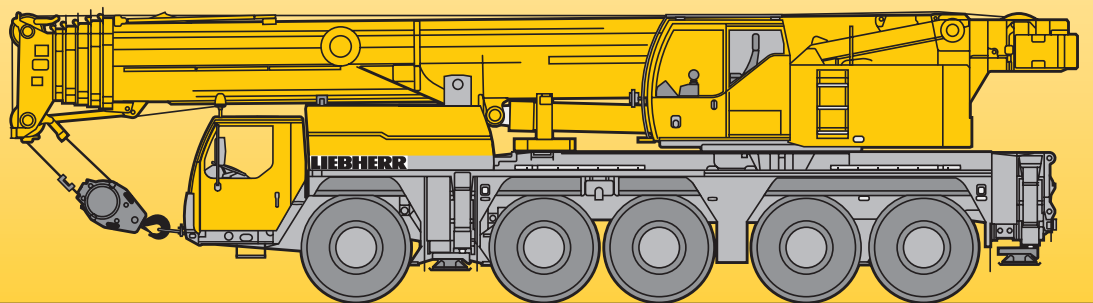


# Mobile Crane Grue mobile

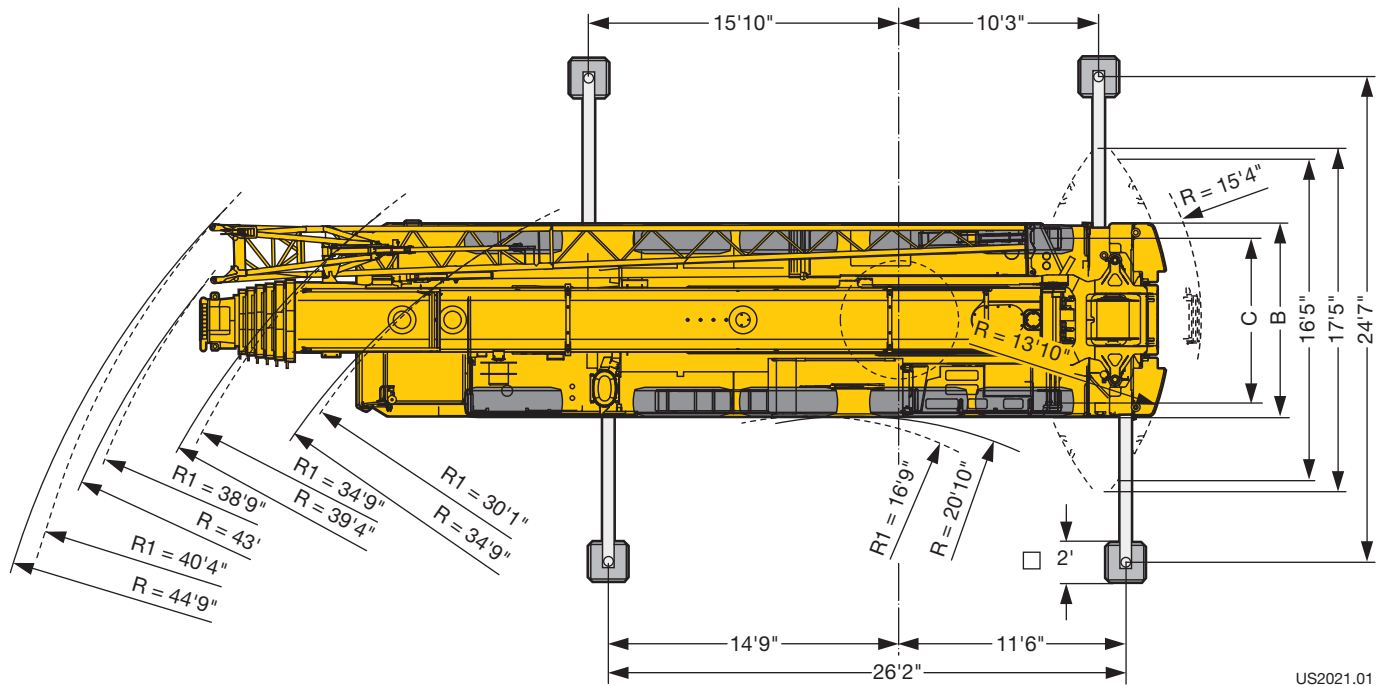
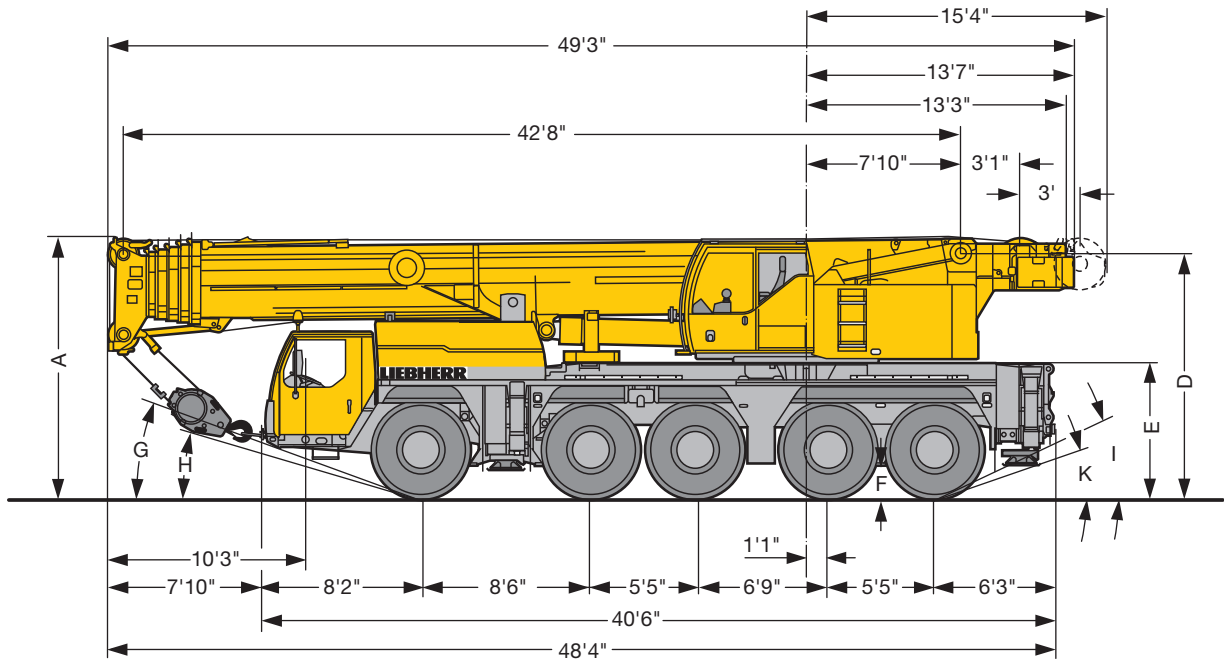
# LTM 1160-5.1

## Technical Data Caractéristiques techniques



# LIEBHERR

# Dimensions Encombrement



US2021.01

R<sub>i</sub> = All-wheel steering · Direction toutes roues

	Dimensions · Encombrement										
	A	A 6" *	B	C	D	E	F	α	β	β <sub>1</sub>	
445/95 R 25 (16.00 R 25)	13'1"	12'8"	9'10"	8'4"	12'4"	6'9"	1'5"	21°	26°	19°	
525/80 R 25 (20.5 R 25)	13'1"	12'8"	10'2"	8'5"	12'4"	6'9"	1'5"	21°	26°	19°	

\* lowered · abaissé

## Weights Poids



Axle Essieu	1	2	3	4	5	Total weight lbs Poids total lbs
lbs	26400	26400	26400	26400	26400	132000 <sup>1)</sup>

<sup>1)</sup> with 14300 lbs counterweight · avec contrepoids 14300 lbs



Load kips Forces de levage kips	No. of sheaves Poulies	No. of lines Brins	Weight lbs Poids lbs
282.2	9	16	2910
263.5	7	15	2730
198.4	5	11	1980
130	3	7	1540
57.3	1	3	1430
19.4	–	1	770

## Working speeds Vitesses

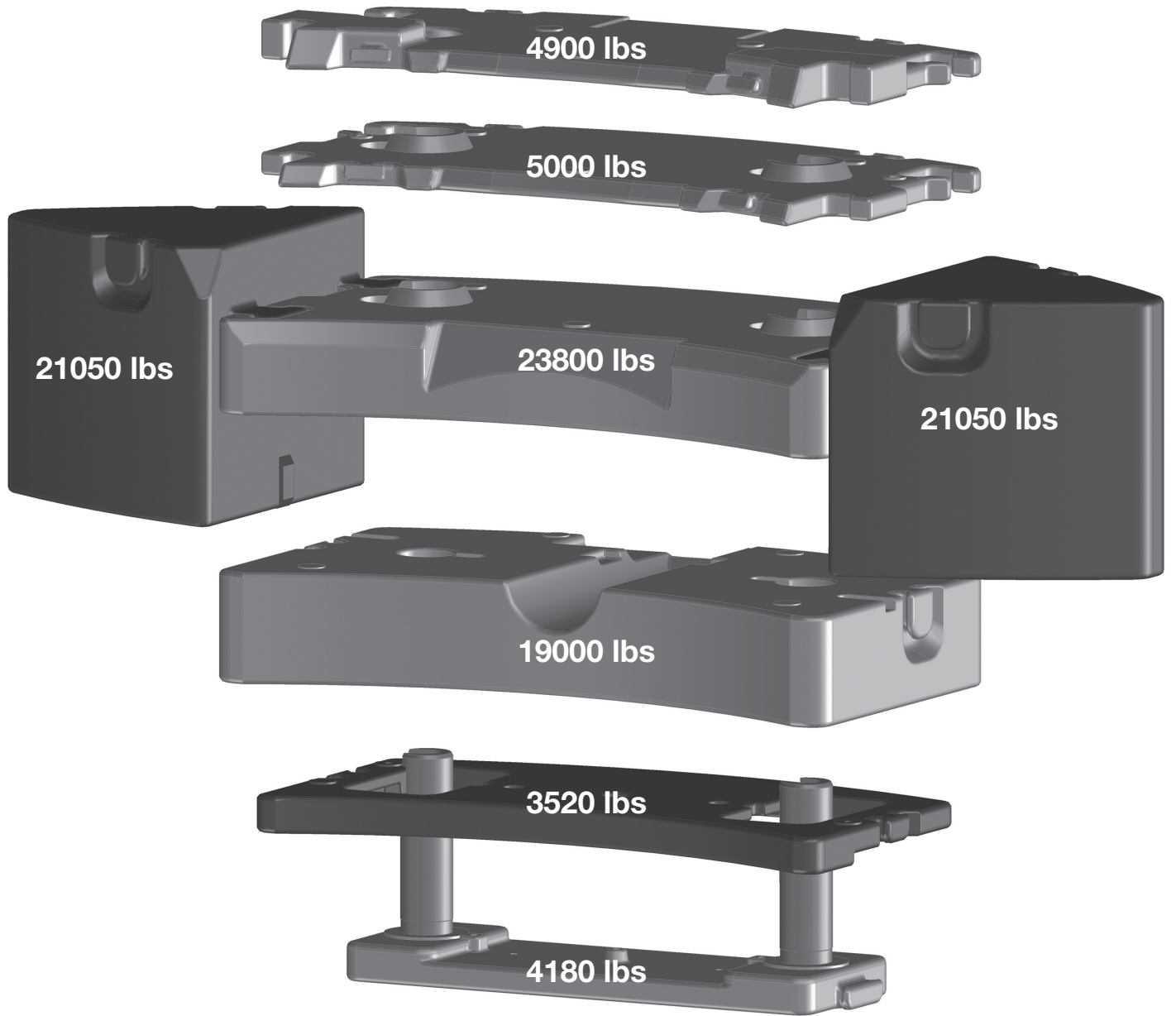


			1	2	3	4	5	6	7	8	9	10	11	12	R 1	R 2	
445/95 R 25 (16.00 R 25) 525/80 R 25 (20.5 R 25)			1.2 – 3.5	4.5	5.8	7.5	9.5	12.2	16.1	20.6	26.6	34.2	43.4	50	1.3 – 3.8	4.9	43 %
			0.52 – 1.6	2	2.6	3.3	4.2	5.3	7	9	11.6	14.9	18.9	24.2	0.57 – 1.7	2.1	55 %








Drive Mécanismes	infinitely variable en continu	Rope diameter / Rope length Diamètre du câble / Longueur du câble	Max. single line pull Effort au brin maxi.
	0 – 460 ft/min single line ft/min au brin simple	7/8" / 820 ft	19400 lbs
	0 – 460 ft/min single line ft/min au brin simple	7/8" / 820 ft	19400 lbs
	0 – 1.7 rpm		
	approx. 50 seconds to reach 82° boom angle env. 50 s jusqu'à 82°		
	approx. 511 seconds for boom extension from 43 ft – 203 ft env. 511 s pour passer de 43 ft – 203 ft		

**Counterweight USA**  
**Contrepoids USA**



# Lifting capacities Forces de levage

T

43 – 203 ft    360°  102500 lbs  85%




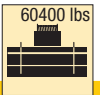
ft	ft												ft	
	*	43 ft	57 ft	72 ft	87 ft	102 ft	116 ft	131 ft	146 ft	161 ft	176 ft	191 ft		203 ft
10	375	276	230											10
12	246	246	226	206	188									12
14	218	218	205	196	184	153								14
16	200	200	188	179	172	151	122							16
18	187	187	176	167	163	149	120	91.5						18
20	175	174	166	158	152	145	119	91	69					20
24	151	148	147	140	135	130	114	86.5	68					24
28	125	125	127	125	121	116	109	81	64.5	52.1				28
32	106	106	108	108	107	105	103	75.5	61	50.8	41.2			32
36			93	93.5	92.5	94.5	92.5	70.5	57.3	48.4	40.1	33.6		36
40			81.5	82	81	83	81.5	65.5	53.9	45.9	38.6	32.7	27.7	40
47			64.5	66.5	68.5	67.5	66	58.1	48.1	41.7	35.9	30.8	26.4	47
51				60.5	61	60.5	58.9	54.3	45.3	39.4	34.3	29.7	25.6	51
54				56.8	56.7	55.8	54.4	51.3	43.4	37.8	33.1	28.8	24.9	54
57				52.8	52.7	51.8	50.4	48.3	41.5	36.3	31.8	28	24.2	57
60				48.7	48.9	48	46.6	45.2	39.6	34.9	30.6	27.1	23.6	60
63				44.3	45.7	44.7	43.4	42.5	37.9	33.5	29.6	26.3	23	63
65					43.6	42.7	41.3	41	36.9	32.6	28.9	25.8	22.5	65
73					36.8	36	34.8	36	33	29.3	26.3	23.7	20.9	73
81						30.7	31.6	30.6	28.8	26.5	23.8	21.8	19.4	81
89						27	27.6	26.3	25.1	23.5	21.8	20	17.9	89
97							24	22.7	22.9	21.1	19.8	18.4	16.5	97
104							21.5	20.1	20.6	19.2	18	17	15.4	104
110								19.1	18.6	17.7	16.6	16	14.4	110
116								18	16.8	16.5	15.6	15	13.5	116
124									14.7	14.6	14.2	13.3	12.5	124
130									13.6	13.4	13.1	12.1	11.8	130
136									12.8	12.3	12	11.1	11	136
142										11.4	11.1	10.2	10.2	142
148										10.7	10.3	9.4	9.3	148
154											9.5	8.6	8.5	154
160											8.8	7.8	7.7	160
166												7	6.9	166
174												6	6	174
182													5	182

\* over rear · en arrière

TAB 1627001 / 1627005

# Lifting capacities Forces de levage

T






43 – 203 ft     60400 lbs **85%**

ft	43 ft	57 ft	72 ft	87 ft	102 ft	116 ft	131 ft	146 ft	161 ft	176 ft	191 ft	203 ft	ft
10	278	230											10
12	246	226	206	188									12
14	218	205	196	184	153								14
16	200	188	179	172	151	122							16
18	182	176	167	163	149	120	91.5						18
20	164	165	158	152	144	119	91	69					20
24	131	134	134	127	117	111	86.5	68					24
28	108	110	110	103	100	93.5	81	64.5	52.1				28
32	90	92	91.5	89.5	84.5	79	73	61	50.8	41.2			32
36		78	80	76.5	72	67.5	64.5	57.3	48.4	40.1	33.6		36
40		68.5	69.5	66.5	62.5	58.6	56.1	52.8	45.9	38.6	32.7	27.7	40
47		54.5	55.5	53.2	50.1	48.5	47.1	44.3	41.2	35.9	30.8	26.4	47
51			49.3	47.4	44.7	44.9	42.1	39.5	36.8	34.3	29.7	25.6	51
54			45.2	43.9	41.3	41.7	39	36.5	34.7	32.7	28.8	24.9	54
57			41.5	40.7	38.9	38.7	36.1	34.9	32.9	30.8	28	24.2	57
60			38	37.7	37.2	35.9	33.5	33.3	31	28.8	27.1	23.6	60
63			35.1	35	35.4	33.5	32.1	31.1	29.1	27.2	26.3	23	63
65				33.3	34.1	32	30.9	29.7	28.4	26.6	25.8	22.5	65
73				27.5	28.8	27	27.1	25	24.3	23.5	21.7	20.7	73
81					24.2	23.1	23.2	22.2	21	19.9	18.3	17.9	81
89					20.6	20.6	19.8	19.3	17.9	17	15.4	15.1	89
97						17.9	16.9	16.5	15.3	14.5	13	12.7	97
104						15.8	14.9	14.4	13.2	12.5	11.2	10.9	104
110							13.3	12.8	11.8	11.1	9.8	9.6	110
116							12.1	11.5	10.5	9.8	8.6	8.4	116
124								10.1	9.1	8.4	7.2	7	124
130								9.1	8.1	7.4	6.2	6	130
136								8.3	7.2	6.6	5.3	5.2	136
142									6.4	5.7	4.6	4.4	142
148									5.6	4.9	3.8	3.7	148
154										4.1	3	3	154
160										3.5			160

TAB 1627006

# Lifting capacities Forces de levage






T

    													
ft	43 ft	57 ft	72 ft	87 ft	102 ft	116 ft	131 ft	146 ft	161 ft	176 ft	191 ft	203 ft	ft
10	278	230											10
12	246	226	206	188									12
14	218	205	196	184	153								14
16	200	188	179	172	151	122							16
18	181	175	167	163	148	120	91.5						18
20	161	163	158	151	142	118	91	69					20
24	129	131	131	121	113	109	86.5	68					24
28	105	108	105	101	96	89.5	80.5	64.5	52.1				28
32	87.5	89.5	88	86	80.5	75.5	70.5	61	50.8	41.2			32
36		76	76.5	73	68.5	64	61	57.3	48.4	40.1	33.6		36
40		66.5	66	63.5	59.6	56.4	55.5	50.1	45.7	38.6	32.7	27.7	40
47		52.1	52.7	50.4	47.5	47.7	44.6	41.8	39	35.9	30.8	26.4	47
51			46.8	44.9	42.3	42.6	39.8	37.7	36.2	33.9	29.7	25.6	51
54			42.9	41.5	40.4	39.5	36.8	35.9	34	31.7	28.8	24.9	54
57			39.3	38.5	38.3	36.6	34.7	33.7	31.5	29.3	28	24.2	57
60			36	35.6	36.1	33.9	32.7	31.5	29.9	28.1	26.9	23.6	60
63			33.2	33	33.7	31.6	31	29.3	28.3	27.2	25.5	23	63
65				31.3	32.2	30.1	30.1	27.9	27.2	26.3	24.4	22.5	65
73				27.3	27.1	25.3	25.5	24.6	23.1	22	20.2	19.8	73
81					22.7	22.8	21.7	21.1	19.6	18.5	16.9	16.6	81
89					19.3	19.6	18.4	18	16.7	15.7	14.1	13.9	89
97						16.7	15.9	15.3	14.1	13.3	11.8	11.6	97
104						14.7	13.7	13.2	12.2	11.5	10.1	9.9	104
110							12.3	11.8	10.8	10.1	8.8	8.6	110
116							11.2	10.6	9.6	9	7.6	7.4	116
124								9.2	8.2	7.6	6.2	6.1	124
130								8.3	7.3	6.7	5.3	5.2	130
136								7.4	6.4	5.8	4.5	4.3	136
142									5.6	4.9	3.8	3.6	142
148									4.8	4.1	3	2.9	148
154										3.4			154
160										2.8			160

TAB 1627007

# Lifting capacities Forces de levage

T

43 – 203 ft    360°  50500 lbs  85%





	43 ft	57 ft	72 ft	87 ft	102 ft	116 ft	131 ft	146 ft	161 ft	176 ft	191 ft	203 ft	
10	277	230											10
12	246	227	206	188									12
14	218	205	196	184	153								14
16	199	188	179	174	151	122							16
18	179	174	168	162	145	120	91.5						18
20	158	160	157	149	137	118	91	69					20
24	126	128	125	118	112	104	86.5	68					24
28	103	105	101	98.5	92	85.5	78.5	64.5	52.1				28
32	85	87	85.5	82	77	71.5	67.5	61	50.8	41.2			32
36		74	73	69.5	65	61.5	59.8	54.3	48.4	40.1	33.6		36
40		64.5	63	60	56.5	54.6	52.6	49.3	45.6	38.6	32.7	27.7	40
47		49.3	49.9	47.8	45.4	45.2	42.2	40	38.2	35.5	30.8	26.4	47
51			44.3	42.5	42.1	40.3	38.3	37.1	34.6	32.3	29.7	25.6	51
54			40.6	39.2	39.6	37.3	36.2	34.5	32.3	30.3	28.6	24.9	54
57			37.2	36.3	36.8	34.5	34.1	32	30.6	29.1	27.3	24.2	57
60			34	33.6	34.1	32	31.9	29.7	28.8	27.7	25.8	23.6	60
63			31.4	31.5	31.8	29.7	29.8	28.1	27	25.8	23.9	23	63
65				30.5	30.3	28.3	28.4	27.3	25.8	24.6	22.7	22.2	65
73				25.8	25.5	25.1	23.9	23.2	21.6	20.5	18.8	18.4	73
81					21.2	21.6	20.4	19.7	18.2	17.2	15.6	15.3	81
89					18.1	18.2	17.4	16.7	15.4	14.5	12.9	12.7	89
97						15.5	14.7	14.1	13	12.2	10.7	10.5	97
104						13.5	12.7	12.2	11.2	10.5	9	8.8	104
110							11.4	10.9	9.9	9.2	7.8	7.6	110
116							10.3	9.7	8.7	8.1	6.7	6.5	116
124								8.4	7.4	6.7	5.4	5.2	124
130								7.5	6.5	5.9	4.5	4.3	130
136								6.6	5.6	5	3.7	3.5	136
142									4.8	4.2	3		142
148									4.1	3.4			148
154										2.7			154

TAB 1627008



# Lifting capacities Forces de levage

T






43 - 203 ft    360°  36600 lbs **85%**

	43 ft	57 ft	72 ft	87 ft	102 ft	116 ft	131 ft	146 ft	161 ft	176 ft	191 ft	203 ft	
10	251	122											10
12	225	210	206	171									12
14	201	200	196	169	139								14
16	178	178	177	165	138	111							16
18	156	157	157	147	130	109	83.5						18
20	136	138	139	131	120	107	83	62.5					20
24	108	110	110	102	98.5	91	78	62					24
28	86.5	89	88	85.5	79.5	73.5	68	58.8	47.4				28
32	70	72.5	74.5	70.5	66	61.5	57.9	53.4	46.2	37.4			32
36		59.6	61.5	59.5	55.6	53.4	51.5	47.9	44	36.5	30.6		36
40		49.5	51.3	51.1	48	48	44.7	41.6	38.5	34.9	29.7	25.2	40
47		37.1	38.6	38.8	40.4	38.2	36.6	35.2	32.4	30	28	24	47
51			33.5	34.2	35.3	34	33	31.3	30	28.4	26.6	23.2	51
54			30.6	32	32.1	31.2	31.1	28.8	27.9	26.9	24.8	22.4	54
57			28	29.4	29.4	28.5	28.9	27.3	25.8	24.8	22.8	21.3	57
60			25.5	26.9	26.8	26.9	26.7	25.8	24.1	22.8	20.9	20.1	60
63			23.4	24.8	24.6	25.2	24.6	24	22.3	21.1	19.3	18.5	63
65				23.4	23.3	24	23.4	22.8	21.2	20	18.2	17.6	65
73				19.2	19.3	19.7	19.2	18.9	17.4	16.4	14.8	14.2	73
81					16	16.4	15.9	15.4	14.3	13.4	11.9	11.6	81
89					13.4	13.7	13.2	12.6	11.6	10.9	9.6	9.3	89
97						11.5	10.9	10.5	9.6	8.9	7.7	7.5	97
104						9.9	9.3	9	8.1	7.5	6.2	6	104
110							8.1	7.8	6.9	6.4	5.1	4.9	110
116							7	6.7	5.9	5.3	4.1	4	116
124								5.5	4.6	4.1			124
130								4.7	3.8	3.3			130
136								4	3.1				136






TAB 1622009

# Lifting capacities Forces de levage

T

    													
ft	43 ft	57 ft	72 ft	87 ft	102 ft	116 ft	131 ft	146 ft	161 ft	176 ft	191 ft	203 ft	ft
10	248	209											10
12	218	207	195	168									12
14	187	188	176	152	128								14
16	159	157	143	129	117	102							16
18	137	134	121	108	102	91	72.5						18
20	117	109	103	95	86	78.5	71	56.1					20
24	83.5	81.5	77	72	65.5	64	58.2	53.1					24
28	60.5	62.5	60.5	56.6	55.6	51.4	48.5	45.3	40.1				28
32	44.9	49	48.6	48	45.7	43.2	41.5	38.9	36.2	32.9			32
36		38.7	40.5	40.4	38.3	37.6	35.4	33.4	30.9	28.9	26.4		36
40		31.5	33.6	34.5	33.2	32.4	30.4	28.7	26.5	24.8	22.5	21.8	40
47		22.7	24.6	26.2	25.8	25.3	23.7	22.4	20.5	19.1	17.1	16.6	47
51			21	22.5	22.6	22.2	20.8	19.6	17.8	16.6	14.7	14.2	51
54			18.7	20.3	20.5	20.3	18.9	17.8	16.2	15	13.2	12.7	54
57			16.8	18.3	18.5	18.5	17.2	16.2	14.6	13.5	11.8	11.4	57
60			14.9	16.5	16.7	16.8	15.6	14.7	13.2	12.1	10.4	10.1	60
63			13.4	14.9	15.1	15.3	14.3	13.4	11.9	10.9	9.2	8.9	63
65				14	14.1	14.3	13.4	12.5	11.1	10.1	8.5	8.2	65
73				10.8	10.9	11.1	10.4	9.8	8.5	7.5			73
81					8.4	8.8	8.2	7.6	6.3	5.5			81
89					6.5	6.8	6.3	5.8					89
97						5.2	4.7	4.3					97
104						4.1							104

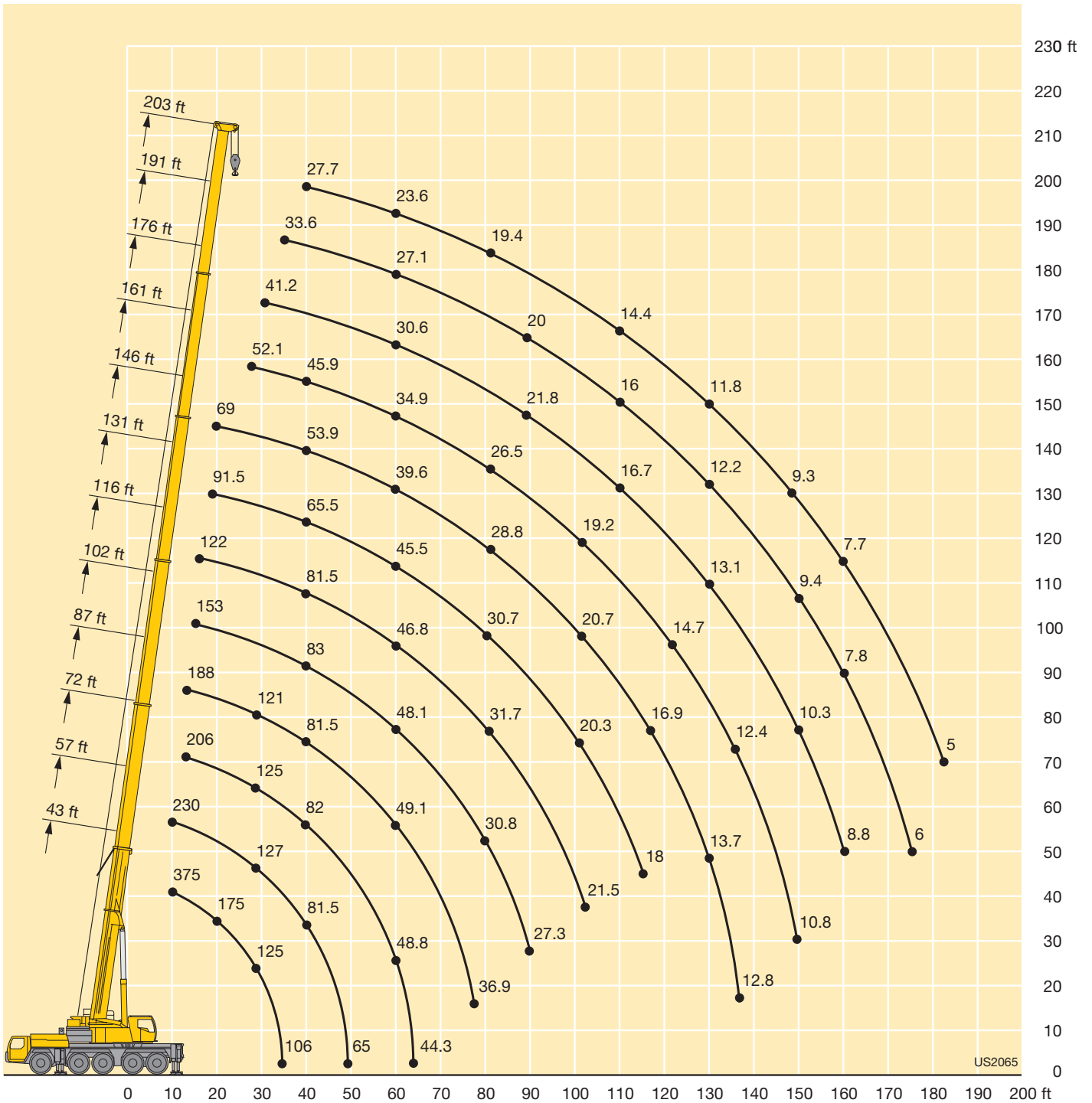
TAB 1622012

    													
ft	43 ft	57 ft	72 ft	87 ft	102 ft	116 ft	131 ft	146 ft	161 ft	176 ft	191 ft	203 ft	ft
10	247	209											10
12	215	206	175	157									12
14	181	179	158	142	119								14
16	153	145	129	116	105	90.5							16
18	127	119	106	100	89	80	66						18
20	103	95	90.5	83	74.5	71	64.5	51					20
24	71.5	70.5	67	62.5	60.5	55.5	51.8	48.3					24
28	51.9	53.7	52	51.5	48.2	45.6	43.1	40.6	34.7				28
32	38.2	42.2	42.2	41.8	39.6	38.5	36	33.8	31.1	27.8			32
36		33.1	34.5	34.6	33.2	32.3	30.2	28.4	26	24.2	21.8		36
40		26.7	28.8	29.4	28.2	27.6	25.8	24.2	22.1	20.5	18.3	17.7	40
47		18.8	20.8	22.3	21.6	21.3	19.8	18.6	16.8	15.5	13.6	13.1	47
51			17.5	19.1	18.8	18.5	17.2	16.1	14.4	13.2	11.4	11	51
54			15.5	17	16.9	16.8	15.5	14.5	12.9	11.8	10	9.7	54
57			13.7	15.2	15.2	15.2	14	13	11.5	10.4	8.7	8.4	57
60			12	13.5	13.6	13.7	12.6	11.7	10.2	9.2	7.5	7.3	60
63			10.6	12.1	12.2	12.4	11.4	10.5	9.1	8.1	6.5	6.2	63
65				11.3	11.4	11.5	10.6	9.8	8.4	7.4			65
73				8.4	8.5	8.9	8.1	7.3					73
81					6.3	6.7	6						81
89					4.6	4.9							89

TAB 1622014

# Lifting heights Hauteurs de levage

T



US2065

# Lifting capacities Forces de levage

# TK/TNZK

ft	43 ft			57 ft			72 ft			87 ft			102 ft			116 ft			ft
	18 ft			18 ft			18 ft			18 ft			18 ft			18 ft			
	0°	22.5°	45°	0°	22.5°	45°	0°	22.5°	45°	0°	22.5°	45°	0°	22.5°	45°	0°	22.5°	45°	
10	113	93.5																	10
12	113	88	70	113	90		113												12
14	111	83.5	68.5	113	88.5		113	89.5		113									14
16	106	79	66	113	84.5	68	113	87.5		113									16
18	99	75.5	64	109	81	66.5	112	84	66.5	111	84		106						18
20	93	72	61.5	105	78	64.5	110	81	66	109	83.5	64.5	103	80		80			20
24	82.5	66	58.1	95.5	72	61	103	76	63	103	79.5	64	99	79	63.5	74.5	60		24
28	74	61	55.1	86.5	67.5	58.4	95	71.5	60.5	97.5	75	61.5	95	75.5	63	69.5	58.6	51	28
32	67	56.9	52.6	79	63	55.9	87.5	67.5	58.1	92	71	59.5	91	72	61.5	65	55.4	49.6	32
36	61	53.2	50.5	72.5	59.4	53.8	81.5	63.5	56.1	86.5	68	57.5	87	68.5	59.4	61.5	52.5	47.4	36
40	56.4	50.6	45.8	67.5	56.3	51.9	75.5	60.5	54.2	79	65	55.8	79	66	57.8	57.7	50	45.4	40
47				59.4	51.8	49.6	65	56	51.6	63.5	59.8	53.1	64	61	55.2	52.5	46	42.4	47
54				52.9	48.5	39.8	53.5	51.7	49.5	51.7	52.8	50.3	52.4	53.5	52	47.9	42.7	39.9	54
61				45.8	38.9		44.6	45.3	42.7	42.9	43.8	44.2	43.5	44.4	45	43.6	39.8	37.6	61
68							37.7	38.2	23.2	36	36.7	37	36.6	37.4	37.8	37.8	37	35.7	68
75							32.3	32.5		30.5	31	28.1	31.1	31.7	32	32.3	32.9	32.8	75
82										26	26.4	15.3	26.6	27.1	27.3	27.8	28.3	28.6	82
89										22.3	22.6	6.9	22.9	23.3	20.7	24	24.4	24.6	89
96													19.7	20	12.1	20.8	21.2	21.3	96
103													17.1	17.3	6.6	18.1	18.4	16.6	103
110																15.8	16	10.3	110
117																13.8	13.9	6.3	117
124																12.3	11.3		124

TAB 1627035 / 1627091 / 1627147

ft	131 ft			146 ft			161 ft			176 ft			191 ft			203 ft			ft
	18 ft			18 ft			18 ft			18 ft			18 ft			18 ft			
	0°	22.5°	45°	0°	22.5°	45°	0°	22.5°	45°	0°	22.5°	45°	0°	22.5°	45°	0°	22.5°	45°	
24	67																		24
28	66	56		51.6															28
32	62.5	54.2	48.5	50.3			40.2												32
36	59.3	51.7	46.9	47.9	47.3		39.1			31.9									36
40	56	49.4	45.1	45.2	44.6	43.5	37.5	37.3	34.4	30.9	28.8	28.5	25	23.5		18.4			40
47	50	45.9	42.4	40.8	40.2	40	34.5	34.2	34	29	28.5	28.2	23.6	23.2	21.9	18.3	17.5	17.7	47
54	44.9	42.6	40	36.8	36.3	36.3	31.6	31.3	31.2	26.9	26.4	26.2	22.2	21.7	21.6	17.6	17.3	17.5	54
61	40.3	39.3	37.8	33.3	32.8	32.8	28.7	28.5	28.6	24.8	24.4	24.3	20.8	20.3	20.2	16.7	16.4	16.4	61
68	35.8	35.8	35.5	30.1	29.9	29.9	26.2	26	26.1	22.9	22.6	22.5	19.5	19	18.9	15.8	15.5	15.5	68
75	30.7	31.5	31.9	27.3	27.2	27.2	23.9	23.8	23.9	21.1	20.8	20.9	18.1	17.8	17.8	14.8	14.6	14.6	75
82	26.2	26.8	27.2	24.9	24.8	24.8	21.8	21.8	21.8	19.3	19.2	19.3	16.9	16.7	16.7	13.9	13.7	13.7	82
89	22.4	23	23.3	22.1	22.4	22.6	20	19.9	20	17.7	17.7	17.8	15.7	15.6	15.6	13	12.9	12.9	89
96	19.2	19.7	19.9	19	19.5	19.8	18.2	18.2	18.4	16.3	16.2	16.4	14.6	14.5	14.6	12.2	12.1	12.2	96
103	16.5	16.9	17.1	16.3	16.7	16.9	16.3	16.6	16.8	14.9	14.9	15.1	13.5	13.5	13.6	11.3	11.4	11.5	103
110	14.2	14.5	14.6	13.9	14.3	14.4	14.1	14.5	14.7	13.6	13.7	13.8	12.4	12.5	12.6	10.6	10.7	10.8	110
117	12.4	12.6	12.7	12.2	12.4	12.5	12.3	12.7	12.8	12.5	12.6	12.7	11.4	11.5	11.6	10	10	10.1	117
124	11	11.1	9.1	10.7	10.9	11	10.9	11.1	11.2	11.2	11.4	11.5	10.6	10.6	10.7	9.3	9.4	9.5	124
131	9.7	9.8		9.4	9.6	9.6	9.6	9.8	9.9	10.1	10.1	10.2	9.9	9.9	10	8.8	8.8	8.9	131
138				8.2	8.4	8.3	8.8	8.8	8.9	9.5	9.5	9.6	9.2	9.2	9.3	8.2	8.3	8.4	138
145				6.9	7		8.2	8.2	8.3	8.9	9	9	8	8.3	8.4	7.7	7.7	7.8	145
152							7.7	7.7	7.6	8.1	8.2	8.2	7	7.2	7.3	7	7.2	7.2	152
159							7.3	7.3	5.9	7.1	7.2	7.2	5.9	6.1	6.2	6	6.2	6.3	159
166										6.1	6.2	6.1	4.9	5.1	5.1	5.1	5.3	5.3	166
173										5.2	5.2	5.2	4	4.2	4.1	4.1	4.3	4.3	173
180													3.2	3.3	3.2	3.3	3.4	3.4	180
187															2.5	2.5	2.6	2.6	187

TAB 1627035 / 1627091 / 1627147

# Lifting capacities Forces de levage

**TK/TNZK**



ft	43 ft			102 ft			116 ft			131 ft			146 ft			161 ft			176 ft			191 ft			203 ft			ft	
	40 ft			40 ft			40 ft			40 ft			40 ft			40 ft			40 ft			40 ft							
	0°	22.5°	45°	0°	22.5°	45°	0°	22.5°	45°	0°	22.5°	45°	0°	22.5°	45°	0°	22.5°	45°	0°	22.5°	45°	0°	22.5°	45°	0°	22.5°	45°		
10	38.6																									10			
12	38.6																										12		
14	38.6																										14		
16	38.6																										16		
18	38.6	38.3		38.6			38.6																				18		
20	38.6	38		38.6			38.6																				20		
24	38.6	34.5		38.6			38.6			38.6																	24		
28	38.6	31.6		38.6			38.6			38.6			37.1														28		
32	38.6	29.2	21.4	38.6	31.5		38.6			38.6			37			30.4											32		
36	38.1	27	21.4	38.6	30.3		38.6	30.5		38.6			36.7			29.9			24								36		
40	34.7	25.2	21.4	38.5	28.9	21.4	38.6	29.2	21.4	38.5	28.9		35.7	26.4		29.3			23.5			17.3			13.8	40			
47	29.2	22.6	20.6	36.9	26.8	21.4	37.8	27.2	21.4	37.1	27	21.4	33.7	26.2		27.9	23.7		22.6	19.8		16.9			13.7	47			
54	25.3	20.5	19.6	33	25	21.2	34.5	25.5	21.3	34.1	25.4	21.3	31.2	24.8	20.5	26.3	23.5	19.9	21.4	19.5		16.2	15			13.3	54		
61	22	18.9		29.9	23.5	20.5	31.4	24.1	20.7	31.5	24.1	20.6	28.6	23.6	20.4	24.4	22.5	19.8	20.2	18.3	16.9	15.4	14.7		12.9	12.1	61		
68	19.3	17.7		27.2	22.1	19.9	28.8	22.8	20.1	29.1	22.9	20.1	26.3	22.5	19.8	22.5	21.4	19.3	18.9	17.2	16.6	14.6	13.9	13.1	12.4	12	11.5	68	
75				24.8	20.8	19.2	26.5	21.6	19.5	27	21.8	19.5	24.1	21.5	19.3	20.7	20	18.7	17.6	16.1	15.6	13.8	13.1	12.9	11.9	11.4	11.3	75	
82				23	19.6	18.3	24.4	20.4	18.8	25.2	20.8	18.9	22	20.6	18.7	19.1	18.7	17.9	16.3	15.2	14.7	13	12.4	12.3	11.3	11	10.9	82	
89				21.2	18.4	17.5	22.8	19.3	18.1	23	19.8	18.3	20.2	19.5	18.1	17.5	17.4	16.9	15.2	14.3	13.9	12.3	11.8	11.7	10.7	10.5	10.4	89	
96				19.7	17.4	16.8	21.2	18.3	17.4	20.7	18.8	17.6	18.5	18.2	17.4	16.1	16	15.9	14	13.4	13.2	11.6	11.2	11.2	10.2	10	10	96	
103				18.4	16.5	16.2	19	17.4	16.8	18.3	17.9	17	16.7	16.9	16.6	14.8	14.8	14.8	12.9	12.6	12.5	11	10.7	10.6	9.6	9.5	9.5	103	
110				17.2	15.7		16.7	16.6	16.2	15.9	16.8	16.5	14.6	15.6	15.6	13.5	13.6	13.8	11.9	11.8	11.8	10.3	10.2	10.2	9.1	9.1	9.1	110	
117				16	15.1		14.7	15.4	15.7	13.9	14.9	15.3	13.2	13.7	14.3	12.4	12.5	12.7	10.9	11.1	11.2	9.8	9.7	9.7	8.6	8.6	8.7	117	
124				14.4	14.5		13.2	13.6		12.4	13.1	13.5	12.1	12.1	12.6	11.1	11.6	11.8	10.1	10.3	10.6	9.2	9.2	9.3	8.1	8.2	8.3	124	
131							11.9	12.3		11	11.7		10.9	11.3	11.4	9.8	10.6	10.9	9.4	9.7	9.9	8.7	8.8	8.9	7.6	7.8	7.9	131	
138							10.8			9.9	10.4		9.7	10.3		9.1	9.4	9.9	8.7	9	9.3	8.1	8.3	8.5	7.2	7.3	7.5	138	
145										8.9	9.3		8.7	9.2		8.6	8.6	8.8	7.7	8.4	8.6	7.6	7.8	8	6.7	6.9	7.1	145	
152										7.9			7.7	8.2		7.8	8.1		7.2	7.4	7.9	7.1	7.3	7.5	6.3	6.5	6.7	152	
159										6.7	7.2		6.7	7.2		6.8	7.4		6.8	6.9	7	6.1	6.8	7	5.8	6.1	6.2	159	
166													5.7	6.1		6	6.4		6.3	6.5		5.3	5.9	6.3	4.9	5.6		166	
173																5.5	5.6		5.5	6		4.4	5.1	5.4	4.1	4.8		173	
180																5.1	5.2		4.7	5.2		3.6	4.2		3.4	4		180	
187																			3.9	4.3		2.8	3.3		2.6	3.2		187	
194																						3.2	3.5		2.5		2.5		194

TAB 1627043 / 1627099 / 1627155

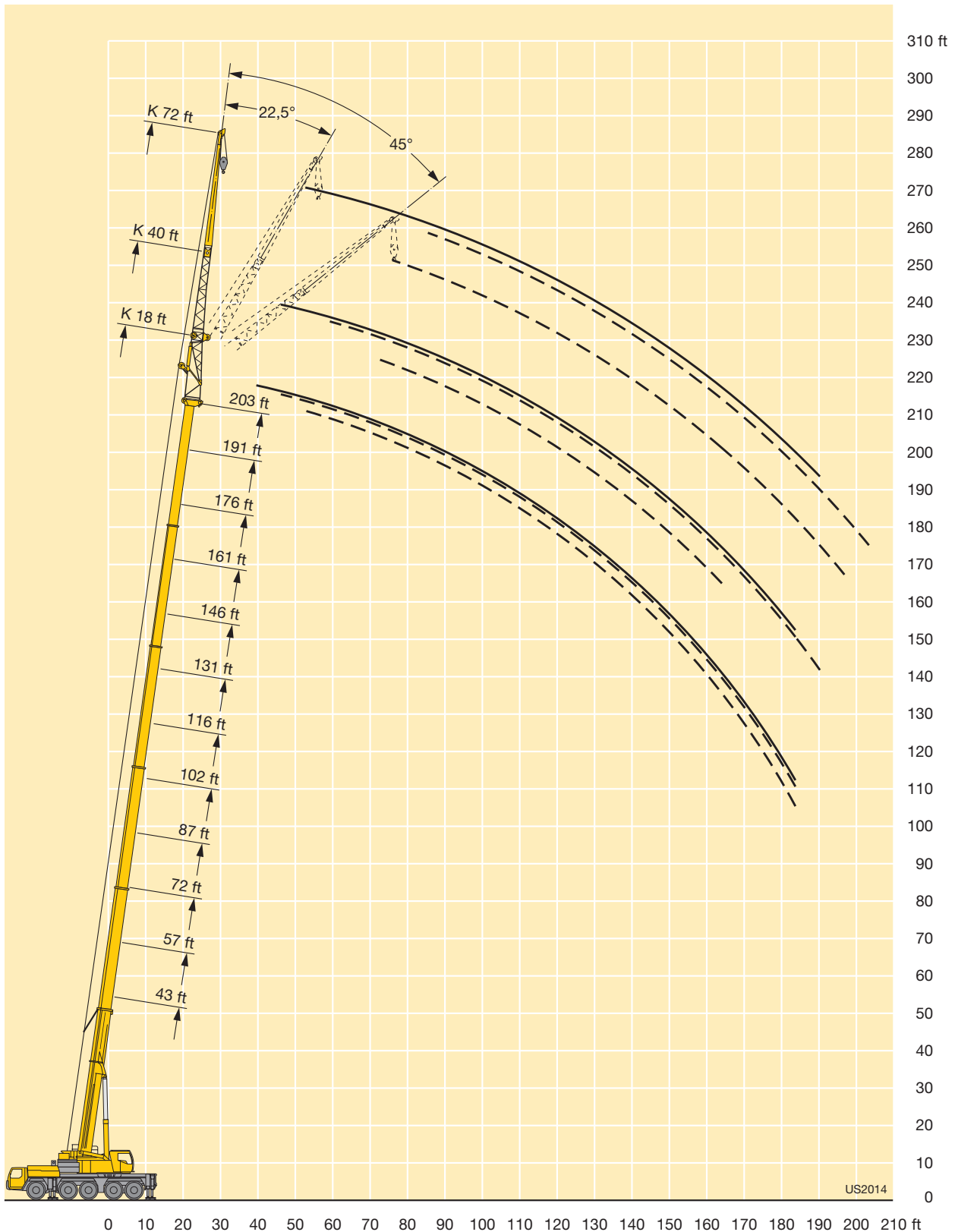
# Lifting capacities Forces de levage

**TK/TNZK**



ft	43 ft			102 ft			116 ft			131 ft			146 ft			161 ft			176 ft			191 ft			203 ft			ft	
	72 ft			72 ft			72 ft			72 ft			72 ft			72 ft			72 ft			72 ft			72 ft				
	0°	22.5°	45°	0°	22.5°	45°	0°	22.5°	45°	0°	22.5°	45°	0°	22.5°	45°	0°	22.5°	45°	0°	22.5°	45°	0°	22.5°	45°	0°	22.5°	45°		
10	28.4																									10			
12	28.4																										12		
14	28.3																										14		
16	28																										16		
18	27.6																										18		
20	27.2			21.1			19.9																				20		
24	26.1			21			19.9																				24		
28	25			20.9			19.8			18.3																	28		
32	23.9			20.7			19.7			18.2			16.5														32		
36	22.7			20.5			19.6			18.2			16.4			14.3											36		
40	21.5	17.8		20.2			19.4			18			16.3			14.3			12.3			10.4					40		
47	19.5	16.3		19.4	15.5		18.9			17.8			16.2			14.2			12.3			10.4			8.7		47		
54	17.6	15	12	18.7	15.3		18.2	14.6		17.4	14.3		16.1			14.2			12.3			10.2			8.7		54		
61	15.7	13.7	11.8	17.9	14.5		17.6	14.4		16.9	14.1		15.7	13.3		14.1			12.2			10			8.5		61		
68	14	12.5	11.1	17.1	13.8	11.1	17	13.8	11.1	16.3	13.5		15.3	13.1		13.9	12.3		12			9.8			8.3		68		
75	12.5	11.5	10.4	16.2	13	10.9	16.3	13.1	10.9	15.8	13	10.7	14.9	12.7		13.6	12.1		11.8	11.2		9.7			8.2		75		
82	11.2	10.8	9.9	15.3	12.4	10.5	15.6	12.6	10.6	15.3	12.5	10.6	14.5	12.3	10.3	13.3	11.8		11.6	11.1		9.5	9		8	8.1		82	
89	10.2	10.1	9.6	14.3	11.8	10.2	14.7	12	10.3	14.7	12	10.3	14.1	11.9	10.1	12.8	11.5	9.9	11.3	10.7		9.2	8.9		7.8	7.9		89	
96	9.4	9.6		13.4	11.3	9.9	13.9	11.5	10	14	11.6	10	13.6	11.5	9.9	12.3	11.1	9.7	10.8	10.3	9.4	9	8.6	8	7.6	7.6		96	
103	8.7			12.5	10.8	9.7	13.2	11.1	9.8	13.3	11.2	9.8	13.1	11.1	9.7	11.8	10.8	9.6	10.3	9.9	9.3	8.6	8.3	7.9	7.5	7.3	7.2	103	
110				11.6	10.3	9.5	12.4	10.6	9.6	12.6	10.8	9.6	12.5	10.7	9.5	11.3	10.5	9.4	9.8	9.4	9.1	8.2	8	7.6	7.2	7	7	110	
117				11	9.9	9.3	11.7	10.2	9.4	12	10.4	9.4	11.9	10.4	9.4	10.6	10.2	9.2	9.3	9	9	7.9	7.6	7.4	6.9	6.7	6.8	117	
124				10.4	9.5	9.1	11	9.8	9.2	11.5	10	9.3	11.3	10	9.2	10	9.8	9.1	8.8	8.6	8.6	7.5	7.3	7.2	6.6	6.4	6.5	124	
131				9.9	9.1	8.9	10.5	9.5	9.1	10.9	9.7	9.1	10.7	9.7	9.1	9.3	9.4	9	8.3	8.2	8.3	7.1	7	7	6.3	6.2	6.3	131	
138				9.4	8.8		10	9.2	8.9	10.4	9.4	9	9.8	9.4	9	8.7	9	8.9	7.8	7.8	7.9	6.8	6.7	6.8	6	5.9	6	138	
145				9	8.6		9.6	8.9	8.8	9.8	9	8.8	8.8	9.2	8.9	8.2	8.6	8.7	7.3	7.5	7.6	6.5	6.4	6.5	5.6	5.7	5.8	145	
152				8.6	8.4		9.2	8.6		8.9	8.8	8.7	8.1	8.8	8.7	7.4	8.1	8.5	6.8	7.2	7.3	6.1	6.1	6.3	5.3	5.5	5.6	152	
159				8.4			8.7	8.4		8	8.5		7.6	8	8.4	6.6	7.6	8	6.3	6.8	7	5.8	5.9	6	5	5.2	5.4	159	
166							8	8.2		7.2	7.9		6.9	7.3	7.7	6.1	6.9	7.4	5.6	6.4	6.7	5.4	5.6	5.8	4.7	4.9	5.1	166	
173							7.3			6.4	7.1		6	6.9		5.8	6.1	6.7	5.1	5.9	6.3	4.8	5.3	5.5	4.3	4.7	4.9	173	
180										5.5	6.2		5.2	6.1		5.2	5.6	5.9	4.8	5.2	5.7	4.1	5	5.3	3.7	4.4	4.6	180	
187										4.8			4.4	5.2		4.4	5.2		4.4	4.7	5	3.4	4.5	5	3	4.1	4.3	187	
194													3.7	4.3		3.9	4.5		3.9	4.4	4.6	2.8	3.8	4.4	2.4	3.5	4	194	
201																3.1			3.6	3.8		3.2	4					201	
208																			3.3	3.5		2.6	3.3					208	
215																						2.6							215

TAB 1627059 / 1627115 / 1627171



# Lifting capacities Forces de levage

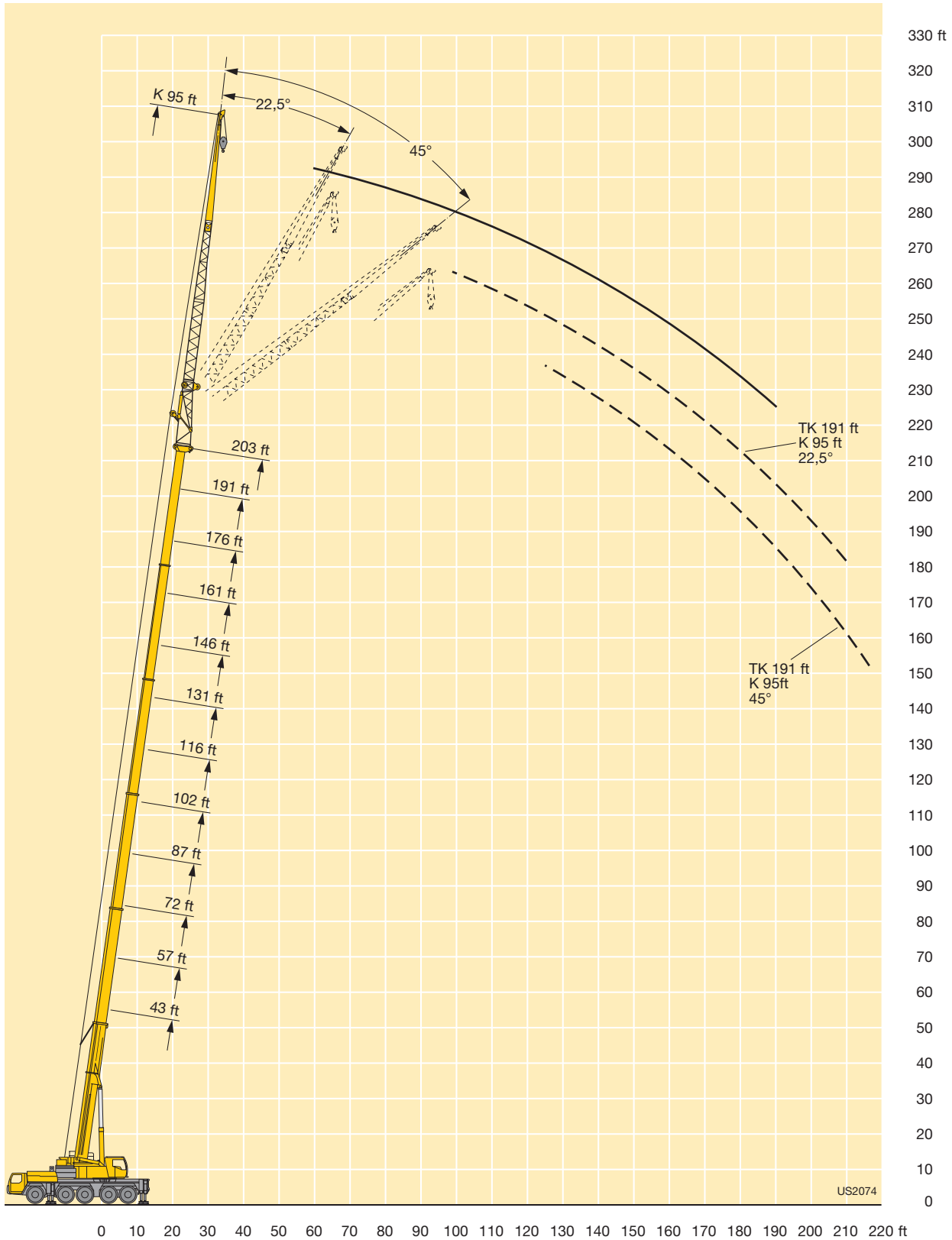
**TK/TNZK**



ft	43 ft			102 ft			116 ft			131 ft			146 ft			161 ft			176 ft			191 ft			203ft	ft	
	95 ft			95 ft			95 ft			95 ft			95 ft			95 ft			95 ft			95 ft					
	0°	22.5°	45°	0°	22.5°	45°	0°	22.5°	45°	0°	22.5°	45°	0°	22.5°	45°	0°	22.5°	45°	0°	22.5°	45°	0°	22.5°	45°	0°		
14	18.6																								14		
16	18.6																									16	
18	18.6																									18	
20	18.5																									20	
24	18.4				14.5																					24	
28	18.3				14.5			13.6																		28	
32	18				14.4			13.6			12.7															32	
36	17.6				14.3			13.5			12.6		11.6													36	
40	17				14.3			13.5			12.6		11.5			10.2			8.9							40	
47	15.7	12			14.1			13.4			12.5		11.4			10.2			8.9			7.4				47	
54	14.4	11.8			13.6			13.1			12.4		11.4			10.2			8.8			7.4			6	54	
61	13.1	10.9			13.2	10.4		12.8			12.1		11.3			10.1			8.8			7.2			5.9	61	
68	11.9	10			12.6	10.2		12.4	9.9		11.8	9.7	11.1			10			8.7			7.1			5.7	68	
75	10.7	9.3	7.8		11.9	9.7		11.9	9.7		11.5	9.5	10.8	9		9.9			8.7			6.9			5.6	75	
82	9.6	8.6	7.6		11.3	9.3		11.3	9.3		11.1	9.1	10.5	8.9		9.7	8.3		8.6			6.8			5.4	82	
89	8.7	8	7.2		10.8	8.8	7.2	10.8	8.9	7.2	10.6	8.8	10.2	8.6		9.5	8.2		8.5	7.6		6.7			5.3	89	
96	8	7.4	6.8		10.3	8.4	7.1	10.4	8.5	7.1	10.2	8.5	7	9.9	8.3		9.3	8		8.4	7.5		6.7	6.6	5.1	96	
103	7.3	7	6.5		9.8	8	6.8	9.9	8.2	6.9	9.8	8.1	6.9	9.5	8	6.7	9	7.7		8.2	7.3		6.6	6.4	5	103	
110	6.8	6.6	6.2		9.3	7.6	6.6	9.5	7.8	6.7	9.5	7.8	6.7	9.2	7.8	6.6	8.7	7.5	6.5	7.9	7.1		6.5	6.2	4.9	110	
117	6.2	6.2	6.1		8.8	7.3	6.4	9.1	7.5	6.5	9.1	7.5	6.5	8.9	7.5	6.5	8.5	7.3	6.3	7.6	7	6.1	6.3	5.9	4.7	117	
124	5.8	6			8.3	7	6.3	8.6	7.2	6.3	8.7	7.3	6.3	8.6	7.3	6.3	8.2	7.1	6.2	7.3	6.8	6.1	6	5.7	5.4	4.6	124
131					7.8	6.8	6.1	8.3	7	6.2	8.4	7	6.2	8.3	7	6.2	7.8	6.9	6.1	7	6.6	6	5.8	5.5	5.3	4.5	131
138					7.5	6.5	6	7.8	6.7	6.1	8.1	6.8	6.1	8	6.8	6.1	7.5	6.7	6	6.7	6.4	5.9	5.5	5.3	5.1	4.4	138
145					7.1	6.3	6	7.5	6.5	6	7.7	6.6	6	7.8	6.6	6	7.2	6.5	5.9	6.3	6.2	5.8	5.3	5.1	5	4.3	145
152					6.7	6.2	5.9	7.2	6.3	5.9	7.4	6.4	5.9	7.5	6.4	5.9	6.8	6.4	5.8	6	5.9	5.7	5	5	4.8	4.2	152
159					6.4	6		6.8	6.2	5.9	7.1	6.2	5.9	7	6.3	5.8	6.4	6.2	5.8	5.6	5.7	5.6	4.8	4.8	4.7	4.1	159
166					6.1	5.8		6.5	6	5.9	6.8	6.1	5.8	6.3	6.1	5.8	5.6	6	5.7	5.2	5.5	5.5	4.5	4.6	4.6	3.8	166
173					5.9	5.7		6.3	5.9		6.5	6	5.8	5.9	6	5.8	5	5.8	5.7	4.6	5.2	5.3	4.3	4.3	4.5	3.6	173
180					5.6			6	5.7		5.9	5.8	5.8	5.4	5.8	5.8	4.7	5.4	5.6	4.1	5	5.1	3.9	4.1	4.3	3.3	180
187								5.8	5.6		5.1	5.7		4.7	5.4	5.6	4.4	4.8	5.5	3.7	4.6	4.9	3.2	3.9	4.1	2.8	187
194								5.4	5.6		4.4	5.3		3.9	5	5.4	3.8	4.3	4.9	3.5	4	4.6	2.6	3.7	3.9		194
201											3.7	4.4		3.3	4.3		3.2	4	4.3	3.2	3.5	4.1		3.3	3.7		201
208											3.1	3		2.7	3.5		2.7	3.6	3.9	2.7	3.2	3.5		2.8	3.5		208
215														2.8			2.5	2.9		2.5	2.9				2.9		215
222																	2.3	2.5			2.5						222
229																											229

TAB 1627075 / 1627131 / 1627187





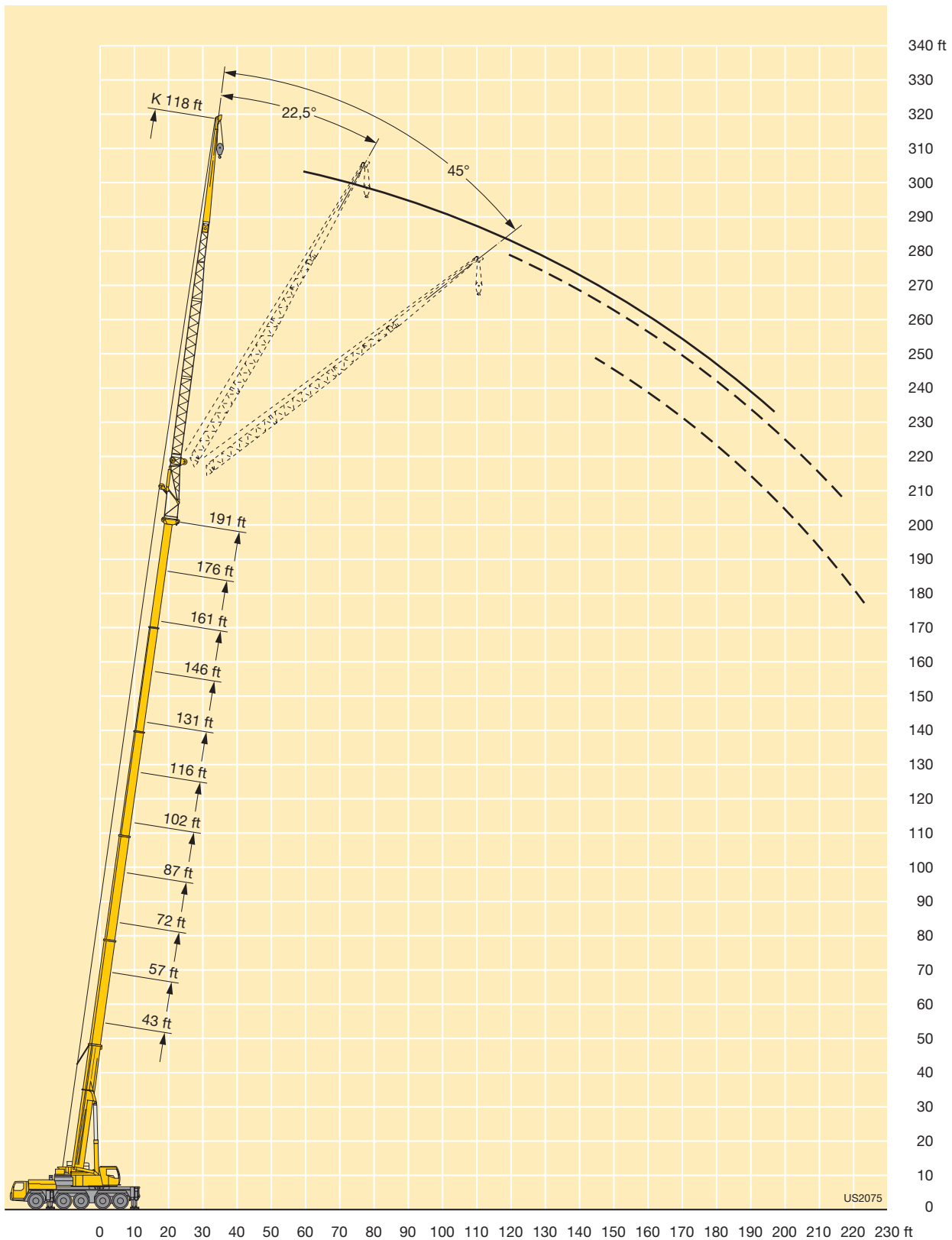
# Lifting capacities Forces de levage

**TK/TNZK**



ft	43 ft			102 ft			116 ft			131 ft			146 ft			161 ft			176 ft			191 ft			ft
	118 ft			118 ft			118 ft			118 ft			118 ft			118 ft			118 ft						
	0°	22.5°	45°	0°	22.5°	45°	0°	22.5°	45°	0°	22.5°	45°	0°	22.5°	45°	0°	22.5°	45°	0°	22.5°	45°	0°	22.5°	45°	
20	12.9																							20	
24	12.9																							24	
28	12.9																							28	
32	12.8																							32	
36	12.5																							36	
40	12.1																							40	
47	11.4																							47	
54	10.6																							54	
61	9.8	7.9																						61	
68	9.1	7.7																						68	
75	8.4	7.1																						75	
82	7.7	6.7																						82	
89	7	6.2																						89	
96	6.4	5.8	4.9																					96	
103	5.9	5.5	4.8																					103	
110	5.4	5.1	4.6																					110	
117	5	4.8	4.4																					117	
124	4.5	4.5	4.2																					124	
131	4.2	4.3	4																					131	
138	3.9	4																						138	
145	3.6																							145	
152																								152	
159																								159	
166																								166	
173																								173	
180																								180	
187																								187	
194																								194	
201																								201	
208																								208	
215																								215	
222																								222	
229																								229	

TAB 1627083 / 1627139 / 1627195



# Lifting capacities Forces de levage

**TVK/TVNZK**



ft	43 ft + 23 ft			102 ft + 23 ft			116 ft + 23 ft			131 ft + 23 ft			146 ft + 23 ft			161 ft + 23 ft			176 ft + 23 ft			191 ft + 23 ft			203 ft + 23 ft			ft
	18 ft			18 ft			18 ft			18 ft			18 ft			18 ft			18 ft			18 ft						
	0°	22.5°	45°	0°	22.5°	45°	0°	22.5°	45°	0°	22.5°	45°	0°	22.5°	45°	0°	22.5°	45°	0°	22.5°	45°	0°	22.5°	45°	0°	22.5°	45°	
10	73.5																									10		
12	68.5																										12	
14	64.5	55.1																									14	
16	60.5	53.2																									16	
18	57	50.6	44.6																								18	
20	53.8	48.1	44.3	49.3																							20	
24	48.2	43.8	40.5	48.5	41.8		45.4																				24	
28	43.3	39.8	36.9	45.5	40.7	37.2	44.5	39.2		39.8																	28	
32	38.9	36	33.8	42.3	38.4	35.8	42.2	38.1	35.4	38.9	35.7		34.3														32	
36	34.9	32.9	31	39.5	35.9	33.7	39.9	36.2	33.9	37.5	34.7	32.9	33.6														36	
40	31.2	30.2	28.8	37	33.8	31.8	37.7	34.3	32.2	36.1	33.3	31.5	32.6	30.7	28.1	28.1	26.2	24.9	22	20.2		15.7					40	
47	26.7	26.2	25.3	33	30.5	29	34	31.2	29.5	33.5	30.7	29.2	31	29	27.9	26.9	26	24.7	21.8	20	18.9	15.6	15		12.5	12.5	47	
54	22.9	23	22.6	29.8	27.8	26.6	31	28.5	27.2	30.8	28.4	27.1	29.2	27.2	26.1	25.3	24.7	23.6	20.5	18.9	18.7	15.1	14.9	14.4	12.4	12.4	12.1	54
61	19.8	20.6	18.1	26.9	25.4	24.5	28.3	26.4	25.3	28.4	26.3	25.2	27.2	25.5	24.5	23.6	23.2	22.5	19.2	17.7	17.7	14.3	14.1	14.1	12	11.9	12	61
68	17.3	18.4		24.6	23.4	22.6	25.9	24.4	23.5	26.4	24.6	23.6	25.3	23.8	23.1	21.9	21.6	21.3	18	16.7	16.6	13.5	13.3	13.3	11.5	11.4	11.5	68
75				22.6	21.5	21	24	22.6	21.9	24.5	22.9	22.2	23.3	22.4	21.8	20.2	20	19.9	16.8	15.7	15.6	12.8	12.6	12.6	11	10.9	11	75
82				20.9	20	19.6	22.1	21.1	20.5	22.8	21.5	20.9	21.4	21	20.7	18.6	18.5	18.5	15.7	14.7	14.7	12	12	12	10.6	10.5	10.5	82
89				19.3	18.6	18.4	20.6	19.7	19.3	21.3	20.2	19.8	19.7	19.5	19.5	17.1	17.1	17.1	14.6	13.8	13.8	11.4	11.3	11.3	10.1	10	10	89
96				17.9	17.4	17.3	19.2	18.5	18.3	19.8	19	18.7	18.1	18	18.1	15.7	15.7	15.8	13.6	13	13	10.9	10.8	10.8	9.6	9.5	9.6	96
103				16.8	16.3	16.3	18	17.4	17.2	18.2	17.8	17.8	16.6	16.6	16.7	14.4	14.4	14.6	12.6	12.2	12.2	10.3	10.3	10.3	9.1	9.1	9.1	103
110				15.7	15.4	15.3	16.4	16.5	16.4	16	16.2	16.4	14.6	15	15.2	13.2	13.3	13.4	11.6	11.4	11.4	9.8	9.8	9.8	8.7	8.7	8.7	110
117				14.8	14.6	10.2	14.5	14.7	14.8	13.9	14.2	14.4	12.9	13.1	13.3	12.1	12.1	12.2	10.8	10.7	10.7	9.3	9.3	9.3	8.2	8.2	8.3	117
124				13.9	13.9	6.5	13	13.1	13.2	12.4	12.6	12.7	11.8	11.8	11.8	11.2	11.3	11.3	9.9	9.9	10	8.8	8.8	8.9	7.8	7.8	7.9	124
131							11.7	11.9	9.2	11.1	11.2	11.3	10.9	10.9	11	9.9	10.2	10.3	9.2	9.3	9.4	8.4	8.4	8.4	7.4	7.4	7.5	131
138							10.6	10.7	6.2	9.9	10	10.1	9.7	9.9	10	8.8	9	9.1	8.6	8.7	8.8	7.9	8	8	7	7	7.1	138
145										8.9	9	8.6	8.7	8.9	8.9	8.3	8.4	8.4	7.7	8	8.1	7.5	7.5	7.5	6.5	6.6	6.7	145
152										7.9	8	6.2	7.7	7.8	7.9	7.8	7.8	7.9	7	7	7.1	6.9	7	7.1	6.1	6.2	6.2	152
159													6.7	6.8	6.7	6.9	7	7.1	6.6	6.6	6.6	6.2	6.4	6.5	5.7	5.8	5.8	159
166													5.7	5.7	5.6	5.9	6	6	6.2	6.2	6.2	5.3	5.5	5.6	5	5.3	5.3	166
173																5.3	5.3	5.4	5.5	5.7	5.7	4.5	4.7	4.7	4.2	4.4	4.5	173
180																5	5	5	4.7	4.8	4.8	3.6	3.8	3.8	3.4	3.6	3.7	180
187																			3.9	4	4	2.8	3	3	2.7	2.9	2.9	187
194																						3.2	3.3	3.2				194

TAB 1627371 / 1627420 / 1627469

# Lifting capacities Forces de levage

**TVK/TVNZK**



ft	43 ft + 23 ft			102 ft + 23 ft			116 ft + 23 ft			131 ft + 23 ft			146 ft + 23 ft			161 ft + 23 ft			176 ft + 23 ft			191 ft + 23 ft			203 ft + 23 ft			ft
	40 ft			40 ft			40 ft			40 ft			40 ft			40 ft			40 ft			40 ft			40 ft			
	0°	22.5°	45°	0°	22.5°	45°	0°	22.5°	45°	0°	22.5°	45°	0°	22.5°	45°	0°	22.5°	45°	0°	22.5°	45°	0°	22.5°	45°	0°	22.5°	45°	
10	38.6																										10	
12	38.6																											12
14	38.6																											14
16	38.6																											16
18	38.6																											18
20	38.6			35.5																								20
24	38	30.5		35			32.3																					24
28	35.4	29.3		33.3			31.7		28.5																			28
32	32.2	26.6		31.7			30.4		27.9			24.5																32
36	29.1	24.3	21.4	30.1			29.2		27			24			19.4													36
40	26.5	22.3	20.9	28.6	23.4		27.9	23.2	26.1	20.6		23.3		19			15.2				12.1						40	
47	22.6	19.4	18.4	26	21.4	17.6	25.9	21.4	17.6	24.5	20.4		22.2	18.1		18.3	16.3	15.1			12				9.9		47	
54	19.4	17	16.4	23.6	19.6	17.3	23.9	19.8	17.3	22.9	19.2	16.2	21	17.9	15.7	17.7	16.2	14.7	13.5		11.7				9.8		54	
61	16.9	15.1	14.7	21.4	18	16.2	22	18.3	16.2	21.5	18.1	16	20	17	15.4	17	15.4	14	14.1	13.4	11.3	10.7			9.6		61	
68	14.8	13.4	13.3	19.3	16.7	15.1	20.2	17	15.3	20	17	15.1	18.9	16.2	14.6	16.3	14.8	13.7	13.6	12.9	12.2	10.9	10.5		9.2	8.9	68	
75	13.1	12.1	12.2	17.7	15.4	14.2	18.5	15.9	14.4	18.6	16	14.3	17.8	15.4	13.9	15.7	14.1	13.1	12.8	12.3	12.1	10.5	10.1	9.6		8.9	8.7	75
82	11.7	11		16.1	14.3	13.3	17.1	14.8	13.6	17.3	15	13.6	16.8	14.6	13.3	14.9	13.5	12.6	12.1	11.7	11.6	10	9.7	9.5	8.5	8.4	8.3	82
89	10.5	10.2		14.8	13.2	12.6	15.7	13.8	12.9	16.1	14.1	13	15.8	13.8	12.7	14	12.9	12.2	11.4	11.1	11.1	9.5	9.2	9.1	8.2	8	8.1	89
96				13.7	12.3	11.9	14.5	12.9	12.2	15	13.3	12.4	14.8	13	12.2	13.1	12.4	11.8	10.8	10.6	10.5	9	8.8	8.8	7.8	7.7	7.7	96
103				12.6	11.6	11.3	13.5	12.1	11.7	13.9	12.5	11.8	13.9	12.4	11.7	12.3	11.8	11.3	10.3	10.1	10	8.6	8.4	8.4	7.5	7.3	7.4	103
110				11.7	10.9	10.8	12.6	11.5	11.2	13	11.8	11.3	13	11.8	11.3	11.4	11.3	11	9.7	9.6	9.5	8.1	8	8.1	7.1	7	7.1	110
117				11	10.3	10.3	11.7	10.8	10.7	12.3	11.3	10.9	12.2	11.2	10.9	10.6	10.6	10.6	9.2	9.1	9.1	7.7	7.7	7.7	6.8	6.7	6.8	117
124				10.3	9.8	9.9	11.1	10.4	10.3	11.5	10.7	10.5	11.4	10.7	10.5	9.8	10	10.1	8.6	8.6	8.7	7.3	7.3	7.4	6.5	6.4	6.5	124
131				9.7	9.4		10.5	9.9		10.8	10.3	10.1	10.2	10.3	10.2	9.2	9.4	9.6	8.1	8.2	8.3	7	6.9	7	6.1	6.1	6.2	131
138				9.3	9		9.9	9.5		10.1	9.9	9.8	9	9.8	9.8	8.6	8.8	9	7.6	7.8	7.9	6.7	6.6	6.7	5.8	5.8	5.9	138
145				8.9	8.3		9.5	9.2		9.1	9.4	9.1	8.3	8.7	9.1	7.8	8.2	8.4	7.1	7.3	7.5	6.3	6.3	6.4	5.5	5.5	5.6	145
152							8.8	8.8		8.1	8.6		7.8	8	8.1	6.8	7.6	7.8	6.6	6.9	7	6	6	6.1	5.2	5.3	5.4	152
159							8.1	8.3		7.2	7.7		7	7.4		6.3	6.6	7	5.8	6.4	6.6	5.6	5.7	5.8	4.8	5	5.1	159
166							7.3			6.3	6.7		6	6.6		5.9	6	6.1	5.2	5.6	6	5	5.3	5.5	4.5	4.7	4.8	166
173										5.4	5.7		5.1	5.6		5.3	5.6		4.9	5	5.2	4.2	4.9	5.1	3.9	4.3	4.5	173
180													4.4			4.2	4.7		4.4	5		4.5	4.7	4.8	3.5	3.8	4.1	180
187																3.5	3.8		3.9	4.2		4	4.3		2.5	3.1	3.5	187
194																			3.6	3.7		3.2	3.7		2.4	2.7		194
201																												201

TAB 1627378 / 1627427 / 1627476

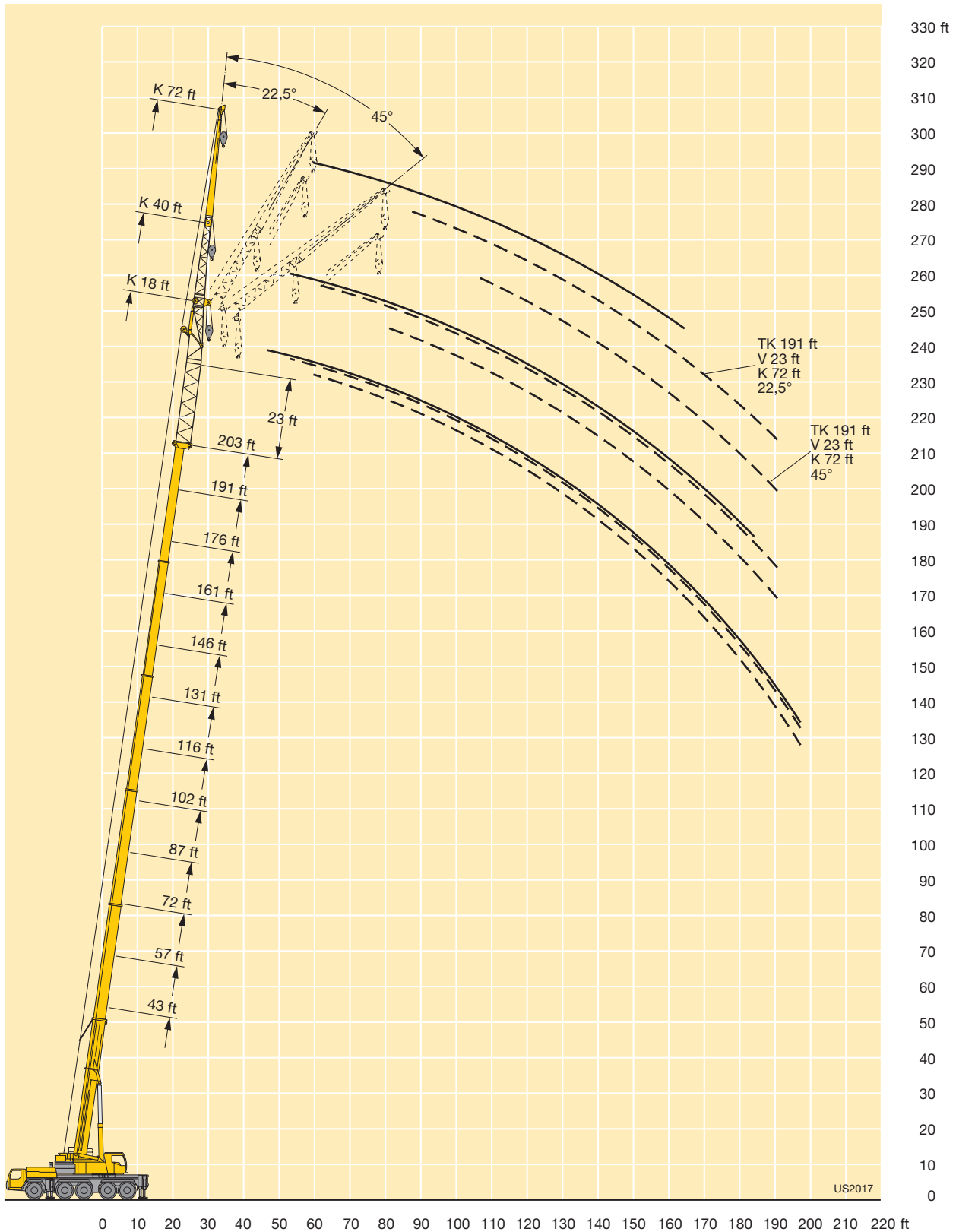
# Lifting capacities Forces de levage

**TVK/TVNZK**



ft	43 ft + 23 ft			102 ft + 23 ft			116 ft + 23 ft			131 ft + 23 ft			146 ft + 23 ft			161 ft + 23 ft			176 ft + 23 ft			191 ft + 23 ft			203 + 23 ft	ft	
	72 ft			72 ft			72 ft			72 ft			72 ft			72 ft			72 ft			72 ft					
	0°	22.5°	45°	0°	22.5°	45°	0°	22.5°	45°	0°	22.5°	45°	0°	22.5°	45°	0°	22.5°	45°	0°	22.5°	45°	0°	22.5°	45°	0°		
14	24.1																								14		
16	24																									16	
18	23.9																									18	
20	23.7																									20	
24	22.8				17.4																					24	
28	21.9				17.3			16.2																		28	
32	20.7				17.2			16.2		14.8																32	
36	19.6				16.9			16		14.7			13.2													36	
40	18.4	14.7			16.4			15.7		14.5			13.1			11.4										40	
47	16.3	14.4			15.6			15		14			12.8			11.4		9.6								47	
54	14.4	12.8			14.7	11.9		14.3	11.8	13.4			12.3			11.1	9.6				7.7			6	54		
61	12.6	11.4	9.9		13.8	11.7		13.5	11.6	12.8	10.9		11.9			10.7	9.4				7.7			5.9	61		
68	11.1	10.4	9.7		12.9	11		12.8	11	12.2	10.8		11.4	10		10.4	9.1				7.5			5.7	68		
75	10	9.5	8.9		12.1	10.3	8.8	12.1	10.4	11.7	10.2		11	9.9		10.1	8.9				7.4			5.6	75		
82	9	8.7	8.3		11.3	9.7	8.6	11.5	9.8	11.2	9.7	8.4	10.6	9.4		9.8	8.9				7.2			5.4	82		
89	8.2	8	7.7		10.7	9.1	8.2	10.8	9.3	10.6	9.2	8.2	10.2	9	7.9	9.4	8.6	7.7			8.4	7.9		7.1	6.7	5.3	89
96	7.5	7.4	7.2		10	8.6	7.9	10.2	8.8	10.1	8.8	7.9	9.8	8.6	7.8	9.1	8.2	7.5	8.2	7.6	6.9	6.5		5.1		96	
103	6.9	6.9	6.7		9.4	8.2	7.5	9.7	8.4	9.7	8.4	7.6	9.4	8.2	7.5	8.8	7.9	7.3	7.9	7.4	6.8	6.6	6.3		5	103	
110	6.4	6.4	6.3		8.8	7.8	7.2	9.1	7.9	9.2	8	7.3	9	7.9	7.2	8.5	7.6	7	7.6	7.2	6.7	6.4	6	5.8	4.9	110	
117	5.9	6			8.3	7.4	6.9	8.7	7.6	8.8	7.6	7.1	8.6	7.6	7	8.2	7.3	6.8	7.3	6.9	6.5	6.1	5.8	5.7	4.7	117	
124	5.5	5.6			7.8	7	6.6	8.2	7.2	8.3	7.3	6.8	8.3	7.3	6.8	7.9	7.1	6.6	7	6.7	6.3	5.8	5.6	5.4	4.6	124	
131					7.4	6.7	6.4	7.8	7	8	7	6.6	7.9	7	6.6	7.6	6.8	6.4	6.7	6.5	6.2	5.5	5.3	5.3	4.5	131	
138					7	6.4	6.2	7.4	6.7	7.6	6.7	6.4	7.6	6.8	6.4	7.3	6.6	6.3	6.3	6.2	6	5.2	5.1	5.1	4.3	138	
145					6.7	6.2	6.1	7	6.4	7.2	6.5	6.2	7.3	6.5	6.2	7	6.4	6.1	6	6	5.9	5	4.9	4.9	4.2	145	
152					6.3	5.9	5.6	6.7	6.2	6.9	6.3	6.1	7	6.3	6	6.6	6.2	6	5.7	5.7	5.7	4.7	4.7	4.8	4	152	
159					6	5.7		6.4	6	6.6	6	5.9	6.6	6.1	5.9	6.2	6	5.8	5.4	5.5	5.6	4.5	4.5	4.6	3.8	159	
166					5.7	5.5		6.1	5.7	6.4	5.9	5.8	6	5.9	5.8	5.4	5.8	5.7	5	5.2	5.3	4.2	4.3	4.4	3.6	166	
173					5.5	5.4		5.8	5.6	6.1	5.7	5.7	5.6	5.7	5.7	4.7	5.5	5.6	4.4	4.9	5.1	4	4.1	4.3	3.3	173	
180					5.2			5.6	5.4	5.6	5.5		5.2	5.5	5.6	4.4	5	5.5	3.8	4.7	4.8	3.6	3.9	4	3.1	180	
187								5.4	5.3	4.8	5.3		4.4	5.1	5.4	4.1	4.4	5	3.5	4.2	4.6	3	3.7	3.8	2.7	187	
194								5		4.1	4.8		3.7	4.6		3.6	4	4.3	3.3	3.6	4.1	2.4	3.4	3.6		194	
201										3.4	4		3	3.8		2.9	3.7	3.9	3	3.2	3.5		2.9	3.4		201	
208										2.8	2.7		2.4	3.1		2.5	3.1		2.4	3	3.1			2.8		208	
215																2.3	2.5			2.6	2.9					215	
222																2.2										222	

TAB 1627392 / 1627441 / 1627490



# Lifting capacities Forces de levage

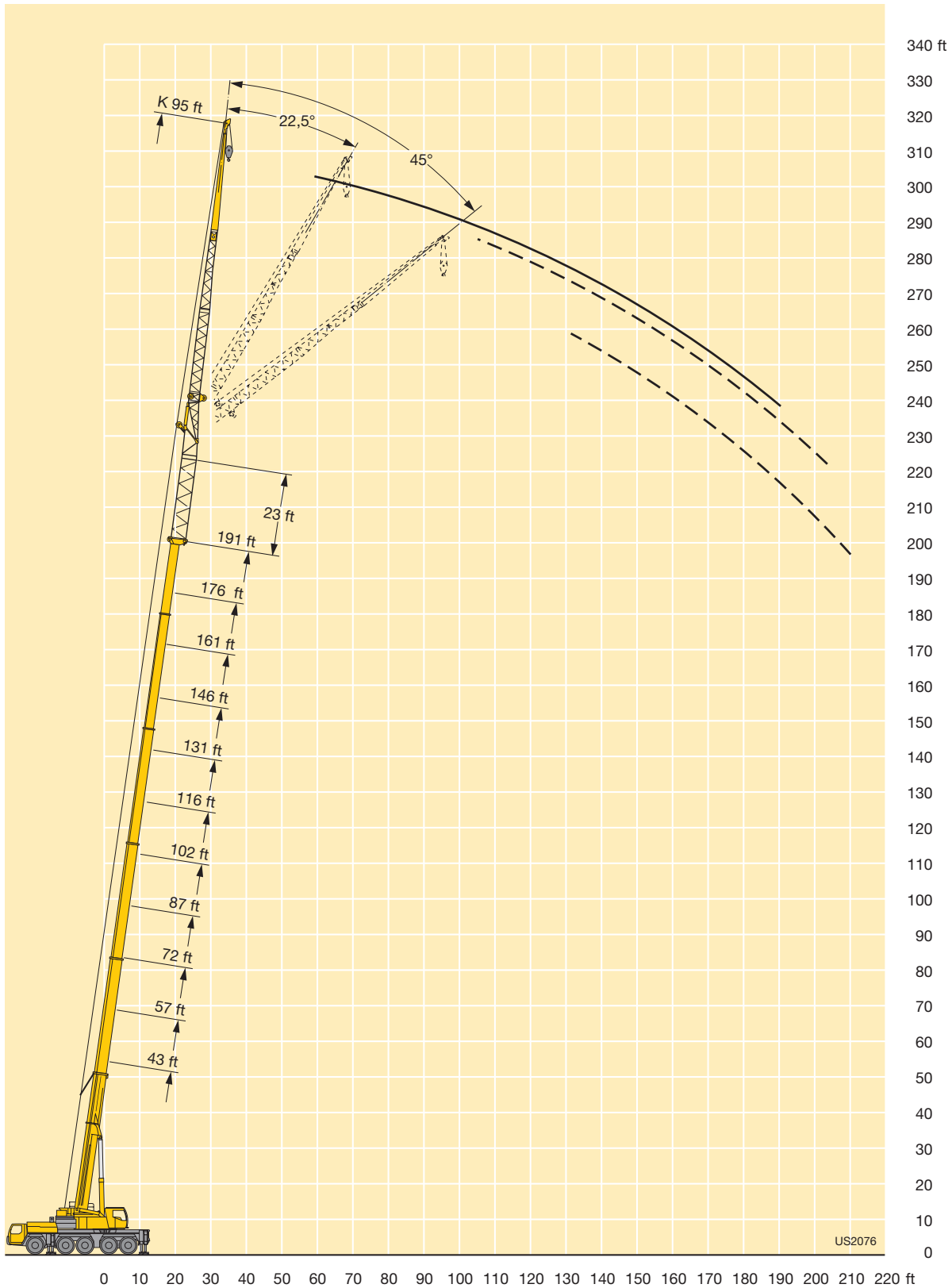
**TVK/TVNZK**



ft	43 ft + 23 ft			102 ft + 23 ft			116 ft + 23 ft			131 ft + 23 ft			146 ft + 23 ft			161 ft + 23 ft			176 ft + 23 ft			191 ft + 23 ft			ft
	95 ft			95 ft			95 ft			95 ft			95 ft			95 ft			95 ft						
	0°	22.5°	45°	0°	22.5°	45°	0°	22.5°	45°	0°	22.5°	45°	0°	22.5°	45°	0°	22.5°	45°	0°	22.5°	45°	0°	22.5°	45°	
18	15.7																							18	
20	15.7																							20	
24	15.5																							24	
28	15.4				12.1																			28	
32	15.1				12.1			11.4																32	
36	14.6				12			11.4																36	
40	14				11.9			11.3		10.5		9.5												40	
47	12.9				11.5			11		10.4		9.5			8.3									47	
54	11.8	9.9			11			10.7		10.1		9.3			8.2			7				4.6		54	
61	10.8	9.6			10.5			10.2		9.7		9			8.1			6.9				4.6		61	
68	9.7	8.7			9.9	8.3		9.7	8.3	9.3		8.7			7.9			6.8				4.6		68	
75	8.8	8			9.4	8.1		9.3	8.1	8.9	7.7	8.4			7.6			6.7				4.6		75	
82	7.9	7.3	6.6		8.9	7.6		8.8	7.6	8.5	7.5	8.1	7		7.4			6.5				4.5		82	
89	7.2	6.6	6.3		8.4	7.1		8.4	7.2	8.2	7.1	7.7	6.9		7.1	6.4		6.3				4.4		89	
96	6.5	6.1	5.8		7.9	6.7	5.8	8	6.8	7.8	6.7	7.4	6.5		6.9	6.2		6.1	5.6			4.2		96	
103	6	5.6	5.4		7.4	6.3	5.6	7.5	6.4	7.4	6.4	5.5	7.1	6.2		6.6	5.9		5.9	5.5		4.1	4.5	103	
110	5.5	5.2	5		6.9	6	5.4	7.1	6.1	7.1	6.1	5.4	6.8	5.9	5.2	6.4	5.7		5.8	5.3		4	4.4	110	
117	5	4.8	4.7		6.5	5.6	5.1	6.7	5.8	6.8	5.8	5.2	6.6	5.7	5.1	6.1	5.4	4.9	5.6	5.1		3.9	4.3	117	
124	4.6	4.4	4.4		6.1	5.3	4.9	6.3	5.4	6.4	5.5	4.9	6.3	5.4	4.9	5.9	5.2	4.7	5.4	4.9	4.5	3.7	4.2	124	
131	4.3	4.1			5.8	5.1	4.7	6	5.2	6.1	5.2	4.8	6	5.2	4.7	5.7	5	4.6	5.2	4.7	4.4	3.7	4.1	3.8	131
138	3.9	3.9			5.4	4.8	4.5	5.7	4.9	5.8	5	4.6	5.8	5	4.5	5.5	4.8	4.4	5.1	4.6	4.3	3.6	3.9	3.7	138
145	3.6				5.1	4.6	4.3	5.4	4.7	5.5	4.8	4.4	5.5	4.7	4.4	5.3	4.6	4.3	4.9	4.4	4.1	3.5	3.8	3.6	145
152					4.8	4.3	4.1	5.1	4.5	5.2	4.6	4.3	5.2	4.6	4.3	5.1	4.5	4.2	4.7	4.3	4	3.4	3.6	3.5	152
159					4.6	4.1	4	4.8	4.3	5	4.4	4.1	5	4.4	4.1	4.9	4.3	4	4.5	4.1	3.9	3.3	3.4	3.4	159
166					4.3	4	3.9	4.6	4.1	4.7	4.2	4	4.8	4.2	4	4.7	4.2	3.9	4.2	4	3.8	3.1	3.3	3.3	166
173					4.1	3.8	3.8	4.3	4	4.5	4	3.9	4.6	4.1	3.9	4.3	4	3.8	4	3.8	3.7	3	3.1	3.1	173
180					3.9	3.6		4.1	3.8	4.3	3.9	3.8	4.3	3.9	3.8	3.8	3.9	3.7	3.5	3.7	3.6	2.8	3	3	180
187					3.7	3.5		3.9	3.6	4.1	3.8	3.7	4.1	3.8	3.7	3.4	3.7	3.7	2.9	3.5	3.5	2.6	2.8	2.9	187
194					3.5	3.4		3.8	3.5	3.9	3.6	3.6	3.7	3.6	3.6	3.2	3.6	3.6	2.5	3.4	3.5		2.7	2.8	194
201					3.4	3.4		3.6	3.4	3.5	3.5	3.6	3.2	3.5	3.6	2.8	3.3	3.5	2.2	3	3.4		2.5	2.7	201
208					3.3			3.4	3.4	3	3.4		2.5	3.4	3.5	2.3	2.9	3.3		2.5	3.2		2.3	2.5	208
215								3.3	3.3	2.4	3.1		3	3.3		2.7	2.9			2.6			2.3	2.5	215
222										2.5			2.3			2.3	2.6								222

TAB 1627406 / 1627455 / 1627504





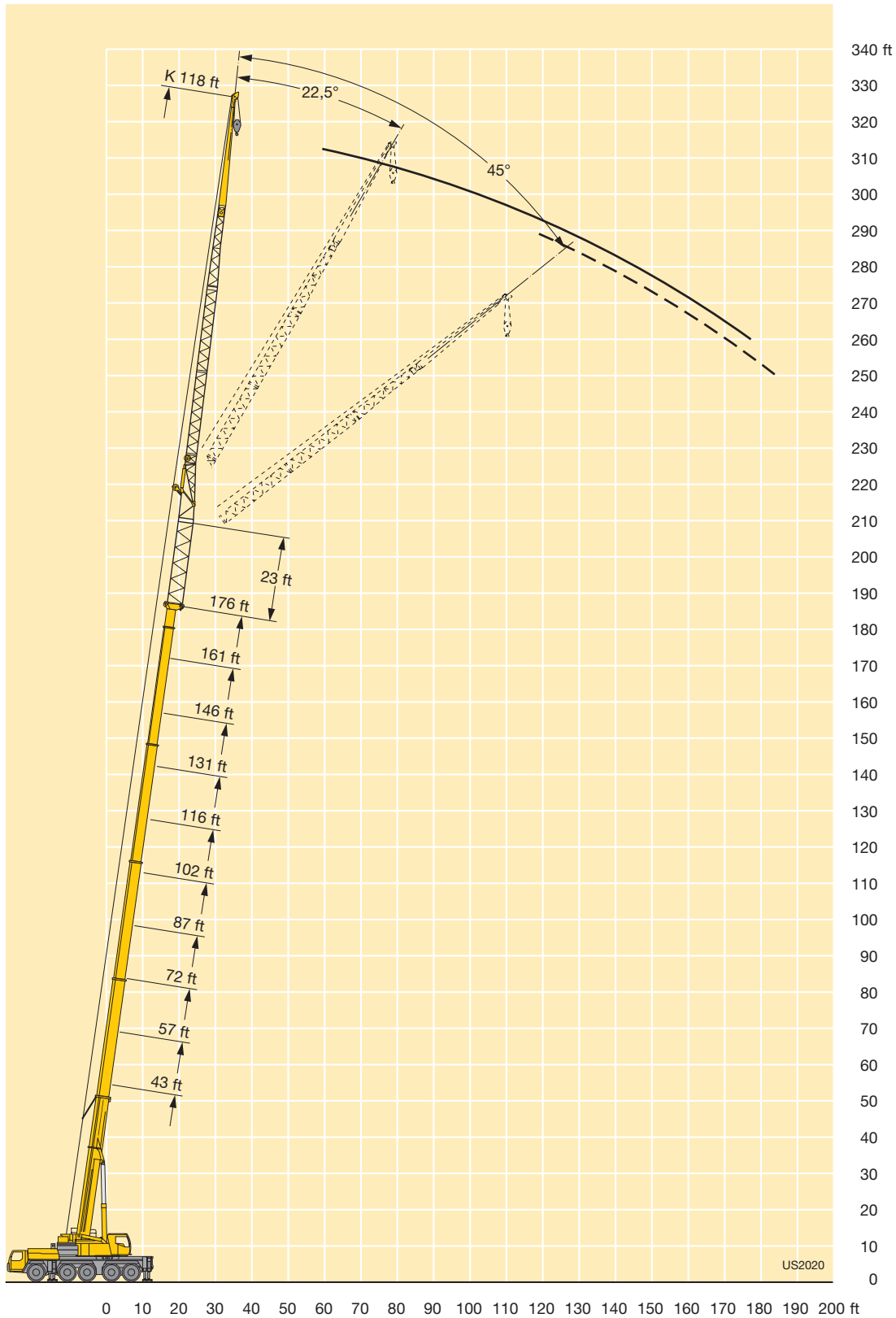
# Lifting capacities Forces de levage

**TVK/TVNZK**



ft	43 ft + 23 ft			102 ft + 23 ft			116 ft + 23 ft			131 ft + 23 ft			146 ft + 23 ft			161 ft + 23 ft			176 ft + 23 ft		ft	
	118 ft			118 ft			118 ft			118 ft			118 ft			118 ft			118 ft			
	0°	22.5°	45°	0°	22.5°	45°	0°	22.5°	45°	0°	22.5°	45°	0°	22.5°	45°	0°	22.5°	45°	0°	22.5°		
24	11.1																				24	
28	11																					28
32	10.9																					32
36	10.9																					36
40	10.7			7.3			7.3															40
47	10.1			7.3			7.3			7.3												47
54	9.4			7.3			7.3			7.3			6.7			5.8						54
61	8.7			7.3			7.3			7.2			6.6			5.8			3.6			61
68	8			7.3			7.3			7			6.4			5.7			3.6			68
75	7.3	6.6		7.2			7.1			6.7			6.2			5.6			3.6			75
82	6.7	6.1		6.9			6.7			6.5			6			5.4			3.6			82
89	6	5.5		6.5	5.6		6.4	5.4		6.2			5.8			5.2			3.6			89
96	5.4	5		6.1	5.2		6.1	5.2		5.9	5.1		5.5			5.1			3.5			96
103	4.9	4.6	4.1	5.8	4.9		5.8	4.9		5.6	4.9		5.3	4.7		4.9			3.4			103
110	4.5	4.2	4	5.4	4.6		5.5	4.6		5.4	4.6		5.1	4.4		4.7	4.2		3.3			110
117	4	3.9	3.7	5.1	4.3	3.7	5.2	4.3		5.1	4.3		4.9	4.2		4.5	4		3.2	3.6		117
124	3.7	3.5	3.4	4.7	4	3.6	4.9	4.1	3.6	4.8	4.1	3.5	4.7	4		4.3	3.8		3.1	3.5		124
131	3.4	3.2	3.1	4.4	3.8	3.4	4.6	3.9	3.4	4.6	3.9	3.4	4.4	3.8	3.3	4.1	3.6		3	3.4		131
138	3	2.9	2.9	4.1	3.5	3.2	4.3	3.6	3.2	4.3	3.7	3.2	4.2	3.6	3.2	4	3.5	3.1	2.9	3.2		138
145	2.8	2.7	2.7	3.9	3.3	3.1	4	3.4	3.1	4.1	3.5	3.1	4	3.4	3	3.8	3.3	2.9	2.8	3.1		145
152	2.5	2.5	2.5	3.6	3.1	2.9	3.8	3.3	2.9	3.8	3.3	2.9	3.8	3.3	2.9	3.6	3.1	2.8	2.7	2.9		152
159	2.3	2.3		3.3	2.9	2.7	3.6	3.1	2.8	3.6	3.1	2.8	3.6	3.1	2.8	3.5	3	2.7	2.6	2.8		159
166				3.1	2.8	2.6	3.3	2.9	2.7	3.4	2.9	2.7	3.4	2.9	2.7	3.3	2.9	2.6	2.5	2.7		166
173				2.9	2.6	2.5	3.1	2.7	2.5	3.2	2.8	2.6	3.3	2.8	2.6	3.2	2.7	2.5	2.4	2.6		173
180				2.8	2.5	2.4	2.9	2.6	2.4	3.1	2.6	2.5	3.1	2.6	2.5	3	2.6	2.4	2.3	2.5		180
187				2.6	2.3	2.3	2.8	2.4	2.3	2.9	2.5	2.4	2.9	2.5	2.4	2.8	2.5	2.3	2.2	2.4		187
194				2.4	2.2	2.2	2.6	2.3	2.2	2.7	2.4	2.3	2.7	2.4	2.3	2.4	2.4	2.2		2.2		194
201				2.3			2.4	2.2	2.2	2.6	2.3	2.2	2.6	2.3	2.2		2.3	2.2		2.2		201
208							2.3		2.1	2.4	2.2	2.1	2.4	2.2	2.1		2.2					208
215							2.2			2.3												215

TAB 1627413 / 1627462 / 1627511



## Equipment Equipment

### Crane carrier

<b>Frame</b>	Self-manufactured, weight-optimized and torsion resistant box-type design of high-tensile structural steel.
<b>Outriggers</b>	4-point supporting system, hydraulically telescopable into horizontal and vertical direction. Automatic levelling of crane. Electronic inclination indicator.
<b>Engine</b>	6-cylinder Diesel, make Liebherr, type D846 A7, watercooled, output 370 kW (503 h.p.) at 1900 rpm, max. torque 1737 lbs-ft at 1200 rpm – 1500 rpm. Exhaust emissions acc. to 97/68/EG stage 3 and EPA/CARB Tier 3. Fuel reservoir: 127 gallons.
<b>Transmission</b>	ZF 12-speed gear box with automatic control system AS-TRONIC. ZF-intarder fitted directly to the gear. Two-stage transfer case with lockable transfer differential.
<b>Axles</b>	Welded design, made of high-tensile fine grained steel. All axles steerable. Axles 2, 4 and 5 are planetary axles with differential locks.
<b>Suspension</b>	All axles are mounted on hydropneumatic suspension – “Niveaumatik suspension” and are lockable hydraulically.
<b>Tyres</b>	10 tyres, size: 445/95 R 25 (16.00 R 25).
<b>Steering</b>	ZF-servocom power steering, dual circuit system with hydraulic servo system and auxiliary pump system, driven by the axle. At road displacement, axles 3, 4 and 5 electrohydraulically speed-dependent and from 18.6 mph, axles 3 and 4 are fixed to straight displacement. From 37.2 mph, axle 5 is fixed straight. Steering according to EG directive 70/311 EWG.
<b>Brakes</b>	Service brake: all-wheel servo-air brake, all axles are equipped with disc brakes, dual circuit. Parking brake: Spring brake actuator, acting on the wheels of the 2 <sup>nd</sup> to 5 <sup>th</sup> axle. Sustained-action brakes: Engine brake as exhaust retarder with Liebherr additional brake system ZBS. Intarder on gear. Brakes acc. to EG directives 71/320 EWG.
<b>Driver's cab</b>	Spacious, steel made, corrosion resistant cab, cataphoretic dip-primed, on resilient suspension with hydraulic shock absorbers, sound and heat absorbing internal panelling acc. to EG directive, safety glazing, operating and control instruments, comfortably equipped.
<b>Electrical system</b>	Modern data bus technique, 24 Volt DC, 2 batteries of 170 Ah each.

### Crane superstructure

<b>Frame</b>	Self-manufactured, weight-optimized and torsion resistant welded design of high-tensile structural steel; linked by a triple-row roller slewing rim to the carrier for continuous rotation.
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<b>Crane engine</b>	4-cylinder Diesel, make Liebherr, type D934S A6, watercooled, output 145 kW (197 h.p.) at 1800 rpm, max. torque 678 lbs-ft at 1100 rpm – 1500 rpm. Exhaust emissions acc. to 97/68/EG stage 3 and EPA/CARB Tier 3. Fuel reservoir: 75 gallons.
<b>Crane drive</b>	Diesel-hydraulic, with 5 axial piston variable displacement pumps, with servo-control and capacity control, 1 double gear pump. Compact hydraulic drive flanged to the Diesel engine. Drive assembly completely enclosed for noise abatement.
<b>Control</b>	Electronic control by the LICCON computer system (PLC control), 2 selfcentering hand control levers (joy-stick type), with winch and slewing gear signal devices. Infinitely variable crane motions.
<b>Hoist gear</b>	Axial piston variable displacement motor, Liebherr hoist drum with integrated planetary gear and spring-loaded static brake. Actuation by closed regulated oil circuit.
<b>Luffing gear</b>	1 differential ram with nonreturn valve.
<b>Slewing gear</b>	Axial piston fixed displacement motor, planetary gear, spring-loaded static brake.
<b>Crane cab</b>	All-steel construction, entirely galvanized, powder coated, with safety glazing, operating and control instruments, comfortably equipped, cab tiltable backwards.
<b>Safety devices</b>	LICCON safe load indicator, test system, hoist limit switch, safety valves to prevent pipe and hose ruptures.
<b>Telescopic boom</b>	Buckling and torsion resistant design of high-tensile structural steel, oviform boom profile, 1 base section and 5 telescopic sections. All telescopic sections hydraulically extendable independent of one another. Rapid-cycle telescoping system “Telematik”. Boom length: 43 ft – 203 ft.
<b>Counterweight</b>	70500 lbs basic counterweight.
<b>Electrical system</b>	Modern data bus technique, 24 Volt DC, 2 batteries of 170 Ah each.

### Additional equipment

<b>Swing-away jib</b>	40 ft – 118 ft long, mountable to the telescopic boom at 0°, 22.5° or 45°, integrated erection jib of 18 ft. Hydraulic ram for operating the swing-away jib from 0° – 45° (option).
<b>Telescopic boom extension</b>	23 ft long lattice section, thus 23 ft higher pinning point for swing-away jib.
<b>2<sup>nd</sup> hoist gear</b>	For two-hook operation or for operation with swing-away jib if the hoist rope shall remain reeved.
<b>Tyres</b>	10 tyres, size 525/80 R 25 (20.5 R 25).
<b>Drive 10 x 8</b>	Additional drive of the 1 <sup>st</sup> axle.
<b>Additional counterweight</b>	32000 lbs for a total counterweight of 102500 lbs.

Other items of equipment available on request.

## Equipment Equipment

### Châssis porteur

<b>Cadre</b>	Construction en caisse résistante à la torsion et optimisée en poids réalisée par Liebherr en acier de construction à grain fin très rigide.
<b>Calage</b>	Dispositif de calage horizontal et vertical en 4 points, entièrement déployable hydrauliquement. Nivellement automatique du calage. Indicateurs électroniques d'inclinaison.
<b>Moteur</b>	Moteur diesel, 6 cylindres, fabriqué par Liebherr, de type D846 A7, à refroidissement par eau, de 370 kW (503 ch) à 1900 rpm, couple max. 1737 lbs-ft à 1200 rpm – 1500 rpm. Emissions des gaz d'échappement conformes aux directives 97/68/EG partie 3 et EPA/CARB Tier 3. Capacité du réservoir à carburant: 127 gallons.
<b>Boîte de vitesse</b>	Boîte de vitesses ZF à 12 rapports, mécanisme automatisé à commande AS-TRONIC. Ralentisseur hydrodynamique ZF directement accouplé à la boîte. Boîte de transfert à 2 étages avec blocage de différentiel.
<b>Essieux</b>	Construction soudée en acier haute résistance à grains fins pour l'ensemble des 5 essieux. Tous les essieux sont directeurs. Essieux 2, 4 et 5 planétaires avec blocage du différentiel.
<b>Suspension</b>	Suspension hydropneumatique «Niveaumatik» - sur tous les essieux. Chaque essieu peut être bloqué hydrauliquement.
<b>Pneumatiques</b>	10 pneus de taille: 445/95 R 25 (16.00 R 25).
<b>Direction</b>	Direction hydraulique ZF Servocom, à 2 circuits, assistée hydrauliquement, avec pompe auxiliaire entraînée par essieu. Lors de déplacements sur route, les essieux 3, 4 et 5 sont dirigés électrohydrauliquement en fonction de la vitesse, et à partir de 18.6 mph, les essieux 3 et 4 sont fixés en marche rectiligne. A partir d'env. 37.2 mph, l'essieu 5 est fixé en marche rectiligne. Direction conforme aux directives européennes 70/311 CE.
<b>Freins</b>	Freins de service: servofrein à air comprimé, tous les essieux sont munis de freins à disque, à 2 circuits. Frein à main: ressort accumulé agissant sur les roues des essieux 2 à 5. Freins continus: frein moteur par clapet sur échappement avec système de ralentissement Liebherr ZBS. Ralentisseur hydrodynamique accouplé à la boîte de vitesses. Freins conformes aux directives européennes 71/320 CE.
<b>Cabine du conducteur</b>	Cabine spacieuse en tôle d'acier traitement anti-corrosion par bain de cataphorèse, avec suspension élastique et amortisseurs hydrauliques, revêtement intérieur avec isolation phonique et thermique selon les directives européennes, glaces de sécurité, appareils de commande et de contrôle, équipement confortable.
<b>Installation électrique</b>	Technique moderne de transmission de données par BUS de données, courant continu 24 Volts, 2 batteries de 170 Ah chacune.

### Partie tournante

<b>Cadre</b>	Construction soudée résistante à la torsion et optimisée en poids réalisée par Liebherr en acier de construction à grain fin très rigide. Couronne d'orientation à rouleaux à 3 rangées permettant une rotation illimitée sert de pièce de liaison avec le châssis de la grue.
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<b>Moteur</b>	Moteur diesel Liebherr, 4 cylindres, de type D934S A6, à refroidissement par eau, de 145 kW (197 ch) à 1800 rpm, couple max. 678 lbs-ft à 1100 rpm – 1500 rpm. Emissions des gaz d'échappement conformes aux directives 97/68/EG partie 3 et EPA/CARB Tier 3. Capacité du réservoir à carburant: 75 gallons.
<b>Entraînement de la grue</b>	Diesel hydraulique avec 5 pompes à débit variable à pistons axiaux, servocommande et régulation de la puissance, 1 double pompe à engrenages. Entraînement hydraulique compact, accouplé directement au moteur Diesel, mécanisme d'entraînement total fermé pour une bonne insonorisation.
<b>Commande</b>	Commande électronique par l'ordinateur LICCON (commande SPS). Deux leviers de commande à 4 positions et à auto-centrage, avec capteur de rotation des treuils et du mécanisme d'orientation. Commande des mouvements progressive.
<b>Mécanisme de levage</b>	Moteur hydraulique à cylindrée variable, treuil de marque Liebherr avec réducteur planétaire à frein d'arrêt à lamelles intégrées, en circuit hydraulique fermé.
<b>Mécanisme de relevage</b>	1 vérin hydraulique différentiel avec clapets anti-retour de sécurité.
<b>Dispositif de rotation</b>	Moteur à cylindrée constante à pistons axiaux, engrenage planétaire, frein d'arrêt commandé par ressort.
<b>Cabine du grutier</b>	Construction en tôle d'acier entièrement zinguée avec peinture par poudrage et cuisson au four, avec glaces de sécurité, appareils de commande et de contrôle, équipement confortable. Cabine inclinable vers l'arrière.
<b>Dispositif de sécurité</b>	Contrôleur de charge, «LICCON», système test, limitation de la course pour le levage, soupape de sûreté contre la rupture de tubes et de tuyaux.
<b>Flèche télescopique</b>	Flèche télescopique en acier à haute résistance à grains fins, à profil ovale, 1 élément de base et 5 éléments télescopiques. Tous les éléments télescopiques indépendamment les uns des autres. Système de télescopage séquentiel rapide, «Telematik». Longueur de flèche: 43 ft – 203 ft.
<b>Contrepoids</b>	Plaque de base 70500 lbs.
<b>Installation électrique</b>	Technique moderne de transmission de données. Courant continu 24 Volts, 2 batteries de 170 Ah chacune.

### Équipement supplémentaire

<b>Fléchette pliante</b>	Longueur: 40 ft – 118 ft, montable sous un angle de 0°, 22.5° ou 45°, fléchette de montage intégrée de 18 ft de long. Vérin hydraulique pour le relevage de la fléchette pliante de 0° à 45° (en option).
<b>Rallonge flèche télescopique</b>	Élément en treillis de 23 ft, de cette manière point d'articulation plus haute de 23 ft pour la flèche pliante.
<b>2ème mécanisme de levage</b>	Pour l'utilisation du deuxième crochet, ou bien pour une utilisation avec fléchette pliante lorsque le câble de levage principal rest mouflé.
<b>Pneumatiques</b>	10 pneus. Taille: 525/80 R 25 (20.5 R 25).
<b>Entraînement 10 x 8</b>	Essieu 1 est entraîné additionnellement.
<b>Contrepoids additionnel</b>	32000 lbs pour un contrepoids total de 102500 lbs.

Autres équipements supplémentaires sur demande.

## Remarks referring to load charts

1. The lifting capacities do not exceed 85 % of the tipping load according to ASME B 30.5.  
The crane's structural steelwork is in accordance with EN 13000 and ASME B 30.5.
2. For the calculation of the load charts at least a wind speed of 23 ft/s (7 m/s, 15.7 mph) and regarding the load a sail area of 1 m<sup>2</sup> per ton load and a wind resistance coefficient of 1.2 on the load have been taken into account. For lifting of loads with large sail areas and/or high wind resistance coefficients the maximum wind speed as stated in the load charts has to be reduced.
3. Lifting capacities are given in kips.
4. The weight of the hook blocks and hooks must be deducted from the lifting capacities.
5. Working radii are measured from the slewing centreline.
6. The lifting capacities given for the telescopic boom only apply if the folding jib is taken off.
7. Lifting capacities above 246900 lbs / 282200 lbs only with additional pulley block/special equipment.
8. The data of this brochure serves only for general information. All information is provided without warranty. Instructions for the correct commissioning of the crane please take from the operation manual and the load chart book.

## Remarques relatives aux tableaux des charges

1. La capacité de charge ne doit pas dépasser 85 % de la charge de basculement conformément à ASME B 30.5.  
La structure métallique de la grue est conforme à EN 13000 et ASME B 30.5.
2. Une vitesse de vent de 23 ft/s (7 m/s, 15.7 mph) minimum, une surface de prise au vent de 1 m<sup>2</sup> par tonne ainsi qu'un coefficient de résistance au vent de la charge 1,2 sont pris en compte pour le calcul des tableaux de charge. Lorsque des charges ayant une surface de prise au vent et/ou un coefficient de résistance au vent plus élevé(e)s sont levées, la vitesse de vent maximale indiquée dans les tableaux de charge doit être réduite.
3. Les forces de levage sont données en kips.
4. Les poids des mouffes et crochets doit être soustrait des charges indiquées.
5. Les portées sont calculées à partir de l'axe de rotation.
6. Les forces indiquées pour la flèche télescopique s'entendent fléchette dépliée.
7. Forces de levage plus de 246900 lbs / 282200 lbs seulement avec moufle additionnel/équipement supplémentaire.
8. Les données de cette brochure sont données à titre informatif. Ces renseignements sont sans garantie. Les consignes relatives à la bonne mise en service de la grue sont disponibles dans le manuel d'utilisation et le manuel de tableaux de charge.