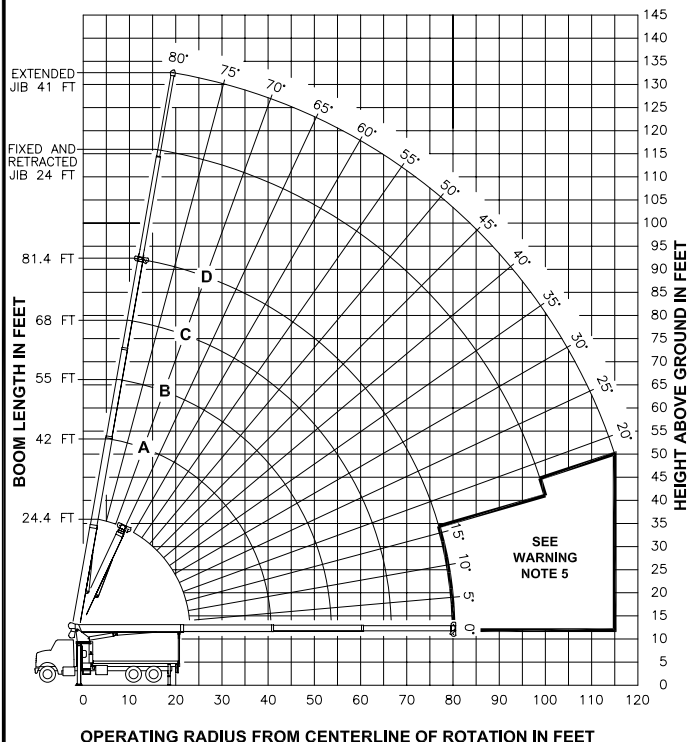




RANGE DIAGRAM



OPERATING RADIUS FROM CENTERLINE OF ROTATION IN FEET

LMI OPERATING CODES

| SETTING | CRANE CONFIGURATION  | SETTING | CRANE WITH PERSONNEL LIFTING PLATFORM              |
|---------|----------------------|---------|----------------------------------------------------|
| #1---   | MAIN BOOM            | #5---   | PERSONNEL LIFTING PLATFORM ON MAIN BOOM            |
| #2---   | FIXED JIB            | #6---   | PERSONNEL LIFTING PLATFORM ON FIXED JIB            |
| #3---   | TELE JIB - RETRACTED | #7---   | PERSONNEL LIFTING PLATFORM ON TELE JIB - RETRACTED |
| #4---   | TELE JIB - EXTENDED  | #8---   | PERSONNEL LIFTING PLATFORM ON TELE JIB - EXTENDED  |

ALLOWABLE LINE PULL

| 1 PART LINE | 2 PART LINE | 3 PART LINE | 4 PART LINE | 5 PART LINE | 6 PART LINE |
|-------------|-------------|-------------|-------------|-------------|-------------|
|             |             |             |             |             |             |
| 8500 LBS    | 17000 LBS   | 25500 LBS   | 34000 LBS   | 42500 LBS   | 44000 LBS   |
| 7400 LBS    | 14800 LBS   | 22200 LBS   | 29600 LBS   | 37000 LBS   | 44000 LBS   |

WARNING

ANTI-TWO-BLOCK SYSTEM MUST BE IN GOOD OPERATING CONDITION BEFORE OPERATING CRANE. REFER TO OWNER'S MANUAL.

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

9/16" - 6X25 WRC (3.5:1 S.F.)  
29750 LBS. BREAKING STRENGTH  
9/16" ROT RESISTANT (5.0:1 S.F.)  
37000 LBS. BREAKING STRENGTH

DEDUCTIONS FROM RATED LOADS FOR LOAD HANDLING DEVICES SUPPLIED BY MANITEX

|                  |     |                                  |
|------------------|-----|----------------------------------|
| AUXILIARY BLOCK  | --- | 50 LBS                           |
| OVERHAUL BALL    | --- | SEE OVERHAUL BALL MFR. NAMEPLATE |
| LOAD BLOCK       | --- | SEE BLOCK MFR. NAMEPLATE         |
| HOSE REEL        | --- | 160 LBS                          |
| SWING AROUND JIB | --- | SEE LOAD CHART                   |

WARNING

LIFTING OFF THE MAIN BOOM POINT WHILE THE JIB IS ERECTED IS NOT INTENDED OR APPROVED.

LOAD RATINGS IN LBS WITH OUTRIGGERS AND STABILIZERS EXTENDED

| LMI CODE #1                 |                                         |             |          |          |          |                          |                                      |                               |                               |       |    |      |    |      |    |      |
|-----------------------------|-----------------------------------------|-------------|----------|----------|----------|--------------------------|--------------------------------------|-------------------------------|-------------------------------|-------|----|------|----|------|----|------|
| BOOM LENGTH<br>TENS OF FEET | BOOM ANGLE<br>BOOM LENGTH AND<br>MARKER | LMI CODE #2 |          |          |          | LMI CODE #3              |                                      |                               |                               |       |    |      |    |      |    |      |
|                             |                                         | A           | B        | C        | D        | FIXED JIB<br>LMI CODE #2 | TELESCOPIC JIB<br>LMI CODE #3        | TELESCOPIC JIB<br>LMI CODE #4 | TELESCOPIC JIB<br>LMI CODE #4 |       |    |      |    |      |    |      |
| BOOM LENGTH<br>TENS OF FEET | BOOM ANGLE<br>BOOM LENGTH AND<br>MARKER | 24.4 FT     | 42 FT    | 55 FT    | 68 FT    | 81.4 FT                  | 24 FT                                | 24 FT                         | 41 FT                         | 41 FT |    |      |    |      |    |      |
| 5                           | 78                                      | 44000       |          |          |          |                          |                                      |                               |                               |       |    |      |    |      |    |      |
| 8                           | 70                                      | 35150       |          |          |          |                          |                                      |                               |                               |       |    |      |    |      |    |      |
| 10                          | 65                                      | 29700       | 76       | 14500    |          |                          |                                      |                               |                               |       |    |      |    |      |    |      |
| 12                          | 60                                      | 24640       | 74       | 14500    | 78       | 14500                    |                                      |                               |                               |       |    |      |    |      |    |      |
| 14                          | 54                                      | 20870       | 71       | 14500    | 76       | 14500                    | 80                                   | 13050                         |                               |       |    |      |    |      |    |      |
| 17                          | 44                                      | 16830       | 66       | 14500    | 73       | 14500                    | 77                                   | 11700                         | 80                            | 9200  |    |      |    |      |    |      |
| 20                          | 32                                      | 13940       | 62       | 14270    | 70       | 13430                    | 75                                   | 10550                         | 78                            | 8500  |    |      |    |      |    |      |
| 25                          |                                         | 54          | 10990    | 64       | 11000    | 70                       | 9000                                 | 75                            | 7550                          | 25    | 78 | 4360 | 78 | 4160 | 80 | 3000 |
| 30                          |                                         | 44          | 8780     | 58       | 8880     | 66                       | 8120                                 | 71                            | 6640                          | 30    | 76 | 3900 | 76 | 3700 | 78 | 2740 |
| 35                          |                                         | 32          | 7180     | 51       | 7290     | 61                       | 7120                                 | 67                            | 5880                          | 35    | 73 | 3500 | 73 | 3290 | 76 | 2490 |
| 40                          |                                         | 13          | 5620     | 44       | 5770     | 56                       | 5840                                 | 63                            | 5260                          | 40    | 70 | 3160 | 70 | 2940 | 74 | 2260 |
| 45                          |                                         |             |          | 35       | 4650     | 50                       | 4720                                 | 59                            | 4700                          | 45    | 67 | 2850 | 67 | 2640 | 71 | 2070 |
| 50                          |                                         |             |          | 24       | 3800     | 44                       | 3880                                 | 55                            | 3930                          | 50    | 64 | 2590 | 64 | 2370 | 69 | 1900 |
| 55                          |                                         |             |          |          |          | 37                       | 3230                                 | 50                            | 3270                          | 55    | 61 | 2370 | 61 | 2140 | 66 | 1730 |
| 60                          |                                         |             |          |          |          | 28                       | 2700                                 | 45                            | 2750                          | 60    | 58 | 2170 | 58 | 1950 | 64 | 1580 |
| 65                          |                                         |             |          |          |          | 15                       | 2260                                 | 39                            | 2320                          | 65    | 55 | 2000 | 55 | 1770 | 61 | 1430 |
| 70                          |                                         |             |          |          |          |                          |                                      | 32                            | 1960                          | 70    | 51 | 1840 | 51 | 1620 | 58 | 1310 |
| 75                          |                                         |             |          |          |          |                          |                                      | 24                            | 1650                          | 75    | 47 | 1710 | 47 | 1470 | 55 | 1210 |
| 80                          |                                         |             |          |          |          |                          |                                      | 3                             | 1380                          | 80    | 43 | 1490 | 43 | 1260 | 52 | 1110 |
| 85                          |                                         |             |          |          |          |                          |                                      |                               |                               | 85    | 39 | 1260 | 39 | 1030 | 49 | 1020 |
| 90                          |                                         |             |          |          |          |                          |                                      |                               |                               | 90    | 34 | 1070 | 34 | 830  | 46 | 940  |
| 95                          |                                         |             |          |          |          |                          |                                      |                               |                               | 95    | 27 | 890  | 27 | 650  | 42 | 870  |
| 100                         |                                         |             |          |          |          |                          |                                      |                               |                               | 100   | 19 | 730  | 19 | 500  | 38 | 790  |
| 105                         |                                         |             |          |          |          |                          |                                      |                               |                               | 105   |    |      |    |      | 34 | 650  |
| 110                         |                                         |             |          |          |          |                          |                                      |                               |                               | 110   |    |      |    |      | 29 | 520  |
| 115                         |                                         |             |          |          |          |                          |                                      |                               |                               | 115   |    |      |    |      | 22 | 410  |
|                             |                                         | 290 LBS.    | 170 LBS. | 130 LBS. | 110 LBS. | 90 LBS.                  | DEDUCTIONS FOR STOWED FIXED JIB      |                               |                               |       |    |      |    |      |    |      |
|                             |                                         | 440 LBS.    | 260 LBS. | 200 LBS. | 160 LBS. | 140 LBS.                 | DEDUCTIONS FOR STOWED TELESCOPIC JIB |                               |                               |       |    |      |    |      |    |      |

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.
- THE OPERATING RADIUS SHOWN IN THE JIB RATING CHART IS FOR FULLY EXTENDED BOOM ONLY. WHEN BOOM IS NOT FULLY EXTENDED, USE ONLY LOADED BOOM ANGLE TO DETERMINE LOAD RATING OF JIB.
- BOOM MUST BE FULLY RETRACTED WHEN JIB IS ERECTED, BEFORE LOWERING BOOM THROUGH THIS AREA.
- FOR BOOM ANGLES NOT SHOWN ON JIB LOAD RATING CHART, USE RATING OF NEXT LOWER BOOM ANGLE.
- FOR BOOM LENGTHS NOT SHOWN, USE RATING OF NEXT LONGER BOOM LENGTH. 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.

DEFINITIONS

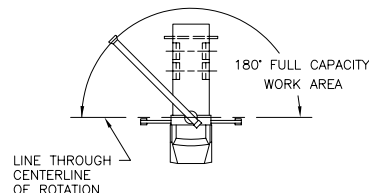
- DEDUCTIONS MUST BE MADE FROM RATED LOADS FOR STOWED JIB, OPTIONAL ATTACHMENTS, HOOKS, AND LOADBLOCKS (SEE DEDUCTION CHART). WEIGHTS OF SLINGS AND ALL OTHER LOAD HANDLING DEVICES SHALL BE CONSIDERED A PART OF THE LOAD.
  - CRANE LOAD RATINGS WITH OUTRIGGERS ARE BASED ON OUTRIGGERS AND STABILIZERS EXTENDED 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  $\angle$  IS THE INCLUDED ANGLE BETWEEN THE HORIZONTAL AND LONGITUDINAL AXES OF THE BOOM BASE AFTER LIFTING RATED LOAD AT RATED RADIUS.

**Manitex**

MODELS  
2281C & 2281T

CRANE MEETS ANSI B30.5 REQUIREMENTS

7300087-004 NR



AREA OF OPERATION