



# Load Rating Chart

***Model 22101S***

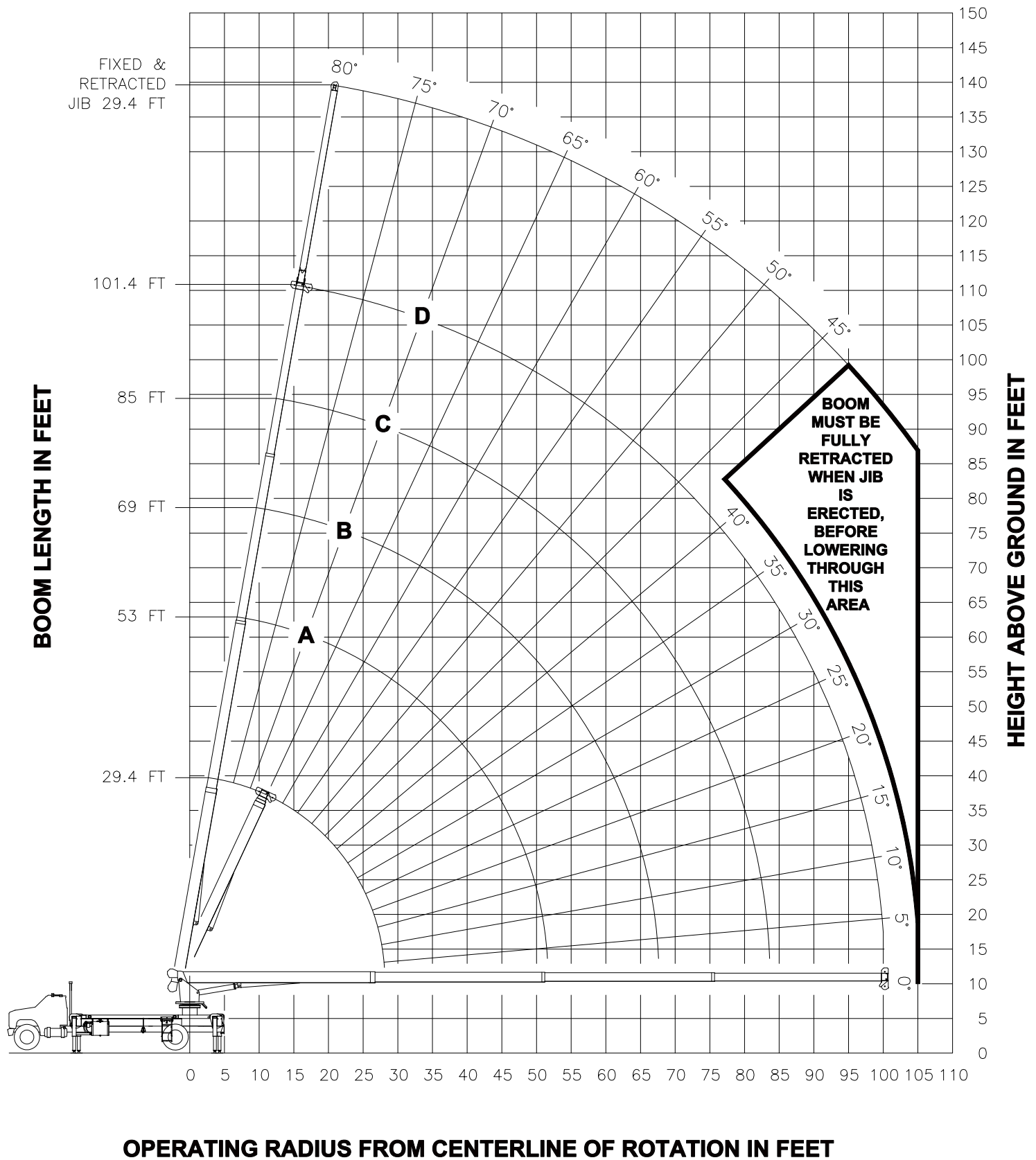


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**NOTE:** Additional copies of this Load Rating Chart can be purchased from your Mani*tex* Distributor. When ordering, use the part number shown in the bottom left corner of this page.

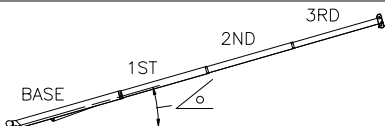


## RANGE DIAGRAM





## LOAD RATINGS WITH OUTRIGGERS FULLY EXTENDED AND SET WITH MACHINE LEVELED

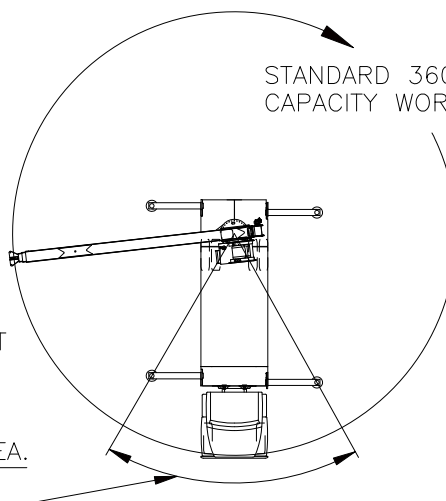
| MAIN BOOM LOAD RATINGS IN LBS |                      |          |                           |          |   |          |          |          |          | JIB LOAD RATINGS IN LBS   |                           |   |          |
|-------------------------------|----------------------|----------|---------------------------|----------|---|----------|----------|----------|----------|---------------------------|---------------------------|---|----------|
| LMI CODE #1                   |                      |          |                           |          |   |          |          |          |          | LMI CODE #2               |                           |   |          |
| OPERATING<br>RADIUS<br>FT     | LOADED<br>BOOM ANGLE |          | BOOM LENGTH<br>AND MARKER |          |  |          |          |          |          | OPERATING<br>RADIUS<br>FT | BOOM<br>LENGTH<br>LOADED  | 29.4 FT JIB FOR<br>ALL BOOM<br>LENGTHS<br><br>SEE WARNING<br>NOTE 4 |          |
|                               |                      |          | <b>A</b>                  |          | <b>B</b>  |          | <b>C</b> |          | <b>D</b> |                           |                           |   |          |
|                               | °                    | 29.4 FT  | °                         | 53 FT    | °   | 69 FT    | °        | 85 FT    | °        |                           |                           |   | 101.4 FT |
| 5                             | 80                   | 44000    |                           |          |   |          |          |          |          |                           |                           |   |          |
| 8                             | 74                   | 33540    |                           |          |   |          |          |          |          |                           | 8                         |   |          |
| 10                            | 70                   | 28140    |                           |          |   |          |          |          |          |                           | 10                        |   |          |
| 12                            | 66                   | 24230    | 78                        | 14000    |   |          |          |          |          |                           | 12                        |   |          |
| 14                            | 61                   | 20460    | 76                        | 14000    | 80  | 14000    |          |          |          |                           | 14                        |   |          |
| 17                            | 54                   | 16400    | 72                        | 14000    | 78  | 12880    |          |          |          |                           | 17                        |   |          |
| 20                            | 46                   | 13520    | 69                        | 13700    | 75  | 11430    | 79       | 8920     |          |                           | 20                        |   |          |
| 25                            | 29                   | 9910     | 63                        | 10320    | 71  | 9460     | 75       | 8000     | 79       | 6000                      | 25                        |   |          |
| 30                            |                      |          | 56                        | 7870     | 66  | 7970     | 72       | 7070     | 76       | 5500                      | 30                        | 80  | 3000     |
| 35                            |                      |          | 49                        | 6200     | 61  | 6300     | 68       | 6130     | 73       | 4980                      | 35                        | 78  | 2840     |
| 40                            |                      |          | 41                        | 4990     | 56  | 5100     | 65       | 5150     | 70       | 4490                      | 40                        | 76  | 2620     |
| 45                            |                      |          | 31                        | 4000     | 51  | 4130     | 61       | 4210     | 67       | 4000                      | 45                        | 73  | 2420     |
| 50                            |                      |          | 17                        | 3180     | 45  | 3320     | 57       | 3390     | 64       | 3440                      | 50                        | 71  | 2230     |
| 55                            |                      |          |                           |          | 38  | 2680     | 52       | 2750     | 61       | 2800                      | 55                        | 69  | 2020     |
| 60                            |                      |          |                           |          | 30  | 2170     | 47       | 2240     | 57       | 2290                      | 60                        | 67  | 1840     |
| 65                            |                      |          |                           |          | 19  | 1750     | 42       | 1830     | 54       | 1870                      | 65                        | 64  | 1670     |
| 70                            |                      |          |                           |          |   |          | 36       | 1480     | 50       | 1520                      | 70                        | 62  | 1520     |
| 75                            |                      |          |                           |          |   |          | 29       | 1180     | 45       | 1230                      | 75                        | 59  | 1340     |
| 80                            |                      |          |                           |          |   |          | 20       | 920      | 41       | 970                       | 80                        | 56  | 1080     |
| 85                            |                      |          |                           |          |   |          |          |          | 36       | 750                       | 85                        | 53  | 860      |
| 90                            |                      |          |                           |          |   |          |          |          | 30       | 560                       | 90                        | 50  | 670      |
| 95                            |                      |          |                           |          |   |          |          |          | 22       | 390                       | 95                        | 47  | 500      |
|                               |                      |          |                           |          |   |          |          |          |          |                           |                           |   |          |
|                               |                      | 340 LBS. |                           | 190 LBS. |   | 150 LBS. |          | 120 LBS. |          | 100 LBS.                  | DEDUCTIONS FOR STOWED JIB |   |          |



# WARNING

**WARNING:**

STANDARD 360° FULL  
CAPACITY WORK AREA

[illegible]



### **LMI OPERATING CODES**

| <u>SETTING</u> | <u>CRANE CONFIGURATION</u>              |
|----------------|---|
| #1 — — —       | MAIN BOOM                               |
| #2 — — —       | FIXED JIB                               |
| #5 — — —       | PERSONNEL LIFTING PLATFORM ON MAIN BOOM |
| #6 — — —       | PERSONNEL LIFTING PLATFORM ON FIXED JIB |

### **WARNING**

1. THE OPERATOR MUST READ AND UNDERSTAND THE OWNER'S MANUAL BEFORE OPERATING THIS CRANE.
2. POSITIONING OR OPERATION OF CRANE BEYOND AREAS SHOWN ON THIS CHART IS NOT INTENDED OR APPROVED EXCEPT WHERE SPECIFIED IN OWNER'S MANUAL.
3. 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.
4. 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.
5. FOR BOOM ANGLES NOT SHOWN ON JIB LOAD RATING CHART, USE RATING OF NEXT LOWER BOOM ANGLE.
6. 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.
7. 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.



## **WARNING (CONTINUED)**

8. 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.
9. THE MAXIMUM LOAD WHICH MAY BE TELESKOPED 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.
10. LIFTING OFF THE MAIN BOOM POINT WHILE THE SWING AROUND JIB IS ERECTED IS NOT INTENDED OR APPROVED.

## **INFORMATION**

1. 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.
2. CRANE LOAD RATINGS ARE BASED ON OUTRIGGERS FULLY EXTENDED AND SET WITH THE MACHINE LEVELED.
3. 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**

1. OPERATING RADIUS IS THE HORIZONTAL DISTANCE FROM THE AXIS OF ROTATION TO THE CENTER OF THE VERTICAL HOIST LINE OR TACKLE WITH LOAD APPLIED.
2. 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.