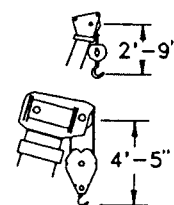
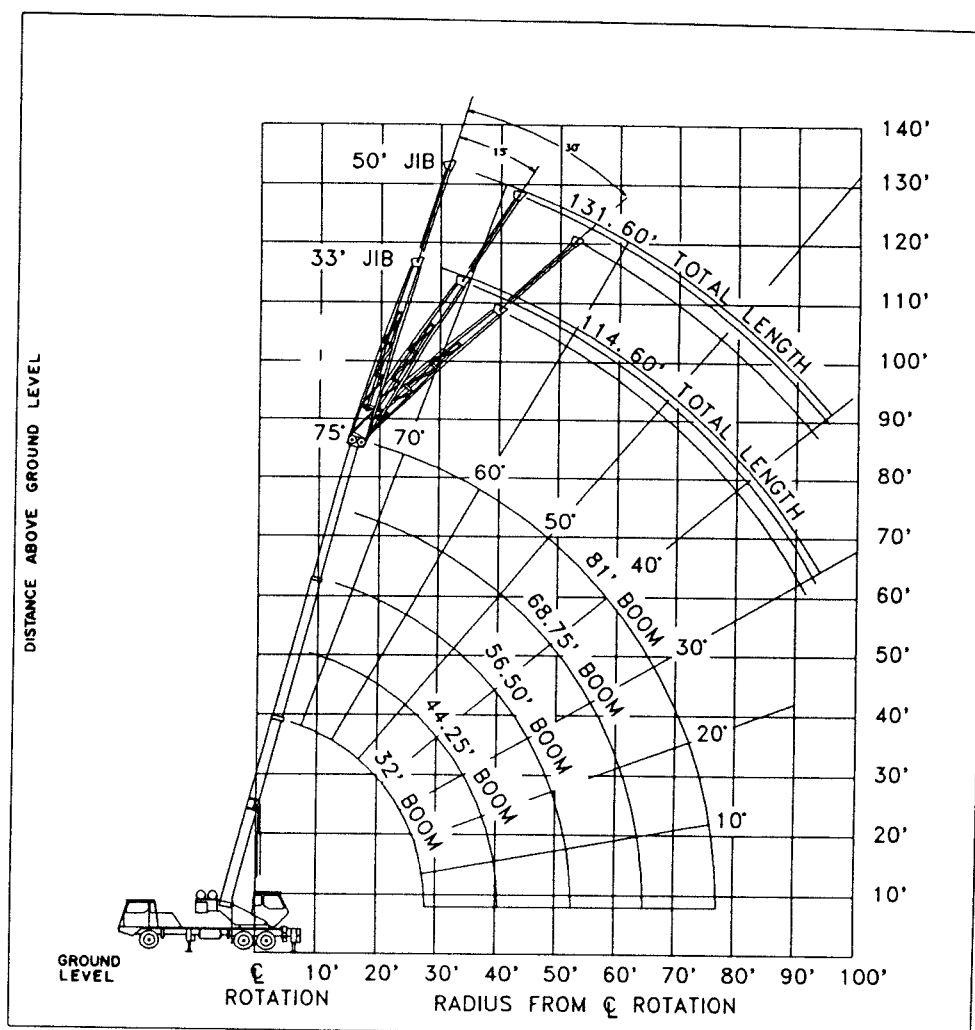




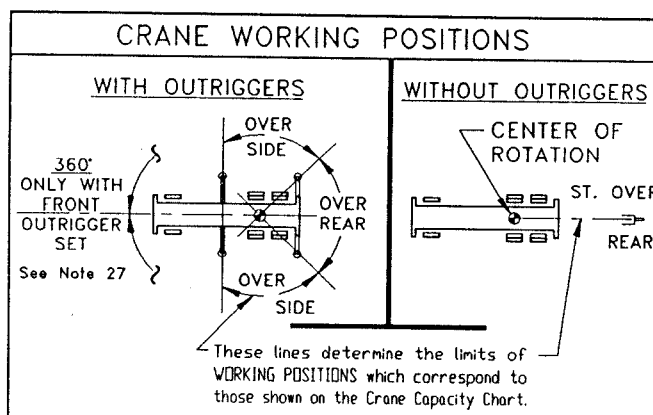
# LORAIN<sup>®</sup> MCH 300D SERIES

carrier-mounted hydraulic crane  
with offsetting jib. 35-ton capacity  
range diagram &  
capacity charts



DIMENSIONS ARE FOR  
LARGEST KOEHRING  
FURNISHED HOOK BLOCK  
AND HEADACHE BALL.  
WITH ANTI-TWO BLOCK  
ACTIVATED.

## Range Diagram (32'-81' boom)





# Capacity Charts — Pounds

## (32'-81' boom)

### MCH 300D SERIES

**IMPORTANT: This specification sheet is not to be used as load rating chart in the machine as data may be subject to change.**

CAPACITY: 35 TON  
COUNTERWEIGHT  
LOWER CHASSIS: ON FRONT BUMPER  
1850 lb. (SEE NOTE 1)  
UPPER STRUCTURE:  
W/AUX. WINCH 4300 lb.  
W/O AUX. WINCH 5100 lb.

BOOM LENGTH 32-81 ft.  
OUTRIGGER SPREAD 18 ft.  
STABILITY PCT.  
ON OUTRIGGERS 85%  
ON TIRES 75%  
PCSA CLASS 10-91

| ON OUTRIGGERS              |                                                                                   |         |         |                                                                                   |         |         |                                                                                   |         |         |                                                                                   |         |         |                                                                                   |         |         |                            |
|----------------------------|-----------------------------------------------------------------------------------|---------|---------|-----------------------------------------------------------------------------------|---------|---------|-----------------------------------------------------------------------------------|---------|---------|-----------------------------------------------------------------------------------|---------|---------|-----------------------------------------------------------------------------------|---------|---------|----------------------------|
| R<br>A<br>D<br>I<br>U<br>S | BOOM LENGTH<br>32 FT.                                                             |         |         | BOOM LENGTH<br>44.25 FT.                                                          |         |         | BOOM LENGTH<br>56.50 FT.                                                          |         |         | BOOM LENGTH<br>68.75 FT.                                                          |         |         | BOOM LENGTH<br>81 FT.                                                             |         |         | R<br>A<br>D<br>I<br>U<br>S |
|                            |  | REAR    | SIDE    |  | REAR    | SIDE    |  | REAR    | SIDE    |  | REAR    | SIDE    |  | REAR    | SIDE    |                            |
| 10                         | 64                                                                                | 70,000* | 70,000* | 72                                                                                | 69,000* | 69,000* |                                                                                   |         |         |                                                                                   |         |         |                                                                                   |         |         | 10                         |
| 12                         | 60                                                                                | 63,000* | 63,000* | 69                                                                                | 60,900* | 60,900* | 74                                                                                | 52,100* | 52,100* |                                                                                   |         |         |                                                                                   |         |         | 12                         |
| 15                         | 54                                                                                | 50,100* | 50,100* | 65                                                                                | 50,300* | 49,600* | 70                                                                                | 45,900* | 45,900* | 74                                                                                | 31,000* | 31,000* |                                                                                   |         |         | 15                         |
| 20                         | 41                                                                                | 36,200* | 33,600  | 58                                                                                | 36,800* | 34,000  | 65                                                                                | 37,100* | 34,200  | 70                                                                                | 25,800* | 25,800* | 74                                                                                | 20,900* | 20,900* | 20                         |
| 25                         | 27                                                                                | 27,900* | 21,500  | 50                                                                                | 28,500* | 22,000  | 60                                                                                | 28,800* | 22,200  | 66                                                                                | 21,900* | 21,900* | 70                                                                                | 17,600* | 17,600* | 25                         |
| 30                         |                                                                                   |         |         | 39                                                                                | 22,900* | 15,700  | 54                                                                                | 23,100* | 15,900  | 61                                                                                | 19,100* | 16,000  | 67                                                                                | 15,300* | 15,300* | 30                         |
| 35                         |                                                                                   |         |         | 24                                                                                | 17,800* | 11,800  | 47                                                                                | 18,000  | 12,000  | 56                                                                                | 16,900* | 12,100  | 63                                                                                | 13,300* | 12,200  | 35                         |
| 40                         |                                                                                   |         |         | 19                                                                                | 14,100  | 9,100   | 39                                                                                | 14,500  | 9,400   | 50                                                                                | 14,600  | 9,500   | 58                                                                                | 11,800* | 9,500   | 40                         |
| 45                         |                                                                                   |         |         |                                                                                   |         |         | 29                                                                                | 11,900  | 7,400   | 43                                                                                | 12,000  | 7,600   | 54                                                                                | 10,500* | 7,600   | 45                         |
| 50                         |                                                                                   |         |         |                                                                                   |         |         | 19                                                                                | 9,900   | 6,000   | 38                                                                                | 10,100  | 6,100   | 49                                                                                | 9,500*  | 6,200   | 50                         |
| 55                         |                                                                                   |         |         |                                                                                   |         |         |                                                                                   |         |         | 29                                                                                | 8,500   | 5,000   | 43                                                                                | 8,600   | 5,100   | 55                         |
| 60                         |                                                                                   |         |         |                                                                                   |         |         |                                                                                   |         |         | 21                                                                                | 7,300   | 4,100   | 37                                                                                | 7,400   | 4,100   | 60                         |
| 65                         |                                                                                   |         |         |                                                                                   |         |         |                                                                                   |         |         |                                                                                   |         |         | 33                                                                                | 6,300   | 3,400   | 65                         |
| 70                         |                                                                                   |         |         |                                                                                   |         |         |                                                                                   |         |         |                                                                                   |         |         | 24                                                                                | 5,500   | 2,800   | 70                         |
| 75                         |                                                                                   |         |         |                                                                                   |         |         |                                                                                   |         |         |                                                                                   |         |         | 16                                                                                | 4,700   | 2,200   | 75                         |

| 33'SIDE STOW JIB ON OUTRIGGERS      |                                     |         |                            |                                     |        |                            |                                     |        | 50'SIDE STOW JIB ON OUTRIGGERS |                                     |        |                            |                                      |        |                            |                                      |        |        |    |
|-------------------------------------|-------------------------------------|---------|----------------------------|-------------------------------------|--------|----------------------------|-------------------------------------|--------|--------------------------------|-------------------------------------|--------|----------------------------|--------------------------------------|--------|----------------------------|--------------------------------------|--------|--------|----|
| R<br>A<br>D<br>I<br>U<br>S<br><br>D | MAX. BOOM<br>& 0° Offset<br>114.60' |         | R<br>A<br>D<br>I<br>U<br>S | MAX. BOOM<br>& 15° Offset<br>113.8' |        | R<br>A<br>D<br>I<br>U<br>S | MAX. BOOM<br>& 30° Offset<br>110.9' |        | R<br>A<br>D<br>I<br>U<br>S     | MAX. BOOM<br>& 0° Offset<br>131.60' |        | R<br>A<br>D<br>I<br>U<br>S | MAX. BOOM<br>& 15° Offset<br>130.20' |        | R<br>A<br>D<br>I<br>U<br>S | MAX. BOOM<br>& 30° Offset<br>125.60' |        | D      |    |
|                                     | REAR                                | SIDE    |                            | REAR                                | SIDE   |                            | REAR                                | SIDE   |                                | REAR                                | SIDE   |                            | REAR                                 | SIDE   |                            | REAR                                 | SIDE   |        |    |
| 75                                  | 29                                  | 10,000* | 10,000*                    | 36                                  | 7,300* | 7,300*                     | 43                                  | 5,500* | 5,500*                         | 34                                  | 5,300* | 5,300*                     | 46                                   | 3,600* | 3,600*                     | 56                                   | 2,800* | 2,800* | 75 |
| 73                                  | 33                                  | 10,000* | 10,000*                    | 41                                  | 7,000* | 7,000*                     | 47                                  | 5,200* | 5,200*                         | 39                                  | 4,900* | 4,900*                     | 51                                   | 3,400* | 3,400*                     | 59                                   | 2,700* | 2,700* | 73 |
| 70                                  | 39                                  | 9,600*  | 9,600*                     | 46                                  | 6,600* | 6,500*                     | 52                                  | 5,000* | 5,000*                         | 45                                  | 4,500* | 4,500*                     | 56                                   | 3,300* | 3,300*                     | 65                                   | 2,500* | 2,500* | 70 |
| 67                                  | 44                                  | 8,700*  | 8,700*                     | 51                                  | 6,200* | 6,200*                     | 56                                  | 4,800* | 4,800*                         | 52                                  | 4,100* | 4,100*                     | 62                                   | 3,100* | 3,100*                     | 70                                   | 2,500* | 2,500* | 67 |
| 64                                  | 50                                  | 8,000*  | 6,700*                     | 56                                  | 5,900* | 5,700*                     | 62                                  | 4,600* | 4,600*                         | 58                                  | 3,900* | 3,900*                     | 68                                   | 2,900* | 2,900*                     | 76                                   | 2,400* | 2,400* | 64 |
| 61                                  | 55                                  | 6,700*  | 5,600*                     | 61                                  | 5,600* | 4,900*                     | 68                                  | 4,500* | 4,300*                         | 64                                  | 3,600* | 3,600*                     | 74                                   | 2,800* | 2,800*                     | 81                                   | 2,300* | 2,300* | 61 |
| 58                                  | 60                                  | 6,000*  | 4,600*                     | 66                                  | 5,400* | 4,300*                     | 70                                  | 4,400* | 3,900*                         | 70                                  | 3,300* | 3,300*                     | 80                                   | 2,700* | 2,700*                     | 86                                   | 2,300* | 2,300* | 58 |
| 54                                  | 66                                  | 5,100*  | 3,700*                     | 71                                  | 4,600* | 3,600*                     | 75                                  | 4,000* | 3,100*                         | 79                                  | 3,200* | 2,700*                     | 86                                   | 2,500* | 2,500*                     | 92                                   | 2,200* | 2,200* | 54 |
| 50                                  | 72                                  | 4,400*  | 2,800*                     | 77                                  | 5,000* | 2,500*                     | 80                                  | 3,700* | 2,500*                         | 87                                  | 2,900* | 2,100*                     | 93                                   | 2,400* | 2,200*                     | 98                                   | 2,200* | 1,900* | 50 |
| 46                                  | 77                                  | 3,900*  | 2,200*                     | 82                                  | 3,500* | 2,300*                     | 85                                  | 3,300* | 2,100*                         | 91                                  | 2,700* | 2,000*                     | 99                                   | 2,300* | 1,800*                     | 103                                  | 2,100* | 1,500* | 46 |
| 42                                  | 83                                  | 3,500*  | 1,800*                     | 87                                  | 3,100* | 1,900*                     | 90                                  | 3,000* | 1,600*                         | 97                                  | 2,500* | 1,400*                     | 104                                  | 2,200* | 1,300*                     | 107                                  | 2,100* | 1,200* | 42 |
| 38                                  | 87                                  | 3,100*  | 1,300*                     | 92                                  | 2,800* | 1,300*                     | 94                                  | 2,800* |                                | 103                                 | 2,400* | 1,100*                     | 109                                  | 2,100* | 1,000*                     | 111                                  | 2,000* | 1,000* | 38 |
| 34                                  | 92                                  | 2,800*  |                            | 97                                  | 2,600* |                            | 98                                  | 2,600* |                                | 110                                 | 2,100* |                            | 113                                  | 2,000* |                            | 115                                  | 2,000* |        | 34 |
| 30                                  | 97                                  | 2,500*  |                            | 99                                  | 2,300* |                            | 101                                 | 2,500* |                                | 114                                 | 1,900* |                            | 116                                  | 1,900* |                            | 118                                  | 1,900* |        | 30 |
| 26                                  | 101                                 | 2,200*  |                            | 102                                 | 2,100* |                            |                                     |        |                                | 117                                 | 1,700* |                            | 119                                  | 1,700* |                            |                                      |        |        | 26 |
| 22                                  | 105                                 |         |                            | 103                                 | 2,000* |                            |                                     |        |                                | 120                                 | 1,600* |                            | 121                                  | 1,600* |                            |                                      |        |        | 22 |

#### NOTES FOR ON TIRES CAPACITIES

- A. FOR PICK AND CARRY OPERATIONS, BOOM MUST BE CENTERED OVER THE REAR OF THE CRANE WITH SWING BRAKE LOCKED OR WITH MECHANICAL SWING LOCK ENGAGED. IF SO EQUIPPED, USE MINIMUM BOOM POINT HEIGHT AND KEEP LOAD CLOSE TO GROUND SURFACE.
- B. THE LOAD SHOULD BE RESTRAINED FROM SWINGING. NO ON-TIRE OPERATION WITH JIB ERECTED.
- C. WITHOUT OUTRIGGERS, NEVER MANEUVER THE BOOM BEYOND LISTED LOAD RADII FOR APPLICABLE TIRES USED TO ENSURE STABILITY.
- D. CREEP SPEED IS CRANE MOVEMENT OF LESS THAN 200 FT. (61m) IN 30 MINUTES PERIOD AND NOT EXCEEDING 1.0 mph (1.6 km/h).

E. REFER TO GENERAL NOTES FOR ADDITIONAL INFORMATION.

#### NOTES FOR JIB CAPACITIES

- F. FOR ALL BOOM LENGTHS LESS THAN THE MAXIMUM WITH A JIB ERECTED, THE RATED LOADS ARE DETERMINED BY BOOM ANGLE ONLY IN THE APPROPRIATE COLUMN.
- G. FOR BOOM ANGLE NOT SHOWN, USE THE CAPACITY OF THE NEXT LOWER BOOM ANGLE.
- H. LISTED RADII ARE FOR FULLY EXTENDED BOOM ONLY.
- I. LOWER CHASSIS:  
1850 lbs. CWT. ON FRONT BUMPER.  
W/FRONT P.T.O. ONLY  
1550 lbs. CWT. (1850 lbs. EQUIV.).  
W/FRONT OUTRIGGERS ONLY:  
1550 lbs. CWT. (1850 lbs. EQUIV.).  
W/FRONT P.T.O. & OUTRIGGERS:  
1350 lbs. CWT. (1850 lbs. EQUIV.).

#### RECOMMENDED TIRE PRESSURE (PSI)

| TIRE SIZE     | 11.00X22.5-16PR |
|---------------|-----------------|
| LIFT ON TIRES | 95              |
| ROADING       | 75              |

#### REDUCTION IN MAIN BOOM CAPACITY

All Jibs in Stowed Position 0 Lbs.

33'-50' Side Stow  
Jib Erected  
Slinger Retracted 3,600 Lbs.

33'-50' Side Stow  
Jib Erected  
Slinger Extended 4,100 Lbs.

#### HOOK BLOCK WEIGHTS

Hook & Ball 239 Lbs.  
Hook Block (3 Sheave) 650 Lbs.  
Hook Block (4 Sheave) 700 Lbs.

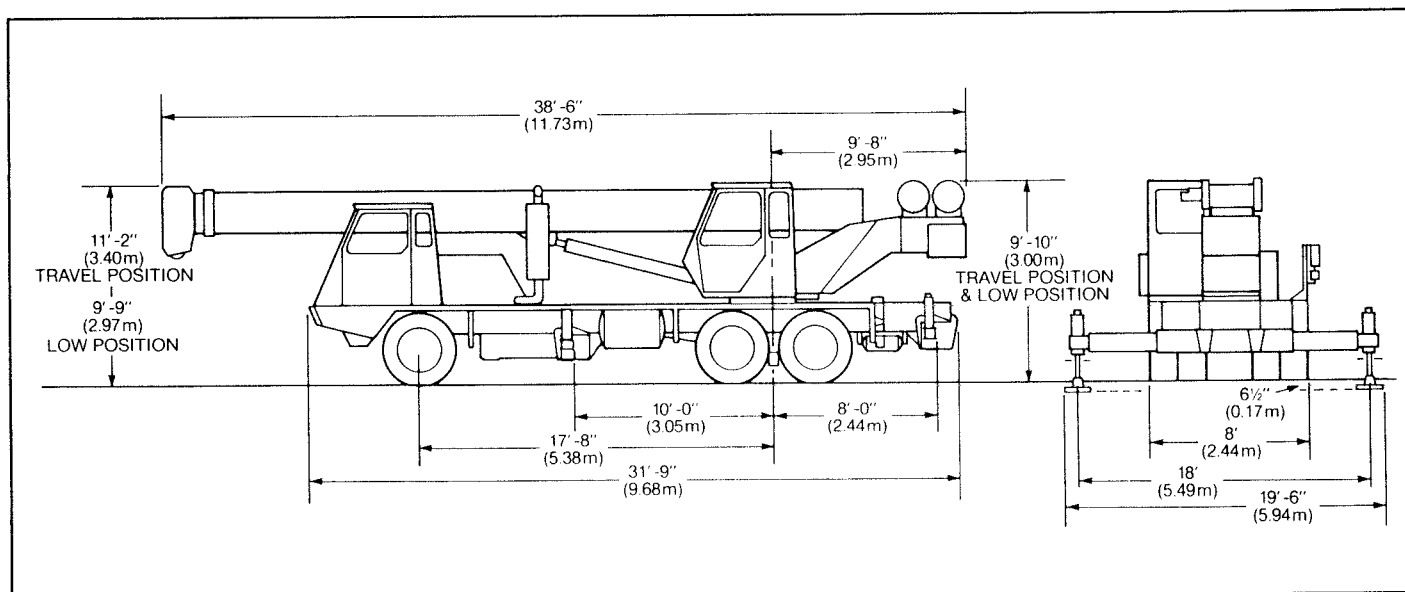
#### ON TIRES STRAIGHT OVER REAR ONLY

| R<br>A<br>D<br>I<br>U<br>S | PICK<br>&<br>CARRY<br>MAIN BOOM<br>CAPACITIES | R<br>A<br>D<br>I<br>U<br>S |
|----------------------------|-----------------------------------------------|----------------------------|
| 10                         | 16,700                                        | 10                         |
| 12                         | 14,500                                        | 12                         |
| 15                         | 11,300                                        | 15                         |
| 20                         | 7,100                                         | 20                         |
| 25                         | 4,700                                         | 25                         |
| 30                         | 3,000                                         | 30                         |
| 35                         | 2,000                                         | 35                         |
| 40                         | 1,400                                         | 40                         |

| MAXIMUM PERMISSABLE HOIST LINE LOAD                           |       |        |        |                                                                |        |         |         |           |
|---------------------------------------------------------------|-------|--------|--------|----------------------------------------------------------------|--------|---------|---------|-----------|
| LINE PARTS                                                    | 1     | 2      | 3      | 4                                                              | 5      | 6       | 7       | 8         |
| MAIN HOIST                                                    | 9,700 | 19,400 | 29,100 | 38,800                                                         | 48,500 | 58,200  | 67,900  | 70,000    |
| AUX. HOIST                                                    | 7,600 | 15,200 | 22,800 | 30,400                                                         | 38,000 | 45,600  | 53,200  | 60,800    |
| BOOM HEAD                                                     | 2     | 2-0    | 2-3    | 1-2-0                                                          | 1-2-3  | 1-2-3-0 | 1-2-3-4 | 1-2-3-4-0 |
| HOOK BLOCK                                                    | 0     | 2      | 2-0    | 1-2                                                            | 1-2-0  | 1-2-3   | 1-2-3-0 | 1-2-3-4   |
| MAIN & OPT. AUX. HOIST LINE                                   |       |        |        | AUX. HOIST LINE                                                |        |         |         |           |
| 5/8" Dia. 6x19 or 6x37 IWRC, IPS, Reg Lay Performed Wire Rope |       |        |        | 1/2" Dia. 6x19 or 6x37 IWRC, XIPS, Reg Lay Performed Wire Rope |        |         |         |           |
| Minimum Breaking Strength - 179 Tons                          |       |        |        | Minimum Breaking Strength - 133 Tons                           |        |         |         |           |
| Max. Permissible Line Pull - 10,228 Lbs                       |       |        |        | Max. Permissible Line Pull - 7,600 Lbs                         |        |         |         |           |



## GENERAL DIMENSIONS



| WEIGHTS & AXLE LOADS                                                                                                                                      | GROSS WEIGHT (LBS.) | UPPER IN TRAVEL POSITION |         | GROSS WEIGHT (KG.) | UPPER IN TRAVEL POSITION |         |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------------------|---------|--------------------|--------------------------|---------|
|                                                                                                                                                           |                     | FRONT                    | REAR    |                    | FRONT                    | REAR    |
| Basic Crane with 6CTAA-8.3L Engine, 81' (24.69 m) Boom, 1000 lb. (454 kg) Upper Counterweight, 16.5 x 22.5 Front Tires, 9.00 x 20 Rear with spoke wheels. | 45,750              | 16,050                   | 29,700  | 20 752             | 7,280                    | 13,472  |
| <b>Add Options:</b>                                                                                                                                       |                     |                          |         |                    |                          |         |
| 33' (10.06 m) Swing-on Offsetable Boom Jib                                                                                                                | + 1,740             | + 1,475                  | + 265   | + 789              | + 669                    | + 120   |
| 33'-50' (10.06-15.24 m) Swing-on Offsetable Jib                                                                                                           | + 2,125             | + 1,600                  | + 525   | + 964              | + 726                    | + 238   |
| Auxiliary Winch with Wire Rope                                                                                                                            | - 100 *             | - 15                     | - 85    | - 45 *             | - 7                      | - 38    |
| 10.00 x 20 Tires (Rear Only) Highway Tread                                                                                                                | + 140               | 0                        | + 140   | + 64               | 0                        | + 64    |
| 16.50 x 22.5-18 PR Tires                                                                                                                                  | + 15                | + 15                     | 0       | + 7                | + 7                      | 0       |
| 5100 lb. (2313 kg) Counterweight on Cab Upper                                                                                                             |                     |                          |         |                    |                          |         |
| 1850 lb. (839 kg) Counterweight on Front Bumper                                                                                                           | + 5,950             | + 305                    | + 5,645 | + 2 705            | + 140                    | + 2,565 |
| 1800 lb. (816 kg) Counterweight on Cab Upper                                                                                                              |                     |                          |         |                    |                          |         |
| 1050 lb. (476 kg) Counterweight on Front Bumper                                                                                                           | + 1,850             | + 980                    | + 870   | + 839              | + 445                    | + 395   |
| Automatic Transmission                                                                                                                                    | + 510               | + 300                    | + 210   | + 231              | + 136                    | + 95    |
| 6 x 6 Powertrain                                                                                                                                          | + 1,900             | + 1,950                  | - 50    | + 862              | + 885                    | - 23    |
| Electric Remote Control Package                                                                                                                           | + 200               | + 160                    | + 40    | + 91               | + 73                     | + 18    |
| Heater/Defroster (Upper)                                                                                                                                  | + 50                | 0                        | + 50    | + 23               | 0                        | + 23    |
| 360° House Lock                                                                                                                                           | + 85                | 0                        | + 85    | + 39               | 0                        | + 39    |
| 35 ton (31.7 mt) Hook Block                                                                                                                               | + 700               | +1,015                   | - 315   | + 320              | + 460                    | - 140   |
| 6.25 ton (5.7 mt) Hook and Ball w/Latch                                                                                                                   | + 240               | + 340                    | - 100   | + 109              | + 154                    | - 45    |

\* Requires removing 1000 lb. (454 kg) counterweight.

NOTE: Weights are for Lorain supplied equipment and subject to 2% variation due to manufacturing tolerances.

WE RESERVE THE RIGHT TO AMEND THESE SPECIFICATIONS AT ANY TIME WITHOUT NOTICE. THE ONLY WARRANTY APPLICABLE IS OUR STANDARD WRITTEN WARRANTY APPLICABLE TO THE PARTICULAR PRODUCT AND SALE. WE MAKE NO OTHER WARRANTY, EXPRESSED OR IMPLIED.



Koehring Cranes & Excavators  
Waverly, Iowa 50677