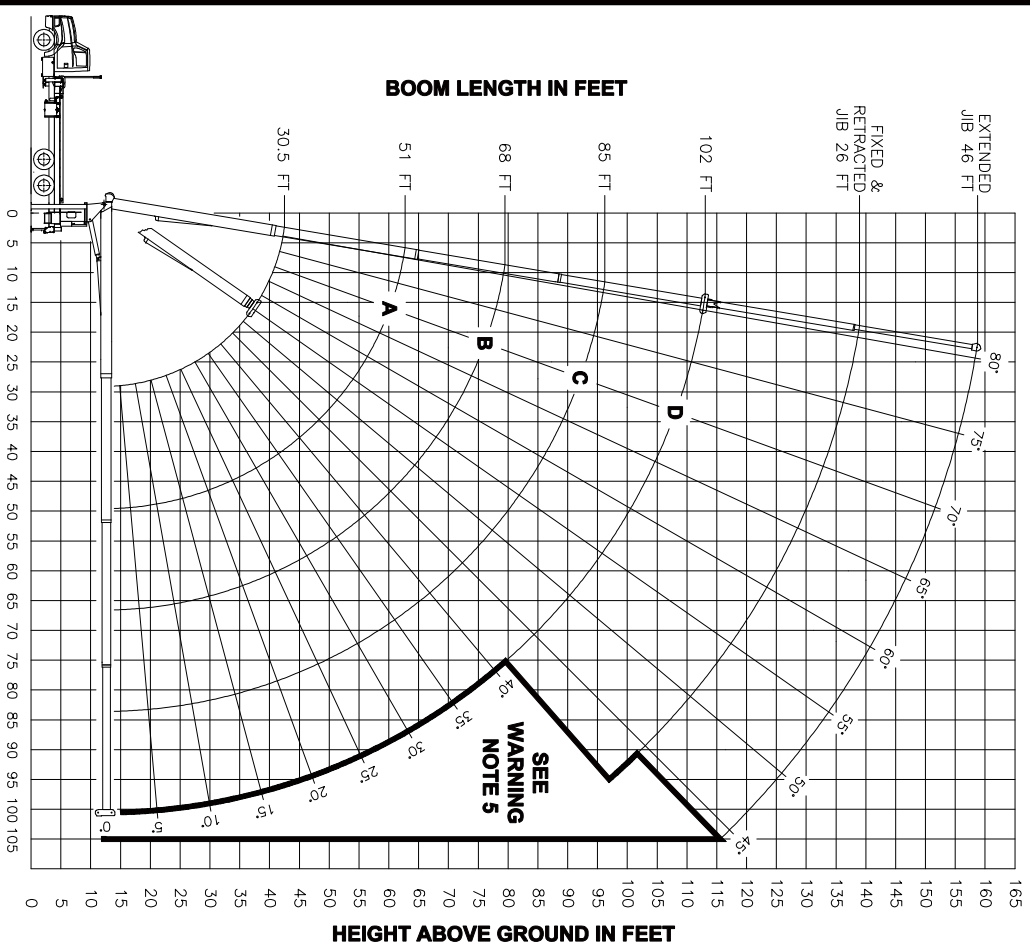


**RANGE DIAGRAM**



**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----	TELESCOPIC JIB--RETRACTED	#7----	PERSONNEL LIFTING PLATFORM ON TELESCOPIC JIB--RETRACTED
#4----	TELESCOPIC JIB--EXTENDED	#8----	PERSONNEL LIFTING PLATFORM ON TELESCOPIC JIB--EXTENDED

**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.

**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 MFR. NAMEPLATE
LOAD BLOCK	SEE BLOCK MFR. NAMEPLATE
HOSE REEL	140 LBS
SWING AROUND JIB	SEE LOAD CHART

**WARNING**  
LIFTING OFF THE MAIN BOOM POINT WHILE THE JIB IS ERCTED IS NOT INTENDED OR APPROVED.

LOAD RATINGS IN LBS WITH OUTRIGGERS AND STABILIZERS EXTENDED

LMI CODE #1

BOOM LENGTH	BOOM ANGLE AND MARKER				LMI CODE #2	LMI CODE #3	LMI CODE #4
	A	B	C	D			
30.5 FT	51 FT	68 FT	85 FT	102 FT	26 FT	26 FT	46 FT
80	60000						
85	39690						
10	71 33510	79 22500			10		
12	67 29120	77 22500			12		
15	60 24440	73 21710	79 20590		15		
20	48 19280	67 16910	74 15830	78 14420	81 10500	20	
25	33 15480	61 13850	70 12840	75 12180	78 9650	25	
30		54 11700	65 10770	72 10140	76 8670	30	
35		47 9770	60 9240	68 8640	73 7670	35	
40		38 7510	55 7720	64 7490	70 6490	40	
45		27 5910	50 6110	60 6220	66 5590	45	
50			43 4920	56 5030	63 4860	50	
55			36 3990	51 4100	60 4160	55	
60			28 3250	47 3360	56 3420	60	
65			15 2630	41 2760	53 2820	65	
70				36 2250	49 2320	70	
75				29 1820	45 1890	75	
80				19 1450	40 1530	80	
85					36 1210	85	
90					29 930	90	
95					22 690	95	
100					100 42	100	
105					105		

DEDUCTIONS FOR STOWED TELESCOPIC 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. BOOM MUST BE FULLY RETRACTED WHEN JIB IS ERCTED, BEFORE LOWERING BOOM THRU THIS AREA.
6. FOR BOOM ANGLES NOT SHOWN ON JIB LOAD RATING CHART, USE RATING OF NEXT LOWER BOOM ANGLE.
7. FOR BOOM LENGTHS NOT SHOWN, USE RATING OF NEXT SHORTER OR LONGER BOOM LENGTH, WHICHEVER IS LESS.
8. 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.
9. PRACTICAL WORKING LOADS DEPEND ON SUPPORTING SURFACE, WIND, AND OTHER FACTORS AFFECTING STABILITY, SUCH AS HAZARDOUS SURROUNDINGS, EXPERIENCE OF PERSONNEL, AND PROPER HANDLING.
10. 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**

1. 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.
2. CRANE LOAD RATINGS WITH OUTRIGGERS AND STABILIZERS EXTENDED AND SET WITH 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 Δ. IS THE INCLUDED ANGLE BETWEEN THE HORIZONTAL AND LONGITUDINAL AXES OF THE BOOM BASE AFTER LIFTING RATED LOAD AT RATED RADIUS.



**MODEL 102WL**

CRANE MEETS ANSI B30.5 REQUIREMENTS

7300096--006 NR

