

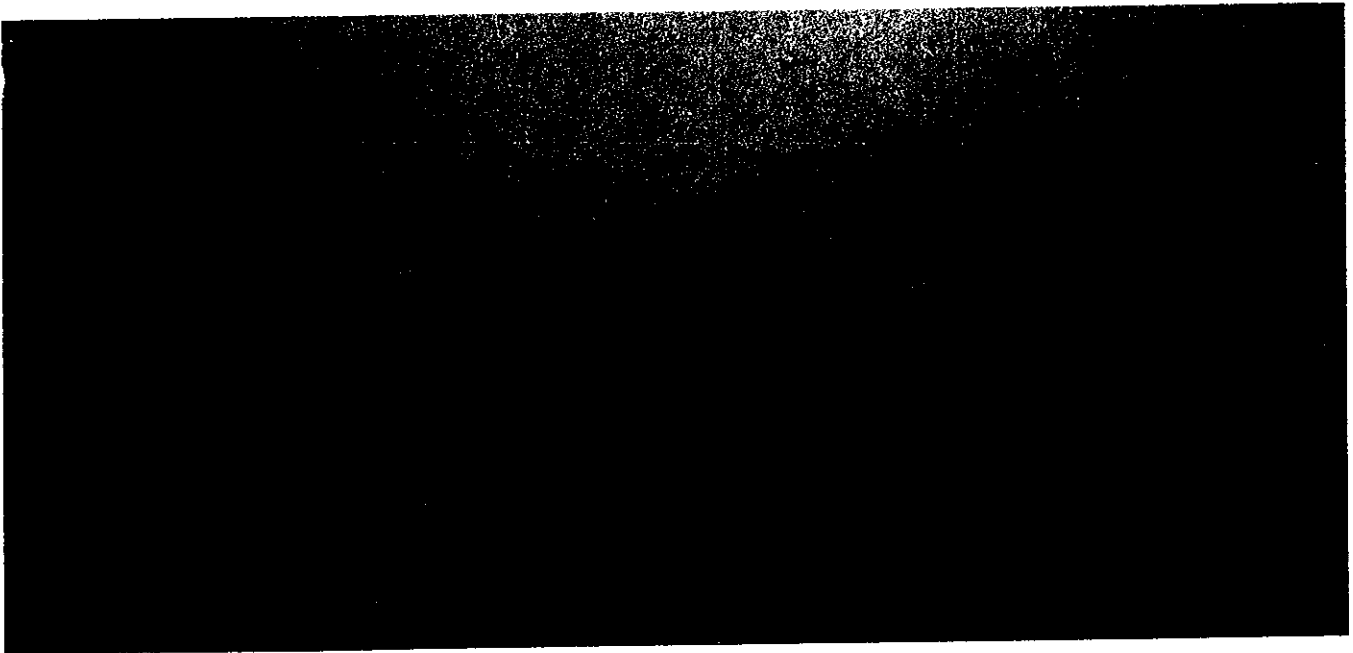


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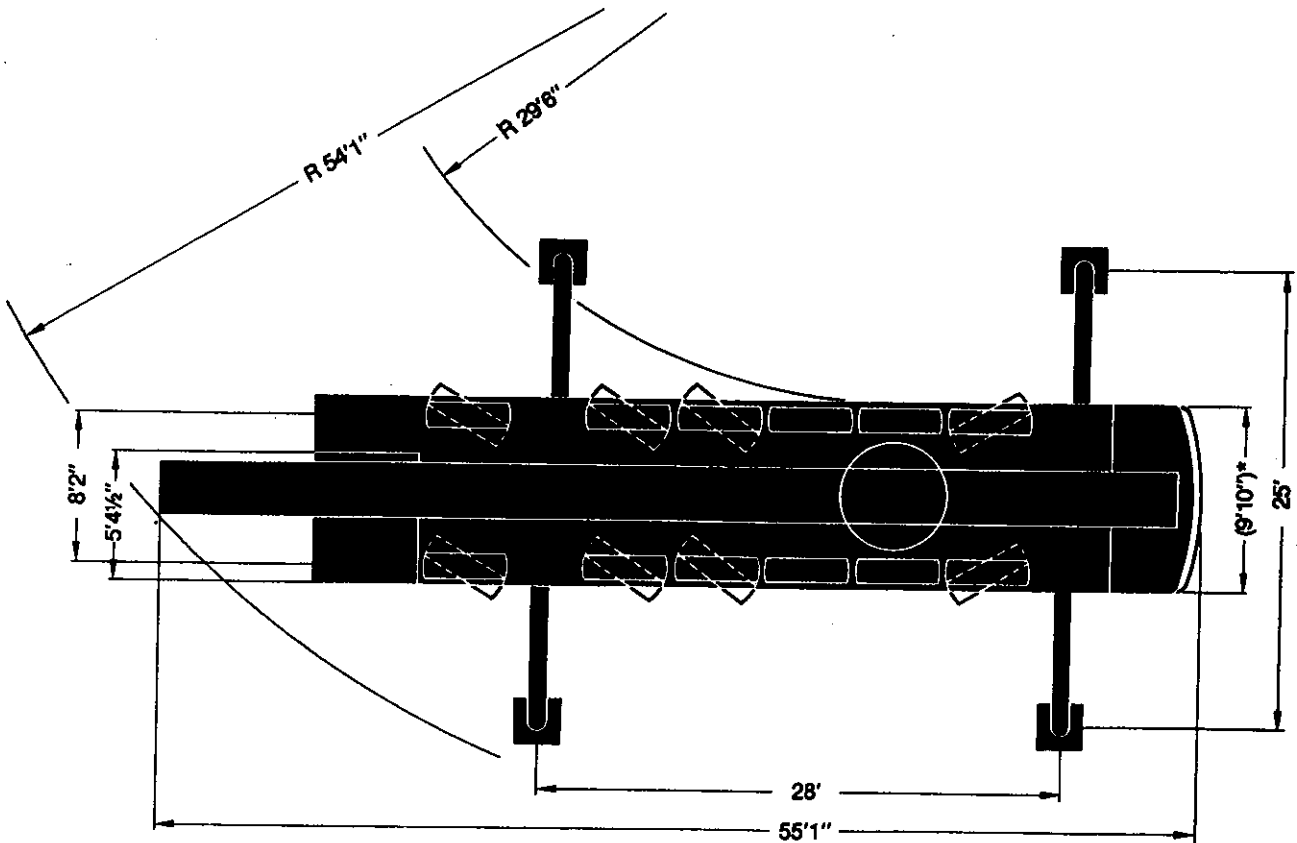
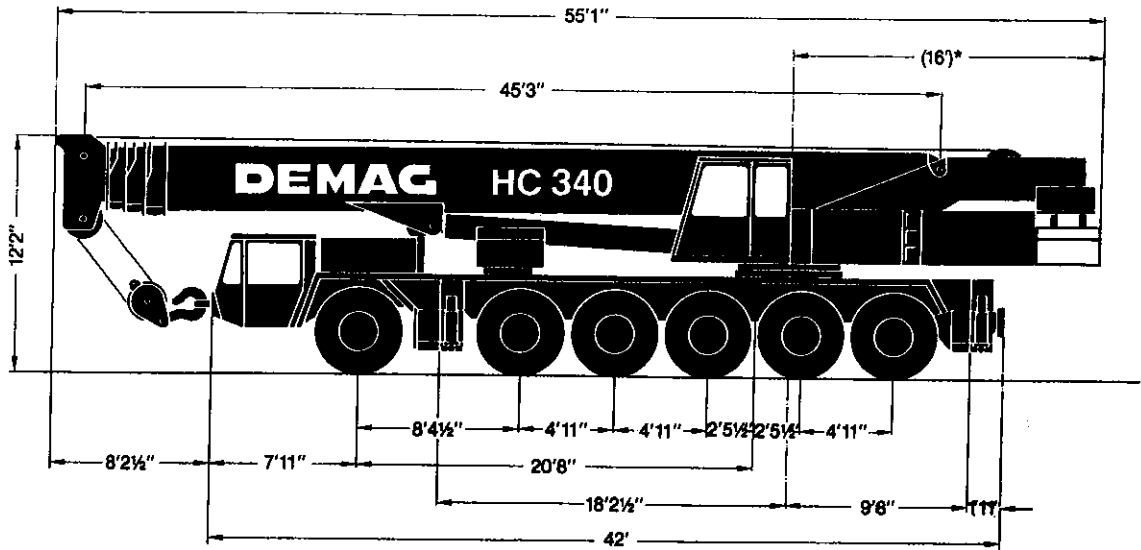
Baumaschinen

**Telescopic Crane**

**HC 340**



# Dimension Chart



\* Width with more than 31,000 lb counterweight: 11'6", tail swing: 16'5"

# Specifications

## Axle Loads

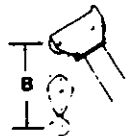
|                                                                 |               |
|-----------------------------------------------------------------|---------------|
| Crane with Main Boom and Hook Block and 31,000 lb Counterweight |               |
| Front Axle                                                      | 1 x 26,400 lb |
| Rear Axles                                                      | 5 x 26,400 lb |
| Total Axle Load                                                 | 158,800 lb    |

## Working Speeds (Infinitely variable)

| Units                                            | Line Speed      | Rope Pull, Single Line | Length of Hoist Rope |
|--------------------------------------------------|-----------------|------------------------|----------------------|
| Main Hoist                                       | max. 394 ft/min | 18,302 lb              | 984 ft               |
| Secondary Hoist                                  | max. 394 ft/min | 18,302 lb              | 591 ft               |
| Swing                                            | max. 2 RPM      |                        |                      |
| Telescoping from 45 ft to 148 ft                 | 80 s            |                        |                      |
| Boom Elevation from $-2^{\circ}$ to $82^{\circ}$ | 62 s            |                        |                      |

## Carrier Performance.

|               |                |
|---------------|----------------|
| Travel Speeds | 0 ... 40.4 mph |
|---------------|----------------|



## Hook-Blocks/Crane Hook

| Capacity   |            | Number of Sheaves | Number of Lines | Weight   | "B"  |
|------------|------------|-------------------|-----------------|----------|------|
| max.       | 85%        |                   |                 |          |      |
| 353,000 lb | 330,000 lb | 9*                | 18              | 3,087 lb | 8 ft |
| 221,000 lb | 201,000 lb | 5                 | 11              | 2,681 lb | 8 ft |
| 139,000 lb | 128,000 lb | 3                 | 7               | 2,326 lb | 8 ft |
| 71,000 lb  | 55,000 lb  | 1                 | 3               | 1,676 lb | 8 ft |
| 28,000 lb  | 18,000 lb  | Crane Hook        | 1               | 816 lb   | 6 ft |

\* requires modification of boom head

# Lifting Capacities without Superlift in 1,000 lb

with outriggers — 360° — 85%

## 64,000 lb Counterweight

| Radius<br>(ft) | Main Boom (ft)     |       |      |      | Main Boom 148 ft |           |          |           |          |           | Radius<br>(ft) |     |
|----------------|--------------------|-------|------|------|------------------|-----------|----------|-----------|----------|-----------|----------------|-----|
|                | 45                 | 79    | 114  | 148  | Fixed Fly Jib    |           |          |           |          |           |                |     |
|                |                    |       |      |      | 49 ft/3°         | 49 ft/20° | 69 ft/3° | 69 ft/20° | 89 ft/3° | 89 ft/20° |                |     |
| 10             | 330.0 <sup>1</sup> | —     | —    | —    | —                | —         | —        | —         | —        | —         | —              | 10  |
| 11             | 269.0              | —     | —    | —    | —                | —         | —        | —         | —        | —         | —              | 11  |
| 13             | 240.0              | 123.0 | —    | —    | —                | —         | —        | —         | —        | —         | —              | 13  |
| 15             | 212.0              | 123.0 | —    | —    | —                | —         | —        | —         | —        | —         | —              | 15  |
| 16             | 193.0              | 123.0 | —    | —    | —                | —         | —        | —         | —        | —         | —              | 16  |
| 20             | 159.0              | 123.0 | 80.0 | —    | —                | —         | —        | —         | —        | —         | —              | 20  |
| 23             | 139.0              | 123.0 | 73.4 | —    | —                | —         | —        | —         | —        | —         | —              | 23  |
| 26             | 119.0              | 119.0 | 67.4 | —    | —                | —         | —        | —         | —        | —         | —              | 26  |
| 29             | 103.0              | 103.0 | 62.1 | 45.0 | —                | —         | —        | —         | —        | —         | —              | 29  |
| 33             | 91.5               | 91.5  | 57.3 | 43.0 | 19.8             | —         | —        | —         | —        | —         | —              | 33  |
| 39             | —                  | 73.4  | 49.1 | 37.4 | 18.5             | —         | 13.0     | —         | —        | —         | —              | 39  |
| 46             | —                  | 60.4  | 43.0 | 33.0 | 17.2             | —         | 12.3     | —         | —        | —         | —              | 46  |
| 52             | —                  | 50.9  | 37.7 | 29.5 | 16.3             | —         | 11.6     | —         | 8.8      | —         | —              | 52  |
| 59             | —                  | 43.4  | 33.3 | 26.4 | 15.2             | —         | 11.0     | —         | 8.1      | —         | —              | 59  |
| 66             | —                  | 37.7  | 30.0 | 24.0 | 13.9             | 11.7      | 10.1     | —         | 7.7      | —         | —              | 66  |
| 72             | —                  | —     | 26.9 | 21.3 | 13.0             | 11.2      | 9.7      | 7.9       | 7.2      | —         | —              | 72  |
| 79             | —                  | —     | 24.5 | 19.4 | 11.9             | 11.0      | 9.0      | 7.5       | 6.6      | —         | —              | 79  |
| 85             | —                  | —     | 21.8 | 17.4 | 11.2             | 10.6      | 8.1      | 7.3       | 6.1      | 5.3       | —              | 85  |
| 92             | —                  | —     | 19.8 | 15.8 | 10.3             | 10.1      | 7.7      | 7.0       | 5.5      | 5.1       | —              | 92  |
| 98             | —                  | —     | 17.4 | 14.1 | 9.7              | 8.7       | 7.0      | 6.6       | 5.0      | 4.6       | —              | 98  |
| 105            | —                  | —     | —    | 12.5 | 9.0              | 9.0       | 6.6      | 6.2       | 4.8      | 4.2       | —              | 105 |
| 112            | —                  | —     | —    | 11.6 | 8.6              | 8.6       | 6.4      | 5.7       | 4.8      | 4.0       | —              | 112 |
| 118            | —                  | —     | —    | 10.5 | 7.9              | 7.9       | 6.1      | 5.5       | 4.4      | 3.7       | —              | 118 |
| 125            | —                  | —     | —    | 9.4  | 7.7              | 7.7       | 5.7      | 5.1       | 4.2      | 3.5       | —              | 125 |
| 131            | —                  | —     | —    | 8.1  | 7.0              | 7.0       | 5.5      | 4.4       | 4.0      | 3.3       | —              | 131 |
| 138            | —                  | —     | —    | —    | 6.8              | 6.6       | 5.0      | 4.2       | 3.7      | 3.1       | —              | 138 |
| 144            | —                  | —     | —    | —    | 6.4              | 6.7       | 4.6      | 4.0       | 3.5      | 2.9       | —              | 144 |
| 151            | —                  | —     | —    | —    | 5.7              | 5.3       | 4.4      | 3.7       | 3.3      | 2.7       | —              | 151 |
| 157            | —                  | —     | —    | —    | 5.0              | 4.4       | 4.2      | 3.5       | 3.0      | 2.6       | —              | 157 |
| 164            | —                  | —     | —    | —    | 4.0              | 4.0       | 2.8      | 2.9       | 2.8      | 2.4       | —              | 164 |

<sup>1</sup> requires special attachment

## 31,000 lb Counterweight

| Radius<br>(ft) | Main Boom (ft) |       |       |      |       |      | Main Boom 148 ft |           |          |           |          |           | Radius<br>(ft) |
|----------------|----------------|-------|-------|------|-------|------|------------------|-----------|----------|-----------|----------|-----------|----------------|
|                | 45             | 79    | 114*  | 114  | 148*  | 148  | Fixed Fly Jib    |           |          |           |          |           |                |
|                |                |       |       |      |       |      | 49 ft/3°         | 49 ft/20° | 69 ft/3° | 69 ft/20° | 89 ft/3° | 89 ft/20° |                |
| 10             | 298.0          | —     | —     | —    | —     | —    | —                | —         | —        | —         | —        | —         | 10             |
| 11             | 253.0          | —     | —     | —    | —     | —    | —                | —         | —        | —         | —        | —         | 11             |
| 13             | 227.0          | 123.0 | —     | —    | —     | —    | —                | —         | —        | —         | —        | —         | 13             |
| 15             | 196.7          | 123.0 | —     | —    | —     | —    | —                | —         | —        | —         | —        | —         | 15             |
| 16             | 174.0          | 123.0 | —     | —    | —     | —    | —                | —         | —        | —         | —        | —         | 16             |
| 20             | 141.0          | 123.0 | 80.0* | 80.0 | —     | —    | —                | —         | —        | —         | —        | —         | 20             |
| 23             | 117.0          | 117.0 | 73.4* | 73.4 | —     | —    | —                | —         | —        | —         | —        | —         | 23             |
| 26             | 100.0          | 100.0 | 67.4* | 67.4 | —     | —    | —                | —         | —        | —         | —        | —         | 26             |
| 29             | 87.3           | 87.3  | 62.1* | 62.1 | 45.0* | 45.0 | —                | —         | —        | —         | —        | —         | 29             |
| 33             | 76.5           | 76.5  | 57.3* | 57.4 | 43.0* | 43.0 | 19.8             | —         | —        | —         | —        | —         | 33             |
| 39             | —              | 59.5  | 49.1* | 49.1 | 37.4* | 37.4 | 18.5             | —         | 13.0     | —         | —        | —         | 39             |
| 46             | —              | 45.2  | 43.0* | 43.0 | 33.0* | 33.0 | 17.2             | —         | 12.3     | —         | —        | —         | 46             |
| 52             | —              | 35.5  | 36.8* | 35.5 | 29.5* | 29.5 | 16.3             | —         | 11.6     | —         | 8.8      | —         | 52             |
| 59             | —              | 28.6  | 30.0* | 28.6 | 26.4* | 26.4 | 15.2             | —         | 11.0     | —         | 8.1      | —         | 59             |
| 66             | —              | 23.3  | 24.7* | 23.3 | 24.0* | 23.3 | 13.9             | 11.7      | 10.1     | —         | 7.7      | —         | 66             |
| 72             | —              | —     | 20.5* | 19.1 | 20.5* | 19.1 | 13.0             | 11.2      | 9.7      | 7.9       | 7.2      | —         | 72             |
| 79             | —              | —     | 17.0* | 15.6 | 17.0* | 15.6 | 11.9             | 11.0      | 9.0      | 7.5       | 6.6      | —         | 79             |
| 85             | —              | —     | 14.3* | 13.0 | 14.3* | 13.0 | 11.2             | 10.6      | 8.1      | 7.3       | 6.1      | 5.3       | 85             |
| 92             | —              | —     | 11.9* | 10.3 | 11.9* | 10.3 | 10.3             | 10.1      | 7.7      | 7.0       | 5.5      | 5.1       | 92             |
| 98             | —              | —     | 9.9*  | 8.8  | 9.9*  | 8.3  | 9.7              | 9.7       | 7.0      | 6.6       | 5.0      | 4.6       | 98             |
| 105            | —              | —     | —     | —    | 8.1*  | 6.6  | 9.0              | 9.0       | 6.6      | 6.2       | 4.8      | 4.2       | 105            |
| 112            | —              | —     | —     | —    | 6.6*  | 5.3  | 7.9              | 8.6       | 6.4      | 5.7       | 4.8      | 4.0       | 112            |
| 118            | —              | —     | —     | —    | 5.0*  | 3.9  | 6.8              | 8.1       | 6.1      | 5.5       | 4.4      | 3.7       | 118            |
| 125            | —              | —     | —     | —    | 3.9*  | 2.8  | 5.5              | 6.8       | 5.7      | 5.1       | 4.2      | 3.5       | 125            |
| 131            | —              | —     | —     | —    | 3.0*  | 2.0  | 4.4              | 5.5       | 5.3      | 4.4       | 4.0      | 3.3       | 131            |
| 138            | —              | —     | —     | —    | —     | —    | 3.5              | 4.4       | 4.2      | 4.2       | 3.7      | 3.1       | 138            |
| 144            | —              | —     | —     | —    | —     | —    | 2.4              | 3.5       | 3.3      | 4.0       | 3.3      | 2.9       | 144            |
| 151            | —              | —     | —     | —    | —     | —    | 1.7              | 2.6       | 2.4      | 3.7       | 2.8      | 2.7       | 151            |
| 157            | —              | —     | —     | —    | —     | —    | —                | 2.0       | 1.7      | 2.9       | 2.2      | 2.6       | 157            |
| 164            | —              | —     | —     | —    | —     | —    | —                | —         | —        | 2.2       | 1.7      | 2.4       | 164            |

\* only 2 x 10° over rear

# Lifting Capacities without Superlift in 1,000 lb with outriggers — 360° — 85%

## 64,000 lb Counterweight (148 ft Main Boom)

| Radius<br>(ft) | Fold-away Extensions |      |       |     | Radius<br>(ft) |
|----------------|----------------------|------|-------|-----|----------------|
|                | 39 ft                |      | 66 ft |     |                |
|                | 0°                   | 20°  | 0°    | 20° |                |
| 39             | 22.7                 | —    | —     | —   | 39             |
| 46             | 20.9                 | 15.4 | 13.9  | —   | 46             |
| 52             | 18.9                 | 15.0 | 13.4  | —   | 52             |
| 59             | 17.2                 | 14.1 | 13.0  | 7.9 | 59             |
| 66             | 15.4                 | 13.2 | 12.5  | 7.7 | 66             |
| 72             | 13.8                 | 12.1 | 11.6  | 7.5 | 72             |
| 79             | 12.3                 | 11.2 | 10.5  | 6.8 | 79             |
| 85             | 11.2                 | 10.1 | 9.0   | 6.6 | 85             |
| 92             | 9.9                  | 9.2  | 8.3   | 6.3 | 92             |
| 98             | 8.8                  | 8.3  | 7.5   | 5.9 | 98             |
| 105            | 7.7                  | 7.5  | 6.8   | 5.5 | 105            |
| 112            | 6.8                  | 6.6  | 5.9   | 5.0 | 112            |
| 118            | 5.7                  | 5.9  | 5.0   | 4.8 | 118            |
| 125            | 4.8                  | 5.0  | 4.4   | 4.4 | 125            |
| 131            | 4.1                  | 4.4  | 3.9   | 4.0 | 131            |
| 138            | 3.3                  | 4.0  | 3.3   | 3.3 | 138            |
| 144            | 2.8                  | 3.3  | 2.8   | 2.8 | 144            |
| 151            | 2.2                  | 2.8  | 2.4   | 2.4 | 151            |
| 157            | —                    | 2.4  | 2.2   | 2.2 | 157            |

## 31,000 lb Counterweight (148 ft Main Boom)

| Radius<br>(ft) | Fold-away Extensions |       |       |      |         |      |       |     | Radius<br>(ft) |
|----------------|----------------------|-------|-------|------|---------|------|-------|-----|----------------|
|                | 39 ft*               |       | 39 ft |      | 66 ft*  |      | 66 ft |     |                |
|                | 0°                   | 20°   | 0°    | 20°  | 0°      | 20°  | 0°    | 20° |                |
| 39             | 22.7°                | —     | 22.7  | —    | —       | —    | —     | —   | 39             |
| 46             | 20.9°                | 15.4° | 20.9  | 15.4 | (13.9°) | —    | 13.9  | —   | 46             |
| 52             | 18.9°                | 15.0° | 18.9  | 15.0 | 13.4°   | —    | 13.4  | —   | 52             |
| 59             | 17.2°                | 14.1° | 17.2  | 14.1 | 13.0°   | 7.9° | 13.0  | 7.9 | 59             |
| 66             | 15.4°                | 13.2° | 15.4  | 13.2 | 12.5°   | 7.7° | 12.5  | 7.7 | 66             |
| 72             | 13.8°                | 12.1° | 13.8  | 12.1 | 11.6°   | 7.5° | 11.6  | 7.5 | 72             |
| 79             | 12.3°                | 11.2° | 12.3  | 11.2 | 10.5°   | 6.8° | 10.5  | 6.8 | 79             |
| 85             | 11.2°                | 10.1° | 11.2  | 10.1 | 9.0°    | 6.6° | 9.0   | 6.6 | 85             |
| 92             | 9.9°                 | 9.2°  | 9.9   | 9.2  | 8.3°    | 6.3° | 8.3   | 6.3 | 92             |
| 98             | 8.8°                 | 8.3°  | 8.8   | 8.3  | 7.5°    | 5.9° | 7.5   | 5.9 | 98             |
| 105            | 7.7°                 | 7.5°  | 6.8   | 7.5  | 6.8°    | 5.5° | 6.6   | 5.5 | 105            |
| 112            | 6.8°                 | 6.6°  | 5.5   | 6.6  | 5.9°    | 5.0° | 5.9   | 5.0 | 112            |
| 118            | 5.7°                 | 5.9°  | 4.1   | 5.3  | 5.0°    | 4.8° | 5.0   | 4.8 | 118            |
| 125            | 4.8°                 | 5.0°  | 2.8   | 4.0  | 4.4°    | 4.4° | 4.4   | 4.4 | 125            |
| 131            | 3.3°                 | 4.4°  | 2.0   | 2.8  | 3.9°    | 4.0° | 3.7   | 4.0 | 131            |
| 138            | 2.4°                 | 3.0°  | —     | 2.0  | 3.3°    | 3.3° | 2.8   | 3.3 | 138            |
| 144            | 1.7°                 | 2.2°  | —     | —    | 2.8°    | 2.8° | 2.0   | 2.8 | 144            |
| 151            | —                    | —     | —     | —    | 2.4°    | 2.4° | —     | 2.4 | 151            |
| 157            | —                    | —     | —     | —    | 1.7°    | 2.2° | —     | 1.7 | 157            |

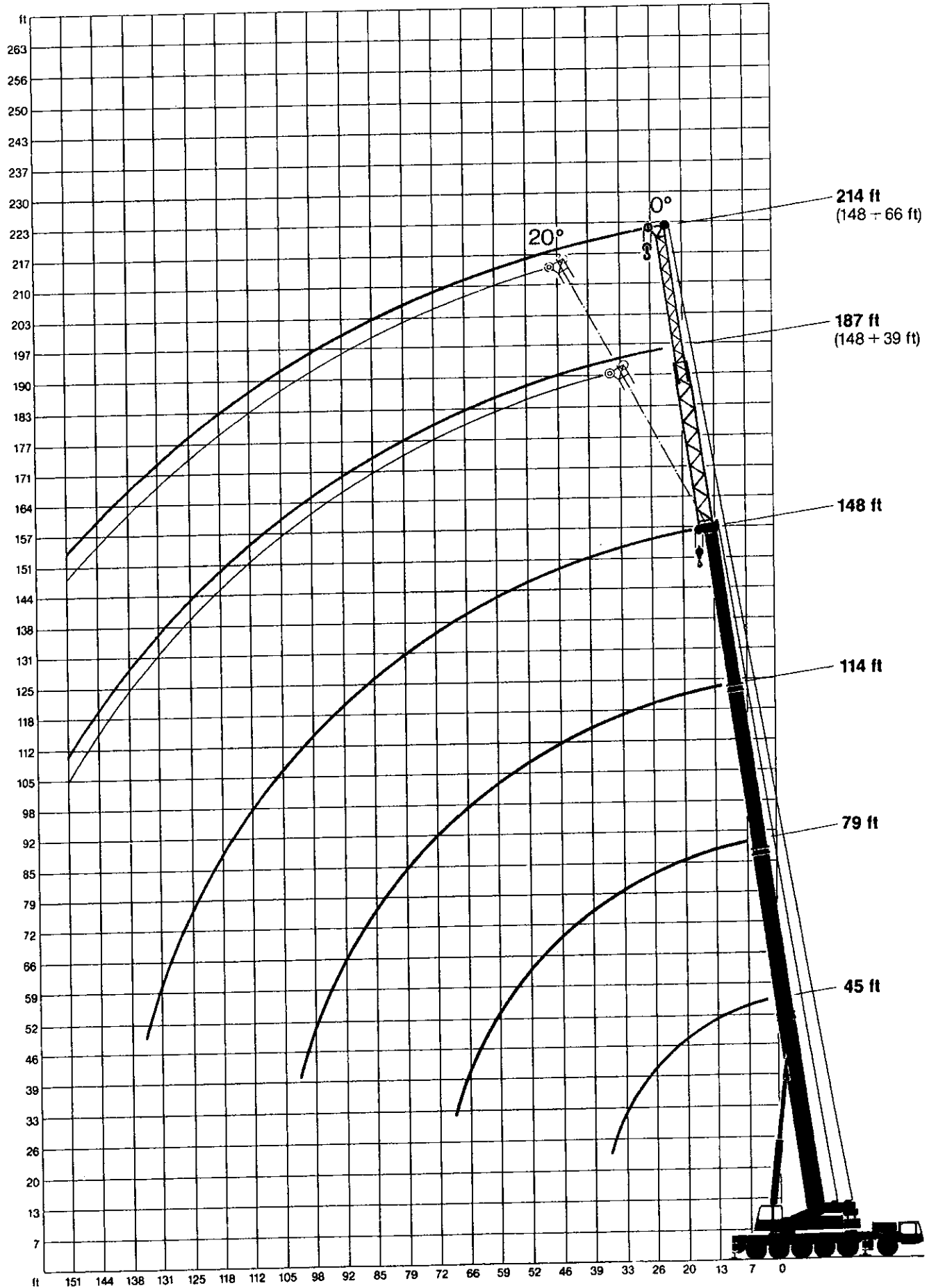
\* only 2 x 10° over rear

# Working Ranges

- Main boom
- Foldaway extension

45 ft — 148 ft

39 ft — 66 ft



## Carrier

|                                 |                                                                                                                                                                                                                                   |
|---------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Truck-Type Carrier Frame</b> | Make: Demag. Drive: 12x6<br>Demag-built monobox main frame with outrigger boxes integral, of high-grade close-grained steel.                                                                                                      |
| <b>Outriggers</b>               | Four telescoping hydraulic outrigger beams with hydraulic jack legs.                                                                                                                                                              |
| <b>Engine</b>                   | Daimler-Benz OM-424 water-cooled 12-cylinder Diesel Engine. Output to DIN 70020: 309 kW (420 HP). Fuel-Tank Capacity: 400 l.                                                                                                      |
| <b>Transmission</b>             | ZF-Transmatic 8-speed forward, 1-reverse synchromesh torque-converter main transmission plus transfer case with longitudinal differential and lock-out control.                                                                   |
| <b>Axles</b>                    | 1st and 3rd: steering, non-driving; 4th: non-driving; 5th: driving, with through-drive differential and lock-out control; 2nd and 6th: steering and driving. All axles with single wheels, and driving axles with planetary hubs. |
| <b>Wheels and Tyres</b>         | Disk-type wheels 10.0 x 24 fitted with 12 tyres 14.00 x 24, PR 22, plus 1 spare.                                                                                                                                                  |
| <b>Steering</b>                 | ZF semibloc mechanical steering with hydraulic booster.                                                                                                                                                                           |
| <b>Brakes</b>                   | to EC standards.                                                                                                                                                                                                                  |
| <b>Electrical Equipment</b>     | 24-volt system.                                                                                                                                                                                                                   |
| <b>Cab</b>                      | Rubber-mounted low-line two-man all-steel cab, 1.64-m wide.                                                                                                                                                                       |

## Superstructure

|                               |                                                                                                                                                                                                                                                                                                                                                         |
|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Upper Frame</b>            | Demag-built weldment of high-grade close-grain steel.                                                                                                                                                                                                                                                                                                   |
| <b>Paneling</b>               | Sectional side panels, which are removable for service accessibility.                                                                                                                                                                                                                                                                                   |
| <b>Turntable Mounting</b>     | 3-row roller-bearing swing circle with external ring gear.                                                                                                                                                                                                                                                                                              |
| <b>Engine</b>                 | Daimler-Benz OM-352 A water-cooled 6-cylinder Diesel Engine. Output to DIN 70020: 112 kW (152 HP). Fuel-Tank Capacity: 300 l.                                                                                                                                                                                                                           |
| <b>Hydraulic System</b>       | 2 variable-displacement axial-piston pumps with automatic power control and 1 fixed-displacement tandem pump (enable the operator to engage three motions at the same time). 1 fixed-displacement pump for the low-pressure control circuits.                                                                                                           |
| <b>Hoist</b>                  | Axial-piston hydraulic motor with planetary reduction, and spring-loaded multi-disk brake.                                                                                                                                                                                                                                                              |
| <b>Swing</b>                  | Axial-piston hydraulic motor and planetary drive. Foot-pedal operated swing brake and spring-loaded holding brake.                                                                                                                                                                                                                                      |
| <b>Boom Elevation Control</b> | 1 hydraulic cylinder with pilot controlled lowering brake valve. Four self-centering levers control all crane operations through hydraulic power and pilot valves.                                                                                                                                                                                      |
| <b>Cab</b>                    | Comfortable all-steel cab with large folding-out front and roof windows, sliding door, hot-air heating unit, and ventilation system.                                                                                                                                                                                                                    |
| <b>Boom</b>                   | Four-section power-telescoping boom, fabricated from high-grade close-grain plate stock, featuring the familiar DEMAG "ovaloid" design of rectangular box members with rounded-off corners. Each center section slides on self-centering diagonally arranged plastic shoes. Boom head with brackets and mounts for extension booms and luffing fly jib. |
| <b>Safety Devices</b>         | Electronic overload cut-out (load limiting device) of Demag design, with safe-load and radius indicator; hoist and load lowering limit switches; relief and safety holding valves.                                                                                                                                                                      |

# Optional Equipment

## Superlift Attachment

The Superlift attachment is a simple means to increase the lifting capacity of the normal crane. It essentially consists of a boom-suspension mast with guy ropes, which provides for an automatic rope-length adjustment for boom telescoping, and a 15-ton Superlift counterweight. The suspension mast is lowered to the main boom when not needed, or for road transport. To mount and remove the Superlift counterweight when setting up the crane for Superlift duty, an auxiliary crane can be dispensed with.

## 2nd Hoist Drum

Permits tandem lifts and avoids re-reeving of hoist line when using an optional extension or luffing fly jib. It is indispensable for jib-luffing. The drum is powered by a fixed-displacement axial-piston hydraulic motor, through a planetary gear train, and equipped with a spring-loaded multi-disk brake.

## Extension Booms

Version 1: Telescoping 39—66 ft side-folding 2-part lattice-type extension boom with adapter to permit an angular adjustment to 20°.

Version 2: Non-folding, non-adjustable lattice-type extension boom, using components of the luffing fly jib, in lengths of 49 ft, 69 ft, and 89 ft (angular adjustment to 3° and 20°).

## Luffing Fly Jib

Lattice-type, with luffing mast, ropes, and safety devices, in lengths from 49 ft to 108 ft (the second hoist drum is required when using the luffing fly jib).

F21 AM