


Liftcrane Boom Capacities

Boom No. B10:680
200 000 kg VPC (Variable Position Counterweight)
Crawler Machine on a Barge
0 Degree thru 3 Degree Static Machine List
No Travel - 360 Degree Rating - Three Swing Drives

MLC650 SERIES 1


 **LIFTING CAPACITIES:** Lifting capacities are for a crawler machine when operating on a barge. Machine shall be positively secured to prevent shifting. Lifting capacities for various boom lengths and operating radii are for freely suspended loads and may be based on percent of static tipping or strength of structural components. Capacities must be reduced by applicable deducts.


Upper boom point capacity for liftcrane service with single part whip line from Drum 3 is 13 600 kg or 27 200 kg with two part whip line. When Drum 1 or Drum 2 is used, capacity with single part whip line is 22 100 kg, or 33 300 kg with two part whip line. In all cases, upper boom point capacities cannot exceed those listed for main boom capacity.


Weight of all load blocks, hooks, weight ball, slings, hoist lines, etc., beneath boom and jib point sheaves is considered part of load. Boom is not to be lowered beyond radii where combined weights are greater than rated capacity. Where no capacity is shown, operation is not intended or approved.

BOOM BACKWARD STABILITY: Capacities indicated by (b) require 5 440 kg minimum weight suspended beneath boom point and (c) require 10 880 kg minimum weight. **Caution: Do not operate in areas indicated by (b) or (c) without required minimum weight. Boom may not lower and boom hoist wire rope may go slack causing wire rope damage or failure.**

OPERATING CONDITIONS: Machine to operate on a firm and uniformly supporting surface with machine list not to exceed degrees noted. Refer to Boom Rigging **No. 81018141**, Wire Rope Specifications chart **No. 9359-A**, Counterweight Arrangements chart **No. 9349-A**, and Wind Conditions chart **No. 9358-A**. Crane operator judgment must be used to allow for dynamic load effects of swinging, hoisting or lowering, wind conditions, as well as adverse operating conditions and physical machine depreciation. Refer to the Operator Manual for operating guidelines.

 **OPERATING RADIUS:** Operating radius is horizontal distance from axis of rotation at barge deck to center of vertical hoist line or load block.

 **BOOM ANGLE:** Boom angle in degrees (°) is angle between horizontal and centerline of boom butt and inserts, and is an indication of operating radius. In all cases, operating radius shall govern capacity.

 **BOOM POINT ELEVATION:** Boom point elevation is vertical distance from barge deck to centerline of boom point shaft.

MACHINE EQUIPMENT: Machine equipped with three swing drives, 11 125 mm crawlers, 1 524 mm or 2 032 mm treads, 11 m live mast, 30 part boom hoist reeving, boom support straps, and 200 000 kg VPC.

Warning: Luffing jib backstay straps must be removed before use of this chart. *Crane tipping or structural damage can occur.*

Consult chart **No. 9672-AM** when Jib No. 148 is attached.

Deduct From Capacities When Jib No. 148 Is Attached	
Jib Length (m)	Deduct (kg)
12,0	8 600
18,0	10 700
24,0	13 400
30,0	16 100
36,0	19 300
42,0	21 900

Weight of jib and 3 000 kg suspended beneath jib point have been included in determination of deduct.

Refer to Tables 1 and 2 for raising ability with the maximum weight of all load blocks, hooks, weight ball, slings, and hoist lines beneath boom point sheaves. For block weights shown with #, load blocks, hooks, weight ball, and slings must remain on barge deck until combined weights are within rated capacity of chart. Raising is not permitted in shaded areas of table.

Combined weight beneath boom point sheaves must not exceed block weight shown.

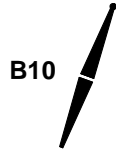
Table 1

Over End or Side of Crawlers				
Boom Length (m)	Machine List			
	0°	1°	2°	3°
	Block Weight (kg)			
32,0 - 50,0	21 000	21 000	21 000	21 000
56,0	21 000	10 200	10 200	10 200
62,0	10 200	10 200	10 200	10 200
68,0	7 300	7 300	7 300	7 300
74,0	#	#	#	#
80,0	Raising Not Permitted			

Table 2

Over End of Blocked Crawlers				
Boom Length (m)	Machine List			
	0°	1°	2°	3°
	Block Weight (kg)			
32,0 - 50,0	21 000	21 000	21 000	21 000
56,0	21 000	10 200	10 200	10 200
62,0	10 200	10 200	10 200	10 200
68,0	7 300	7 300	7 300	7 300
74,0	7 300	7 300	7 300	7 300
80,0	#	#	#	#
Warning: Crane must remain in-line with crawlers when raising over end of blocked crawlers until operating radius is within 360 degree chart. Crane tipping or structural damage can occur.				

Explanation of Symbols



Boom No. B10:680



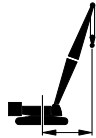
VPC (Variable Position Counterweight)



360 Degree Rating



Boom Length



Operating Radius
(see page 1)



Boom Angle
(see page 1)



Boom Point Elevation
(see page 1)



Machine List



Lifting Capacities
(see page 1)

MLC650 S-1



B10



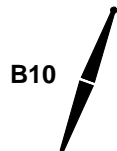
200 000 kg



360°

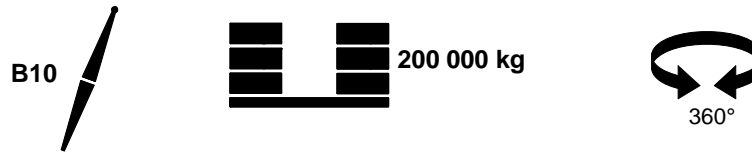
m	°	m	kg	kg	kg	kg	m
5,8	84,9	34,9	562 200c				5,8
6,0	84,5	34,8	547 000c				6,0
6,5	83,6	34,8	513 000c				6,5
7,0	82,7	34,7	483 200c				7,0
7,5	81,8	34,6	456 500b	420 900c			7,5
8,0	80,9	34,5	432 600b	399 900b	371 200c		8,0
8,5	80,0	34,4	411 000b	381 200b	354 700c	329 500c	8,5
9,0	79,0	34,3	391 400b	364 100b	339 600b	306 800c	9,0
9,5	78,1	34,1	373 500	348 400b	320 800b	284 700b	9,5
10,0	77,2	34,0	357 200	331 800b	297 700b	266 000b	10,0
10,5	76,3	33,9	341 500	310 700	277 500	249 500b	10,5
11,0	75,3	33,7	322 600	289 000	260 000	235 000	11,0
11,5	74,4	33,6	300 700	270 500	244 600	221 900	11,5
12,0	73,4	33,4	280 600	254 200	230 900	210 300	12,0
12,5	72,5	33,2	263 300	239 700	218 500	199 700	12,5
13,0	71,5	33,0	247 900	226 600	207 300	190 100	13,0
13,5	70,6	32,8	234 400	215 000	197 300	181 500	13,5
14,0	69,6	32,6	222 300	204 500	188 200	173 500	14,0
14,5	68,6	32,4	211 000	194 800	179 800	166 200	14,5
15,0	67,7	32,2	201 100	186 100	172 200	159 500	15,0
16,0	65,7	31,7	183 600	170 700	158 700	147 600	16,0
17,0	63,6	31,2	168 900	157 700	147 100	137 300	17,0
18,0	61,6	30,6	156 200	146 400	137 000	128 300	18,0
19,0	59,5	30,0	145 300	136 600	128 200	120 400	19,0
20,0	57,3	29,3	135 700	128 000	120 500	113 400	20,0
21,0	55,1	28,6	127 200	120 300	113 500	107 200	21,0
22,0	52,8	27,8	119 700	113 500	107 400	101 600	22,0
23,0	50,4	26,9	113 000	107 400	101 800	96 500	23,0
24,0	48,0	25,9	107 000	101 900	96 800	91 900	24,0
25,0	45,4	24,9	101 500	96 900	92 200	87 800	25,0
26,0	42,7	23,8	96 600	92 300	88 100	84 000	26,0
27,0	39,9	22,5	92 000	88 200	84 300	80 600	27,0
28,0	36,8	21,2	87 600	84 400	80 800	77 400	28,0
29,0	33,5	19,6	83 100	80 900	77 700	74 500	29,0
30,0	29,8	17,8	78 600	76 800	74 400	71 900	30,0
32,0	20,5	13,0	70 400	69 000	67 500	66 100	32,0

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 m	 °	 m	 0° kg	 1° kg	 2° kg	 3° kg	 m
6,7	84,3	40,8	491 900c				6,7
7,0	83,9	40,8	476 000c				7,0
7,5	83,1	40,7	449 700b	408 600c			7,5
8,0	82,3	40,6	426 700b	389 000b	356 700c		8,0
8,5	81,6	40,5	405 800	371 300b	341 600b	314 600c	8,5
9,0	80,8	40,4	386 800	355 200	327 600b	294 000c	9,0
9,5	80,0	40,3	369 500	340 300	311 300b	273 800b	9,5
10,0	79,3	40,2	353 600	325 900	291 600b	256 500b	10,0
10,5	78,5	40,1	339 000	309 800	271 900	241 200b	10,5
11,0	77,7	40,0	325 300	288 000	255 300	227 600	11,0
11,5	76,9	39,8	304 800	269 800	240 500	215 400	11,5
12,0	76,1	39,7	284 700	253 800	227 300	204 400	12,0
12,5	75,4	39,5	267 000	239 400	215 400	194 400	12,5
13,0	74,6	39,4	251 400	226 500	204 600	185 300	13,0
13,5	73,8	39,2	237 800	215 100	194 900	177 100	13,5
14,0	73,0	39,0	225 500	204 700	186 100	169 600	14,0
14,5	72,2	38,9	214 100	195 100	177 900	162 600	14,5
15,0	71,4	38,7	204 100	186 500	170 500	156 200	15,0
16,0	69,8	38,3	186 400	171 200	157 300	144 800	16,0
17,0	68,1	37,9	171 500	158 300	146 100	134 900	17,0
18,0	66,5	37,4	158 600	147 000	136 200	126 200	18,0
19,0	64,8	36,9	147 500	137 200	127 500	118 500	19,0
20,0	63,1	36,4	137 900	128 700	119 900	111 800	20,0
21,0	61,3	35,8	129 300	121 000	113 100	105 700	21,0
22,0	59,6	35,2	121 700	114 200	107 000	100 200	22,0
23,0	57,8	34,5	114 900	108 100	101 500	95 300	23,0
24,0	55,9	33,8	108 800	102 600	96 500	90 800	24,0
25,0	54,0	33,0	103 300	97 600	92 000	86 700	25,0
26,0	52,1	32,2	98 200	93 000	87 900	83 000	26,0
27,0	50,1	31,4	93 200	88 800	84 100	79 600	27,0
28,0	48,0	30,4	88 300	84 800	80 600	76 400	28,0
29,0	45,9	29,4	83 400	80 400	77 400	73 500	29,0
30,0	43,7	28,3	79 000	76 300	73 700	70 700	30,0
32,0	38,9	25,9	71 100	68 800	66 600	64 500	32,0
34,0	33,5	22,9	64 100	62 300	60 500	58 700	34,0
36,0	27,1	19,2	58 000	56 500	55 100	53 600	36,0
38,0	18,6	13,9	52 500	51 300	50 200	49 100	38,0

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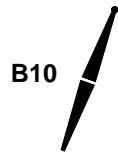
44,0 m								
m	°	m	kg	kg	kg	kg	m	
7,3	84,3	46,8	450 400b					7,3
7,5	84,0	46,7	442 000b					7,5
8,0	83,4	46,7	419 500	377 100b				8,0
8,5	82,7	46,6	399 300	360 600b	326 800b			8,5
9,0	82,1	46,5	381 000	345 300	315 100b			9,0
9,5	81,4	46,4	364 300	331 300	301 200	263 100b		9,5
10,0	80,7	46,3	348 900	318 400	284 600	246 600b		10,0
10,5	80,1	46,2	334 700	305 100	265 500	232 400b		10,5
11,0	79,4	46,1	321 500	285 800	249 600	219 700		11,0
11,5	78,7	46,0	306 300	268 100	235 500	208 300		11,5
12,0	78,1	45,9	288 100	252 200	222 800	198 000		12,0
12,5	77,4	45,8	269 500	238 100	211 400	188 600		12,5
13,0	76,7	45,6	253 700	225 400	201 000	180 000		13,0
13,5	76,1	45,5	239 900	214 100	191 600	172 200		13,5
14,0	75,4	45,3	227 500	203 800	183 100	165 000		14,0
14,5	74,7	45,2	216 000	194 300	175 200	158 300		14,5
15,0	74,0	45,0	205 900	185 900	168 000	152 300		15,0
16,0	72,7	44,7	188 000	170 700	155 200	141 300		16,0
17,0	71,3	44,3	173 000	157 900	144 200	131 800		17,0
18,0	69,9	44,0	160 000	146 700	134 500	123 500		18,0
19,0	68,5	43,5	148 800	137 000	126 100	116 100		19,0
20,0	67,0	43,1	139 100	128 500	118 600	109 500		20,0
21,0	65,6	42,6	130 400	120 900	111 900	103 600		21,0
22,0	64,1	42,1	122 800	114 100	105 900	98 300		22,0
23,0	62,7	41,6	115 900	108 000	100 500	93 500		23,0
24,0	61,2	41,0	109 700	102 500	95 600	89 100		24,0
25,0	59,6	40,4	104 100	97 500	91 100	85 100		25,0
26,0	58,1	39,7	98 900	93 000	87 100	81 500		26,0
27,0	56,5	39,0	93 400	88 600	83 300	78 100		27,0
28,0	54,9	38,3	88 100	84 300	79 800	75 000		28,0
29,0	53,2	37,5	83 300	79 700	76 300	72 100		29,0
30,0	51,6	36,7	78 900	75 600	72 600	69 200		30,0
32,0	48,0	34,9	71 000	68 200	65 500	63 000		32,0
34,0	44,3	32,9	64 200	61 800	59 500	57 300		34,0
36,0	40,3	30,5	58 100	56 200	54 200	52 300		36,0
38,0	35,9	27,8	52 800	51 100	49 400	47 800		38,0
40,0	30,9	24,5	48 000	46 600	45 200	43 800		40,0
42,0	25,0	20,5	43 700	42 500	41 300	40 100		42,0
44,0	17,1	14,7	39 600	38 700	37 800	36 900		44,0

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50,0 m							
m	°	m	0° kg	1° kg	2° kg	3° kg	m
7,3	85,0	52,8	441 500				7,3
7,5	84,8	52,8	433 500				7,5
8,0	84,2	52,7	412 000				8,0
8,5	83,6	52,6	392 800	348 400			8,5
9,0	83,0	52,6	375 200	335 400			9,0
9,5	82,4	52,5	359 000	322 200	291 500		9,5
10,0	81,9	52,4	344 200	310 000	278 500		10,0
10,5	81,3	52,3	330 500	298 200	260 100	224 800 ^b	10,5
11,0	80,7	52,2	317 800	284 600	244 900	212 700	11,0
11,5	80,1	52,1	306 000	267 400	231 300	202 000	11,5
12,0	79,5	52,0	290 800	251 400	219 100	192 300	12,0
12,5	78,9	51,9	273 800	237 500	208 100	183 400	12,5
13,0	78,4	51,8	258 400	225 000	198 000	175 300	13,0
13,5	77,8	51,7	243 700	213 800	189 000	167 900	13,5
14,0	77,2	51,5	230 400	203 700	180 800	161 100	14,0
14,5	76,6	51,4	218 800	194 300	173 100	154 700	14,5
15,0	76,0	51,3	208 600	185 900	166 100	148 900	15,0
16,0	74,8	51,0	190 500	170 900	153 600	138 400	16,0
17,0	73,6	50,7	175 300	158 200	142 900	129 300	17,0
18,0	72,4	50,3	162 200	147 100	133 400	121 200	18,0
19,0	71,2	50,0	150 800	137 400	125 100	114 100	19,0
20,0	69,9	49,6	141 000	128 900	117 800	107 700	20,0
21,0	68,7	49,2	132 200	121 300	111 200	102 000	21,0
22,0	67,5	48,7	124 400	114 500	105 300	96 900	22,0
23,0	66,2	48,3	117 500	108 500	100 000	92 200	23,0
24,0	64,9	47,8	110 900	103 000	95 200	87 900	24,0
25,0	63,6	47,3	104 500	97 800	90 800	84 000	25,0
26,0	62,3	46,7	98 200	92 800	86 700	80 500	26,0
27,0	61,0	46,1	92 500	87 700	82 700	77 100	27,0
28,0	59,7	45,5	87 300	82 800	78 700	74 000	28,0
29,0	58,3	44,9	82 600	78 400	74 500	70 800	29,0
30,0	56,9	44,2	78 200	74 300	70 700	67 300	30,0
32,0	54,1	42,8	70 300	67 000	63 900	60 900	32,0
34,0	51,1	41,1	63 500	60 700	57 900	55 400	34,0
36,0	48,0	39,3	57 500	55 000	52 700	50 400	36,0
38,0	44,8	37,3	52 100	50 100	48 000	46 000	38,0
40,0	41,3	35,1	47 400	45 600	43 800	42 100	40,0
42,0	37,6	32,5	43 100	41 600	40 000	38 500	42,0
44,0	33,5	29,5	39 300	37 900	36 600	35 300	44,0
46,0	28,8	26,0	35 800	34 600	33 400	32 300	46,0
48,0	23,3	21,6	32 500	31 500	30 600	29 600	48,0

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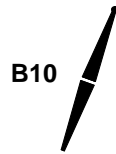
56,0 m								
m	°	m	0° kg	1° kg	2° kg	3° kg	m	
7,9	84,9	58,8	407 500				7,9	
8,0	84,8	58,7	404 700				8,0	
8,5	84,3	58,7	386 300				8,5	
9,0	83,8	58,6	369 300				9,0	
9,5	83,3	58,6	353 800	313 400			9,5	
10,0	82,7	58,5	339 500	301 800	268 800		10,0	
10,5	82,2	58,4	326 300	291 100	255 200		10,5	
11,0	81,7	58,3	314 000	281 000	240 300	206 700	11,0	
11,5	81,2	58,2	302 600	266 200	227 200	196 100	11,5	
12,0	80,7	58,1	291 600	251 000	215 500	186 800	12,0	
12,5	80,1	58,0	279 500	237 000	204 900	178 400	12,5	
13,0	79,6	57,9	265 100	224 600	195 200	170 700	13,0	
13,5	79,1	57,8	248 500	213 600	186 500	163 700	13,5	
14,0	78,6	57,7	233 500	203 600	178 400	157 200	14,0	
14,5	78,1	57,6	221 700	194 300	171 000	151 100	14,5	
15,0	77,5	57,5	211 400	186 000	164 200	145 600	15,0	
16,0	76,5	57,2	193 000	171 100	152 000	135 500	16,0	
17,0	75,4	56,9	177 700	158 400	141 500	126 700	17,0	
18,0	74,3	56,6	164 400	147 400	132 300	119 000	18,0	
19,0	73,3	56,3	152 900	137 800	124 200	112 100	19,0	
20,0	72,2	56,0	142 900	129 300	117 000	105 900	20,0	
21,0	71,1	55,6	134 000	121 700	110 500	100 400	21,0	
22,0	70,0	55,2	125 700	115 000	104 700	95 400	22,0	
23,0	68,9	54,8	117 700	108 900	99 500	90 800	23,0	
24,0	67,8	54,4	110 100	102 700	94 700	86 700	24,0	
25,0	66,7	54,0	103 300	96 700	90 100	82 900	25,0	
26,0	65,5	53,5	97 100	91 000	85 400	79 400	26,0	
27,0	64,4	53,0	91 400	85 900	80 800	75 700	27,0	
28,0	63,2	52,5	86 200	81 100	76 400	72 000	28,0	
29,0	62,1	51,9	81 400	76 800	72 400	68 200	29,0	
30,0	60,9	51,3	77 000	72 700	68 600	64 800	30,0	
32,0	58,5	50,1	69 200	65 500	61 900	58 600	32,0	
34,0	56,0	48,7	62 300	59 100	56 000	53 100	34,0	
36,0	53,5	47,3	56 300	53 500	50 800	48 300	36,0	
38,0	50,8	45,6	51 000	48 600	46 200	44 000	38,0	
40,0	48,1	43,8	46 300	44 200	42 100	40 100	40,0	
42,0	45,2	41,8	42 100	40 200	38 300	36 600	42,0	
44,0	42,1	39,6	38 200	36 600	34 900	33 400	44,0	
46,0	38,9	37,2	34 800	33 300	31 900	30 400	46,0	
48,0	35,4	34,4	31 600	30 300	29 000	27 800	48,0	
50,0	31,5	31,2	28 600	27 500	26 400	25 300	50,0	
52,0	27,1	27,4	25 900	25 000	24 000	23 000	52,0	
54,0	21,9	22,7	23 400	22 600	21 700	20 900	54,0	

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 m	 °	 m	 0° kg	 1° kg	 2° kg	 3° kg	 m
8,5	84,8	64,7	377 100				8,5
9,0	84,4	64,7	362 500				9,0
9,5	83,9	64,6	347 500				9,5
10,0	83,5	64,5	333 800	292 700			10,0
10,5	83,0	64,5	321 200	282 600			10,5
11,0	82,5	64,4	309 400	273 300	236 300		11,0
11,5	82,1	64,3	298 400	263 800	223 200		11,5
12,0	81,6	64,2	288 100	250 800	211 800	181 500	12,0
12,5	81,1	64,1	277 200	236 300	201 500	173 400	12,5
13,0	80,6	64,1	264 500	224 100	192 200	166 100	13,0
13,5	80,2	64,0	250 300	213 200	183 700	159 400	13,5
14,0	79,7	63,9	236 900	203 300	176 000	153 200	14,0
14,5	79,2	63,8	225 300	194 100	168 700	147 400	14,5
15,0	78,8	63,6	214 400	185 800	162 200	142 100	15,0
16,0	77,8	63,4	195 500	171 100	150 300	132 500	16,0
17,0	76,9	63,2	179 900	158 600	140 100	124 100	17,0
18,0	75,9	62,9	166 400	147 600	131 100	116 600	18,0
19,0	74,9	62,6	154 800	138 000	123 100	110 000	19,0
20,0	74,0	62,3	144 600	129 600	116 000	104 000	20,0
21,0	73,0	62,0	134 400	122 000	109 700	98 700	21,0
22,0	72,0	61,6	125 000	114 900	104 000	93 800	22,0
23,0	71,0	61,3	116 600	107 700	98 800	89 400	23,0
24,0	70,1	60,9	109 000	101 000	93 500	85 400	24,0
25,0	69,1	60,5	102 200	94 800	88 200	81 500	25,0
26,0	68,1	60,1	96 000	89 300	83 100	77 500	26,0
27,0	67,1	59,7	90 300	84 100	78 500	73 300	27,0
28,0	66,0	59,2	85 100	79 400	74 200	69 400	28,0
29,0	65,0	58,7	80 300	75 100	70 200	65 700	29,0
30,0	64,0	58,2	75 900	71 100	66 600	62 400	30,0
32,0	61,9	57,1	68 000	63 800	59 900	56 300	32,0
34,0	59,7	55,9	61 100	57 500	54 100	50 900	34,0
36,0	57,5	54,7	55 100	52 000	49 000	46 200	36,0
38,0	55,3	53,3	49 800	47 100	44 400	41 900	38,0
40,0	53,0	51,7	45 100	42 700	40 300	38 100	40,0
42,0	50,6	50,1	40 900	38 700	36 600	34 600	42,0
44,0	48,1	48,3	37 100	35 100	33 300	31 500	44,0
46,0	45,5	46,3	33 600	31 900	30 200	28 600	46,0
48,0	42,8	44,2	30 400	28 900	27 400	25 900	48,0
50,0	39,9	41,8	27 500	26 200	24 800	23 500	50,0
52,0	36,8	39,1	24 900	23 600	22 400	21 300	52,0
54,0	33,5	36,2	22 400	21 300	20 200	19 200	54,0
56,0	29,9	32,7	20 100	19 100	18 200	17 200	56,0
58,0	25,7	28,7	17 900	17 100	16 300	15 400	58,0
60,0	20,8	23,8	15 900	15 200	14 500	13 700	60,0

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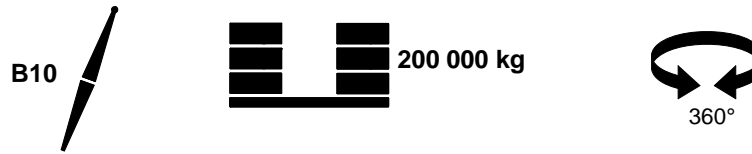
m	°	m	kg	kg	kg	kg	m
9,1	84,8	70,7	348 800				9,1
9,5	84,5	70,7	339 200				9,5
10,0	84,0	70,6	326 100				10,0
10,5	83,6	70,5	314 100	272 600			10,5
11,0	83,2	70,5	302 900	264 000			11,0
11,5	82,8	70,4	292 400	255 800			11,5
12,0	82,3	70,3	282 500	246 100	207 100		12,0
12,5	81,9	70,2	272 600	235 200	197 100		12,5
13,0	81,5	70,2	261 600	223 900	188 100		13,0
13,5	81,1	70,1	249 800	212 200	179 900		13,5
14,0	80,6	70,0	238 100	201 400	172 400	148 900	14,0
14,5	80,2	69,9	226 800	192 300	165 400	143 600	14,5
15,0	79,8	69,8	215 500	184 200	159 000	138 300	15,0
16,0	78,9	69,6	196 000	169 700	147 500	128 800	16,0
17,0	78,0	69,3	180 400	157 300	137 600	120 800	17,0
18,0	77,2	69,1	166 900	146 400	128 800	113 600	18,0
19,0	76,3	68,8	155 200	136 900	121 000	107 200	19,0
20,0	75,4	68,6	144 900	128 600	114 100	101 400	20,0
21,0	74,6	68,3	134 600	121 100	107 900	96 200	21,0
22,0	73,7	68,0	125 100	114 000	102 300	91 500	22,0
23,0	72,8	67,7	116 600	106 900	97 200	87 200	23,0
24,0	71,9	67,3	109 000	100 300	92 100	83 300	24,0
25,0	71,0	67,0	102 200	94 100	87 000	79 600	25,0
26,0	70,1	66,6	96 000	88 600	81 900	75 900	26,0
27,0	69,2	66,2	90 200	83 500	77 400	71 900	27,0
28,0	68,3	65,8	85 000	78 900	73 200	68 000	28,0
29,0	67,4	65,3	80 200	74 500	69 300	64 400	29,0
30,0	66,4	64,9	75 800	70 500	65 600	61 100	30,0
32,0	64,6	63,9	67 900	63 400	59 100	55 200	32,0
34,0	62,7	62,9	61 000	57 100	53 400	49 900	34,0
36,0	60,7	61,7	55 000	51 600	48 300	45 200	36,0
38,0	58,8	60,5	49 700	46 700	43 800	41 000	38,0
40,0	56,7	59,2	45 000	42 300	39 700	37 200	40,0
42,0	54,7	57,8	40 800	38 400	36 000	33 800	42,0
44,0	52,5	56,2	37 000	34 800	32 700	30 700	44,0
46,0	50,4	54,6	33 500	31 600	29 700	27 900	46,0
48,0	48,1	52,8	30 400	28 600	26 900	25 300	48,0
50,0	45,7	50,8	27 500	25 900	24 400	22 900	50,0
52,0	43,3	48,7	24 800	23 400	22 000	20 700	52,0
54,0	40,7	46,4	22 400	21 100	19 800	18 600	54,0
56,0	38,0	43,8	20 100	18 900	17 800	16 700	56,0
58,0	35,1	41,0	18 000	17 000	15 900	14 900	58,0
60,0	31,9	37,9	16 000	15 100	14 200	13 200	60,0
62,0	28,4	34,2	14 200	13 300	12 500	11 700	62,0
64,0	24,5	30,0	12 400	11 700	10 900	10 200	64,0
66,0	19,8	24,8	10 700	10 100	9 500	8 800	66,0

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 74,0 m							
 m	 °	 m	 0° kg	 1° kg	 2° kg	 3° kg	 m
9,8	84,7	76,7	324 900				9,8
10,0	84,5	76,6	319 100				10,0
10,5	84,1	76,6	307 600				10,5
11,0	83,7	76,5	297 000	255 500			11,0
11,5	83,4	76,5	287 000	247 600			11,5
12,0	83,0	76,4	277 700	240 500			12,0
12,5	82,6	76,3	268 700	232 600	194 300		12,5
13,0	82,2	76,2	259 800	222 900	186 000		13,0
13,5	81,8	76,2	251 100	211 700	177 600		13,5
14,0	81,4	76,1	241 500	201 100	169 900	145 000	14,0
14,5	81,0	76,0	230 500	192 300	163 100	139 900	14,5
15,0	80,6	75,9	218 600	184 100	156 900	134 900	15,0
16,0	79,8	75,7	198 300	169 500	145 700	125 800	16,0
17,0	79,0	75,5	182 500	157 200	136 000	118 000	17,0
18,0	78,2	75,3	168 800	146 500	127 400	111 100	18,0
19,0	77,4	75,0	156 200	137 000	119 800	105 000	19,0
20,0	76,6	74,8	144 000	128 600	113 100	99 400	20,0
21,0	75,8	74,5	133 300	120 200	107 000	94 400	21,0
22,0	75,0	74,2	123 800	112 200	101 200	89 800	22,0
23,0	74,2	73,9	115 400	104 900	95 600	85 700	23,0
24,0	73,4	73,6	107 800	98 200	89 800	81 700	24,0
25,0	72,6	73,3	100 900	92 200	84 400	77 600	25,0
26,0	71,8	73,0	94 700	86 700	79 500	73 100	26,0
27,0	71,0	72,6	88 900	81 700	75 000	69 100	27,0
28,0	70,1	72,2	83 700	77 000	70 900	65 300	28,0
29,0	69,3	71,8	78 900	72 700	67 000	61 900	29,0
30,0	68,5	71,4	74 500	68 700	63 500	58 600	30,0
32,0	66,8	70,6	66 500	61 600	57 000	52 700	32,0
34,0	65,1	69,6	59 700	55 300	51 300	47 600	34,0
36,0	63,3	68,6	53 600	49 800	46 300	42 900	36,0
38,0	61,6	67,5	48 300	45 000	41 800	38 800	38,0
40,0	59,8	66,3	43 600	40 600	37 800	35 100	40,0
42,0	57,9	65,1	39 300	36 700	34 100	31 700	42,0
44,0	56,1	63,7	35 500	33 100	30 800	28 700	44,0
46,0	54,2	62,3	32 100	29 900	27 800	25 900	46,0
48,0	52,2	60,7	28 900	27 000	25 100	23 300	48,0
50,0	50,2	59,1	26 000	24 300	22 600	20 900	50,0
52,0	48,1	57,3	23 400	21 800	20 200	18 700	52,0
54,0	45,9	55,3	20 900	19 500	18 100	16 700	54,0
56,0	43,7	53,2	18 700	17 400	16 100	14 800	56,0
58,0	41,4	51,0	16 600	15 400	14 200	13 000	58,0
60,0	38,9	48,5	14 600	13 500	12 500	11 400	60,0
62,0	36,3	45,8	12 800	11 800	10 800	9 900	62,0
64,0	33,5	42,8	11 100	10 200	9 300	8 400	64,0
66,0	30,5	39,5	9 500	8 600			66,0

MLC650 S-1



80,0 m							
m	°	m	0° kg	1° kg	2° kg	3° kg	m
10,4	84,7	82,6	305 500				10,4
10,5	84,6	82,6	302 700				10,5
11,0	84,2	82,6	292 400				11,0
11,5	83,9	82,5	282 800				11,5
12,0	83,5	82,4	273 800	232 800			12,0
12,5	83,1	82,4	265 300	228 800			12,5
13,0	82,8	82,3	257 200	221 300			13,0
13,5	82,4	82,2	249 600	210 800			13,5
14,0	82,0	82,2	241 100	200 500	167 500		14,0
14,5	81,7	82,1	231 000	192 000	161 100		14,5
15,0	81,3	82,0	220 000	183 700	154 800		15,0
16,0	80,6	81,8	200 400	168 900	143 600	123 000	16,0
17,0	79,9	81,6	184 000	156 800	134 200	115 300	17,0
18,0	79,1	81,4	169 200	146 100	125 800	108 600	18,0
19,0	78,4	81,2	155 700	136 600	118 400	102 700	19,0
20,0	77,7	81,0	143 500	127 800	111 800	97 300	20,0
21,0	76,9	80,7	132 800	118 900	105 800	92 500	21,0
22,0	76,2	80,5	123 300	110 700	99 900	88 100	22,0
23,0	75,4	80,2	114 800	103 500	93 600	84 000	23,0
24,0	74,7	79,9	107 200	96 900	87 900	79 700	24,0
25,0	74,0	79,6	100 300	90 900	82 600	75 300	25,0
26,0	73,2	79,3	94 000	85 500	77 800	71 000	26,0
27,0	72,5	79,0	88 300	80 500	73 400	67 100	27,0
28,0	71,7	78,6	83 100	75 800	69 300	63 400	28,0
29,0	70,9	78,3	78 300	71 600	65 500	60 000	29,0
30,0	70,2	77,9	73 800	67 600	62 000	56 800	30,0
32,0	68,6	77,1	65 800	60 500	55 600	51 100	32,0
34,0	67,1	76,3	59 000	54 300	50 000	46 000	34,0
36,0	65,5	75,3	52 900	48 800	45 000	41 400	36,0
38,0	63,9	74,3	47 600	44 000	40 500	37 400	38,0
40,0	62,3	73,3	42 900	39 600	36 600	33 700	40,0
42,0	60,6	72,1	38 600	35 700	33 000	30 400	42,0
44,0	59,0	70,9	34 800	32 200	29 700	27 300	44,0
46,0	57,2	69,6	31 300	29 000	26 700	24 600	46,0
48,0	55,5	68,3	28 200	26 000	24 000	22 000	48,0
50,0	53,7	66,8	25 300	23 400	21 500	19 700	50,0
52,0	51,9	65,2	22 600	20 900	19 200	17 500	52,0
54,0	50,0	63,5	20 200	18 600	17 000	15 500	54,0
56,0	48,1	61,7	18 000	16 500	15 000	13 600	56,0
58,0	46,1	59,8	15 900	14 500	13 200	11 900	58,0
60,0	44,1	57,7	13 900	12 700	11 500	10 300	60,0
62,0	41,9	55,5	12 100	11 000	9 800	8 700	62,0
64,0	39,7	53,1	10 400	9 300	8 300		64,0
66,0	37,3	50,5	8 800				66,0