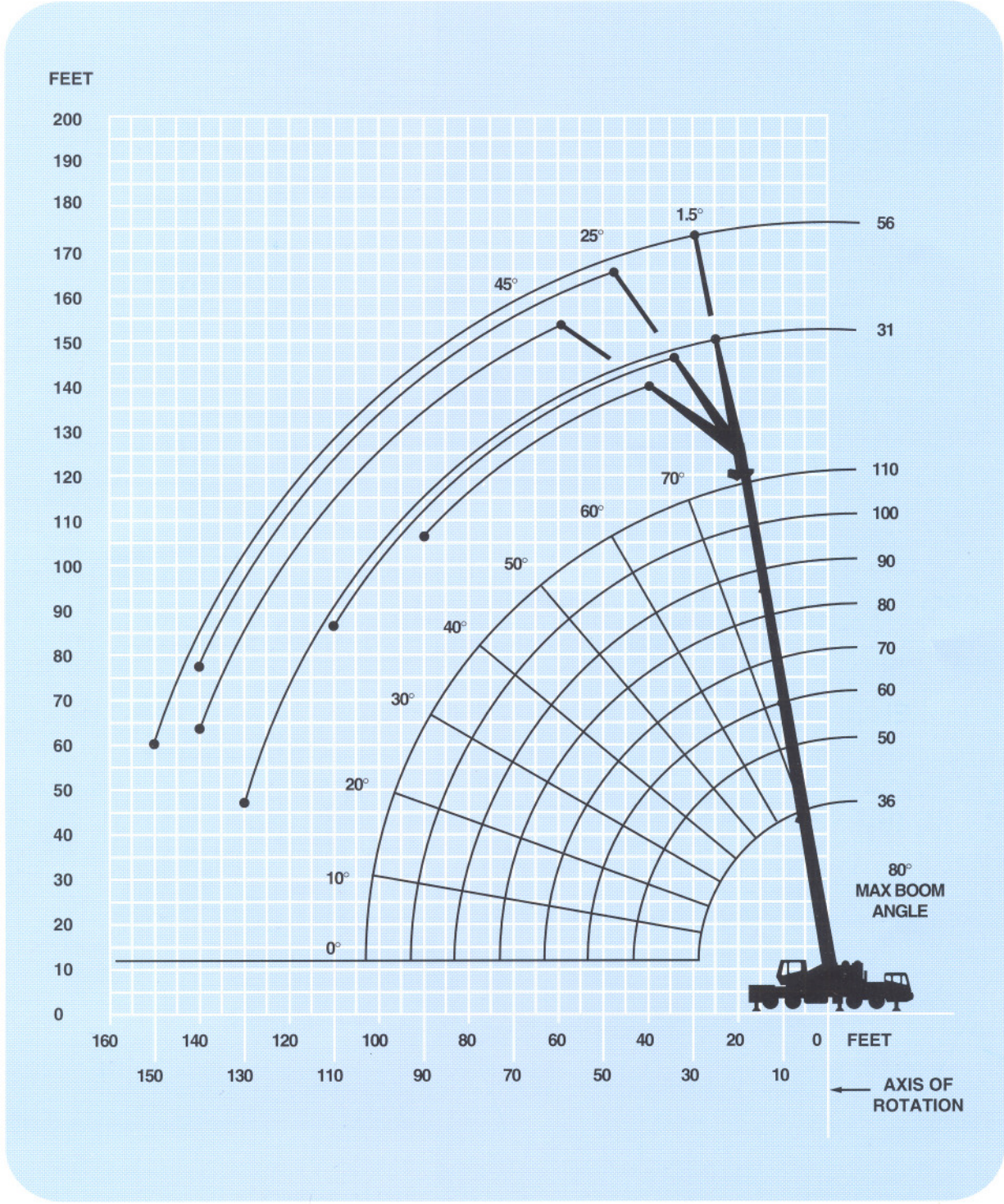
31 - 56 ft.  
(9.4 - 17 m)

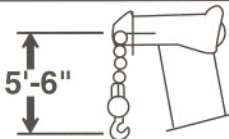


8,500 lbs.  
(3856 kg)



360°





5'-6"



7'-0"

DIMENSIONS ARE FOR LARGEST GROVE FURNISHED HOOK BLOCK AND HEADACHEBALL, WITH ANTI-TWO BLOCK ACTIVATED.



## ***Weight Reductions for Load Handling Devices***

### **4 Section Boom 31 ft. - 56 ft. (9.4 m - 17 m) Folding Boom Extension**

|                                     |            |           |
|-------------------------------------|------------|-----------|
| *31 ft. (9.4 m) extension (erected) | 4,048 lbs. | (1836 kg) |
| *56 ft. (17 m) extension (erected)  | 8,963 lbs. | (4066 kg) |

\*Reduction of main boom capacities:

When lifting over swingaway and/or jib combinations, deduct total weight of all load handling devices reeved over main boom nose directly from swingaway or jib capacity.

NOTE: All load handling devices and boom attachments are considered part of the load and suitable allowances **MUST BE MADE** for their combined weights. Weights are for Grove furnished equipment.

|                                              |            |          |
|----------------------------------------------|------------|----------|
| Auxiliary Boom Nose                          | 116 lbs.   | (53 kg)  |
| + 70 ton, 6 sheave hookblock w/o cheekplates | 1,674 lbs. | (759 kg) |
| + 70 ton, 6 sheave hookblock w/cheekplates   | 2,010 lbs. | (912 kg) |
| + 45 ton, 3 sheave hookblock w/o cheekplates | 876 lbs.   | (397 kg) |
| + 45 ton, 3 sheave hookblock w/cheekplates   | 1,066 lbs. | (484 kg) |
| + 15 ton, 1 sheave hookblock                 | 380 lbs.   | (173 kg) |
| + 10 ton headache ball                       | 560 lbs.   | (254 kg) |
| + Refer to rating plate for actual weight.   |            |          |



36 - 110 ft.  
(10.9 - 33.5 m)



18,000 lbs.  
(8165 kg)



100%



360°



85% Domestic (Pounds)

| (Feet) | 36               | 50                | *60              | 70               | 80               | 90               | 100              | 110              |
|--------|------------------|-------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| 10     | +140,000<br>(68) | 109,500<br>(75)   | 84,200<br>(78)   | **56,450<br>(80) |                  |                  |                  |                  |
| 12     | 110,500<br>(64)  | 104,500<br>(72.5) | 79,850<br>(76)   | 56,450<br>(78.5) |                  |                  |                  |                  |
| 15     | 96,800<br>(58.5) | 91,400<br>(69)    | 73,900<br>(73)   | 56,450<br>(76)   | 56,500<br>(78.5) | **47,850<br>(80) |                  |                  |
| 20     | 78,750<br>(47)   | 75,300<br>(62)    | 59,600<br>(67.5) | 56,450<br>(71.5) | 50,950<br>(74.5) | 41,000<br>(77)   | 40,350<br>(79)   | **27,350<br>(80) |
| 25     | 59,800<br>(32.5) | 59,750<br>(55)    | 50,000<br>(62.5) | 48,900<br>(67)   | 43,800<br>(71)   | 35,250<br>(73.5) | 34,750<br>(76)   | 27,350<br>(78.5) |
| 30     |                  | 47,300<br>(47)    | 42,300<br>(56.5) | 41,900<br>(62.5) | 38,300<br>(67)   | 31,050<br>(70.5) | 30,450<br>(73)   | 27,350<br>(75.5) |
| 35     |                  | 38,550<br>(37.5)  | 36,950<br>(50)   | 36,400<br>(57.5) | 33,900<br>(63)   | 27,650<br>(67)   | 27,000<br>(70)   | 25,300<br>(72.5) |
| 40     |                  | 28,450<br>(24.5)  | 28,450<br>(43)   | 29,700<br>(52)   | 30,300<br>(58.5) | 24,350<br>(63)   | 24,250<br>(67)   | 22,900<br>(70)   |
| 45     |                  |                   | 23,400<br>(34.5) | 24,650<br>(46.5) | 25,550<br>(54)   | 22,050<br>(59.5) | 21,900<br>(63.5) | 20,850<br>(67)   |
| 50     |                  |                   | 19,450<br>(23)   | 20,700<br>(39.5) | 21,600<br>(49)   | 20,050<br>(55.5) | 19,950<br>(60)   | 19,100<br>(64)   |
| 55     |                  |                   |                  | 17,500<br>(32)   | 18,450<br>(43.5) | 18,350<br>(51)   | 18,300<br>(56.5) | 17,550<br>(61)   |
| 60     |                  |                   |                  | 14,900<br>(21)   | 15,850<br>(37.5) | 16,550<br>(46.5) | 16,850<br>(53)   | 16,200<br>(57.5) |
| 65     |                  |                   |                  |                  | 13,650<br>(30)   | 14,350<br>(41.5) | 14,900<br>(49)   | 15,050<br>(54.5) |
| 70     |                  |                   |                  |                  | 11,650<br>(20)   | 12,500<br>(35.5) | 13,050<br>(44.5) | 13,500<br>(50.5) |
| 75     |                  |                   |                  |                  |                  | 10,900<br>(29)   | 11,450<br>(39.5) | 11,900<br>(47)   |
| 80     |                  |                   |                  |                  |                  | 9,480<br>(19)    | 10,000<br>(34.5) | 10,500<br>(43)   |
| 85     |                  |                   |                  |                  |                  |                  | 8,790<br>(28)    | 9,260<br>(38.5)  |
| 90     |                  |                   |                  |                  |                  |                  | 7,690<br>(18.5)  | 8,150<br>(33)    |
| 95     |                  |                   |                  |                  |                  |                  |                  | 7,170<br>(27)    |
| 100    |                  |                   |                  |                  |                  |                  |                  | 6,280<br>(18.5)  |

Minimum boom angle (deg.) for indicated length (no load)

0

Maximum boom length (ft.) at 0 degree boom angle (no load)

110

NOTE: ( ) Boom angles are in degrees.

\*60 ft. boom length is with inner-mid extended and outer-mid & fly retracted.

\*\*This capacity is based on maximum boom angle.

+ 12 parts line required to lift this capacity (using aux. boom nose).

| Boom Angle | 36               | 50               | *60              | 70              | 80              | 90              | 100             | 110              |
|------------|------------------|------------------|------------------|-----------------|-----------------|-----------------|-----------------|------------------|
| 0          | 27,600<br>(28.3) | 16,200<br>(42.8) | 11,350<br>(53.1) | 9,150<br>(62.8) | 7,410<br>(72.8) | 6,040<br>(82.8) | 4,950<br>(92.8) | 4,060<br>(102.8) |

NOTE: ( ) Reference radii are in feet.

\*60 ft. boom length is with inner-mid extended and outer-mid & fly retracted.

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Regardless of counterweight and outrigger spread configuration, no deduct is required from the main boom charts for a stowed boom extension. However, the LMI system still monitors the effect of the stowed boom extension and will display a load value which will vary with changes in boom length and boom angle. To achieve maximum boom capacities, the boom extension must be removed from this crane.

THIS CHART IS ONLY A GUIDE AND SHOULD NOT BE USED TO OPERATE THE CRANE. The individual crane's load chart, operating instructions and other instructional plates must be read and understood prior to operating the crane.

TMS870/TTS870



36 - 110 ft.  
(10.9 - 33.5 m)



31 - 56 ft.  
(9.4 - 17 m)  
FOLDING



18,000 lbs.  
(8165 kg)



100%



360°



85% Domestic (Pounds)

31 FT. LENGTH (SWINGAWAY BASE)

56 FT. LENGTH (SWINGAWAY BASE & FLY)

| (Feet)                                            | 1.5°             | 25°             | 45°             | 1.5°            | 25°             | 45°             |
|---------------------------------------------------|------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| 25                                                | *12,900<br>(80)  |                 |                 |                 |                 |                 |
| 30                                                | 12,900<br>(78.5) |                 |                 |                 |                 |                 |
| 35                                                | 12,900<br>(76.5) | 8,340<br>(79.5) |                 | 8,220<br>(79.5) |                 |                 |
| 40                                                | 12,750<br>(74.5) | 8,020<br>(77.5) | *6,370<br>(80)  | 8,220<br>(78)   |                 |                 |
| 45                                                | 12,350<br>(72.5) | 7,730<br>(76)   | 6,300<br>(79)   | 8,220<br>(76.5) |                 |                 |
| 50                                                | 11,500<br>(70.5) | 7,390<br>(74)   | 6,250<br>(77)   | 8,220<br>(75)   | *4,780<br>(80)  |                 |
| 55                                                | 10,950<br>(68.5) | 7,130<br>(72)   | 6,190<br>(74.5) | 8,220<br>(74)   | 4,640<br>(79.5) |                 |
| 60                                                | 10,400<br>(66.5) | 6,870<br>(69.5) | 6,120<br>(72)   | 8,220<br>(72)   | 4,490<br>(78)   |                 |
| 65                                                | 9,960<br>(64)    | 6,660<br>(67.5) | 6,090<br>(69.5) | 8,220<br>(70)   | 4,340<br>(76)   | *3,770<br>(80)  |
| 70                                                | 9,480<br>(61.5)  | 6,450<br>(65)   | 6,050<br>(67)   | 8,080<br>(68)   | 4,190<br>(74)   | 3,740<br>(78)   |
| 75                                                | 9,060<br>(59)    | 6,280<br>(62.5) | 6,050<br>(64.5) | 7,650<br>(66)   | 4,070<br>(72)   | 3,720<br>(76)   |
| 80                                                | 8,630<br>(56.5)  | 6,110<br>(60)   | 6,050<br>(62)   | 7,220<br>(64)   | 3,940<br>(70)   | 3,700<br>(73.5) |
| 85                                                | 8,270<br>(54)    | 5,970<br>(57.5) | 6,050<br>(59)   | 6,870<br>(62)   | 3,830<br>(67.5) | 3,700<br>(71.5) |
| 90                                                | 7,900<br>(51)    | 5,840<br>(54.5) | 6,050<br>(56)   | 6,530<br>(60)   | 3,730<br>(65.5) | 3,700<br>(69)   |
| 95                                                | 7,580<br>(48.5)  | 5,740<br>(51.5) |                 | 6,130<br>(58)   | 3,640<br>(63.5) | 3,700<br>(66.5) |
| 100                                               | 7,060<br>(45.5)  | 5,650<br>(48.5) |                 | 5,730<br>(55.5) | 3,550<br>(61)   | 3,700<br>(64)   |
| 110                                               | 5,600<br>(38.5)  | 5,510<br>(41.5) |                 | 5,060<br>(51)   | 3,420<br>(56)   | 3,480<br>(59)   |
| 120                                               | 4,400<br>(30.5)  |                 |                 | 4,510<br>(46)   | 3,320<br>(51)   |                 |
| 130                                               | 3,400<br>(18.5)  |                 |                 | 4,050<br>(40)   | 3,280<br>(45)   |                 |
| 140                                               |                  |                 |                 | 3,190<br>(33.5) | 2,320<br>(37.5) |                 |
| 150                                               |                  |                 |                 | 2,460<br>(24.5) |                 |                 |
| Minimum boom angle<br>(deg.) for indicated length | 2                | 25              | 45              | 2               | 25              | 45              |
| Maximum boom length<br>(ft.) at 0 deg. boom angle |                  | 110             |                 |                 | 110             |                 |

NOTE: ( ) Boom angles are in degrees.

\*This capacity is based on maximum boom angle.

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