

LEC500

Load Capacity By Boom Length



US UNITS: BOOM LENGTH = 100 Feet			
REACH (ft)	ANGLE (deg)	ONBOARD LOAD (STATIC) lbs	OFFBOARD LOAD (DYNAMIC) lbs
18	80.9	950,000	574,318
20	79.8	950,000	574,318
25	77.0	950,000	574,318
30	74.3	856,000	517,491
35	71.4	733,714	443,564
40	68.6	642,000	388,118
45	65.7	570,667	344,994
50	62.7	513,600	310,495
55	59.6	466,909	282,268
60	56.4	428,000	258,745
65	53.1	395,077	238,842
70	49.7	366,857	221,782
75	46.0	342,400	206,996
80	42.1	321,000	194,059
85	37.9	302,118	182,644
90	33.3	285,333	172,497
95	27.9	270,316	163,418
100	21.4	256,800	155,247
105	11.6	244,571	147,855
107	0.5	240,000	145,091

US UNITS: BOOM LENGTH = 120 Feet			
REACH (ft)	ANGLE (deg)	ONBOARD LOAD (STATIC) lbs	OFFBOARD LOAD (DYNAMIC) lbs
25	81.4	947,200	572,625
30	78.9	789,333	477,188
35	76.5	676,571	409,018
40	74.0	592,000	357,891
45	71.5	526,222	318,125
50	69.0	473,600	286,313
55	66.4	430,545	260,284
60	63.8	394,667	238,594
65	61.1	364,308	220,241
70	58.3	338,286	204,509
75	55.5	315,733	190,875
80	52.5	296,000	178,945
85	49.5	278,588	168,419
90	46.2	263,111	159,063
95	42.8	249,263	150,691
100	39.2	236,800	143,156
105	35.2	225,524	136,339
110	30.9	215,273	130,142
115	25.8	205,913	124,484
120	19.7	197,333	119,297
125	10.5	189,440	114,525
127	0.5	186,457	112,722

US UNITS: BOOM LENGTH = 140 Feet			
REACH (ft)	ANGLE (deg)	ONBOARD LOAD (STATIC) lbs	OFFBOARD LOAD (DYNAMIC) lbs
30	80.5	689,333	416,733
35	78.5	590,857	357,200
40	76.4	517,000	312,550
45	74.3	459,556	277,822
50	72.1	413,600	250,040
55	70.0	376,000	227,309
60	67.8	344,667	208,367
65	65.5	318,154	192,338
70	63.3	295,429	178,600
75	60.9	275,733	166,693
80	58.6	258,500	156,275
85	56.1	243,294	147,082
90	53.6	229,778	138,911
95	51.1	217,684	131,600
100	48.4	206,800	125,020
105	45.6	196,952	119,067
110	42.6	188,000	113,655
115	39.5	179,826	108,713
120	36.2	172,333	104,183
125	32.6	165,440	100,016
130	28.5	159,077	96,169
135	23.9	153,185	92,607
140	18.2	147,714	89,300
145	9.7	142,621	86,221
147	0.5	140,680	85,048

US UNITS: BOOM LENGTH = 160 Feet			
REACH (ft)	ANGLE (deg)	ONBOARD LOAD (STATIC) lbs	OFFBOARD LOAD (DYNAMIC) lbs
32	81.0	583,750	352,903
35	79.9	533,714	322,655
40	78.1	467,000	282,323
45	76.3	415,111	250,954
50	74.4	373,600	225,858
55	72.5	339,636	205,326
60	70.7	311,333	188,215
65	68.7	287,385	173,737
70	66.8	266,857	161,327
75	64.8	249,067	150,572
80	62.9	233,500	141,161
85	60.8	219,765	132,858
90	58.8	207,556	125,477
95	56.6	196,632	118,873
100	54.5	186,800	112,929
105	52.2	177,905	107,552
110	49.9	169,818	102,663
115	47.5	162,435	98,199
120	45.1	155,667	94,108
125	42.5	149,440	90,343
130	39.8	143,692	86,869
135	36.9	138,370	83,651
140	33.8	133,429	80,664
145	30.4	128,828	77,882
150	26.7	124,533	75,286
155	22.3	120,516	72,857
160	17.0	116,750	70,581
165	9.1	113,212	68,442
167	0.5	111,856	67,622

US UNITS: BOOM LENGTH = 180 Feet			
REACH (ft)	ANGLE (deg)	ONBOARD LOAD (STATIC) lbs	OFFBOARD LOAD (DYNAMIC) lbs
34	80.1	490,588	296,583
40	78.2	417,000	252,095
45	76.6	370,667	224,085
50	75.0	333,600	201,676
55	73.4	303,273	183,342
60	71.8	278,000	168,064
65	70.2	256,615	155,136
70	68.6	238,286	144,055
75	66.9	222,400	134,451
80	65.2	208,500	126,048
85	63.5	196,235	118,633
90	61.8	185,333	112,042
95	60.0	175,579	106,145
100	58.2	166,800	100,838
105	56.4	158,857	96,036
110	54.5	151,636	91,671
115	52.6	145,043	87,685
120	50.6	139,000	84,032
125	48.6	133,440	80,671
130	46.5	128,308	77,568
135	44.3	123,556	74,695
140	42.0	119,143	72,027
145	39.7	115,034	69,544
150	37.2	111,200	67,225
155	34.5	107,613	65,057
160	31.7	104,250	63,024
165	28.6	101,091	61,114
170	25.1	98,118	59,317
175	21.1	95,314	57,622
180	16.2	92,667	56,021
185	8.9	90,162	54,507
187	0.5	89,198	53,924

SI UNITS BOOM LENGTH = 32 Meters			
REACH (m)	ANGLE (deg)	ONBOARD LOAD (STATIC) Kg	OFFBOARD LOAD (DYNAMIC) Kg
5.5	80.9	431,818	261,054
6.1	79.8	431,818	261,054
7.6	77.0	431,818	261,054
9.1	74.3	389,091	235,223
10.7	71.4	333,506	201,620
12.2	68.6	291,818	176,417
13.7	65.7	259,394	156,815
15.2	62.7	233,455	141,134
16.8	59.6	212,231	128,304
18.3	56.4	194,545	117,612
19.8	53.1	179,580	108,565
21.3	49.7	166,753	100,810
22.9	46.0	155,636	94,089
24.4	42.1	145,909	88,209
25.9	37.9	137,326	83,020
27.4	33.3	129,697	78,408
29.0	27.9	122,871	74,281
30.5	21.4	116,727	70,567
32.0	11.6	111,169	67,207
32.6	0.5	109,091	65,950

SI UNITS BOOM LENGTH = 38 Meters			
REACH (m)	ANGLE (deg)	ONBOARD LOAD (STATIC) Kg	OFFBOARD LOAD (DYNAMIC) Kg
7.6	81.4	430,545	260,284
9.1	78.9	358,788	216,904
10.7	76.5	307,532	185,917
12.2	74.0	269,091	162,678
13.7	71.5	239,192	144,602
15.2	69.0	215,273	130,142
16.8	66.4	195,702	118,311
18.3	63.8	179,394	108,452
19.8	61.1	165,594	100,109
21.3	58.3	153,766	92,959
22.9	55.5	143,515	86,761
24.4	52.5	134,545	81,339
25.9	49.5	126,631	76,554
27.4	46.2	119,596	72,301
29.0	42.8	113,301	68,496
30.5	39.2	107,636	65,071
32.0	35.2	102,511	61,972
33.5	30.9	97,851	59,156
35.1	25.8	93,597	56,584
36.6	19.7	89,697	54,226
38.1	10.5	86,109	52,057
38.7	0.5	84,753	51,237

SI UNITS BOOM LENGTH = 44 Meters			
REACH (m)	ANGLE (deg)	ONBOARD LOAD (STATIC) Kg	OFFBOARD LOAD (DYNAMIC) Kg
9.1	80.5	313,333	189,424
10.7	78.5	268,571	162,364
12.2	76.4	235,000	142,068
13.7	74.3	208,889	126,283
15.2	72.1	188,000	113,655
16.8	70.0	170,909	103,322
18.3	67.8	156,667	94,712
19.8	65.5	144,615	87,427
21.3	63.3	134,286	81,182
22.9	60.9	125,333	75,770
24.4	58.6	117,500	71,034
25.9	56.1	110,588	66,856
27.4	53.6	104,444	63,141
29.0	51.1	98,947	59,818
30.5	48.4	94,000	56,827
32.0	45.6	89,524	54,121
33.5	42.6	85,455	51,661
35.1	39.5	81,739	49,415
36.6	36.2	78,333	47,356
38.1	32.6	75,200	45,462
39.6	28.5	72,308	43,713
41.2	23.9	69,630	42,094
42.7	18.2	67,143	40,591
44.2	9.7	64,828	39,191
44.8	0.5	63,946	38,658

SI UNITS BOOM LENGTH = 50 Meters			
REACH (m)	ANGLE (deg)	ONBOARD LOAD (STATIC) Kg	OFFBOARD LOAD (DYNAMIC) Kg
9.8	81.0	265,341	160,411
10.7	79.9	242,597	146,661
12.2	78.1	212,273	128,329
13.7	76.3	188,687	114,070
15.2	74.4	169,818	102,663
16.8	72.5	154,380	93,330
18.3	70.7	141,515	85,552
19.8	68.7	130,629	78,971
21.3	66.8	121,299	73,331
22.9	64.8	113,212	68,442
24.4	62.9	106,136	64,164
25.9	60.8	99,893	60,390
27.4	58.8	94,343	57,035
29.0	56.6	89,378	54,033
30.5	54.5	84,909	51,331
32.0	52.2	80,866	48,887
33.5	49.9	77,190	46,665
35.1	47.5	73,834	44,636
36.6	45.1	70,758	42,776
38.1	42.5	67,927	41,065
39.6	39.8	65,315	39,486
41.2	36.9	62,896	38,023
42.7	33.8	60,649	36,665
44.2	30.4	58,558	35,401
45.7	26.7	56,606	34,221
47.3	22.3	54,780	33,117
48.8	17.0	53,068	32,082
50.3	9.1	51,460	31,110
50.9	0.5	50,844	30,737

SI UNITS BOOM LENGTH = 57 Meters			
REACH (m)	ANGLE (deg)	ONBOARD LOAD (STATIC) Kg	OFFBOARD LOAD (DYNAMIC) Kg
10.4	80.1	222,995	134,810
12.2	78.2	189,545	114,589
13.7	76.6	168,485	101,857
15.2	75.0	151,636	91,671
16.8	73.4	137,851	83,337
18.3	71.8	126,364	76,393
19.8	70.2	116,643	70,516
21.3	68.6	108,312	65,479
22.9	66.9	101,091	61,114
24.4	65.2	94,773	57,294
25.9	63.5	89,198	53,924
27.4	61.8	84,242	50,928
29.0	60.0	79,809	48,248
30.5	58.2	75,818	45,836
32.0	56.4	72,208	43,653