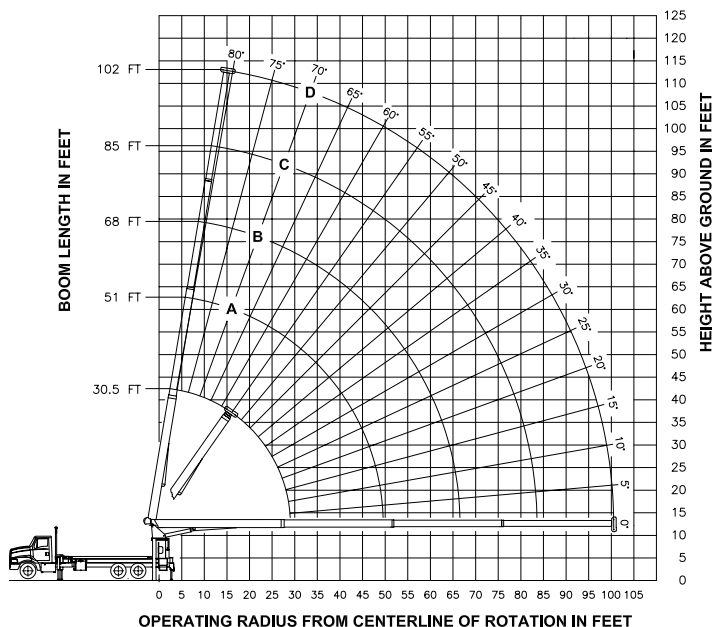


RANGE DIAGRAM



OPERATING RADIUS FROM CENTERLINE OF ROTATION IN FEET

LOAD RATINGS IN LBS WITH ALL OUTRIGGERS AND STABILIZERS EXTENDED AND THE CRANE LEVEL

| OPERATING RADIUS IN FEET | LOADED BOOM ANGLE | BOOM LENGTH AND MARKER | LOAD RATING (LBS) | | | | | | | |
|--------------------------|-------------------|------------------------|-------------------|-------|----|-------|----|-------|----|-------|
| | | | A | B | C | D | | | | |
| 5 | 80 | 60000 | 51 | 68 | 85 | 102 | | | | |
| 8 | 75 | 39560 | | | | | | | | |
| 10 | 71 | 33410 | 79 | 22500 | | | | | | |
| 12 | 67 | 29030 | 77 | 20210 | | | | | | |
| 15 | 60 | 24380 | 73 | 16590 | 78 | 15620 | | | | |
| 20 | 48 | 19240 | 67 | 12750 | 74 | 11840 | 78 | 11200 | 81 | 10500 |
| 25 | 33 | 15480 | 61 | 10310 | 69 | 9460 | 74 | 8870 | 78 | 8430 |
| 30 | | | 54 | 8590 | 65 | 7830 | 71 | 7280 | 75 | 6850 |
| 35 | | | 47 | 7270 | 60 | 6610 | 67 | 6100 | 72 | 5700 |
| 40 | | | 38 | 6160 | 55 | 5670 | 63 | 5190 | 69 | 4820 |
| 45 | | | 27 | 5070 | 49 | 4890 | 60 | 4470 | 66 | 4120 |
| 50 | | | | | 43 | 4230 | 55 | 3880 | 63 | 3550 |
| 55 | | | | | 36 | 3630 | 51 | 3370 | 59 | 3070 |
| 60 | | | | | 28 | 3030 | 46 | 2930 | 56 | 2660 |
| 65 | | | | | 15 | 2200 | 41 | 2530 | 52 | 2310 |
| 70 | | | | | | | 35 | 2160 | 49 | 2000 |
| 75 | | | | | | | 29 | 1770 | 44 | 1710 |
| 80 | | | | | | | 19 | 1300 | 40 | 1440 |
| 85 | | | | | | | | | 35 | 1190 |
| 90 | | | | | | | | | 29 | 920 |
| 95 | | | | | | | | | 22 | 620 |

WARNING

- THE OPERATOR MUST READ AND UNDERSTAND THE OWNER'S MANUAL BEFORE OPERATING THIS CRANE.
- POSITIONING OR OPERATION OF CRANE BEYOND AREAS SHOWN ON THIS CHART IS NOT INTENDED OR APPROVED EXCEPT WHERE SPECIFIED IN OWNER'S MANUAL.
- LOADED BOOM ANGLES AT SPECIFIED BOOM LENGTHS GIVE ONLY AN APPROXIMATION OF THE OPERATING RADIUS. THE BOOM ANGLE BEFORE LOADING SHOULD BE GREATER TO ACCOUNT FOR DEFLECTIONS. DO NOT EXCEED THE OPERATING RADIUS FOR RATED LOADS.
- FOR BOOM LENGTHS NOT SHOWN, USE RATING OF NEXT SHORTER OR LONGER BOOM LENGTH, WHICHEVER IS LESS. FOR RADII NOT SHOWN, USE RATING OF NEXT LONGER RADIUS.
- CRANE LOAD RATINGS ON OUTRIGGERS ARE BASED ON FREELY SUSPENDED LOADS WITH THE MACHINE LEVELED AND STANDING ON A FIRM UNIFORM SUPPORTING SURFACE. NO ATTEMPT SHALL BE MADE TO MOVE A LOAD HORIZONTALLY ON THE GROUND IN ANY DIRECTION.
- PRACTICAL WORKING LOADS DEPEND ON SUPPORTING SURFACE, WIND, AND OTHER FACTORS AFFECTING STABILITY SUCH AS HAZARDOUS SURROUNDINGS, EXPERIENCE OF PERSONNEL, AND PROPER HANDLING, ALL OF WHICH MUST BE TAKEN INTO ACCOUNT BY THE OPERATOR.
- THE MAXIMUM LOAD WHICH MAY BE TELESCOPED IS LIMITED BY HYDRAULIC PRESSURE, BOOM ANGLE, AND BOOM LUBRICATION. IT IS SAFE TO ATTEMPT TO TELESCOPE ANY LOAD WITHIN THE LIMITS OF THE LOAD RATING CHART. BOOM MUST BE FULLY RETRACTED AGAINST BOOM STOPS AT ALL TIMES WHEN LIFTING MINIMUM BOOM LENGTH CAPACITY LOADS.

INFORMATION

- DEDUCTIONS MUST BE MADE FROM RATED LOADS FOR STOWED JIB, OPTIONAL ATTACHMENTS, HOOKS, AND LOAD-BLOCKS (SEE DEDUCTION CHART). WEIGHTS OF SLINGS AND ALL OTHER LOAD HANDLING DEVICES SHALL BE CONSIDERED A PART OF THE LOAD.
- CRANE LOAD RATINGS WITH OUTRIGGERS ARE BASED ON OUTRIGGERS AND STABILIZERS EXTENDED AND SET WITH MACHINE LEVELED.
- LOAD RATINGS ABOVE THE HEAVY LINE ARE STRUCTURALLY LIMITED CAPACITIES. LOAD RATINGS BELOW THE HEAVY LINE ARE STABILITY LIMITED CAPACITIES AND DO NOT EXCEED 85% OF TIPPING.

DEFINITIONS

- OPERATING RADIUS IS THE HORIZONTAL DISTANCE FROM THE AXIS OF ROTATION TO THE CENTER OF THE VERTICAL HOIST LINE OR TACKLE WITH LOAD APPLIED.
- LOADED BOOM ANGLE AS SHOWN IN THE COLUMN HEADED BY α , IS THE INCLUDED ANGLE BETWEEN THE HORIZONTAL AND LONGITUDINAL AXES OF THE BOOM BASE AFTER LIFTING RATED LOAD AT RATED RADIUS.

ALLOWABLE LINE PULL

| 1 PART | 2 PART | 3 PART | 4 PART | 5 PART | 6 PART | 7 PART |
|----------|-----------|-----------|-----------|-----------|-----------|-----------|
| | | | | | | |
| 8500 LBS | 17000 LBS | 25500 LBS | 34000 LBS | 42500 LBS | 51000 LBS | 60000 LBS |
| 7400 LBS | 14800 LBS | 22200 LBS | 29600 LBS | 37000 LBS | 44400 LBS | 51800 LBS |

WARNING

ANTI-TWO-BLOCK SYSTEM MUST BE IN GOOD OPERATING CONDITION BEFORE OPERATING CRANE.

REFER TO THE OWNER'S MANUAL.

KEEP AT LEAST 3 WRAPS OF LOAD LINE ON THE DRUM AT ALL TIMES.

9/16" 6X25 IWRC (3.5:1 SF) - 29750 LBS MIN BREAKING STRENGTH

9/16" ROT RESISTANT (5.0:1 SF) - 37000 LBS MIN BREAKING STRENGTH

DEDUCTIONS FROM RATED LOADS FOR LOAD HANDLING DEVICES SUPPLIED BY MANITEX

| | | |
|----------------------|-------|-----------------------------------|
| AUXILIARY BLOCK | ----- | 50 LBS |
| WIRELINE SHEAVE HEAD | ----- | 100 LBS |
| AUXILIARY WINCH | ----- | 200 LBS |
| OVERHAUL BALL | ----- | SEE OVERHAUL BALL MFGR. NAMEPLATE |
| LOAD BLOCK | ----- | SEE BLOCK MFGR. NAMEPLATE |
| HOSE REEL | ----- | 140 LBS |



MODEL 102WL

CRANE MEETS ANSI B30.5 REQUIREMENTS

7300096-008 NR

