



190 USt



203 ft



256 ft



325 ft

Efficiency coupled with massive lifting capacity

LTM 1160-5.2

Mobile crane

Grue mobile

LIEBHERR

Mobile and crawler cranes



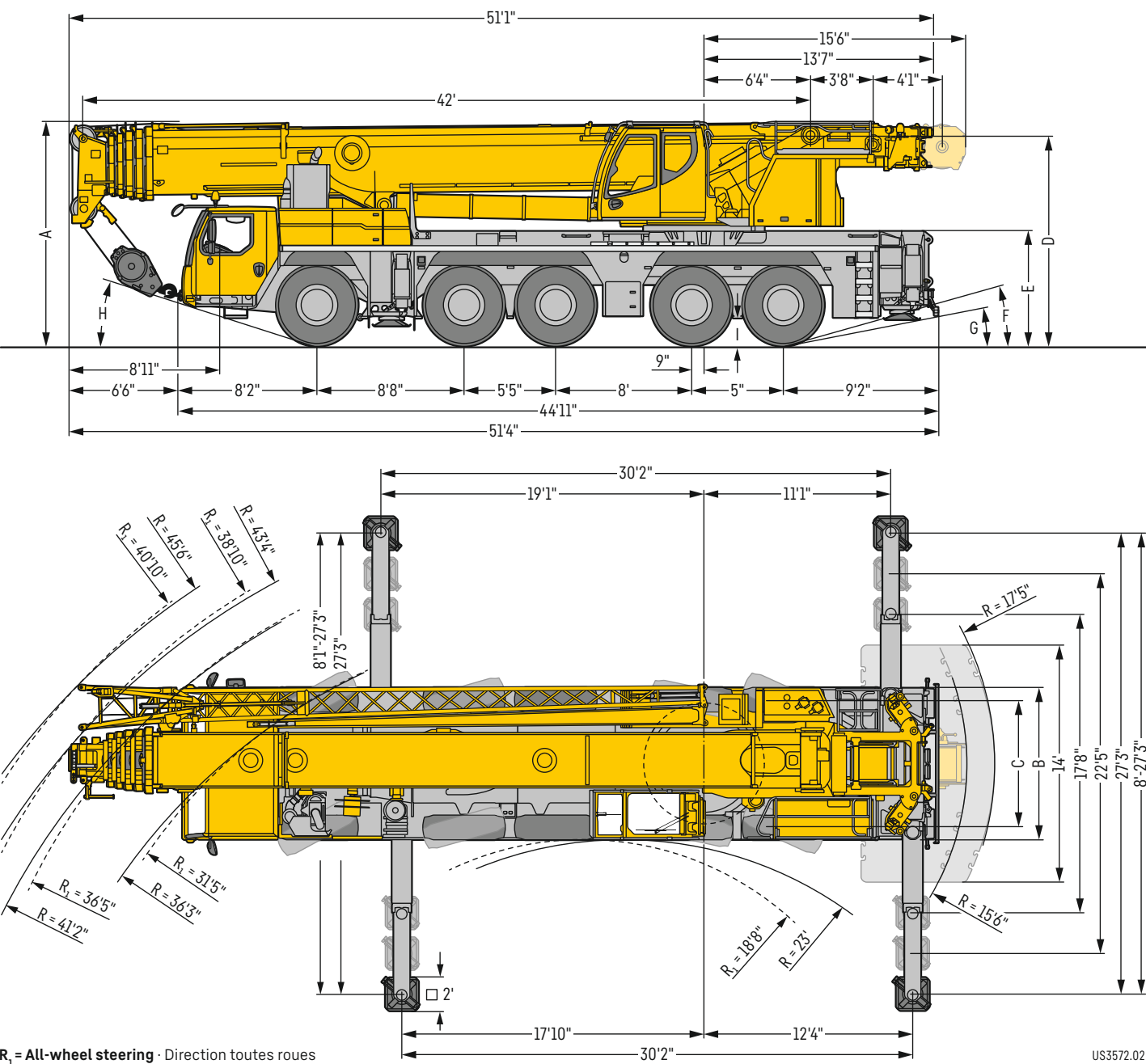
Technical data

Caractéristiques technique

Dimensions	
Encombrement	3
Mobile crane	
Grue mobile	4-5
Fuel saving and noise reduction	
Economie de carburant et réduction du bruit	6-7
Counterweight	
Contrepoids	8
On-road driving, Jobsite driving	
Déplacement sur route, Déplacement sur chantier	9
Crane data	
Dates de la grue	10
Boom/jib combinations	
Configurations de flèche	11
T	12-21
TNZK	22-25
TVNZK	26-40
TK	41-42
Equipment	
Equipement	43-44
Description of symbols	
Explication des symboles	45
Remarks	
Remarques	46

Dimensions

Encombrement



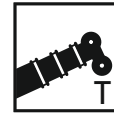
Dimensions · Encombrement

	incl. 9 ft 10 in-special axle · incl. axe spécial de 9 ft 10 in									
	A	A 4 " *	B	C	D	E	F	G	H	I
445/95 R 25 (16.00 R 25) – ET50	13'1"	12'10"	10'2"	8'4"	12'4"	6'9"	16°	10°	18°	1'5"
445/95 R 25 (16.00 R 25) – ET18	13'1"	12'10"	10'2"	8'7"	12'4"	6'9"	16°	10°	18°	1'5"
525/80 R 25 (20.5 R 25)	13'1"	12'10"	10'2"	8'5"	12'4"	6'9"	16°	10°	18°	1'5"

* lowered · abaissé

LTM 1160-5.2

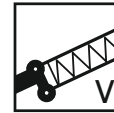




203 ft



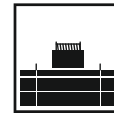
35 ft – 62 ft



3 x 23 ft



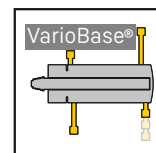
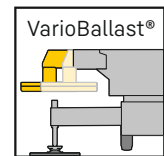
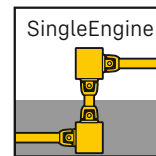
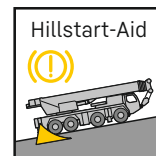
9 ft 6 in



119,000 lb



400 KW / 544 h.p.



Fuel saving and noise reduction

Economie de carburant et réduction du bruit

ECOdrive
TRAXON

Driving strategy in the carrier with ECO- or Power-mode to reduce noise and fuel

L'adaptation du mode de déplacement avec le mode ECO ou le mode Puissance permet de réduire le niveau sonore et la consommation de carburant

ZF-TraXon

**Automated shift gearbox,
12 forward gears, 2 reverse gears**

Boîte de vitesses automatisée,
12 vitesses avant, 2 vitesses arrière

Innovative One-Engine-Concept

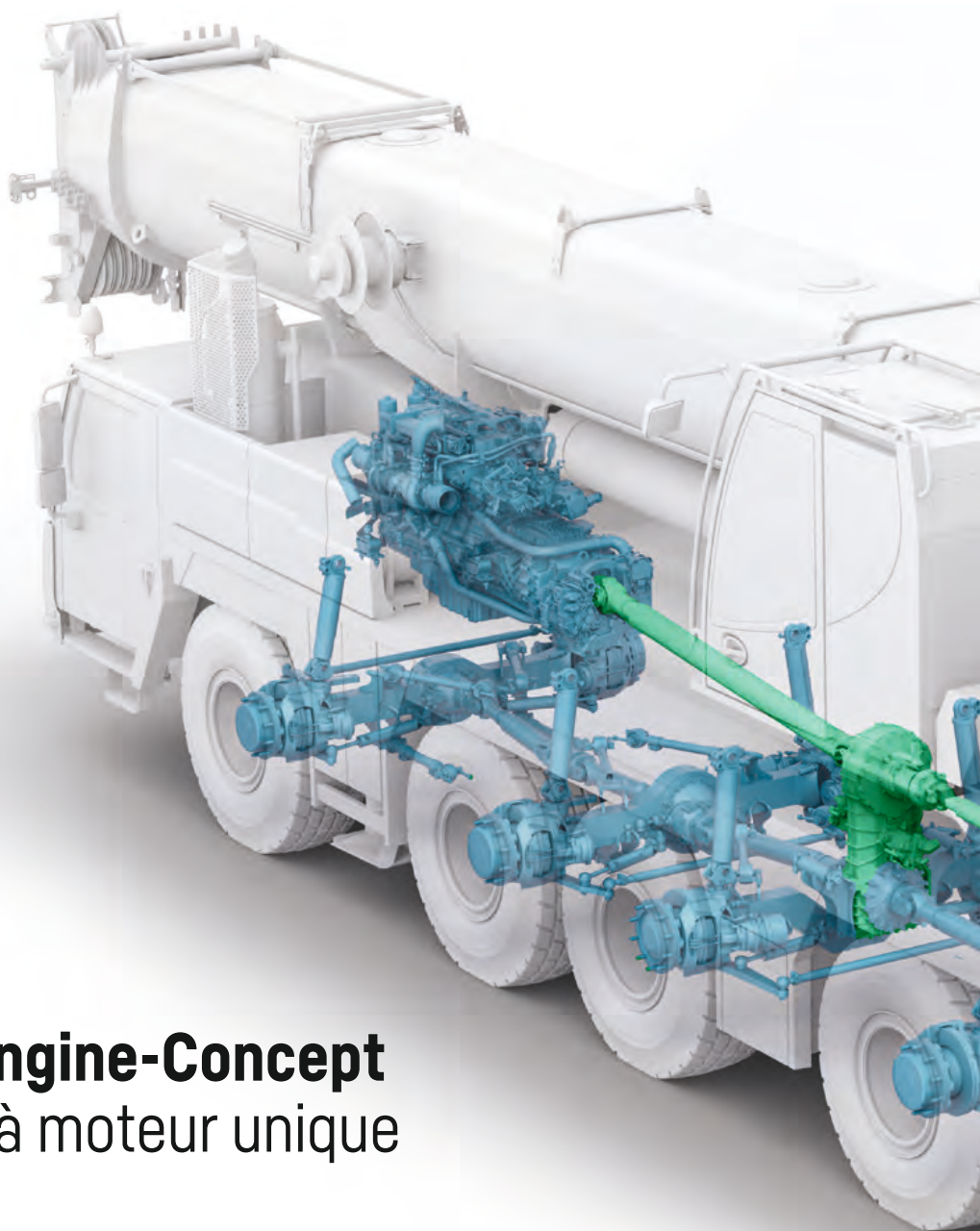
Concept innovant à moteur unique

**Drive from chassis engine via a mechanical shaft
with special high efficiency factor**

Increased effectiveness and reduced maintenance expenditure

Entraînement du moteur du châssis par le biais d'un arbre mécanique particulièrement performant

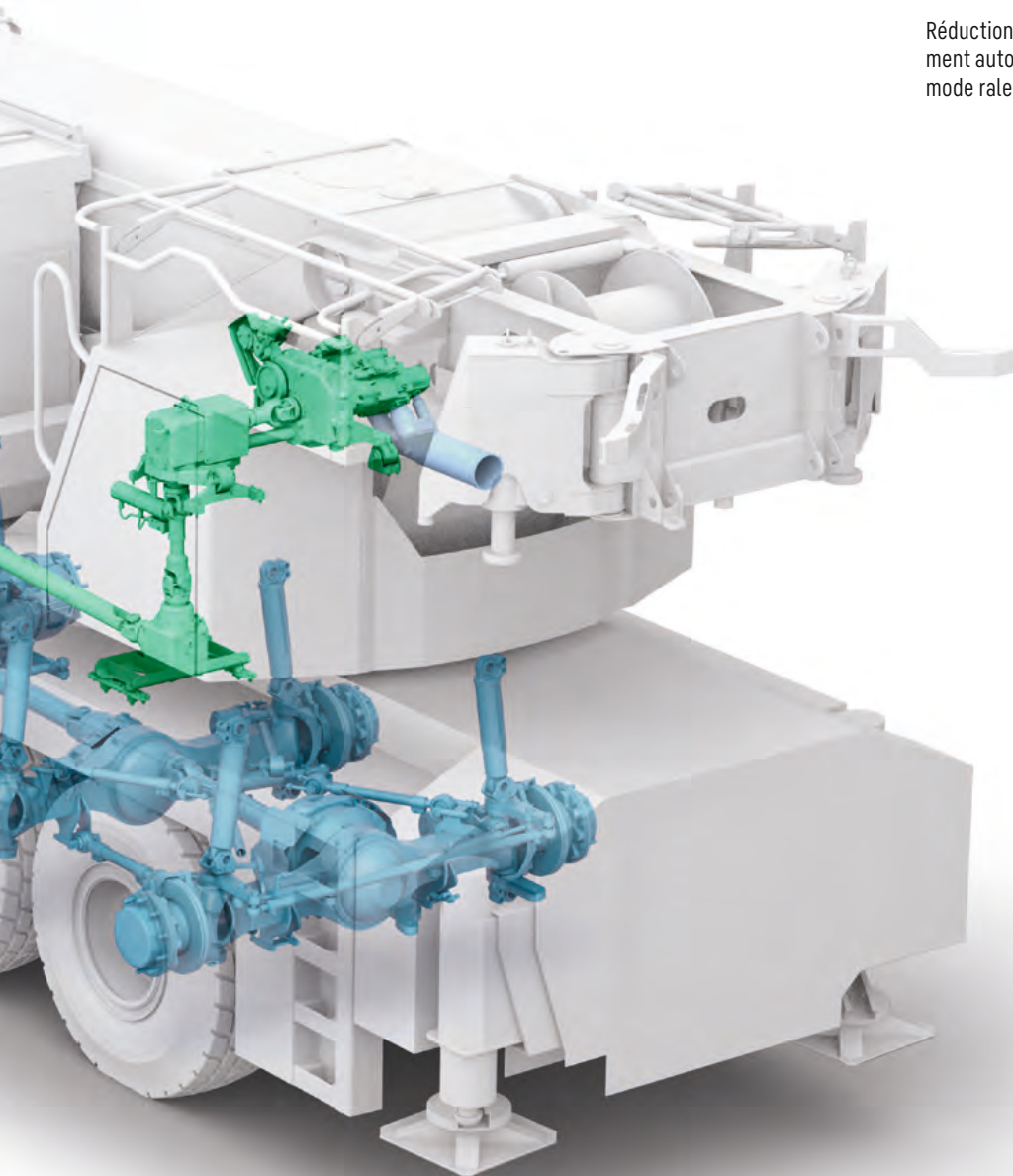
Rentabilité accrue et entretien nettement réduit



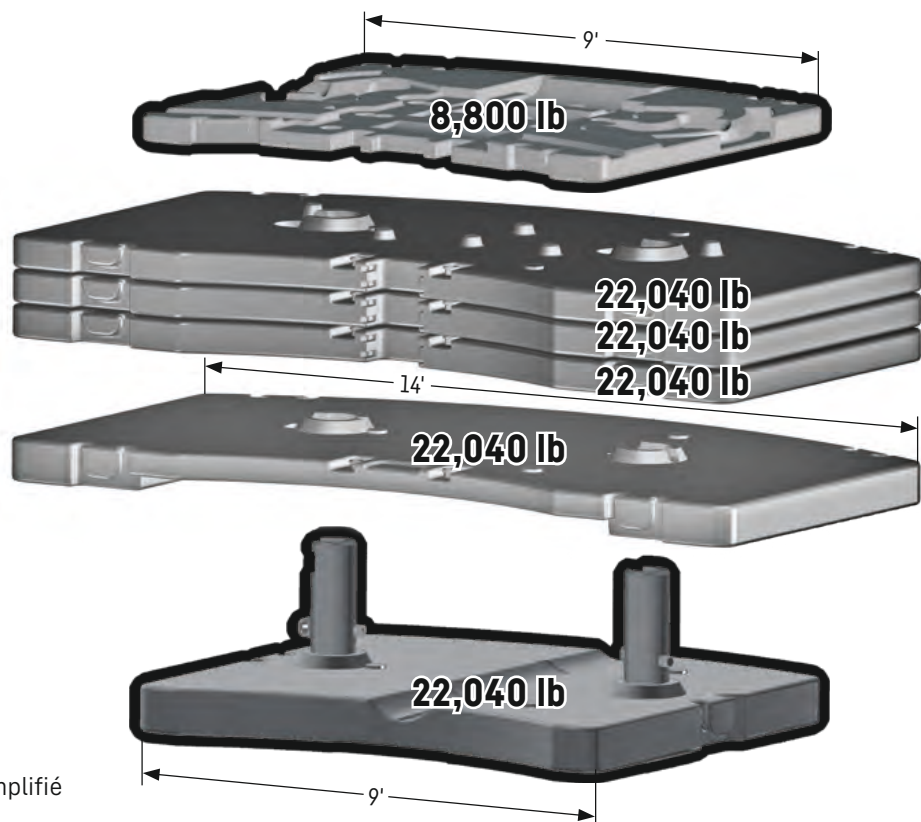
ECMode

Reduced fuel consumption due to automatic disengaging of the complete pump drive at engine idling with automatic speed adjustment

Réduction de la consommation de carburant par désengagement automatique de l'entraînement complet de la pompe en mode ralenti avec adaptation automatique du régime

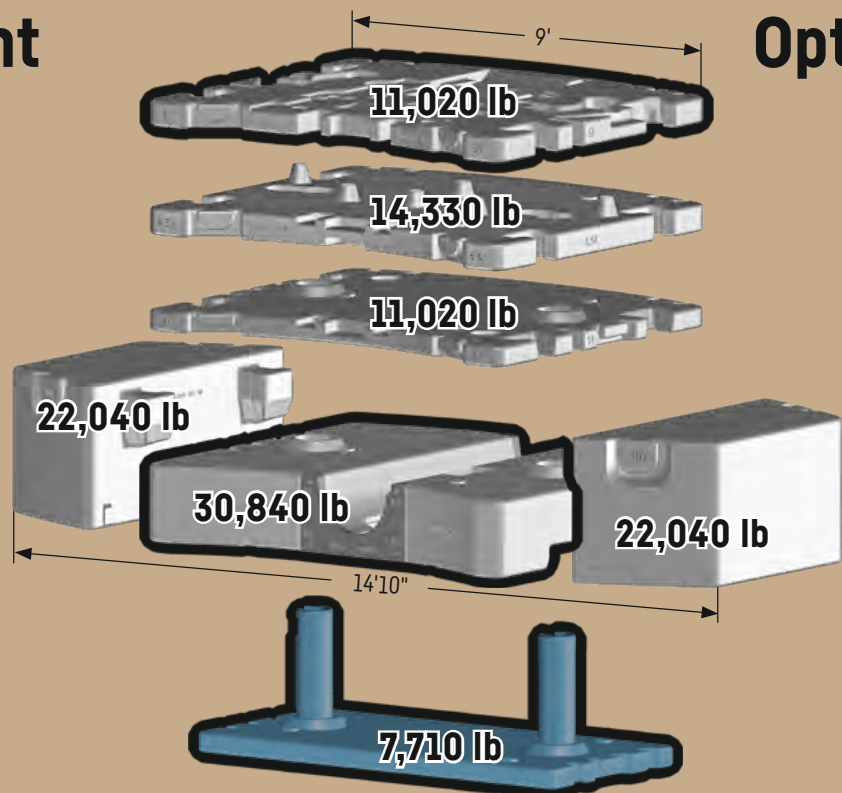


Counterweight Contrepoids



Technically transportable
Transport techniquement simplifié

UK-Counterweight UK-Contrepoids



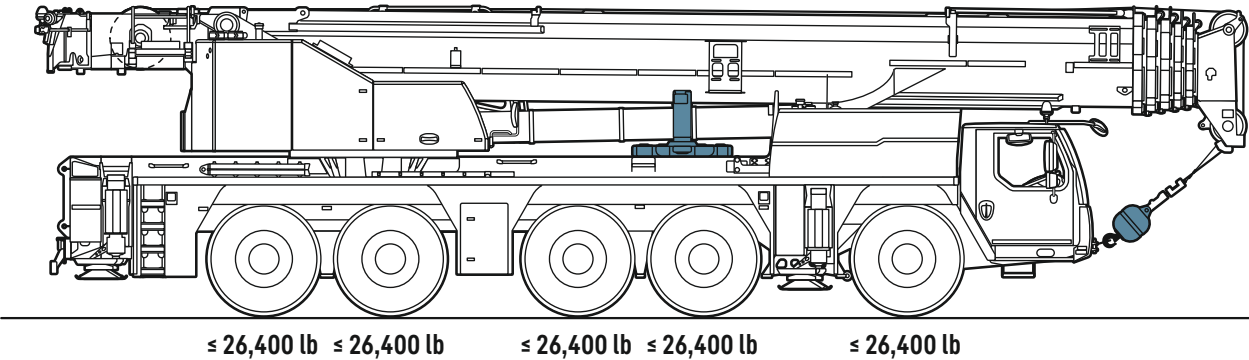
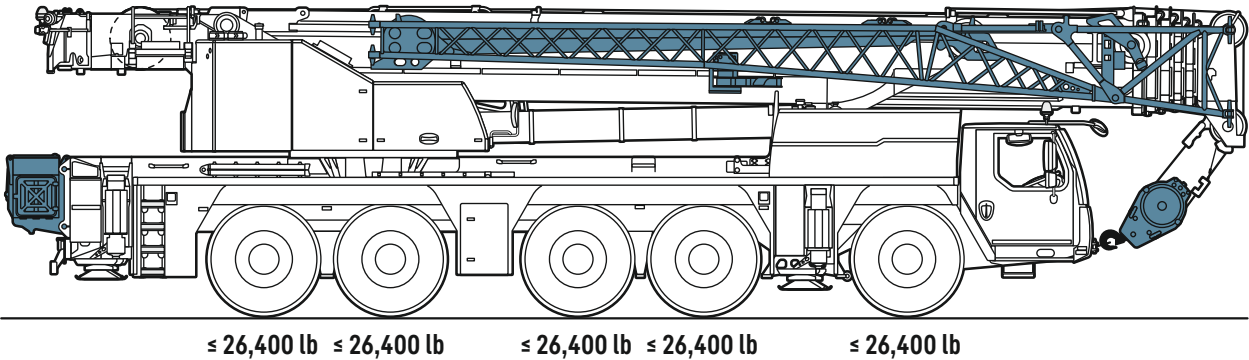
Option

26,400 lb axle load
26,400 lb de charge par essieu

Technically transportable
Transport techniquement simplifié

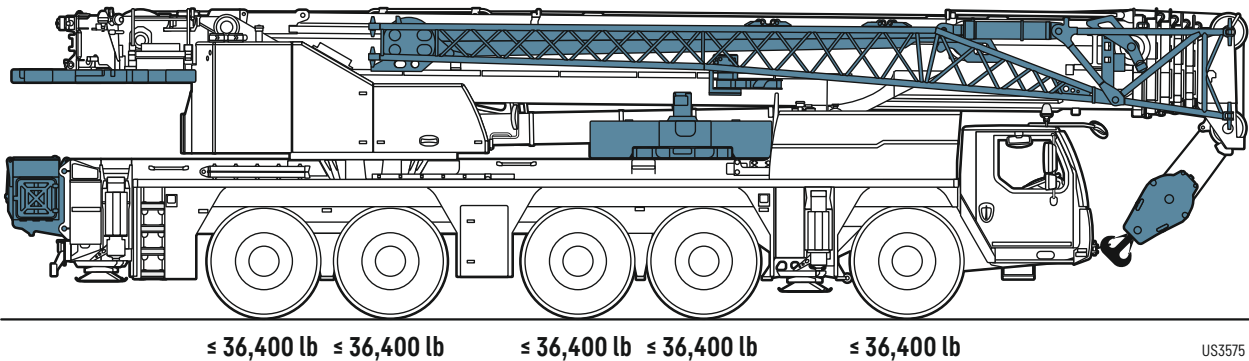
On-road driving

Déplacement sur route



Jobsite driving

Déplacement sur chantier



US3575

Crane data

Dates de la grue



Hook block - Moufles à crochet

			
321,900 lb	9	18	2,910 lb
189,600 lb	5	10	2,820/1,980 lb
135,800 lb	3	7	1,540 lb
60,000 lb	1	3	1,430 lb
23,300 lb	-	1	770 lb



Crane carrier - Châssis porteur

	 min.	 max.			
445/95 R 25 (16.00 R 25)	0.3	53	55,7 %		12 / R2
525/80 R 25 (20.5 R 25)	0.3	53	55,7 %		4 / R2

Theoretical gradeability - Aptitude théorique en pente



Max. supporting forces - Forces d'appui max.

		
F _{max}	169,000 lb	237,000 lb



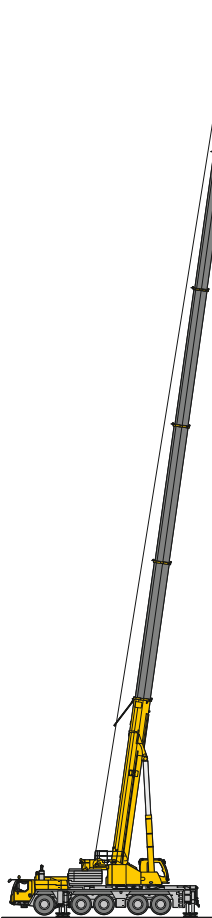
Crane superstructure - Partie tournante

				
	0 - 407 ft/min single line • au brin simple	21 mm	968 ft	20,600 lb
	0 - 407 ft/min single line • au brin simple	21 mm	968 ft	20,600 lb
	0 - 1.4 rpm			
	approx. 65 seconds to reach 82° boom angle env. 65 s jusqu'à 82°			
	approx. 450 seconds for boom extension from 43 ft - 203 ft env. 450 s pour passer de 43 ft - 203 ft			

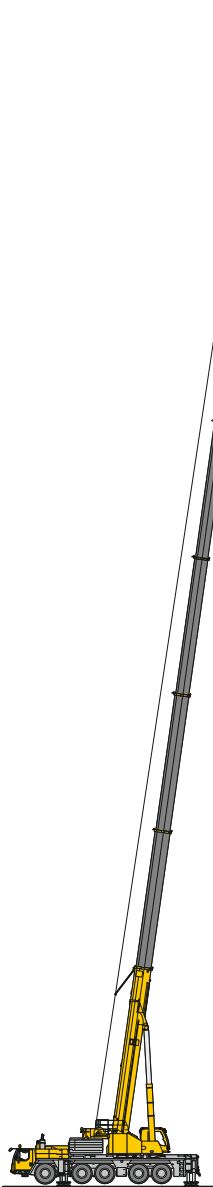
Boom/jib combinations

Configurations de flèche

T	Telescopic boom · Flèche télescopique
K/NZK	Mechanically/hydraulically adjustable folding jib · Pointe pliante réglable mécaniquement/hydrauliquement
V	Telescopic boom extension · Rallonge de flèche télescopique
K	Assembly jib · Fléchette de montage



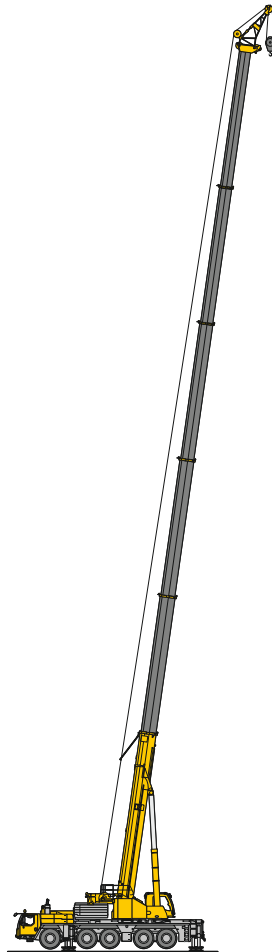
T



TK/TNZK



TVK/TVNZK



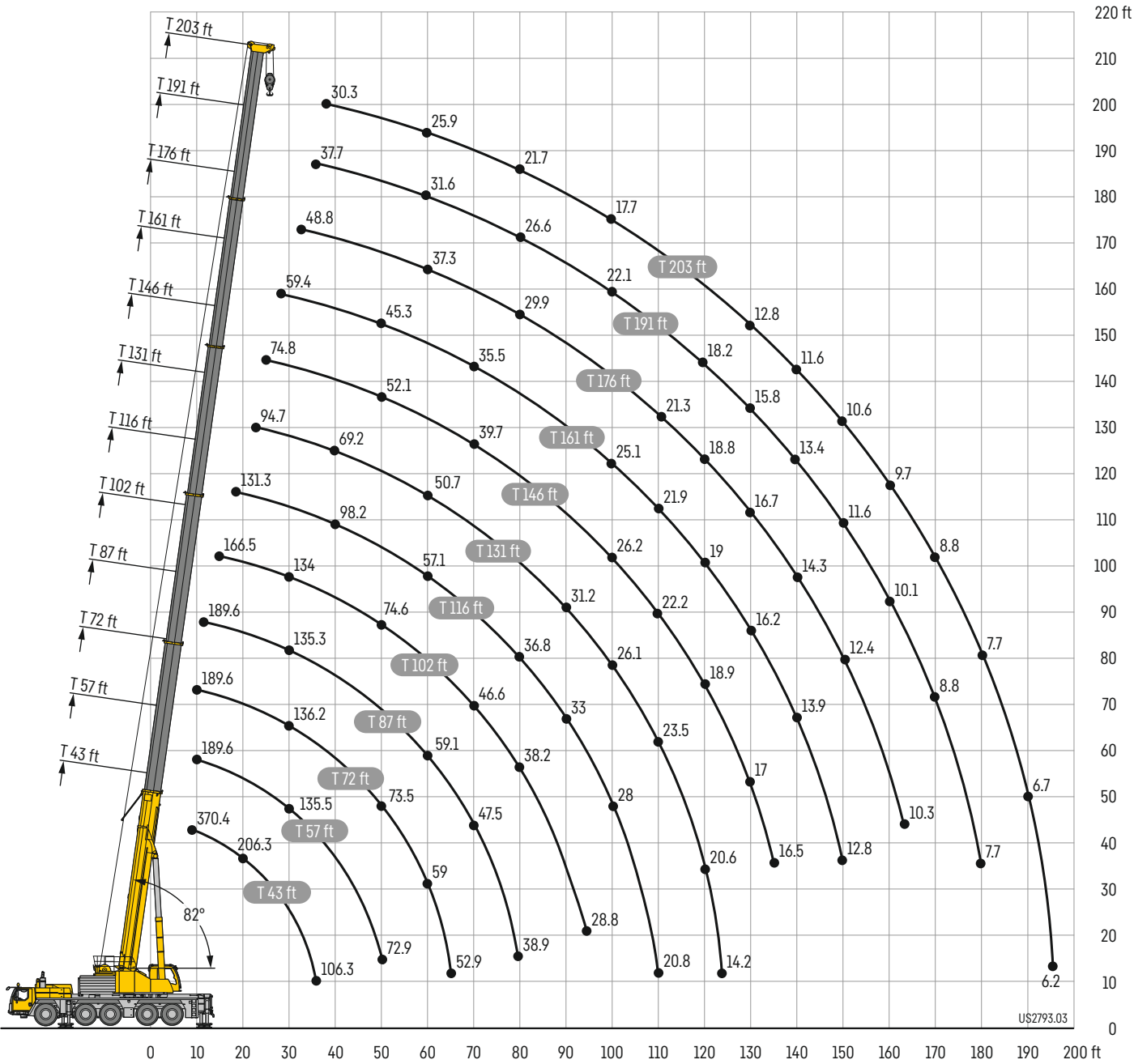
TK

S2911.01

Lifting heights

Hauteurs de levage

T



Lifting capacities

Forces de levage

T



	43 ft		57 ft	72 ft	87 ft	102 ft	116 ft	131 ft	146 ft	161 ft	176 ft	191 ft	203 ft	
	*													
9	370.4													9
10	352.7	189.6	189.6	189.6										10
11	313.5	189.6	189.6	189.6	189.6									11
12	300.9	189.6	189.6	189.6	189.6									12
13	289.6	189.6	189.6	189.6	189.6									13
14	279.1	189.6	189.6	189.6	189.6									14
15	268.6	189.6	189.6	189.6	189.6	166.5								15
16	257	189.6	189.6	189.6	189.6	165.5								16
17	242.5	189.6	189.6	189.6	189.6	164.2								17
18	229.3	189.6	189.6	189.6	189.6	163	131.3							18
19	217.5	189.6	189.4	189.6	189.3	161.8	130							19
20	206.3	188.2	186.8	188.3	188.6	160.5	128.7							20
22	187.6	175.8	176.8	176.1	175.1	158.2	126.1	94.7						22
24	171.9	164	165.3	164.8	165	155.2	123.6	91.4	74.8					24
26	158.2	152.7	154.4	154.8	154.1	151.2	120.8	88.1	73.4					26
28	146.6	142.8	144.5	145.2	144.3	143	118.4	84.8	71.5	59.4				28
30	136.2	133.7	135.5	136.2	135.3	134	116	81.7	69.3	58.1				30
32	127.2	125.1	127	127.4	126.7	125.6	113.6	79	67.4	56.9	48.8			32
34	119.3	116.6	118.5	119	118.9	117.5	111	76.3	65.5	55.7	47.9			34
36	106.3	106.2	111	111.4	111	109.8	108.6	73.8	63.6	54.3	47	37.7		36
38			104	104.5	103.7	104.5	104.5	71.4	61.9	53.1	46.2	37.2	30.3	38
40			97.9	98.4	97.8	99.6	98.2	69.2	60.2	51.9	45.2	36.7	30	40
45			84	84.6	85.8	85.6	84.2	63.9	55.6	48.6	43	35.4	29	45
50			72.9	73.5	75.4	74.6	73.5	58.9	52.1	45.3	41.1	34.2	27.9	50
55				64.6	66.3	65.6	64.3	54.7	48.4	42.6	39.1	32.9	26.9	55
60				59	59.1	58.2	57.1	50.7	45.3	40	37.3	31.6	25.9	60
65				52.9	52.9	51.9	50.6	47.4	42.4	37.7	35.3	30.3	24.8	65
70					47.5	46.6	45.4	44.5	39.7	35.5	33.4	29	23.8	70
75					42.9	42	40.7	41.6	37.3	33.3	31.6	27.8	22.7	75
80					38.9	38.2	36.8	37.6	35	31.4	29.9	26.6	21.7	80
85						35.7	34.8	34.2	32.8	29.7	28.3	25.4	20.6	85
90						32.8	33	31.2	30.8	28.1	26.8	24.3	19.6	90
95						28.8	30.4	28.5	28.6	26.6	25.4	23.1	18.6	95
100							28	26.1	26.2	25.1	24	22.1	17.7	100
105							25.9	24.5	24.1	23.1	22.8	21	16.7	105
110							20.8	23.5	22.2	21.9	21.3	20	15.8	110
115								22.2	20.4	20.6	19.7	19.1	15	115
120								20.6	18.9	19	18.8	18.2	14.2	120
125								14.2	17.6	17.6	17.9	17.1	13.5	125
130									17	16.2	16.7	15.8	12.8	130
135									16.5	15	15.5	14.6	12.1	135
140										13.9	14.3	13.4	11.6	140
145										13.3	13.3	12.4	11.1	145
150										12.8	12.4	11.6	10.6	150
155											11.6	10.8	10.1	155
160											10.9	10.1	9.7	160
165											10.3	9.4	9.3	165
170												8.8	8.8	170
175												8.2	8.2	175
180												7.7	7.7	180
185													7.1	185
190													6.7	190
195													6.2	195

* ± 0° over rear - en arrière

Lifting capacities

Forces de levage

T



	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	189.6	189.6	189.6										10
11	189.6	189.6	189.6	189.6									11
12	189.6	189.6	189.6	189.6									12
13	189.6	189.6	189.6	189.6									13
14	189.6	189.6	189.6	189.6									14
15	189.6	189.6	189.6	189.6	166.5								15
16	189.6	189.6	189.6	189.6	165.5								16
17	189.6	189.6	189.6	189.6	164.2								17
18	189.6	189.6	189.6	189.6	163	131.3							18
19	188.9	189.2	189.1	188.3	161.8	130							19
20	185.8	184.5	186.1	185.2	160.5	128.7							20
22	171.4	172.5	171.7	172	158.2	126.1	94.7						22
24	158.8	160.6	160.7	159.9	154.7	123.6	91.4	74.8					24
26	146.2	148.3	148.5	148	145.1	120.8	88.1	73.4					26
28	134.3	136.4	137.4	136.4	134.3	118.4	84.8	71.5	59.4				28
30	123.7	126	126.9	125.9	124.1	116	81.7	69.3	58.1				30
32	113.9	116.2	117	116.1	115.7	112.8	79	67.4	56.9	48.8			32
34	105	107.3	107.9	107.7	108.6	105.6	76.3	65.5	55.7	47.9			34
36	97.2	99.5	100.1	101.7	101.4	99.1	73.8	63.6	54.3	47	37.7		36
38		92.5	93	94.8	94.2	92.7	71.4	61.9	53.1	46.2	37.2	30.3	38
40		86.3	86.9	88.9	88.3	86.6	69.2	60.2	51.9	45.2	36.7	30	40
45		74.1	75.6	75.6	74.8	73.3	63.9	55.6	48.6	43	35.4	29	45
50		63.5	65	65.1	64.3	63.1	58.9	52.1	45.3	41.1	34.2	27.9	50
55			56.5	56.5	55.7	54.4	54.1	48.4	42.6	39.1	32.9	26.9	55
60			49.8	49.8	48.9	47.9	48.6	45.3	40	37.3	31.6	25.9	60
65			44.3	44.2	44.5	44.1	42.9	41.6	37.7	35.3	30.3	24.8	65
70				39.5	39.7	40.2	38.2	38.3	35.5	33.4	29	23.8	70
75				36.3	35.8	36.1	34.5	34.4	33	31.6	27.8	22.7	75
80				33	33.1	32.6	31.6	30.9	29.9	29.8	26.6	21.7	80
85					30.4	29.6	29.7	28	27.9	27	25.4	20.6	85
90					27.9	27	27	25.3	25.6	25	24.3	19.6	90
95					25.6	24.7	24.7	23.8	23.2	23.6	22.7	18.6	95
100						22.9	22.9	21.9	21.1	21.5	20.7	17.7	100
105						21.1	21.2	20.9	19.5	19.7	18.9	16.7	105
110						19.7	19.6	19.5	18.5	18	17.2	15.8	110
115							18.1	18	17.2	16.5	15.6	15	115
120							16.7	16.6	15.8	15.1	14.2	14.1	120
125							14.2	15.3	14.5	13.8	12.9	13	125
130								14.2	13.3	12.6	11.9	11.9	130
135								13.2	12.3	11.7	11	11	135
140									11.5	10.9	10.1	10.1	140
145									10.8	10.1	9.2	9.3	145
150									10.1	9.4	8.4	8.4	150
155										8.6	7.6	7.6	155
160										7.9	6.8	6.8	160
165										7.2	6.1	6.1	165
170											5.5	5.5	170
175											4.9	4.9	175
180											4.3	4.3	180
185												3.8	185

Lifting capacities

Forces de levage

T



	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	189.6	189.6	189.6										10
11	189.6	189.6	189.6	189.6									11
12	189.6	189.6	189.6	189.6									12
13	189.6	189.6	189.6	189.6									13
14	189.6	189.6	189.6	189.6									14
15	189.6	189.6	189.6	189.6	166.5								15
16	189.6	189.6	189.6	189.6	165.5								16
17	189.6	189.6	189.6	189.6	164.2								17
18	189.6	189.6	189.6	189.6	163	131.3							18
19	187.2	189	187.7	186.9	161.8	130							19
20	181.1	181.7	181.5	180.4	160.5	128.7							20
22	165.6	166.6	167.7	167.2	158.2	126.1	94.7						22
24	150	152.4	153	151.7	146.6	123.6	91.4	74.8					24
26	136.2	138.6	139	138.2	133.1	120.8	88.1	73.4					26
28	123.4	125.8	126.9	125.9	122.9	117.1	84.8	71.5	59.4				28
30	112	114.7	115.7	115.6	115.2	108.3	81.7	69.3	58.1				30
32	102.6	105	105.8	107.3	106	100	79	67.4	56.9	48.8			32
34	93.9	96.4	97.1	99.6	98.2	92.1	76.3	65.5	55.7	47.9			34
36	86	88.6	90.6	91.7	90.8	85.9	73.8	63.6	54.3	47	37.7		36
38		82.7	84.3	84.2	83.5	79.9	71.4	61.9	53.1	46.2	37.2	30.3	38
40		76.6	78.2	78.4	77.7	74.6	69.2	60.2	51.9	45.2	36.7	30	40
45		64.3	65.8	65.8	65	63.5	61.6	55.6	48.6	43	35.4	29	45
50		54.8	56.3	56.4	55.6	55.7	54.5	50.8	45.3	41.1	34.2	27.9	50
55			48.8	48.8	49.2	49.4	47.6	45.8	42.4	39.1	32.9	26.9	55
60			42.7	43.5	43.1	43.5	42	41	38.5	36.8	31.6	25.9	60
65			37.6	38.3	38.9	38.1	37.6	36.4	35	33.5	30.3	24.8	65
70				33.9	34.5	33.9	33.9	32.4	32.2	30.7	28.8	23.8	70
75				30.5	30.9	30.5	30.3	29.3	28.7	28.8	27	22.7	75
80				28.2	27.8	27.4	27.5	27	25.8	25.9	24.2	21.7	80
85					25.2	24.7	25	25	24	23.4	21.9	20.6	85
90					22.9	23.2	22.7	22.7	21.9	21.1	19.8	19	90
95					21	21.4	20.9	20.6	19.8	19	17.9	17.3	95
100						19.6	19.1	18.8	18	17.2	16.2	15.7	100
105						18.1	17.4	17.1	16.3	15.5	14.6	14.2	105
110						16.6	15.9	15.6	14.8	14	13	12.9	110
115							14.5	14.2	13.3	12.6	11.7	11.7	115
120							13.3	12.9	12.1	11.4	10.4	10.4	120
125							12.3	11.9	11.1	10.3	9.3	9.3	125
130								11	10	9.2	8.3	8.3	130
135								10.1	9.1	8.3	7.3	7.3	135
140									8.2	7.4	6.4	6.5	140
145									7.5	6.6	5.6	5.7	145
150									6.8	5.9	4.9	4.9	150
155										5.3	4.2	4.2	155
160										4.6	3.6	3.6	160
165										4.1			165

Lifting capacities

Forces de levage

T



	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	189.6	189.6	189.6										10
11	189.6	189.6	189.6	189.6									11
12	189.6	189.6	189.6	189.6									12
13	189.6	189.6	189.6	189.6									13
14	189.6	189.6	189.6	189.6									14
15	189.6	189.6	189.6	189.6	166.5								15
16	189.6	189.6	189.6	189.6	165.5								16
17	189.6	189.6	189.6	189.6	164.2								17
18	189.1	188	189.2	187.5	163	131.3							18
19	184.6	185.5	185.5	182	161.7	130							19
20	174.8	175.8	175.4	175.3	160.5	128.7							20
22	156.8	159.5	159.4	157	145.1	126.1	94.7						22
24	140.1	142.7	143.4	138.8	130.4	122.8	91.4	74.8					24
26	125.2	127.6	128.5	124.5	120.2	111.5	88.1	73.4					26
28	113.1	115.4	116.6	116.7	109	101.5	84.8	71.5	59.4				28
30	101.3	104.2	105.4	106.2	99.4	93.1	81.7	69.3	58.1				30
32	91.5	94.2	97.3	97.1	91.3	85.8	78.6	67.4	56.9	48.8			32
34	83.2	87	88.7	89.3	84.6	78.8	73.6	65.5	55.7	47.9			34
36	76.1	79.8	81.4	81.8	78.3	73.2	69.7	63.6	54.3	47	37.7		36
38		73.4	75	74.9	72.4	67.6	66.1	61.6	53.1	46.2	37.2	30.3	38
40		67.9	69.5	69.6	67.6	65	61.7	57.8	51.9	45.2	36.7	30	40
45		56.2	57.9	57.9	58.5	56.8	52.8	50.7	47.5	43	35.4	29	45
50		46.7	48.4	49.3	49.6	49.1	46.2	43.8	41.9	39.9	34.2	27.9	50
55			41.1	41.9	42.7	41.9	41.6	39	37.3	35.7	32.9	26.9	55
60			35.7	37.2	37	36.7	36.4	34.4	33	32.4	30.4	25.9	60
65			31.2	32.6	32.3	31.9	32.1	32	30.4	28.7	26.9	24.8	65
70				28.8	28.5	28.9	28.6	28.4	27.2	25.5	23.7	23	70
75				25.6	25.4	26	25.6	25.3	24.3	22.8	21	20.5	75
80				23.1	22.9	23.3	22.8	22.6	21.7	20.3	18.7	18.3	80
85					20.8	21	20.5	20.3	19.5	18.2	16.7	16.2	85
90					18.9	19	18.5	18.2	17.4	16.3	14.9	14.5	90
95					17.2	17.2	16.7	16.4	15.5	14.7	13.2	12.9	95
100						15.7	15.1	14.7	13.8	13	11.8	11.5	100
105						14.3	13.6	13.3	12.4	11.5	10.4	10.1	105
110						13	12.3	12	11.1	10.3	9.2	9	110
115							11.1	10.8	9.9	9.1	8.1	7.9	115
120							10.1	9.7	8.8	8	7	6.9	120
125							9.3	8.7	7.8	7	6	6	125
130								7.9	6.9	6.1	5.1	5.1	130
135								7.1	6.1	5.3	4.3	4.4	135
140									5.4	4.6	3.6	3.6	140
145									4.7	3.9			145
150									4.1				150

Lifting capacities

Forces de levage

T



	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	189.6	189.6	189.6										10
11	189.6	189.6	189.6	189.6									11
12	189.6	189.6	189.6	189.6									12
13	189.6	189.6	189.6	189.6									13
14	189.6	189.6	189.6	189.6									14
15	189.6	189.6	189.6	189.6	166.5								15
16	189.6	189.6	189.6	189.6	165.5								16
17	189.6	189.6	189.6	189.6	164.2								17
18	188.4	187	188.6	185.8	163	131.3							18
19	182.8	183.4	183.8	178.1	160.3	130							19
20	172	173.4	172.7	171.7	154.5	128.7							20
22	153.8	156.5	156.9	149.9	138.2	125.7	94.7						22
24	136.5	139.2	140.1	132.4	127.6	118.6	91.4	74.8					24
26	121.9	124.4	125.2	122.7	114.6	106.2	88.1	73.4					26
28	109.2	111.9	113	111.3	103.8	96.6	84.8	71.5	59.4				28
30	97.5	100.5	103.7	101.2	94.7	88.5	81	69.3	58.1				30
32	88	91.7	93.8	92.7	86.9	81.5	75.9	67.4	56.9	48.8			32
34	80.1	83.8	85.5	85.6	80.3	74.4	71.2	65.5	55.7	47.9			34
36	73.1	76.9	78.5	78.8	74	70	66.9	62.6	54.3	47	37.7		36
38		70.7	72.2	72.2	68.3	66.9	62.2	58.3	53.1	46.2	37.2	30.3	38
40		65.1	66.8	66.9	63.6	62.4	58.3	56	51.5	45.2	36.7	30	40
45		52.9	54.7	54.8	55.1	53.4	50.3	47.5	44.8	42.6	35.4	29	45
50		43.9	45.5	46.5	47.4	46.2	44.5	42	39.8	37.7	34.2	27.9	50
55			38.8	40.4	40.2	39.7	38.9	36.6	35.2	34.1	32	26.9	55
60			33.4	34.9	34.7	34.4	34.6	33.7	31.9	30.2	28.1	25.9	60
65			29.2	30.6	30.3	30.8	30.3	30.2	28.4	26.5	24.8	24.1	65
70				27	26.7	27.4	26.9	26.5	25.2	23.5	21.7	21.3	70
75				24	24.1	24.3	23.9	23.6	22.5	20.9	19.2	18.7	75
80				21.5	21.6	21.7	21.2	21	20.1	18.6	17	16.6	80
85					19.4	19.5	19.1	18.8	18	16.6	15.1	14.7	85
90					17.5	17.6	17.1	16.9	16	14.8	13.4	13	90
95					15.9	16	15.4	15	14.1	13.2	11.8	11.5	95
100						14.4	13.8	13.5	12.5	11.7	10.4	10.1	100
105						13	12.4	12.1	11.2	10.3	9.1	8.8	105
110						11.9	11.2	10.8	9.9	9.1	8	7.7	110
115							10	9.7	8.8	8	7	6.7	115
120							9.1	8.7	7.7	7	6	5.8	120
125							8.3	7.8	6.8	6	5	4.9	125
130								6.9	6	5.2	4.2	4.1	130
135								6.2	5.2	4.4	3.4	3.3	135
140									4.5	3.7			140
145									3.9				145
150									3.3				150

Lifting capacities

Forces de levage

T



	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	189.6	189.6	189.6										10
11	189.6	189.6	189.6	189.6									11
12	189.6	189.6	189.6	189.6									12
13	189.6	189.6	189.6	189.6									13
14	189.6	189.6	189.6	189.6									14
15	189.6	189.6	189.6	189.6	166.5								15
16	189.6	189.6	189.6	188.2	165.5								16
17	189.6	189.6	189.6	183	164.2								17
18	183.5	182.6	184.1	171.1	155.2	131.3							18
19	174	174.6	173.5	161.3	145.7	130							19
20	163.1	163.9	163.4	149	137.6	127.7							20
22	142.5	145.7	141.2	132.6	124.6	114.6	94.7						22
24	125.6	128.7	124.4	118.8	110.5	102.3	91.3	74.8					24
26	110	112.8	112.9	106.3	99	90.9	84.6	73.4					26
28	97.6	100.9	102.2	96.1	89	81.9	77.2	71.5	59.4				28
30	87	91.2	92.2	86.6	80.3	76.5	72.2	66	58.1				30
32	78.4	82.3	83.1	78.6	73.4	72.3	66.7	62.2	56.4	48.8			32
34	70	74.3	75.5	72.1	68.4	66.1	61.5	57.8	54	47.9			34
36	62.3	66.8	68.8	66	64.3	61.2	57.6	53.5	50.3	46.7	37.7		36
38		60.2	62	61.6	59.9	56.6	54.3	51	47.7	44.8	37.2	30.3	38
40		54.6	56.5	57.3	56	52.5	50.6	47.5	44.8	41.5	36.7	30	40
45		43.8	45.9	47.5	47	44.6	42.8	41.5	39.3	37.1	34.2	29	45
50		36.1	38	39.7	39.6	38.5	37.5	36.3	33.8	31.8	29.6	27.9	50
55			32	33.5	33.4	34	32.7	31.4	29.4	27.3	25.4	24.7	55
60			27.3	28.8	29.1	29.4	28.7	27.4	25.5	23.8	21.9	21.3	60
65			23.6	25	25.3	25.5	25	24.1	22.4	20.7	19.1	18.5	65
70				21.9	22.1	22.4	21.9	21.3	19.7	18.1	16.4	16.1	70
75				19.3	19.5	19.7	19.2	18.9	17.3	15.9	14.3	13.8	75
80				17.2	17.3	17.5	16.9	16.7	15.3	13.8	12.4	12	80
85					15.3	15.5	15	14.7	13.5	12.1	10.7	10.3	85
90					13.6	13.8	13.2	12.9	11.9	10.6	9.2	8.9	90
95					12.2	12.3	11.7	11.3	10.4	9.2	7.8	7.6	95
100						10.9	10.3	10	9	8	6.6	6.4	100
105						9.7	9.1	8.8	7.8	6.9	5.6	5.3	105
110						8.7	8	7.7	6.8	5.9	4.5	4.3	110
115							7.1	6.7	5.8	5	3.5		115
120							6.2	5.8	4.9	4.1			120
125							5.6	5	4.1				125
130								4.3	3.4				130
135								3.7					135

Lifting capacities

Forces de levage

T



	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	189.6	189.6	189.6										10
11	189.6	189.6	189.6	189.6									11
12	189.6	189.6	189.6	189.6									12
13	189.6	189.6	189.6	189.6									13
14	189.6	189.6	189.6	189.6									14
15	189.6	189.6	189.6	189.6	166.5								15
16	189.6	189.6	189.6	185.1	162.5								16
17	188.6	189.6	184.5	173.3	156.8								17
18	180.4	180	173	160.8	144.6	130.4							18
19	168.6	170.9	163.5	147.8	136.8	124.7							19
20	156.2	159.4	149.9	140.2	128.8	118.7							20
22	136.4	139.4	130	123.4	114.2	104.6	93.3						22
24	118	121.3	116.7	108.9	100.8	92.3	84.7	74.8					24
26	103	106.5	103.4	96.6	89.2	81.7	78	72.2					26
28	91.3	95.4	92.5	86.5	79.7	77.2	71.3	67.6	59.4				28
30	80.8	85.2	82.8	77.7	73.6	70.8	65.9	60.9	55.7				30
32	70.6	75.5	74.4	70.3	68.7	64.7	61.2	56.4	52.4	48.1			32
34	62.3	66.8	67.6	65.5	63.3	59	56.3	52.7	49.6	45.7			34
36	55.3	59.8	61.5	60	58.2	55.1	52	48.7	45.5	43	37.7		36
38		53.7	55.6	56.3	53.6	50.9	48.4	45.5	43.1	41.4	36.9	30.3	38
40		48.7	50.8	52.3	49.9	47.1	45.7	43.9	41.3	38.5	35.6	30	40
45		38.8	40.9	42.5	41.7	41	38.9	37.1	34.7	32.4	29.9	28.4	45
50		31.7	33.7	35.3	35.3	35.3	33.2	31.9	29.6	27.6	25.5	24.5	50
55			28.2	29.7	30.1	30.2	28.7	27.4	25.5	23.5	21.7	21.1	55
60			23.9	25.4	25.7	26	25	23.8	22	20.3	18.5	17.9	60
65			20.6	22	22.2	22.4	21.8	20.8	19.1	17.5	15.9	15.3	65
70				19.1	19.3	19.6	19.1	18.2	16.7	15.1	13.5	13.2	70
75				16.8	17	17.1	16.7	16	14.5	13.1	11.5	11.1	75
80				14.7	14.9	15	14.5	14.1	12.6	11.2	9.8	9.4	80
85					13	13.2	12.6	12.4	11	9.6	8.2	7.9	85
90					11.4	11.6	11	10.7	9.6	8.3	6.9	6.6	90
95					10.1	10.2	9.6	9.3	8.3	7	5.7	5.4	95
100						9	8.4	8	7.1	5.9	4.4	4.3	100
105						7.9	7.2	6.9	6	4.9			105
110						7	6.3	5.9	5	3.9			110
115							5.4	5	4.1				115
120							4.7	4.2					120
125							4.1	3.5					125

Lifting capacities

Forces de levage

T



	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	189.6	189.6	189.6										10
11	189.6	189.6	189.6	189.6									11
12	189.6	189.6	189.6	189.6									12
13	189.6	189.6	189.6	189.4									13
14	189.6	189.6	189.6	188.6									14
15	189.6	189.6	189.6	171.5	155.9								15
16	189.6	189.6	175.4	162.2	144.1								16
17	180.1	178	161.4	146.8	136.8								17
18	167.5	161.9	148.8	137.9	126.2	113.1							18
19	154.8	148.8	137.3	128.3	116.1	104.4							19
20	142.6	136.8	128.8	118.5	106.7	96.1							20
22	120.4	116	110	101.1	92.3	87.3	79.2						22
24	103.6	100.7	95.2	87.5	82.5	77.9	71.6	66					24
26	88.9	86.6	82.8	78.3	74.7	69.3	65.4	60.4					26
28	75	76.1	73.5	70.9	66.7	62.3	58.8	54.3	50.3				28
30	63.7	67.4	65.5	64.1	60	56.4	54.1	50.6	46.4				30
32	55.1	59.8	59.1	58	54.4	52.5	49.9	46.7	43.5	40.5			32
34	48.2	52.8	53.4	53	49.9	48.4	45.3	42.9	40	36.9			34
36	42.5	47	48.6	48.3	46.4	44.6	41.7	39.6	36.5	33.9	31.2		36
38		41.9	44.2	44.1	42.6	41.1	38.5	36.6	33.9	31.5	28.7	27.7	38
40		37.8	40	40.8	39.5	38	35.8	34	31.5	28.9	26.5	25.4	40
45		29.7	31.7	33.4	32.7	31.6	29.8	28.2	26	23.9	21.7	21	45
50		23.9	25.8	27.5	27.6	26.8	25	23.9	21.7	19.9	18	17.2	50
55			21.3	22.8	23.2	22.8	21.3	20.2	18.4	16.5	14.9	14.4	55
60			17.7	19.3	19.5	19.6	18.2	17.2	15.5	14	12.2	11.8	60
65			14.8	16.4	16.6	16.8	15.6	14.7	13.2	11.6	10.1	9.7	65
70				13.9	14.1	14.4	13.4	12.5	11.1	9.6	8.1	7.9	70
75				11.8	12	12.2	11.6	10.8	9.3	8	6.5	6.1	75
80				10.1	10.3	10.5	9.9	9.2	7.8	6.4	4.8	4.4	80
85					8.7	8.9	8.4	7.9	6.4	5.1			85
90					7.4	7.6	7	6.6	5.2	3.5			90
95					6.3	6.4	5.9	5.5	3.9				95
100						5.4	4.8	4.4					100
105						4.5	3.8						105
110						3.8							110

Lifting capacities

Forces de levage

T

43 - 203 ft

360°

0 lb

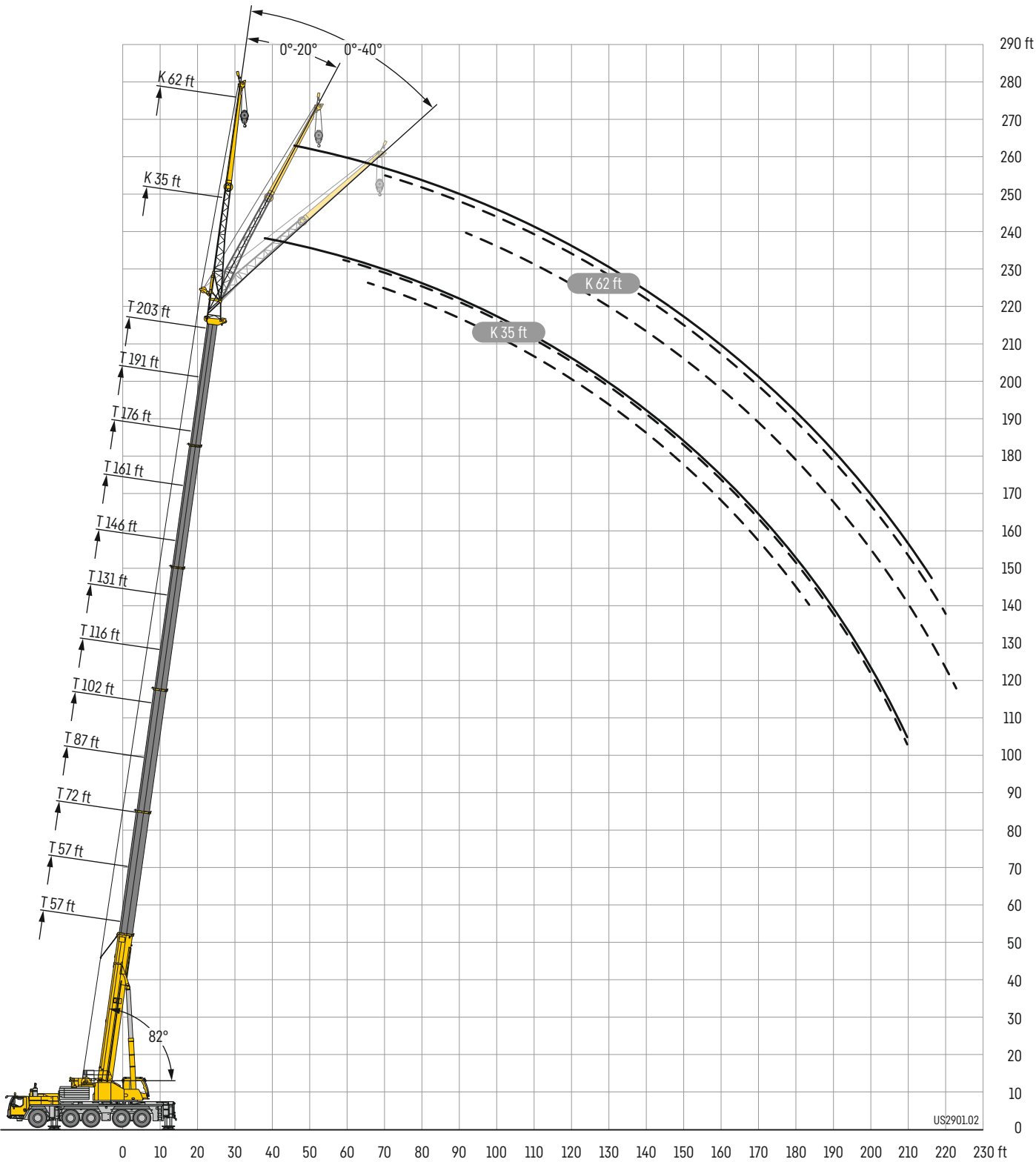
85%

	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	189.6	189.6	189.6										10
11	189.6	189.6	189.6	189.6									11
12	189.6	189.6	189.6	189.6									12
13	189.6	189.6	189.6	185.3									13
14	189.6	189.6	186.9	175.2									14
15	189.5	189.6	176.1	159.5	143.8								15
16	188.9	178.3	161.2	145	134.8								16
17	173.5	162	145.9	135.7	121.9								17
18	159	147.4	135.5	124.4	110.9	97.7							18
19	145.2	132.8	125.5	113.2	100.7	91.2							19
20	130.8	120.9	113.6	103	92.9	88.4							20
22	107.1	102.8	95.4	87.6	83.6	76.6	70.5						22
24	89.3	86.8	82.3	78.1	73.1	67.9	63.2	56.3					24
26	75.7	74.4	71.3	69.2	64.5	59.7	57.1	53.2					26
28	64.1	65.1	63.6	61.7	57.4	55.3	51.8	48.6	44.5				28
30	54.1	57.4	56.5	55.2	52.1	50	46.8	43.5	40.2				30
32	46.6	51	50.4	49.7	47.4	45.5	42.6	39.7	36.7	33.9			32
34	40.5	45.1	45.4	45.3	43.3	41.3	38.5	36.4	33.6	30.7			34
36	35.5	40	41.2	41.2	39.6	38	35.3	33.4	30.5	28.1	25.5		36
38		35.5	37.4	37.5	36.2	34.9	32.5	30.7	28.2	26	23.4	22.5	38
40		31.9	34.1	34.5	33.4	32.1	30.1	28.4	26.1	23.7	21.4	20.5	40
45		24.7	26.8	28.2	27.4	26.5	24.7	23.3	21.2	19.3	17.2	16.6	45
50		19.5	21.5	23.2	22.9	22.2	20.6	19.5	17.5	15.8	13.9	13.2	50
55			17.4	19	19.2	18.6	17.2	16.2	14.5	12.8	11.1	10.7	55
60			14.1	15.9	16.2	15.8	14.5	13.6	11.9	10.5	8.8	8.5	60
65			11.5	13.1	13.4	13.4	12.2	11.4	9.9	8.4	6.8	6.5	65
70				10.9	11.2	11.4	10.3	9.5	8.1	6.6	4.7	4.4	70
75				9.1	9.3	9.5	8.7	7.9	6.5	4.8			75
80				7.6	7.7	8	7.2	6.5	4.9				80
85					6.4	6.6	6	5.2					85
90					5.2	5.4	4.7	3.8					90
95					4.3	4.3	3.3						95

Lifting heights

Hauteurs de levage

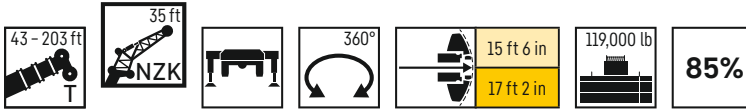
TNZK



Lifting capacities

Forces de levage

TNZK



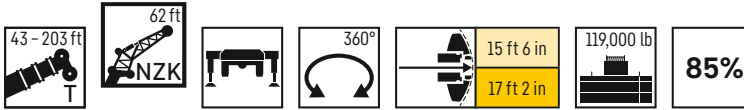
	43 ft			57 ft			72 ft			87 ft			102 ft			116 ft			
	35 ft																		
	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	
17	40.3	34.6		40.3			40.3			40.3			40.3						17
18	40	33.9		40.3			40.3			40.3			40.3			40.3			18
19	39.3	33		40.3	35		40.3			40.3			40.3			40.3			19
20	38.4	32.1		40.3	34.2		40.3			40.3			40.3			40.3			20
22	36.7	30.7		40.1	32.8		40.3	34.5		40.3			40.3			40.3			22
24	35	29.4		39.1	31.5		40.3	33.3		40.3	34.7		40.3			40.3			24
26	33.4	28.2	24	37.6	30.3		40.2	32.1		40.3	33.6		40.3			40.3			26
28	31.8	27	23.2	36.2	29.2	23.9	39.5	31		40.3	32.6		40.3	33.3		40.3			28
30	30.3	25.9	22.5	34.7	28.2	23.3	38.3	30.1	23.8	40.3	31.6		40.3	32.3		39.9	31.2		30
32	29	25	21.9	33.4	27.2	22.7	36.9	29.1	23.2	39.8	30.8	23.5	40.3	31.4		39.4	30.5		32
34	27.8	24.1	21.3	32	26.3	22.1	35.7	28.2	22.7	38.7	29.9	23.1	40.3	30.7		38.7	29.8		34
36	26.6	23.2	20.7	30.8	25.5	21.6	34.5	27.5	22.2	37.6	29	22.6	39.7	29.9	22.8	38.1	29.1		36
38	25.5	22.5	20.1	29.5	24.7	21.1	33.4	26.6	21.7	36.5	28.3	22.2	39.1	29.1	22.4	37.4	28.4	22	38
40	24.6	21.7	19.6	28.5	24	20.7	32.2	25.9	21.3	35.4	27.6	21.8	38.2	28.4	22	36.7	27.8	21.7	40
45	21.9	20.1	18.5	26.1	22.3	19.6	29.5	24.2	20.3	32.9	25.9	20.8	35.6	26.9	21.1	34.9	26.4	20.9	45
50	19	18.8	17.6	24	20.9	18.7	27.4	22.8	19.4	30.4	24.4	20	33.4	25.4	20.3	33.1	25.2	20.2	50
55	16.7	17.7	16.9	21.5	19.7	17.9	25.4	21.5	18.7	28.3	23.1	19.3	31.2	24.1	19.6	31.5	24	19.5	55
60	14.8	16.8	16.5	19	18.6	17.3	23.2	20.3	18	26.5	21.9	18.6	29.1	23	19	30	23	19	60
65	13.2	15.9	16.3	17.1	17.7	16.7	21	19.3	17.4	24.7	20.9	18	27.4	21.9	18.4	28.5	22	18.4	65
70	12	15.3		15.5	16.9	16.4	19	18.5	16.9	22.4	20	17.5	25.5	21	17.9	26.7	21.1	18	70
75				14	16.3	16.2	17.3	17.7	16.5	20.5	19.1	17	23.5	20.1	17.4	24.8	20.4	17.5	75
80				12.8	15.6		15.8	17.1	16.3	18.8	18.4	16.7	21.6	19.4	17	23.1	19.7	17.1	80
85				11.8			14.6	16.5	16.1	17.3	17.7	16.3	20	18.7	16.7	21.5	19	16.8	85
90							13.4	15.9		16	17.2	16.1	18.5	18.1	16.4	20.1	18.4	16.5	90
95							12.4	15.4		14.9	16.7	16	17.2	17.5	16.1	18.9	17.9	16.2	95
100							11.7			13.9	16.2		16.1	17	16	17.7	17.4	16	100
105										13	15.7		15.1	16.6	15.9	16.6	16.9	15.8	105
110										12.2	15.3		14.2	16.1		15.7	16.6	15.7	110
115										11.6			13.4	15.7		14.9	16.2	15.6	115
120													12.6	15.4		14.1	15.8	15.6	120
125													12	15.1		13.4	15.4		125
130													11.5			12.8	15.2		130
135																12.2	15		135
140																11.8	14.3		140
145																11.4			145

	131 ft			146 ft			161 ft			176 ft			191 ft			203 ft				
	35 ft																			
	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°		
22	39.2																		22	
24	38.8																		24	
26	38.3			33															26	
28	37.9			32.8															28	
30	37.5			32.4			28.4												30	
32	37.1			32.1			28.2			24.2									32	
34	36.7	29.3		31.8			27.9			24.1									34	
36	36.1	28.7		31.5			27.7			24			20.1						36	
38	35.5	28.1		31.2	26.5		27.5			23.9			20.1			15.9			38	
40	34.8	27.6		30.8	26.1		27.3			23.7			20			15.9			40	
45	33.2	26.3	20.8	29.8	25		26.7	23.7		23.4			19.9			15.8			45	
50	31.9	25.1	20.2	28.8	24	20	26.1	22.9	19.7	23.1	21.5		19.7	18.7		15.8			50	
55	30.6	24	19.5	27.8	23.1	19.5	25.4	22.1	19.2	22.6	20.9	18.3	19.5	18.5		15.7	15.8		55	
60	29.2	23.1	19	26.9	22.3	19	24.7	21.5	18.7	22.2	20.3	18	19.3	18.2	16.8	15.7	15.3		60	
65	28	22.2	18.5	26	21.5	18.6	24	20.8	18.3	21.7	19.8	17.6	19	17.8	16.5	15.2	14.8	14.6	65	
70	26.9	21.4	18	25.2	20.8	18.1	23.4	20.2	17.9	21.3	19.3	17.2	18.7	17.4	16.2	14.8	14.3	14.2	70	
75	25.7	20.6	17.6	24.4	20.2	17.7	22.8	19.6	17.5	20.8	18.8	16.9	18.3	16.9	16	14.3	13.9	13.7	75	
80	24.4	19.9	17.2	23.5	19.6	17.4	22.2	19.1	17.2	20.4	18.4	16.6	17.8	16.4	15.7	13.9	13.4	13.3	80	
85	22.9	19.3	16.9	22.7	19	17.1	21.6	18.6	16.9	20	17.9	16.4	17.3	15.9	15.5	13.5	13	12.9	85	
90	21.7	18.7	16.6	21.7	18.5	16.8	21	18.1	16.6	19.6	17.5	16.1	16.7	15.4	15.2	13.1	12.6	12.5	90	
95	20.4	18.2	16.3	20.7	18	16.5	20.4	17.7	16.4	19.1	17.2	15.9	16.2	14.9	14.8	12.7	12.2	12.1	95	
100	19.2	17.7	16.1	19.7	17.6	16.3	19.7	17.3	16.1	18.6	16.8	15.7	15.7	14.5	14.4	12.3	11.8	11.8	100	
105	18.2	17.3	15.9	18.7	17.2	16.1	18.9	16.9	16	18.1	16.5	15.5	15.2	14.1	13.9	11.9	11.6	11.4	105	
110	17.2	16.9	15.7	17.8	16.8	15.9	18.2	16.6	15.8	17.3	16.2	15.4	14.7	13.7	13.5	11.6	11.2	11.2	110	
115	16.3	16.5	15.6	17	16.4	15.8	17.4	16.3	15.6	16.5	15.9	15.3	14.2	13.3	13.2	11.2	10.9	10.9	115	
120	15.5	16.2	15.5	16.2	16.1	15.7	16.7	16	15.5	15.7	15.5	15.1	13.8	12.9	12.8	10.9	10.7	10.6	120	
125	14.7	15.9	15.4	15.5	15.9	15.6	16	15.8	15.4	15	15	15	13.3	12.5	12.4	10.4	10.4	10.4	125	
130	14.1	15.4	15.4	14.8	15.6	15.4	15	15.4	15.3	14.3	14.5	14.6	12.8	12.2	12.1	10	10.1	10.1	130	
135	13.4	15		14.1	15.1	15.1	14.1	14.5	14.9	13.6	13.9	14.1	12.4	11.8	11.8	9.6	9.7	9.9	135	
140	12.7	14.5		13.6	14.4	14.7	13.4	13.5	13.9	12.6	13.1	13.4	11.9	11.5	11.6	9.2	9.4	9.6	140	
145	12.3	13.9		12.8	13.3		12.6	13	13.1	11.7	12.3	12.7	11.4	11.2	11.3	8.8	9	9.2	145	
150	11.9	13		12	12.3		11.8	12.2	12.5	11	11.4	11.9	10.8	10.9	11.1	8.4	8.6	8.8	150	
155	11.5			11.2	11.5		11.1	11.4	11.7	10.6	10.7	11	10.3	10.6	10.8	8	8.2	8.4	155	
160	8.6			10.6	10.7		10.3	10.7		10.3	10.4	10.4	9.6	10.1	10.4	7.6	7.9	8	160	
165				10.3	10.3		9.7	9.9		9.8	10	10.1	8.9	9.5	9.7	7.3	7.5	7.7	165	
170				9.8			9.1	9.3		9.2	9.5		8.3	8.8	9	6.9	7.1	7.3	170	
175				4.8			8.6	8.7		8.6	8.9		7.7	8.2	8.4	6.6	6.8	6.9	175	
180							8.3	8.4		8	8.3		7.1	7.6		6.3	6.5	6.6	180	
185							8.1			7.5	7.7		6.6	7		6	6.2	6.3	185	
190										7	7.2		6.1	6.5		5.7	5.9		190	
195										6.6	6.7		5.7	6		5.4	5.6		195	
200										6.2			5.2	5.5		4.6	5.3		200	
205													4.7	5		3.5	4.4		205	
210													4.2	4.5		2.2	3		210	
215													3.5						215	

Lifting capacities

Forces de levage

TNZK

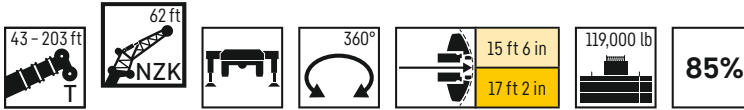


	43 ft			57 ft			72 ft			87 ft			102 ft			116 ft			
	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	
17	16.3			16.4			16.4			16.5									17
18	16.2			16.3			16.4			16.5									18
19	16.2			16.3			16.4			16.4			16.5						19
20	16.1			16.3			16.3			16.4			16.5						20
22	15.9			16.2			16.3			16.4			16.4			16.1			22
24	15.7			16			16.3			16.3			16.4			16			24
26	15.5			15.9			16.2			16.3			16.3			15.8			26
28	15.1			15.7			16			16.2			16.3			15.7			28
30	14.8			15.5			15.9			16.1			16.2			15.6			30
32	14.4	12.3		15.3			15.7			16			16.1			15.4			32
34	14	12		14.9	12.3		15.5			15.9			15.9			15.3			34
36	13.6	11.7		14.6	12		15.3	12.3		15.7			15.7			15.1			36
38	13.2	11.4		14.2	11.7		15.1	12		15.4	12.2		15.5			14.9			38
40	12.9	11.1		13.9	11.5		14.8	11.7		15.2	11.9		15.3			14.8			40
45	12	10.5		13.1	10.9		14	11.2		14.5	11.4		14.7	11.5		14.3	11.4		45
50	11.3	9.9	8.6	12.3	10.4	8.8	13.3	10.7		13.9	10.9		14.1	11.1		13.8	11		50
55	10.6	9.5	8.3	11.7	9.9	8.5	12.6	10.2	8.6	13.2	10.5	8.7	13.5	10.7		13.3	10.7		55
60	9.8	9	8.1	11.1	9.5	8.3	11.9	9.8	8.4	12.6	10.1	8.4	13	10.3	8.5	12.8	10.3	8.5	60
65	9	8.6	7.9	10.4	9.1	8	11.4	9.4	8.2	12	9.7	8.2	12.4	10	8.3	12.4	10	8.3	65
70	8.3	8.3	7.7	9.6	8.8	7.9	10.7	9.1	8	11.5	9.4	8.1	11.9	9.6	8.2	11.9	9.7	8.2	70
75	7.6	8	7.5	8.9	8.5	7.7	10.1	8.8	7.8	10.9	9.1	7.9	11.4	9.4	8	11.5	9.4	8	75
80	7.1	7.8	7.5	8.3	8.2	7.6	9.5	8.5	7.7	10.4	8.8	7.8	11	9.1	7.9	11.1	9.2	7.9	80
85	6.6	7.6	7.5	7.7	8	7.5	8.8	8.3	7.6	9.8	8.6	7.7	10.6	8.8	7.8	10.8	8.9	7.8	85
90	6.2	7.5	7.5	7.2	7.8	7.5	8.3	8.1	7.5	9.3	8.4	7.6	10.1	8.6	7.7	10.4	8.7	7.7	90
95	5.8	7.5		6.8	7.6	7.4	7.8	7.9	7.4	8.7	8.2	7.5	9.5	8.4	7.6	10	8.5	7.6	95
100				6.4	7.5	7.4	7.3	7.7	7.4	8.2	8	7.4	9	8.2	7.5	9.6	8.4	7.5	100
105				6	7.4		6.9	7.6	7.4	7.8	7.8	7.4	8.6	8.1	7.4	9.1	8.2	7.5	105
110				5.7	7.4		6.6	7.5	7.4	7.4	7.7	7.4	8.1	7.9	7.4	8.7	8	7.4	110
115							6.2	7.4	7.4	7	7.6	7.4	7.7	7.8	7.4	8.3	7.9	7.4	115
120							5.9	7.4		6.7	7.5	7.4	7.4	7.7	7.4	7.9	7.8	7.4	120
125							5.7	7.4		6.4	7.4	7.4	7.1	7.5	7.4	7.6	7.6	7.3	125
130										6.1	7.4		6.7	7.5	7.4	7.3	7.5	7.3	130
135										5.8	7.4		6.5	7.4	7.4	7	7.5	7.3	135
140										5.6	7.4		6.2	7.4	7.4	6.7	7.4	7.3	140
145													6	7.4		6.5	7.3	7.3	145
150													5.8	7.4		6.2	7.3	7.3	150
155													5.6	7.4		6	7.3		155
160																5.9	7.3		160
165																5.7	7.3		165
170																5.5			170

Lifting capacities

Forces de levage

TNZK

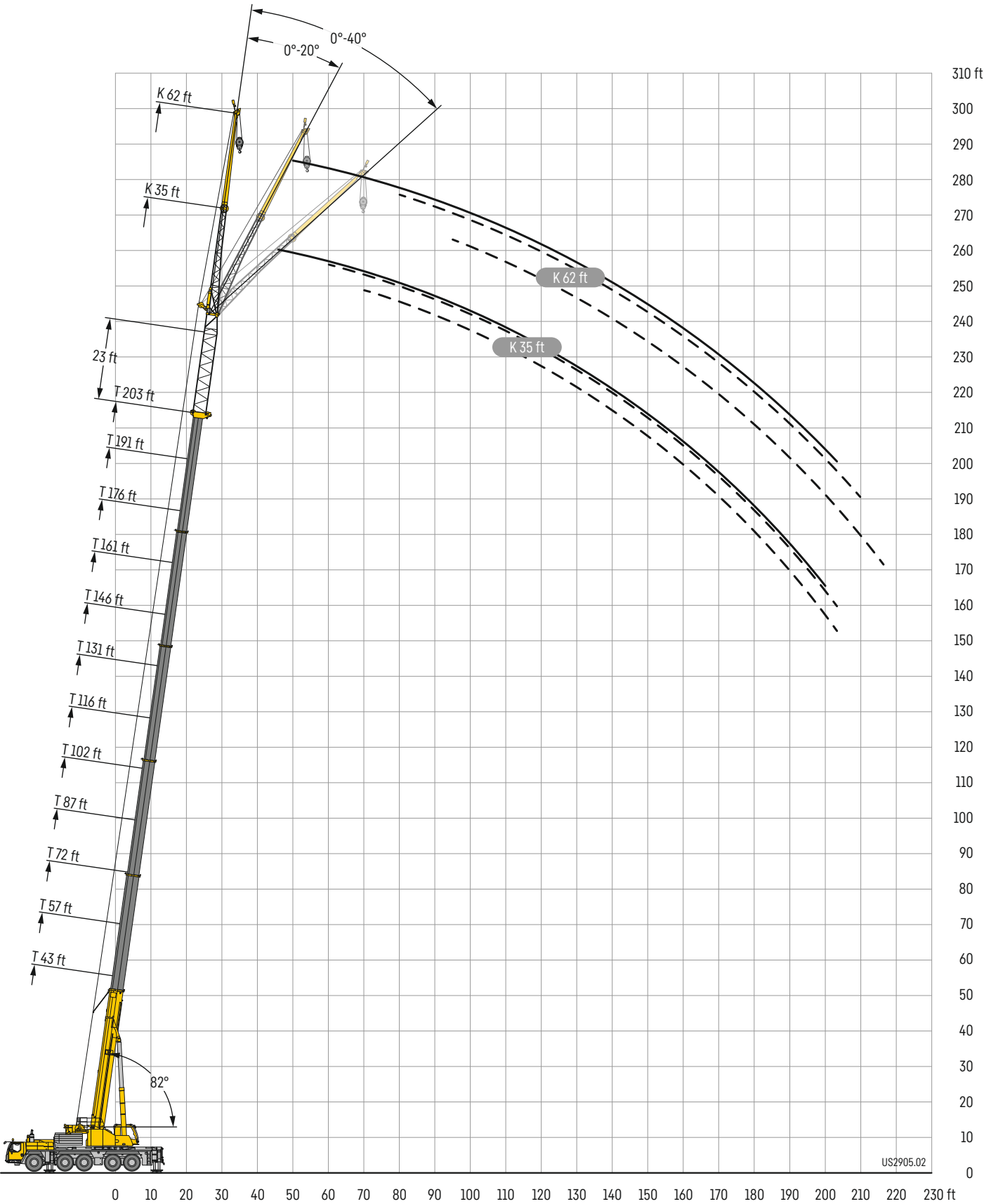


	131 ft			146 ft			161 ft			176 ft			191 ft			203 ft			
	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	
26	15.4																		26
28	15.2			14.1															28
30	15.1			14															30
32	15			13.9			13												32
34	14.9			13.8			12.9												34
36	14.7			13.7			12.8			11.8									36
38	14.6			13.6			12.7			11.8									38
40	14.4			13.5			12.7			11.7			10.6						40
45	14			13.3			12.5			11.6			10.5			9.5			45
50	13.6	11		12.9			12.2			11.5			10.4			9.4			50
55	13.2	10.7		12.6	10.5		12	10.2		11.3			10.3			9.4			55
60	12.7	10.4		12.2	10.2		11.7	10		11.1	9.7		10.2			9.3			60
65	12.3	10.1	8.3	11.9	9.9		11.4	9.7		10.9	9.5		10	9.1		9.2			65
70	11.9	9.8	8.2	11.6	9.7	8.1	11.2	9.5		10.7	9.3		9.9	8.9		9.1	8.5		70
75	11.5	9.5	8.1	11.2	9.4	8	10.9	9.3	8	10.5	9.1	7.9	9.8	8.8		9	8.4		75
80	11.2	9.3	7.9	10.9	9.2	7.9	10.7	9.1	7.9	10.3	8.9	7.8	9.6	8.6		8.9	8.3		80
85	10.8	9.1	7.8	10.6	9	7.8	10.4	8.9	7.8	10.1	8.8	7.7	9.5	8.5	7.6	8.8	8.1		85
90	10.5	8.9	7.7	10.4	8.8	7.7	10.2	8.8	7.7	9.9	8.6	7.6	9.3	8.4	7.5	8.6	8	7.3	90
95	10.2	8.7	7.6	10.1	8.7	7.6	10	8.6	7.6	9.6	8.5	7.5	9.2	8.2	7.4	8.5	7.9	7.3	95
100	10	8.5	7.6	9.9	8.5	7.5	9.7	8.4	7.5	9.5	8.3	7.5	9	8.1	7.4	8.4	7.8	7.2	100
105	9.6	8.3	7.5	9.6	8.3	7.5	9.5	8.3	7.5	9.3	8.2	7.4	8.9	8	7.3	8.3	7.7	7.2	105
110	9.2	8.2	7.4	9.4	8.2	7.4	9.3	8.2	7.4	9.1	8.1	7.4	8.7	7.9	7.3	8.2	7.6	7.1	110
115	8.8	8	7.4	9.1	8	7.4	9.1	8	7.4	8.9	8	7.3	8.6	7.8	7.2	8.1	7.6	7.1	115
120	8.5	7.9	7.3	8.8	7.9	7.3	8.9	7.9	7.3	8.8	7.9	7.3	8.5	7.7	7.2	8	7.5	7.1	120
125	8.1	7.8	7.3	8.4	7.8	7.3	8.6	7.8	7.3	8.6	7.8	7.2	8.4	7.6	7.2	7.9	7.4	7	125
130	7.8	7.7	7.3	8.1	7.7	7.3	8.4	7.7	7.3	8.4	7.7	7.2	8.2	7.5	7.1	7.8	7.4	7	130
135	7.5	7.6	7.3	7.8	7.6	7.3	8.1	7.6	7.2	8.2	7.6	7.2	8	7.5	7.1	7.8	7.3	7	135
140	7.2	7.5	7.3	7.5	7.5	7.3	7.8	7.6	7.2	8	7.5	7.2	7.8	7.4	7.1	7.6	7.2	7	140
145	6.9	7.4	7.3	7.3	7.4	7.3	7.5	7.5	7.2	7.7	7.5	7.1	7.7	7.3	7.1	7.5	7.2	7	145
150	6.7	7.4	7.3	7	7.4	7.3	7.3	7.4	7.2	7.5	7.4	7.1	7.5	7.3	7.1	7.4	7.1	7	150
155	6.5	7.3	7.3	6.8	7.3	7.3	7.1	7.4	7.2	7.3	7.3	7.1	7.3	7.2	7.1	7.2	7.1	7	155
160	6.3	7.3	7.3	6.6	7.3	7.3	6.9	7.3	7.2	7.1	7.3	7.1	7.1	7.2	7.1	7	7	6.9	160
165	6.1	7.3	7.3	6.4	7.3	7.3	6.7	7.3	7.2	6.9	7.2	7.1	7	7.1	7.1	6.8	6.8	6.9	165
170	5.9	7.3		6.2	7.3	7.3	6.5	7.2	7.2	6.7	7.2	7.1	6.8	7.1	7.1	6.5	6.7	6.8	170
175	5.8	7.3		6.1	7.3	7.3	6.3	7.2	7.2	6.5	7.2	7.1	6.6	7.1	7.1	6.3	6.5	6.7	175
180	5.6	7.3		5.9	7.3		6.2	7.2	7.2	6.4	7.2	7.1	6.5	7.1	7.1	6	6.3	6.5	180
185	5.5			5.8	7.3		6	7.2	7.2	6.3	7.2	7.1	6.3	7.1	7.1	5.7	6	6.3	185
190				5.7	7.3		5.9	7.2		6.1	7.1	7.1	6.2	7.1	7.1	5.4	5.8	6.1	190
195				5.6	7.3		5.8	7.2		6	7.1	7.1	6.1	6.9	7.1	5.2	5.5	5.8	195
200				5.5			5.7	7.1		5.8	7.1	7.1	5.9	6.5	6.8	5	5.3	5.5	200
205							5.6	6.6		5.7	6.8		5.6	6.1	6.3	4.5	5	5.2	205
210							5.5	6.4		5.6	6.3		5.1	5.6	5.8	3.5	4.7	4.9	210
215							5.3			5.5	5.9		4.5	5.2		2.3	4.2	4.6	215
220										5.3	5.5		3.6	4.7			2.9	3.5	220
225										4.9	5.1		2.5	3.6				2.2	225
230										3.4				2.5					230

Lifting heights

Hauteurs de levage

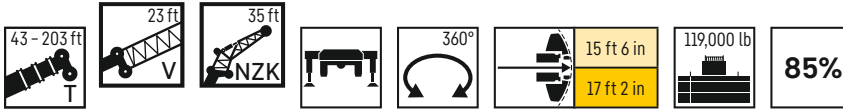
TVNZK



Lifting capacities

Forces de levage

TVNZK

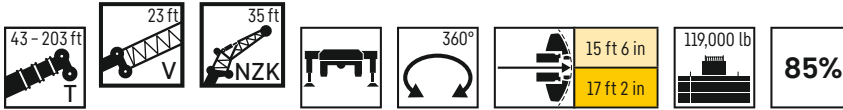


	43 ft + 23 ft			57 ft + 23 ft			72 ft + 23 ft			87 ft + 23 ft			102 ft + 23 ft			116 ft + 23 ft			
	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	
17	19.2			19.7			20.2			20.2									17
18	19.3			19.8			20.1			20.2									18
19	19.3			19.7			20.1			20.2			20.2						19
20	19.2			19.6			20			20.2			20.2						20
22	18.8	17.2		19.4			19.8			20			20.2						22
24	18.3	17.1		19.2	17.2		19.6			19.9			20.1			20.2			24
26	17.7	16.6		18.8	17.2		19.3	17.2		19.7			19.9			20.1			26
28	17.2	16.1		18.3	16.8		19.1	17.2		19.5	17.2		19.8			20			28
30	16.7	15.6	14.7	17.9	16.4		18.8	17		19.3	17.2		19.6			19.9			30
32	16.2	15.1	14.7	17.4	15.9	14.7	18.4	16.6		19.1	17.2		19.4	17.2		19.7			32
34	15.6	14.7	14.4	16.9	15.5	14.7	18	16.2	14.7	18.8	16.8		19.3	17.2		19.6	17.2		34
36	15.2	14.3	14	16.5	15.1	14.6	17.6	15.9	14.7	18.5	16.5		19.1	17		19.4	17.2		36
38	14.6	13.8	13.6	16.1	14.7	14.3	17.1	15.5	14.7	18.1	16.1	14.7	18.8	16.6		19.2	17.1		38
40	14.2	13.4	13.2	15.6	14.4	13.9	16.7	15.1	14.5	17.7	15.8	14.7	18.5	16.4	14.7	19.1	16.8		40
45	12.8	12.6	12.4	14.5	13.5	13.1	15.8	14.3	13.7	16.7	15	14.2	17.6	15.6	14.6	18.4	16.1	14.7	45
50	11.8	11.8	11.7	13.4	12.7	12.4	14.8	13.5	13	15.9	14.3	13.5	16.8	14.9	14	17.6	15.4	14.4	50
55	10.9	11.1	11.1	12.3	12	11.8	13.8	12.8	12.4	15	13.6	12.9	16	14.2	13.4	16.8	14.8	13.8	55
60	10.1	10.4	10.6	11.5	11.5	11.3	12.8	12.2	11.8	14.2	12.9	12.4	15.2	13.6	12.8	16.1	14.2	13.2	60
65	9.4	9.7	10.1	10.7	10.8	10.8	12	11.7	11.4	13.2	12.4	11.9	14.4	13	12.3	15.4	13.6	12.8	65
70	8.8	9	9.4	10.1	10.2	10.4	11.2	11.2	11	12.4	11.9	11.5	13.6	12.5	11.9	14.6	13.1	12.3	70
75	8.2	8.4	8.7	9.4	9.6	9.9	10.6	10.6	10.6	11.7	11.4	11.1	12.8	12	11.5	13.9	12.6	12	75
80	7.7	7.9	8.1	8.9	9	9.3	10	10	10.3	11	10.9	10.8	12.1	11.6	11.2	13.1	12.1	11.6	80
85	7.3	7.4	7.6	8.4	8.5	8.7	9.5	9.5	9.7	10.5	10.4	10.5	11.5	11.2	10.9	12.5	11.8	11.3	85
90	7	7.1	7.5	7.9	8.1	8.3	9	9	9.2	10	9.9	10.1	10.9	10.7	10.6	11.8	11.4	11	90
95				7.5	7.6		8.5	8.6	8.8	9.5	9.5	9.6	10.4	10.3	10.3	11.3	11	10.8	95
100				7.2	7.3		8.1	8.2	8.3	9	9	9.2	10	9.8	9.9	10.8	10.6	10.5	100
105				6.9	6.9		7.7	7.8		8.6	8.6	8.8	9.5	9.4	9.5	10.4	10.1	10.2	105
110							7.4	7.5		8.3	8.3	8.4	9.1	9	9.2	9.9	9.8	9.8	110
115							7.1	7.2		7.9	7.9	8.1	8.7	8.7	8.8	9.5	9.4	9.5	115
120							6.9	6.9		7.6	7.6		8.4	8.3	8.5	9.2	9	9.1	120
125										7.3	7.3		8	8	8.1	8.8	8.7	8.8	125
130										7	7.1		7.7	7.7		8.5	8.4	8.5	130
135										6.8			7.5	7.5		8.2	8.1	8.2	135
140													7.2	7.2		7.9	7.8		140
145													7	7		7.6	7.6		145
150													6.8			7.4	7.4		150
155																7.1	7.2		155
160																6.9	7		160
165																6.8			165

Lifting capacities

Forces de levage

TVNZK

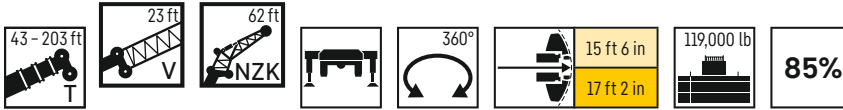


	131 ft + 23 ft			146 ft + 23 ft			161 ft + 23 ft			176 ft + 23 ft			191 ft + 23 ft			203 ft + 23 ft			
	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	
26	20.2																		26
28	20.1																		28
30	20.1			20.2															30
32	19.9			20.1			18.4												32
34	19.8			20			18.3												34
36	19.7			19.9			18.3			15.7									36
38	19.5	17.2		19.7			18.2			15.6									38
40	19.4	17.2		19.6			18.1			15.6			13						40
45	19	16.6		19.3	17		17.9			15.4			12.9			11.1			45
50	18.3	15.9	14.7	18.8	16.3	14.7	17.7	16.7		15.2	15.2		12.7			11			50
55	17.6	15.3	14.2	18.2	15.7	14.5	17.4	16.1	14.7	15.1	14.9		12.6	12.8		10.9			55
60	16.8	14.7	13.7	17.5	15.2	14	17.1	15.6	14.3	14.9	14.5	13.4	12.5	12.6		10.9	11		60
65	16.2	14.2	13.2	16.8	14.6	13.5	16.8	15.1	13.9	14.7	14.1	13.1	12.4	12.4	11.9	10.8	10.8		65
70	15.5	13.6	12.7	16.2	14.1	13.1	16.3	14.6	13.4	14.5	13.7	12.7	12.3	12.2	11.7	10.7	10.7	10.7	70
75	14.8	13.1	12.3	15.6	13.7	12.7	15.8	14.1	13	14.3	13.3	12.4	12.2	11.9	11.4	10.5	10.5	10.5	75
80	14.2	12.7	12	15	13.2	12.3	15.3	13.7	12.7	14	12.9	12.1	12.1	11.7	11.2	10.3	10.3	10.3	80
85	13.5	12.2	11.7	14.4	12.8	12	14.8	13.2	12.3	13.6	12.5	11.8	11.9	11.4	11	10.1	10	10	85
90	12.8	11.9	11.4	13.7	12.4	11.7	14.3	12.8	12	13.3	12.2	11.5	11.7	11.2	10.9	9.9	9.8	9.8	90
95	12.2	11.6	11.1	13.1	12	11.4	13.9	12.5	11.8	12.9	11.9	11.3	11.5	11	10.7	9.7	9.5	9.5	95
100	11.6	11.2	10.9	12.5	11.7	11.2	13.3	12.1	11.5	12.6	11.6	11.1	11.2	10.8	10.5	9.4	9.3	9.3	100
105	11.1	10.8	10.6	12	11.4	11	12.8	11.8	11.3	12.3	11.3	10.9	10.9	10.6	10.3	9.2	9	9	105
110	10.7	10.4	10.4	11.5	11	10.8	12.2	11.5	11	11.9	11.1	10.7	10.7	10.4	10.1	8.9	8.8	8.8	110
115	10.3	10.1	10.1	11	10.7	10.5	11.8	11.2	10.8	11.6	10.8	10.5	10.4	10.1	10	8.7	8.6	8.5	115
120	9.9	9.7	9.7	10.6	10.3	10.3	11.3	10.9	10.6	11.3	10.6	10.3	10.1	9.9	9.8	8.4	8.3	8.3	120
125	9.5	9.4	9.4	10.3	10	10	10.9	10.5	10.4	11.1	10.4	10.2	9.9	9.7	9.7	8.2	8.1	8.1	125
130	9.2	9	9.1	9.9	9.7	9.7	10.6	10.2	10.2	10.9	10.2	10	9.6	9.5	9.5	8	7.9	7.9	130
135	8.8	8.7	8.8	9.6	9.3	9.4	10.2	9.9	9.9	10.6	10.1	9.9	9.4	9.2	9.3	7.8	7.7	7.7	135
140	8.5	8.5	8.5	9.2	9	9.1	9.9	9.6	9.6	10.4	9.9	9.7	9.1	9	9	7.6	7.5	7.5	140
145	8.3	8.2	8.3	8.9	8.8	8.8	9.6	9.3	9.3	10.2	9.7	9.6	8.9	8.8	8.8	7.4	7.3	7.3	145
150	8	7.9	8	8.6	8.5	8.6	9.3	9	9.1	9.9	9.5	9.5	8.7	8.6	8.6	7.2	7.1	7.1	150
155	7.7	7.7		8.4	8.2	8.3	9	8.8	8.8	9.6	9.3	9.3	8.5	8.4	8.4	7	6.9	7	155
160	7.5	7.5		8.1	8	8.1	8.7	8.5	8.6	9.3	9	9.1	8.3	8.2	8.2	6.7	6.7	6.8	160
165	7.3	7.3		7.9	7.8		8.4	8.3	8.4	9	8.8	8.8	8.1	8	8.1	6.4	6.6	6.6	165
170	7.1	7.1		7.6	7.6		8.2	8.1	8.1	8.5	8.6	8.6	7.9	7.8	7.9	6.2	6.3	6.4	170
175	6.9	6.9		7.4	7.4		8	7.9		7.9	8.3	8.4	7.7	7.7	7.7	5.9	6.1	6.2	175
180	6.8			7.2	7.2		7.8	7.7		7.5	7.7	7.9	7.4	7.5	7.6	5.6	5.8	6	180
185				7	7		7.5	7.5		7.3	7.3	7.4	6.9	7.3	7.3	5.3	5.5	5.7	185
190				6.9	6.9		7.2	7.3		7.1	7.2		6.4	6.8	6.9	5	5.3	5.4	190
195				6.8			6.7	6.9		6.8	6.9		5.9	6.2	6.4	4.5	5	5.1	195
200							6.3	6.4		6.3	6.6		5.5	5.8		3.2	4.4	4.6	200
205							6.1			5.9	6.1		4.3	5.2			3.1	3.7	205
210							5.9			5.5	5.7		3.1	3.9					210
215										5.1	5.3		1.8	2.7					215
220										4.1									220
225										3.2									225

Lifting capacities

Forces de levage

TVNZK



	43 ft + 23 ft			57 ft + 23 ft			72 ft + 23 ft			87 ft + 23 ft			102 ft + 23 ft			116 ft + 23 ft			
	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	
17	11			11															17
18	11			11			11												18
19	10.9			11			11												19
20	10.9			11			11			11									20
22	10.9			10.9			11			11									22
24	10.8			10.9			11			11			11						24
26	10.7			10.8			10.9			11			11			11			26
28	10.7			10.8			10.9			10.9			11			11			28
30	10.6			10.7			10.8			10.9			11			11			30
32	10.5			10.7			10.8			10.9			10.9			11			32
34	10.3			10.6			10.7			10.8			10.9			10.9			34
36	10.2	10		10.5			10.7			10.8			10.8			10.9			36
38	10.1	10		10.4	10		10.6			10.7			10.8			10.9			38
40	9.9	9.8		10.3	10		10.5	10		10.7			10.8			10.8			40
45	9.4	9.3		10	9.7		10.3	9.9		10.5	10		10.6	10		10.7			45
50	9	8.9		9.5	9.2		10	9.5		10.3	9.8		10.4	9.9		10.6	10		50
55	8.6	8.4	8.4	9.1	8.8	8.4	9.6	9.1		10	9.4		10.2	9.7		10.4	9.9		55
60	8.2	8.1	8	8.7	8.4	8.3	9.2	8.8	8.4	9.6	9.1	8.4	10	9.3		10.2	9.6		60
65	7.8	7.7	7.7	8.3	8.1	7.9	8.8	8.4	8.2	9.3	8.7	8.3	9.7	9	8.4	10	9.3	8.3	65
70	7.4	7.3	7.4	8	7.8	7.6	8.5	8.1	7.9	8.9	8.4	8.1	9.3	8.7	8.2	9.7	9	8.1	70
75	7.1	7	7.1	7.7	7.5	7.4	8.2	7.8	7.6	8.6	8.2	7.8	9	8.4	8	9.4	8.7	8	75
80	6.8	6.7	6.8	7.4	7.2	7.1	7.9	7.5	7.4	8.3	7.9	7.6	8.7	8.2	7.8	9.1	8.4	7.9	80
85	6.5	6.5	6.5	7.1	6.9	6.9	7.6	7.3	7.2	8	7.6	7.4	8.5	7.9	7.6	8.8	8.2	7.8	85
90	6.2	6.2	6.3	6.8	6.6	6.7	7.3	7	6.9	7.8	7.4	7.2	8.2	7.7	7.4	8.6	8	7.6	90
95	6	6	6.1	6.5	6.4	6.4	7	6.8	6.7	7.5	7.1	7	7.9	7.5	7.2	8.3	7.7	7.4	95
100	5.7	5.8	6	6.2	6.2	6.3	6.8	6.6	6.6	7.2	6.9	6.8	7.7	7.2	7	8	7.5	7.2	100
105	5.6	5.6	5.9	6	6	6.1	6.5	6.3	6.4	7	6.7	6.6	7.4	7	6.9	7.8	7.3	7.1	105
110	5.3	5.5	5.8	5.8	5.8	6	6.3	6.2	6.2	6.8	6.5	6.5	7.2	6.8	6.7	7.6	7.1	6.9	110
115	5.1	5.3	5.5	5.6	5.6	5.9	6.1	6	6.1	6.5	6.3	6.3	7	6.6	6.6	7.4	7	6.8	115
120	4.9	5.1		5.5	5.5	5.8	5.9	5.8	6	6.3	6.1	6.2	6.7	6.5	6.4	7.2	6.8	6.6	120
125				5.2	5.4		5.7	5.7	5.9	6.1	6	6.1	6.5	6.3	6.3	7	6.6	6.5	125
130				5	5.2		5.6	5.6	5.8	6	5.8	6	6.4	6.1	6.2	6.7	6.4	6.4	130
135				4.9			5.4	5.5	5.7	5.8	5.7	5.9	6.2	6	6.1	6.5	6.3	6.2	135
140							5.2	5.3		5.6	5.6	5.8	6	5.9	6	6.4	6.1	6.1	140
145							5	5.1		5.5	5.5	5.8	5.8	5.7	5.9	6.2	6	6.1	145
150							4.9			5.3	5.4		5.7	5.6	5.8	6	5.9	6	150
155										5.1	5.2		5.6	5.5	5.8	5.9	5.8	5.9	155
160										5	5.1		5.4	5.5	5.7	5.8	5.7	5.8	160
165										4.9			5.2	5.3		5.6	5.6	5.8	165
170													5.1	5.2		5.5	5.5	5.8	170
175													4.9	5.1		5.3	5.4		175
180													4.9			5.2	5.3		180
185																5.1	5.2		185
190																4.9	5.1		190
195																4.9			195

Lifting capacities

Forces de levage

TVNZK

43 - 203 ft

23 ft

62 ft

360°

15 ft 6 in
17 ft 2 in

119,000 lb

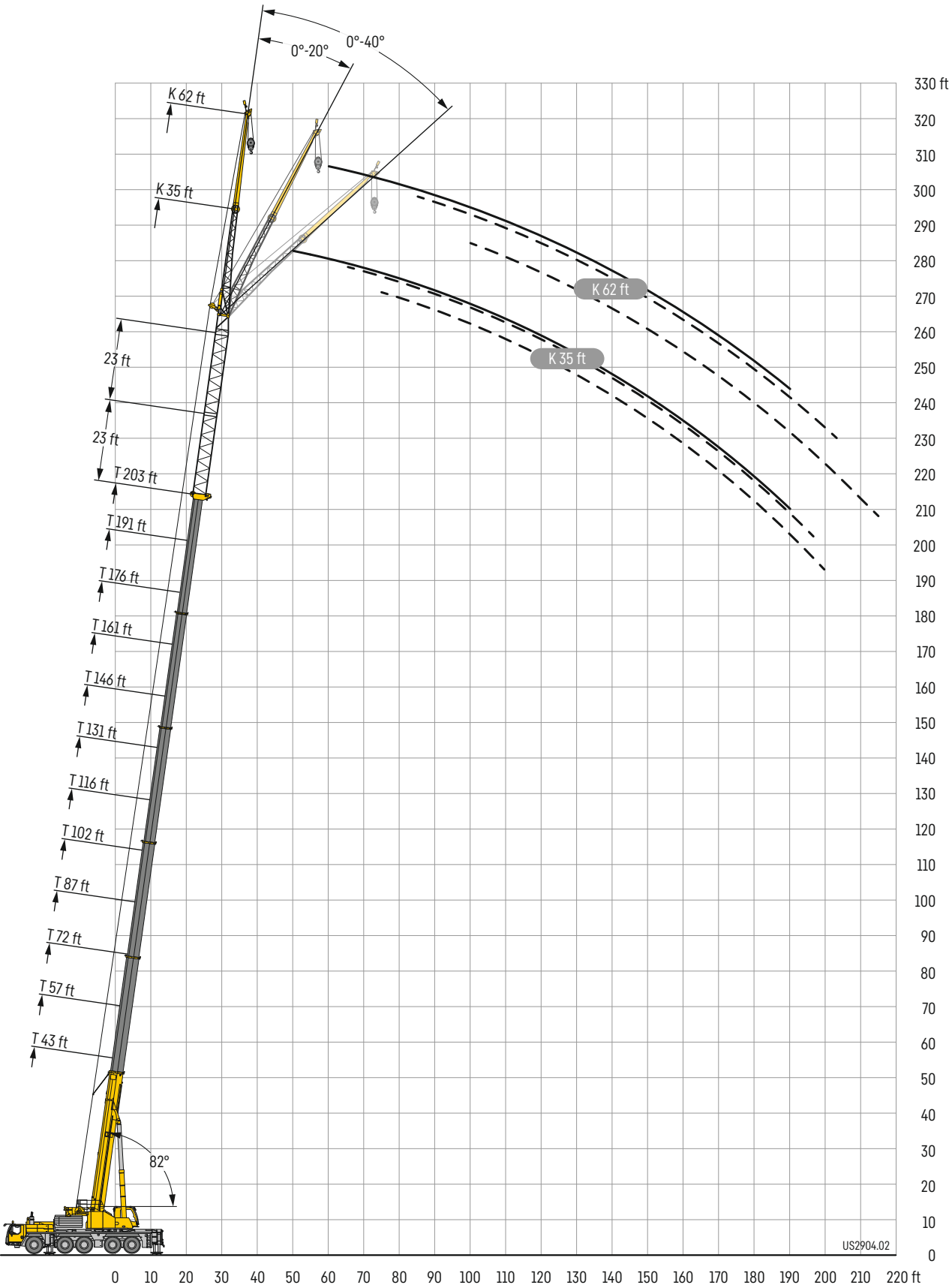
85%

	131 ft + 23 ft			146 ft + 23 ft			161 ft + 23 ft			176 ft + 23 ft			191 ft + 23 ft			203 ft + 23 ft			
	62 ft																		
	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	
30	11																		30
32	11																		32
34	11			10.7															34
36	10.9			10.8			10.6												36
38	10.9			11			10.7												38
40	10.9			10.9			10.7												40
45	10.8			10.9			10.6			9.7			8.3						45
50	10.7			10.8			10.5			9.6			8.4			7.2			50
55	10.6	10		10.7			10.4			9.5			8.4			7.4			55
60	10.4	9.8		10.5	9.8		10.3			9.4			8.4			7.4			60
65	10.2	9.5		10.4	9.6		10.2	9.3		9.4			8.3			7.4			65
70	10	9.2	8.1	10.2	9.4		10.1	9.1		9.3	8.8		8.2			7.4			70
75	9.7	8.9	8	10	9.1	7.9	10	9		9.2	8.6		8.2	8.1		7.3			75
80	9.5	8.7	7.9	9.8	8.9	7.8	9.8	8.8	7.8	9.1	8.5		8.1	8		7.3	7.4		80
85	9.2	8.4	7.8	9.5	8.7	7.7	9.6	8.7	7.7	9	8.4	7.6	8	7.8		7.2	7.3		85
90	8.9	8.2	7.7	9.3	8.4	7.7	9.4	8.5	7.6	8.8	8.2	7.5	8	7.7	7.2	7.2	7.2		90
95	8.7	8	7.6	9	8.2	7.6	9.2	8.3	7.5	8.7	8	7.4	7.9	7.6	7.2	7.1	7.1	6.8	95
100	8.4	7.8	7.4	8.7	8	7.5	9	8.2	7.5	8.5	7.9	7.3	7.8	7.4	7.1	7.1	6.9	6.7	100
105	8.2	7.6	7.2	8.5	7.8	7.4	8.8	8	7.4	8.4	7.7	7.3	7.7	7.3	6.9	7	6.8	6.6	105
110	7.9	7.4	7.1	8.3	7.6	7.3	8.6	7.8	7.3	8.2	7.5	7.2	7.6	7.1	6.8	6.9	6.7	6.5	110
115	7.7	7.2	6.9	8.1	7.5	7.1	8.3	7.6	7.2	8	7.4	7	7.4	7	6.7	6.8	6.6	6.4	115
120	7.5	7	6.8	7.9	7.3	7	8.1	7.4	7.1	7.8	7.2	6.9	7.3	6.9	6.6	6.6	6.5	6.3	120
125	7.3	6.9	6.7	7.7	7.1	6.8	7.9	7.3	7	7.6	7.1	6.8	7.2	6.7	6.5	6.5	6.4	6.2	125
130	7.1	6.7	6.6	7.5	7	6.7	7.7	7.1	6.8	7.5	7	6.7	7.1	6.6	6.4	6.4	6.3	6.1	130
135	6.9	6.5	6.4	7.3	6.8	6.6	7.5	7	6.7	7.3	6.8	6.6	6.9	6.5	6.3	6.2	6.2	6.1	135
140	6.7	6.4	6.3	7.1	6.6	6.5	7.4	6.8	6.6	7.2	6.7	6.5	6.8	6.4	6.2	6.1	6	6	140
145	6.6	6.2	6.2	6.9	6.5	6.4	7.2	6.7	6.5	7	6.6	6.4	6.6	6.2	6.1	5.9	5.9	5.9	145
150	6.4	6.1	6.1	6.7	6.4	6.3	7	6.5	6.4	6.8	6.4	6.3	6.5	6.1	6	5.8	5.8	5.8	150
155	6.2	6	6	6.6	6.2	6.2	6.8	6.4	6.3	6.7	6.3	6.2	6.4	6	6	5.7	5.6	5.7	155
160	6.1	5.9	6	6.4	6.1	6.1	6.7	6.3	6.2	6.5	6.2	6.1	6.3	5.9	5.9	5.5	5.5	5.6	160
165	6	5.8	5.9	6.3	6	6	6.5	6.2	6.1	6.4	6.1	6	6.1	5.8	5.8	5.4	5.3	5.4	165
170	5.8	5.7	5.9	6.1	5.9	6	6.4	6	6	6.3	5.9	5.9	6	5.8	5.8	5.2	5.2	5.3	170
175	5.7	5.6	5.8	6	5.8	5.9	6.2	5.9	6	6.1	5.9	5.9	5.9	5.7	5.7	5.1	5.1	5.2	175
180	5.6	5.5	5.8	5.9	5.7	5.9	6.1	5.8	5.9	6	5.8	5.8	5.8	5.6	5.6	4.9	5	5.1	180
185	5.4	5.5		5.7	5.6	5.8	6	5.7	5.8	5.9	5.7	5.7	5.7	5.5	5.6	4.8	4.8	4.9	185
190	5.3	5.3		5.6	5.5	5.8	5.8	5.7	5.8	5.8	5.6	5.7	5.6	5.4	5.5	4.6	4.7	4.8	190
195	5.2	5.2		5.5	5.5	5.7	5.7	5.6	5.8	5.7	5.5	5.7	5.5	5.4	5.5	4.4	4.6	4.7	195
200	5	5.1		5.4	5.4		5.6	5.5	5.7	5.6	5.4	5.6	5.4	5.3	5.5	3.9	4.5	4.6	200
205	4.9	5.1		5.3	5.3		5.5	5.4	5.7	5.5	5.4	5.6	5.2	5.2	5.4	2.9	4.3	4.5	205
210	4.7			5.1	5.2		5.4	5.4		5.3	5.3	5.6	4	5.2	5.4		3.7	4.3	210
215				5	5.1		5.3	5.3		5.2	5.2	5.4	2.9	4.7	5.4			3.9	215
220				4.9	5.1		5.2	5.3		5	5.1	5.4		3.6	4.4				220
225				2.2			5	5.1		4	4.9			2.4	3.1				225
230							4.7	4.8		3	4.1								230
235							4.6			2	2.9								235
240											1.9								240

Lifting heights

Hauteurs de levage

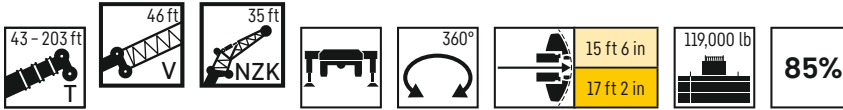
TVNZK



Lifting capacities

Forces de levage

TVNZK

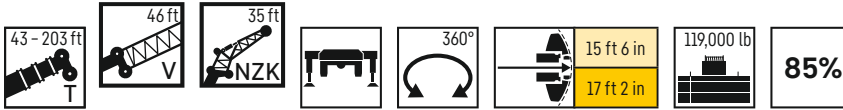


	43 ft + 46 ft			57 ft + 46 ft			72 ft + 46 ft			87 ft + 46 ft			102 ft + 46 ft			116 ft + 46 ft			
	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	
17	12.4			12.5															17
18	12.4			12.5			12.5												18
19	12.3			12.5			12.5												19
20	12.2			12.4			12.5			12.5									20
22	12.1			12.3			12.4			12.5									22
24	11.9			12.2			12.3			12.5			12.5						24
26	11.8	11.8		12			12.2			12.4			12.5			12.5			26
28	11.6	11.8		11.9	11.8		12.1			12.3			12.4			12.5			28
30	11.3	11.4		11.8	11.8		12	11.8		12.2			12.3			12.4			30
32	11.1	11.2		11.6	11.6		11.9	11.8		12.1	11.8		12.2			12.4			32
34	10.8	10.9	10.5	11.3	11.3		11.8	11.7		12	11.8		12.1			12.3			34
36	10.6	10.6	10.5	11.1	11.1	10.5	11.6	11.5		11.9	11.8		12	11.8		12.2			36
38	10.3	10.3	10.3	10.9	10.8	10.5	11.4	11.2	10.5	11.7	11.6		11.9	11.8		12.1	11.8		38
40	10.1	10	10.1	10.7	10.5	10.4	11.2	11	10.5	11.6	11.3		11.8	11.7		12	11.8		40
45	9.5	9.4	9.5	10.1	9.9	9.9	10.7	10.4	10.2	11.1	10.8	10.5	11.5	11.2	10.5	11.8	11.5		45
50	8.9	8.8	8.9	9.6	9.4	9.3	10.2	9.9	9.7	10.7	10.3	10	11.1	10.7	10.3	11.4	11	10.5	50
55	8.4	8.3	8.4	9	8.9	8.9	9.7	9.4	9.3	10.2	9.8	9.6	10.7	10.2	9.9	11	10.6	10.2	55
60	7.9	7.9	8	8.6	8.4	8.4	9.2	8.9	8.8	9.7	9.4	9.2	10.2	9.7	9.5	10.7	10.1	9.8	60
65	7.5	7.5	7.5	8.1	8	8	8.7	8.5	8.4	9.3	9	8.8	9.8	9.4	9.1	10.2	9.7	9.4	65
70	7.1	7.1	7.2	7.7	7.6	7.6	8.3	8.1	8.1	8.9	8.6	8.5	9.4	9	8.8	9.9	9.4	9.1	70
75	6.7	6.7	6.8	7.4	7.3	7.3	7.9	7.8	7.7	8.5	8.2	8.1	9	8.6	8.5	9.5	9	8.8	75
80	6.3	6.4	6.5	7	6.9	7	7.6	7.4	7.4	8.1	7.9	7.8	8.6	8.3	8.2	9.1	8.7	8.5	80
85	6	6.1	6.1	6.7	6.6	6.7	7.3	7.1	7.1	7.8	7.6	7.5	8.3	8	7.9	8.8	8.4	8.2	85
90	5.7	5.7	5.9	6.4	6.3	6.4	7	6.8	6.9	7.5	7.3	7.2	8	7.7	7.6	8.5	8.1	7.9	90
95	5.5	5.5	5.6	6.1	6.1	6.1	6.7	6.6	6.6	7.2	7	7	7.7	7.4	7.3	8.1	7.8	7.7	95
100	5.2	5.3	5.4	5.8	5.8	5.9	6.4	6.3	6.3	6.9	6.8	6.7	7.4	7.2	7.1	7.9	7.6	7.4	100
105	5	5.1	5.2	5.6	5.5	5.6	6.1	6.1	6.1	6.6	6.5	6.5	7.1	6.9	6.9	7.6	7.3	7.2	105
110	4.8	4.9	5.2	5.3	5.3	5.4	5.9	5.8	5.9	6.4	6.3	6.3	6.9	6.7	6.7	7.3	7.1	7	110
115	4.6	4.6		5.1	5.2		5.6	5.6	5.7	6.1	6.1	6.1	6.6	6.5	6.4	7.1	6.8	6.8	115
120				4.9	5		5.4	5.4	5.5	5.9	5.8	5.9	6.4	6.2	6.2	6.9	6.6	6.6	120
125				4.7	4.8		5.2	5.2		5.7	5.6	5.7	6.2	6.1	6.1	6.6	6.4	6.4	125
130				4.5			5.1	5.1		5.5	5.5	5.5	5.9	5.9	5.9	6.4	6.2	6.2	130
135							4.9	4.9		5.3	5.3		5.7	5.7	5.7	6.2	6.1	6	135
140							4.7	4.8		5.2	5.1		5.6	5.5	5.6	6	5.9	5.9	140
145							4.5			5	5		5.4	5.4	5.4	5.8	5.7	5.7	145
150										4.8	4.9		5.2	5.2		5.6	5.5	5.6	150
155										4.7	4.7		5.1	5.1		5.5	5.4	5.5	155
160										4.5			4.9	5		5.3	5.3		160
165													4.8	4.8		5.2	5.1		165
170													4.6	4.7		5	5		170
175													4.5			4.9	4.9		175
180																4.7	4.8		180
185																4.6			185
190																4.5			190

Lifting capacities

Forces de levage

TVNZK

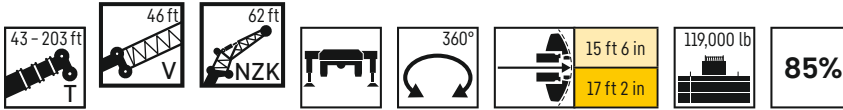


	131 ft + 46 ft			146 ft + 46 ft			161 ft + 46 ft			176 ft + 46 ft			191 ft + 46 ft			203 ft + 46 ft			
	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	
30	12.5																		30
32	12.5																		32
34	12.4			12.5															34
36	12.3			12.4			12.4												36
38	12.2			12.4			12.3												38
40	12.2			12.3			12.3			10.7									40
45	11.9	11.8		12.1			12.1			10.6			9						45
50	11.7	11.3		11.9	11.6		12	11.8		10.5			9			7.4			50
55	11.4	10.9	10.4	11.7	11.2	10.5	11.8	11.4		10.4	10.4		8.9			7.6			55
60	11	10.5	10	11.3	10.8	10.3	11.5	11	10.4	10.3	10.2		8.8	8.9		7.6			60
65	10.6	10.1	9.7	11	10.4	9.9	11.3	10.7	10.1	10.1	9.9	9.5	8.7	8.8		7.6	7.7		65
70	10.3	9.7	9.3	10.6	10	9.6	10.9	10.3	9.8	9.9	9.6	9.3	8.6	8.6	8.5	7.5	7.6		70
75	9.9	9.4	9	10.3	9.7	9.3	10.6	10	9.5	9.7	9.4	9	8.5	8.5	8.3	7.5	7.5	7.5	75
80	9.6	9	8.8	9.9	9.4	9	10.3	9.7	9.2	9.6	9.1	8.8	8.4	8.3	8.1	7.4	7.5	7.4	80
85	9.2	8.7	8.5	9.6	9	8.8	10	9.4	9	9.3	8.9	8.5	8.3	8.1	7.9	7.3	7.4	7.3	85
90	8.9	8.4	8.2	9.3	8.7	8.5	9.7	9.1	8.7	9.1	8.6	8.3	8.2	7.9	7.7	7.3	7.2	7.1	90
95	8.6	8.2	8	9	8.5	8.2	9.4	8.8	8.5	8.8	8.4	8.1	8	7.7	7.5	7.2	7.1	7	95
100	8.3	7.9	7.7	8.7	8.2	8	9	8.5	8.2	8.6	8.1	7.9	7.9	7.5	7.4	7.1	6.9	6.8	100
105	8	7.7	7.5	8.4	8	7.8	8.8	8.3	8	8.3	7.9	7.7	7.7	7.3	7.2	7	6.8	6.7	105
110	7.8	7.4	7.3	8.1	7.8	7.6	8.5	8	7.8	8.1	7.7	7.5	7.5	7.2	7	6.8	6.7	6.6	110
115	7.5	7.2	7.1	7.9	7.5	7.4	8.2	7.8	7.6	7.9	7.5	7.3	7.3	7	6.9	6.6	6.5	6.5	115
120	7.3	7	6.9	7.7	7.3	7.2	8	7.6	7.4	7.7	7.3	7.2	7.1	6.9	6.7	6.5	6.4	6.3	120
125	7	6.8	6.7	7.4	7.1	7	7.8	7.4	7.2	7.5	7.1	7	7	6.7	6.6	6.3	6.2	6.2	125
130	6.8	6.6	6.5	7.2	6.9	6.8	7.6	7.2	7	7.3	7	6.8	6.8	6.5	6.4	6.1	6.1	6.1	130
135	6.6	6.4	6.4	7	6.7	6.6	7.3	7	6.9	7.1	6.8	6.7	6.6	6.4	6.3	6	5.9	5.9	135
140	6.4	6.2	6.2	6.8	6.5	6.5	7.1	6.8	6.7	6.9	6.6	6.5	6.5	6.3	6.2	5.8	5.7	5.8	140
145	6.2	6.1	6	6.6	6.4	6.3	6.9	6.6	6.5	6.7	6.5	6.4	6.3	6.1	6	5.6	5.6	5.6	145
150	6	5.9	5.9	6.4	6.2	6.2	6.7	6.5	6.4	6.5	6.3	6.2	6.2	6	5.9	5.4	5.4	5.5	150
155	5.8	5.7	5.7	6.2	6.1	6	6.5	6.3	6.2	6.4	6.2	6.1	6	5.9	5.8	5.3	5.3	5.3	155
160	5.7	5.6	5.6	6	5.9	5.9	6.3	6.1	6.1	6.2	6	6	5.9	5.7	5.7	5.1	5.1	5.2	160
165	5.5	5.4	5.5	5.9	5.7	5.8	6.2	6	5.9	6.1	5.9	5.8	5.8	5.6	5.6	5	5	5	165
170	5.4	5.3		5.7	5.6	5.6	6	5.8	5.8	5.9	5.7	5.7	5.7	5.5	5.5	4.8	4.9	4.9	170
175	5.3	5.2		5.6	5.5	5.5	5.9	5.7	5.7	5.8	5.6	5.6	5.5	5.4	5.4	4.7	4.7	4.8	175
180	5.1	5.1		5.5	5.4	5.4	5.7	5.6	5.6	5.6	5.5	5.5	5.4	5.3	5.3	4.5	4.6	4.6	180
185	5	5		5.3	5.2		5.6	5.4	5.5	5.5	5.4	5.4	5.3	5.2	5.2	4.3	4.4	4.5	185
190	4.8	4.9		5.2	5.1		5.4	5.3	5.4	5.4	5.3	5.3	5.2	5.1	5.1	3.8	4.3	4.4	190
195	4.7	4.8		5.1	5		5.3	5.2		5.3	5.2	5.2	4.8	5	5.1		3.8	4.3	195
200	4.6			4.9	5		5.2	5.1		5.2	5.1	5.2	3.7	4.7	4.9			3.5	200
205	4.5			4.8	4.8		5	5		5	5		2.3	3.7	4.4				205
210				4.7	4.7		5	4.9		4.3	4.8				3				210
215				4.6			4.9	4.9		3.3	4.1								215
220				4.1			4.5	4.7		2.2	3								220
225							4.2	4.4			1.9								225
230							3.3												230
235							1.9												235

Lifting capacities

Forces de levage

TVNZK

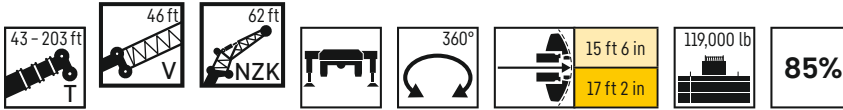


	43 ft + 46 ft			57 ft + 46 ft			72 ft + 46 ft			87 ft + 46 ft			102 ft + 46 ft			116 ft + 46 ft			
	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	
17	8.4																		17
18	8.4																		18
19	8.4			8.4															19
20	8.4			8.4															20
22	8.4			8.4			8.4												22
24	8.3			8.4			8.4			8.4									24
26	8.3			8.3			8.4			8.4									26
28	8.2			8.3			8.4			8.4			8.4						28
30	8.1			8.2			8.3			8.4			8.4			8.4			30
32	8.1			8.2			8.3			8.3			8.4			8.4			32
34	8			8.1			8.2			8.3			8.4			8.4			34
36	7.9			8.1			8.2			8.3			8.3			8.4			36
38	7.8			8			8.1			8.2			8.3			8.3			38
40	7.7	7.6		7.9			8.1			8.2			8.2			8.3			40
45	7.4	7.5		7.6	7.6		7.9	7.6		8			8.1			8.2			45
50	7	7.1		7.4	7.4		7.6	7.6		7.8	7.6		8	7.6		8.1			50
55	6.6	6.7	6.5	7	7		7.4	7.3		7.6	7.5		7.8	7.6		8	7.6		55
60	6.3	6.4	6.5	6.7	6.7	6.5	7.1	6.9	6.5	7.4	7.2		7.6	7.4		7.8	7.6		60
65	6	6	6.2	6.4	6.4	6.4	6.8	6.6	6.5	7.1	6.9	6.5	7.4	7.1		7.6	7.3		65
70	5.6	5.7	5.8	6.1	6.1	6.1	6.5	6.3	6.3	6.8	6.6	6.5	7.1	6.8	6.5	7.4	7	6.5	70
75	5.3	5.4	5.5	5.8	5.8	5.8	6.2	6.1	6	6.5	6.3	6.2	6.8	6.6	6.4	7.1	6.8	6.5	75
80	5	5.1	5.3	5.5	5.5	5.5	5.9	5.8	5.8	6.2	6.1	6	6.6	6.3	6.2	6.9	6.5	6.3	80
85	4.8	4.9	5	5.2	5.2	5.3	5.6	5.5	5.5	6	5.8	5.8	6.3	6.1	5.9	6.6	6.3	6.1	85
90	4.5	4.6	4.7	4.9	5	5	5.4	5.3	5.3	5.7	5.6	5.5	6.1	5.8	5.7	6.4	6.1	5.9	90
95	4.3	4.4	4.5	4.7	4.7	4.8	5.1	5	5.1	5.5	5.3	5.3	5.8	5.6	5.5	6.2	5.9	5.7	95
100	4.1	4.2	4.3	4.5	4.5	4.6	4.9	4.8	4.9	5.3	5.1	5.1	5.6	5.4	5.3	5.9	5.7	5.5	100
105	3.9	4	4.1	4.3	4.3	4.4	4.7	4.6	4.7	5	4.9	4.9	5.4	5.2	5.1	5.7	5.4	5.3	105
110	3.7	3.8	3.9	4.1	4.1	4.2	4.5	4.4	4.5	4.8	4.7	4.7	5.2	5	5	5.5	5.3	5.2	110
115	3.6	3.6	3.8	3.9	4	4.1	4.3	4.3	4.3	4.6	4.6	4.6	5	4.8	4.8	5.3	5.1	5	115
120	3.4	3.5	3.6	3.8	3.8	3.9	4.1	4.1	4.2	4.5	4.4	4.4	4.8	4.6	4.6	5.1	4.9	4.8	120
125	3.3	3.3	3.5	3.6	3.6	3.8	4	3.9	4	4.3	4.2	4.3	4.6	4.5	4.5	4.9	4.7	4.7	125
130	3.1	3.2	3.4	3.5	3.5	3.6	3.8	3.8	3.9	4.1	4.1	4.1	4.4	4.3	4.3	4.7	4.6	4.6	130
135	3.1	3.1	3.4	3.3	3.4	3.5	3.7	3.7	3.8	4	3.9	4	4.3	4.2	4.2	4.6	4.4	4.4	135
140	3	3.1		3.2	3.3	3.4	3.5	3.5	3.6	3.8	3.8	3.9	4.1	4	4.1	4.4	4.3	4.3	140
145				3.1	3.2		3.4	3.4	3.6	3.7	3.7	3.8	4	3.9	4	4.3	4.2	4.2	145
150				3	3.1		3.3	3.3	3.5	3.6	3.6	3.7	3.9	3.8	3.9	4.1	4	4	150
155				3	3.1		3.2	3.2		3.5	3.4	3.6	3.7	3.7	3.8	4	3.9	4	155
160							3.1	3.1		3.3	3.3	3.5	3.6	3.6	3.7	3.9	3.8	3.8	160
165							3	3.1		3.2	3.3	3.4	3.5	3.5	3.6	3.8	3.7	3.8	165
170							3	3.1		3.1	3.2		3.4	3.4	3.5	3.7	3.6	3.7	170
175										3.1	3.1		3.3	3.3	3.4	3.5	3.5	3.6	175
180										3	3.1		3.2	3.2		3.4	3.4	3.5	180
185										3	3.1		3.1	3.2		3.3	3.3	3.5	185
190													3.1	3.1		3.2	3.2	3.4	190
195													3	3.1		3.2	3.2		195
200													3			3.1	3.1		200
205																3	3.1		205
210																3			210
215																3			215

Lifting capacities

Forces de levage

TVNZK

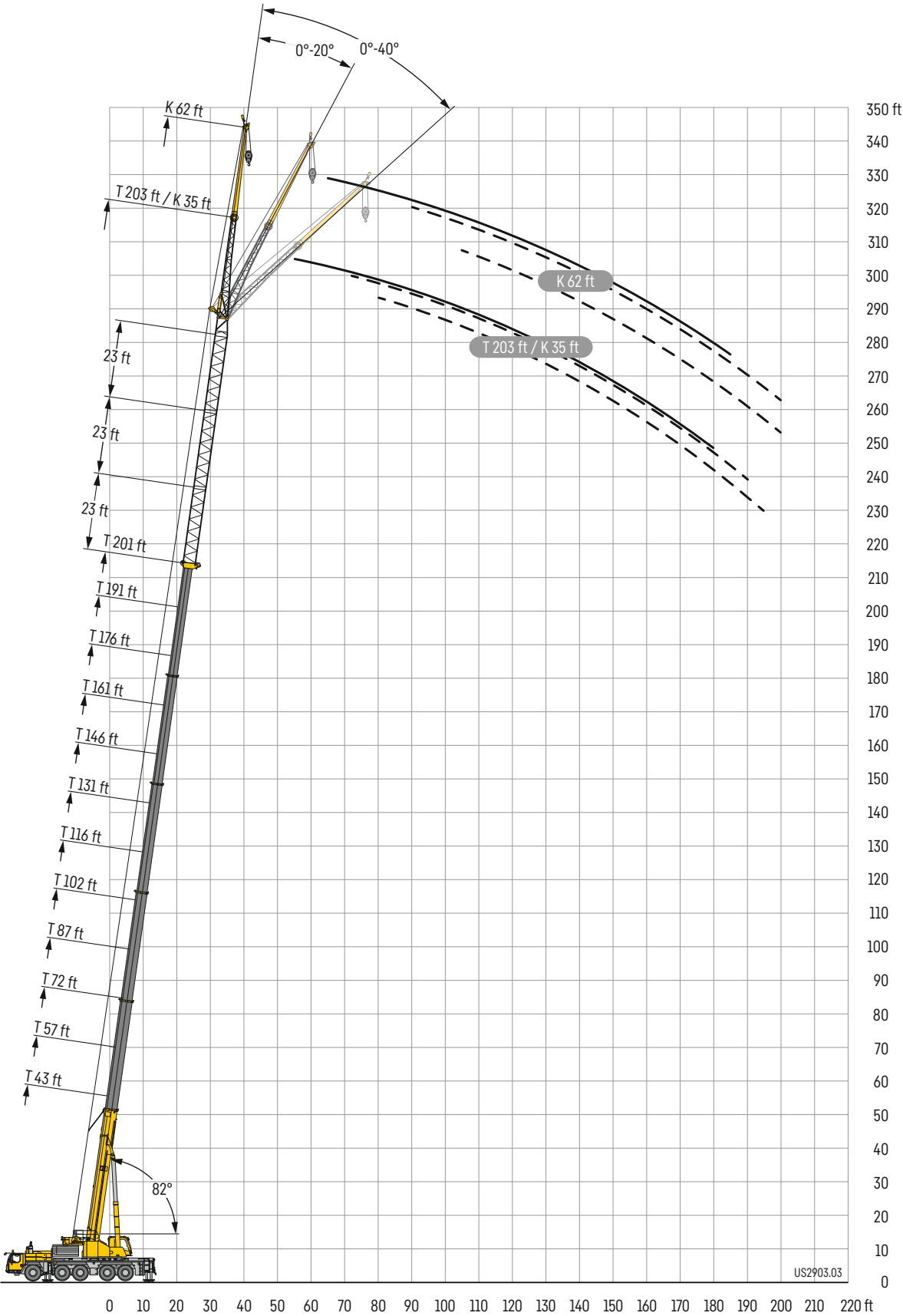


	131 ft + 46 ft			146 ft + 46 ft			161 ft + 46 ft			176 ft + 46 ft			191 ft + 46 ft			203 ft + 46 ft			
	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	
34	8.4																		34
36	8.4																		36
38	8.4			7.4															38
40	8.3			7.5															40
45	8.3			7.9			7.7												45
50	8.2			8.2			8			6.7									50
55	8.1			8.1			8			6.9			5.4						55
60	7.9	7.6		8.1			7.9			7			5.6			4.4			60
65	7.7	7.5		7.9	7.6		7.8			7			5.8			4.6			65
70	7.6	7.2		7.7	7.4		7.7	7.5		6.9			5.9			4.7			70
75	7.4	7	6.5	7.5	7.1		7.6	7.3		6.8	6.8		5.9			4.8			75
80	7.1	6.7	6.4	7.4	6.9	6.5	7.4	7		6.8	6.6		5.9	6		4.9			80
85	6.9	6.5	6.2	7.1	6.7	6.4	7.3	6.8	6.5	6.7	6.5		5.8	5.9		5	5.2		85
90	6.7	6.3	6	6.9	6.5	6.2	7.1	6.6	6.3	6.6	6.3	6	5.8	5.7		5	5.1		90
95	6.4	6.1	5.9	6.7	6.3	6	6.9	6.4	6.1	6.5	6.1	5.8	5.7	5.6	5.4	5	5.1		95
100	6.2	5.9	5.7	6.5	6.1	5.8	6.7	6.3	6	6.3	5.9	5.7	5.7	5.5	5.3	4.9	5	4.9	100
105	6	5.7	5.5	6.3	5.9	5.7	6.5	6.1	5.8	6.2	5.8	5.6	5.6	5.4	5.2	4.9	4.9	4.8	105
110	5.8	5.5	5.4	6.1	5.7	5.5	6.3	5.9	5.6	6	5.6	5.4	5.5	5.2	5.1	4.9	4.8	4.7	110
115	5.6	5.3	5.2	5.9	5.5	5.4	6.1	5.7	5.5	5.8	5.5	5.3	5.4	5.1	4.9	4.8	4.7	4.6	115
120	5.4	5.1	5	5.7	5.4	5.2	5.9	5.5	5.3	5.6	5.3	5.1	5.2	5	4.8	4.7	4.6	4.5	120
125	5.2	5	4.9	5.5	5.2	5.1	5.7	5.4	5.2	5.5	5.2	5	5.1	4.8	4.7	4.6	4.5	4.4	125
130	5	4.8	4.7	5.3	5	4.9	5.5	5.2	5.1	5.3	5	4.9	5	4.7	4.6	4.6	4.4	4.3	130
135	4.9	4.7	4.6	5.2	4.9	4.8	5.4	5.1	4.9	5.2	4.9	4.8	4.8	4.6	4.5	4.5	4.3	4.2	135
140	4.7	4.5	4.5	5	4.7	4.6	5.2	4.9	4.8	5	4.8	4.6	4.7	4.5	4.4	4.4	4.2	4.1	140
145	4.6	4.4	4.4	4.8	4.6	4.5	5	4.8	4.7	4.9	4.6	4.5	4.6	4.4	4.3	4.3	4.1	4.1	145
150	4.4	4.3	4.2	4.7	4.5	4.4	4.9	4.6	4.5	4.7	4.5	4.4	4.5	4.3	4.2	4.2	4	4	150
155	4.3	4.1	4.1	4.5	4.3	4.3	4.7	4.5	4.4	4.6	4.4	4.3	4.4	4.2	4.1	4.1	3.9	3.9	155
160	4.1	4	4	4.4	4.2	4.2	4.6	4.4	4.3	4.5	4.3	4.2	4.3	4.1	4	4	3.9	3.8	160
165	4	3.9	3.9	4.3	4.1	4.1	4.5	4.3	4.2	4.3	4.2	4.1	4.1	4	3.9	3.9	3.8	3.8	165
170	3.9	3.8	3.8	4.1	4	4	4.3	4.2	4.1	4.2	4.1	4	4	3.9	3.9	3.8	3.7	3.7	170
175	3.8	3.7	3.8	4	3.9	3.9	4.2	4	4	4.1	4	3.9	3.9	3.8	3.8	3.7	3.6	3.6	175
180	3.7	3.6	3.7	3.9	3.8	3.8	4.1	3.9	4	4	3.9	3.9	3.8	3.7	3.7	3.6	3.5	3.6	180
185	3.6	3.5	3.6	3.8	3.7	3.8	4	3.8	3.9	3.9	3.8	3.8	3.7	3.6	3.6	3.5	3.5	3.5	185
190	3.5	3.4	3.5	3.7	3.6	3.7	3.9	3.7	3.8	3.8	3.7	3.7	3.7	3.6	3.6	3.5	3.4	3.4	190
195	3.4	3.4	3.5	3.6	3.5	3.6	3.8	3.7	3.7	3.7	3.6	3.6	3.6	3.5	3.5		3.3	3.4	195
200	3.3	3.3	3.4	3.5	3.5	3.6	3.7	3.6	3.6	3.6	3.5	3.6	3.5	3.4	3.5		3.2	3.3	200
205	3.2	3.2		3.4	3.4	3.5	3.6	3.5	3.6	3.5	3.4	3.5	2.9	3.3	3.4		3.1	3.3	205
210	3.1	3.2		3.3	3.3	3.4	3.5	3.4	3.5	3.5	3.4	3.5		3.3	3.3			3.1	210
215	3.1	3.1		3.3	3.2	3.4	3.4	3.3	3.4	3.3	3.3	3.4			3.3			2.8	215
220	3	3.1		3.2	3.2		3.3	3.3	3.4	2.8	3.3	3.3							220
225	3	3.1		3.1	3.1		3.2	3.2	3.4		3.1	3.3							225
230	3			3.1	3.1		3.1	3.2			2.4	2.9							230
235				3	3.1		2.8	3				1.8							235
240				3	3.1		2	2.8											240
245				3				1.9											245

Lifting heights

Hauteurs de levage

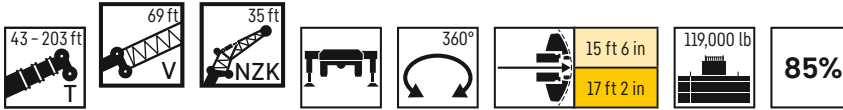
TVNZK



Lifting capacities

Forces de levage

TVNZK

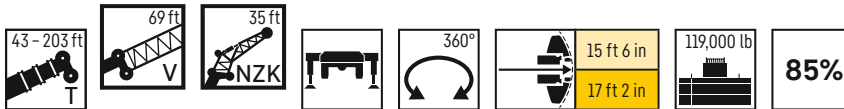


	43 ft + 69 ft			57 ft + 69 ft			72 ft + 69 ft			87 ft + 69 ft			102 ft + 69 ft			116 ft + 69 ft			
	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	
17	6.7																		17
18	6.8																		18
19	6.9			6.9															19
20	7			7															20
22	7.1			7.2			7.1												22
24	7.1			7.3			7.2			7.3									24
26	7.2			7.3			7.3			7.4			7.4						26
28	7.2	7.3		7.4			7.4			7.5			7.5						28
30	7.3	7.5		7.6			7.5			7.7			7.8			7.9			30
32	7.5	7.7		7.8	7.9		7.7			7.9			8.1			8.3			32
34	7.5	7.7		7.9	8.1		7.9	8.3		8.1			8.3			8.5			34
36	7.5	7.7		8.1	8.2		8.1	8.5		8.3	8.6		8.5			8.7			36
38	7.4	7.6	7.6	8	8.2		8.2	8.6		8.5	8.8		8.7			8.8			38
40	7.4	7.5	7.7	8	8.1	7.8	8.3	8.6		8.6	8.9		8.8	9.1		9			40
45	7.1	7.2	7.4	7.8	7.9	8	8.2	8.4	8.3	8.7	8.8	8.3	9	9.2		9.2	9.3		45
50	6.8	6.8	7.1	7.5	7.5	7.6	8.1	8.1	8.1	8.6	8.5	8.4	8.8	8.8	8.5	9.1	9		50
55	6.3	6.4	6.6	7.2	7.1	7.2	7.8	7.7	7.7	8.2	8.1	8	8.5	8.4	8.2	8.8	8.7	8.5	55
60	5.9	6	6.2	6.8	6.7	6.9	7.4	7.3	7.3	7.8	7.7	7.6	8.2	8	7.9	8.5	8.3	8.1	60
65	5.6	5.6	5.8	6.4	6.4	6.5	7	6.9	6.9	7.5	7.3	7.2	7.8	7.6	7.5	8.2	8	7.8	65
70	5.2	5.3	5.5	6	6	6.1	6.6	6.6	6.5	7.1	6.9	6.9	7.5	7.3	7.2	7.8	7.6	7.4	70
75	4.8	4.9	5.1	5.6	5.6	5.8	6.3	6.2	6.2	6.7	6.6	6.5	7.1	6.9	6.8	7.5	7.3	7.1	75
80	4.5	4.5	4.7	5.3	5.3	5.4	5.9	5.9	5.9	6.4	6.3	6.2	6.8	6.6	6.5	7.2	6.9	6.8	80
85	4.2	4.3	4.4	5	5	5.1	5.6	5.6	5.6	6.1	6	5.9	6.5	6.3	6.2	6.9	6.6	6.5	85
90	3.9	4	4.1	4.7	4.7	4.8	5.3	5.2	5.3	5.7	5.7	5.7	6.2	6	6	6.6	6.4	6.3	90
95	3.6	3.7	3.8	4.4	4.4	4.5	5	5	5	5.5	5.4	5.4	5.9	5.8	5.7	6.3	6.1	6	95
100	3.4	3.4	3.6	4.1	4.1	4.2	4.7	4.7	4.8	5.2	5.1	5.1	5.6	5.5	5.5	6	5.8	5.8	100
105	3.2	3.2	3.3	3.9	3.9	4	4.5	4.5	4.5	4.9	4.9	4.9	5.3	5.2	5.2	5.7	5.6	5.5	105
110	3	3	3.1	3.6	3.6	3.7	4.3	4.3	4.3	4.7	4.6	4.7	5.1	5	5	5.5	5.3	5.3	110
115	2.9	2.8	3	3.4	3.4	3.5	4	4	4.1	4.5	4.4	4.4	4.8	4.8	4.8	5.2	5.1	5.1	115
120	2.7	2.7	2.8	3.3	3.3	3.3	3.8	3.8	3.9	4.2	4.2	4.2	4.6	4.6	4.6	5	4.9	4.9	120
125	2.6	2.6	2.7	3.1	3.1	3.2	3.6	3.6	3.7	4	4	4	4.4	4.4	4.4	4.8	4.7	4.7	125
130	2.6	2.6	2.7	2.9	2.9		3.4	3.4	3.5	3.9	3.9	3.9	4.2	4.2	4.2	4.6	4.5	4.5	130
135	2.6	2.5	2.7	2.8	2.8		3.3	3.3	3.3	3.7	3.7	3.7	4	4	4	4.4	4.3	4.3	135
140	2.6	2.5		2.8	2.7		3.1	3.1	3.2	3.5	3.5	3.6	3.9	3.8	3.9	4.2	4.2	4.1	140
145				2.7	2.7		3	3		3.4	3.4	3.4	3.7	3.7	3.7	4	4	4	145
150				2.6	2.7		2.9	2.9		3.2	3.2	3.3	3.6	3.5	3.6	3.9	3.8	3.9	150
155				2.6			2.8	2.8		3.1	3.1		3.4	3.4	3.4	3.7	3.7	3.7	155
160							2.7	2.7		3	3		3.3	3.3	3.3	3.6	3.6	3.6	160
165							2.6			2.9	2.9		3.1	3.1		3.5	3.4	3.5	165
170							2.6			2.8	2.8		3	3		3.3	3.3	3.3	170
175										2.7	2.7		2.9	2.9		3.2	3.2	3.2	175
180										2.6			2.8	2.8		3.1	3.1		180
185													2.7	2.7		3	3		185
190													2.6	2.7		2.9	2.9		190
195													2.6			2.8	2.8		195
200																2.7	2.7		200
205																2.6	2.7		205
210																2.6			210

Lifting capacities

Forces de levage

TVNZK

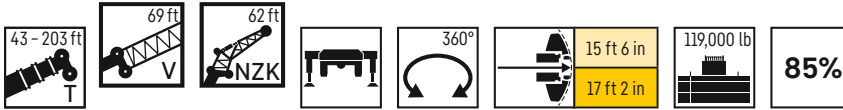


	131 ft + 69 ft			169 ft + 69 ft			161 ft + 69 ft			176 ft + 69 ft			191 ft + 69 ft			203 ft + 69 ft			
	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	
34	8.6																		34
36	8.8																		36
38	9			9.1															38
40	9.1			9.3															40
45	9.3			9.4			8.2												45
50	9.2	9.2		9.3	9.3		8.3			6.8									50
55	9	8.9	8.5	9.1	9.1		8.2	8.3		7			5.3			4			55
60	8.7	8.6	8.3	9	8.8	8.5	8.1	8.1		7.1	7.2		5.4			4.1			60
65	8.4	8.2	8	8.7	8.5	8.2	8	7.9	7.8	7	7.1		5.6	5.8		4.3			65
70	8.1	7.9	7.7	8.4	8.1	7.9	7.8	7.7	7.6	6.9	7	7	5.7	5.9		4.4	4.6		70
75	7.8	7.5	7.4	8.1	7.8	7.6	7.6	7.5	7.3	6.8	6.9	6.8	5.8	5.9	6	4.5	4.7		75
80	7.5	7.2	7.1	7.8	7.5	7.3	7.4	7.2	7	6.7	6.7	6.6	5.7	5.8	5.9	4.6	4.8	5	80
85	7.2	6.9	6.8	7.6	7.2	7.1	7.3	7	6.8	6.6	6.5	6.4	5.7	5.8	5.8	4.7	4.8	5	85
90	6.9	6.7	6.5	7.3	6.9	6.8	7	6.7	6.6	6.5	6.3	6.2	5.6	5.6	5.6	4.7	4.9	5	90
95	6.6	6.4	6.3	7	6.7	6.5	6.8	6.5	6.4	6.3	6.1	6	5.5	5.5	5.5	4.8	4.8	4.9	95
100	6.4	6.2	6	6.7	6.4	6.3	6.5	6.3	6.1	6.1	5.9	5.8	5.4	5.4	5.3	4.7	4.7	4.8	100
105	6.1	5.9	5.8	6.4	6.2	6.1	6.3	6.1	6	5.9	5.7	5.6	5.4	5.2	5.2	4.7	4.7	4.7	105
110	5.8	5.7	5.6	6.2	6	5.8	6.1	5.9	5.8	5.7	5.6	5.5	5.2	5.1	5	4.6	4.6	4.6	110
115	5.6	5.4	5.4	6	5.7	5.6	5.8	5.6	5.6	5.5	5.4	5.3	5.1	4.9	4.9	4.5	4.5	4.5	115
120	5.4	5.2	5.2	5.7	5.5	5.4	5.6	5.4	5.4	5.4	5.2	5.1	4.9	4.8	4.7	4.4	4.4	4.4	120
125	5.1	5	5	5.5	5.3	5.3	5.4	5.3	5.2	5.2	5	4.9	4.8	4.6	4.6	4.3	4.3	4.3	125
130	4.9	4.8	4.8	5.3	5.1	5.1	5.2	5.1	5	5	4.9	4.8	4.6	4.5	4.5	4.2	4.2	4.1	130
135	4.8	4.6	4.6	5.1	4.9	4.9	5	4.9	4.8	4.8	4.7	4.6	4.5	4.4	4.3	4.1	4	4	135
140	4.6	4.5	4.4	4.9	4.8	4.7	4.9	4.7	4.7	4.7	4.5	4.5	4.4	4.2	4.2	4	3.9	3.9	140
145	4.4	4.3	4.3	4.7	4.6	4.5	4.7	4.6	4.5	4.5	4.4	4.4	4.2	4.1	4.1	3.9	3.8	3.8	145
150	4.2	4.1	4.1	4.5	4.4	4.4	4.5	4.4	4.4	4.4	4.3	4.2	4.1	4	4	3.8	3.7	3.7	150
155	4	4	4	4.4	4.3	4.2	4.4	4.3	4.2	4.2	4.1	4.1	4	3.9	3.9	3.7	3.6	3.6	155
160	3.9	3.8	3.8	4.2	4.1	4.1	4.2	4.1	4.1	4.1	4	4	3.9	3.8	3.8	3.6	3.5	3.6	160
165	3.8	3.7	3.7	4	4	4	4.1	4	4	4	3.9	3.9	3.7	3.7	3.7	3.5	3.4	3.5	165
170	3.6	3.6	3.6	3.9	3.8	3.8	3.9	3.9	3.9	3.8	3.7	3.8	3.6	3.6	3.6	3.4	3.4	3.4	170
175	3.5	3.4	3.5	3.8	3.7	3.7	3.8	3.7	3.7	3.7	3.6	3.7	3.5	3.5	3.5	3.3	3.3	3.3	175
180	3.4	3.3	3.4	3.6	3.6	3.6	3.7	3.6	3.6	3.6	3.5	3.6	3.4	3.4	3.4	3.2	3.2	3.2	180
185	3.3	3.2	3.2	3.5	3.5	3.5	3.6	3.5	3.5	3.5	3.4	3.5	3.3	3.3	3.3		3.1	3.1	185
190	3.1	3.1		3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.3	3.4	3.3	3.2	3.2		3	3.1	190
195	3	3		3.3	3.2	3.3	3.3	3.3	3.3	3.3	3.2	3.3		3.1	3.2			3	195
200	2.9	2.9		3.2	3.1		3.2	3.2	3.2	3.2	3.2	3.2			3.1				200
205	2.9	2.9		3.1	3		3.1	3.1	3.1	2.9	3.1	3.1							205
210	2.8	2.8		3	3		3	3	3.1		2.8	3							210
215	2.7	2.7		2.9	2.9		2.9	2.9				2.6							215
220	2.6	2.7		2.8	2.8		2.7	2.8											220
225	2.6			2.7	2.7		2	2.5											225
230				2.7	2.7														230
235				2.6															235
240				2.3															240

Lifting capacities

Forces de levage

TVNZK



	43 ft + 69 ft			57 ft + 69 ft			72 ft + 69 ft			87 ft + 69 ft			102 ft + 69 ft			116 ft + 69 ft			
	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	
22	6.7																		22
24	6.7			6.7															24
26	6.6			6.7			6.7												26
28	6.5			6.6			6.7			6.7									28
30	6.5			6.6			6.6			6.7									30
32	6.4			6.5			6.6			6.7			6.7						32
34	6.4			6.5			6.5			6.6			6.7						34
36	6.3			6.4			6.5			6.6			6.6			6.7			36
38	6.2			6.3			6.4			6.5			6.6			6.6			38
40	6.2			6.3			6.4			6.5			6.5			6.6			40
45	6	6.3		6.1			6.3			6.3			6.4			6.5			45
50	5.8	6.1		6	6.3		6.1	6.3		6.2			6.3			6.4			50
55	5.6	5.8		5.8	6		5.9	6.2		6.1	6.3		6.2	6.3		6.3			55
60	5.2	5.4	5.4	5.6	5.7		5.8	5.9		5.9	6.1		6.1	6.2		6.2	6.3		60
65	4.9	5.1	5.3	5.3	5.4	5.4	5.6	5.6	5.4	5.8	5.8		5.9	6		6	6.1		65
70	4.5	4.7	5	4.9	5	5.2	5.3	5.3	5.3	5.6	5.5	5.4	5.8	5.7	5.4	5.9	5.9		70
75	4.3	4.5	4.7	4.6	4.7	4.9	5	5	5.1	5.3	5.3	5.2	5.6	5.5	5.3	5.8	5.7	5.4	75
80	4	4.2	4.4	4.4	4.5	4.6	4.7	4.7	4.8	5	5	5	5.3	5.2	5.2	5.6	5.4	5.3	80
85	3.7	3.9	4.1	4.1	4.2	4.3	4.4	4.5	4.6	4.8	4.7	4.8	5.1	5	4.9	5.3	5.2	5.1	85
90	3.5	3.7	3.9	3.9	4	4.1	4.2	4.3	4.3	4.5	4.5	4.5	4.8	4.7	4.7	5.1	4.9	4.9	90
95	3.3	3.4	3.6	3.6	3.7	3.9	4	4	4.1	4.3	4.3	4.3	4.6	4.5	4.5	4.9	4.7	4.7	95
100	3.1	3.2	3.4	3.4	3.5	3.7	3.8	3.8	3.9	4.1	4.1	4.1	4.4	4.3	4.3	4.7	4.5	4.5	100
105	2.9	3	3.2	3.2	3.3	3.5	3.5	3.6	3.7	3.9	3.9	3.9	4.2	4.1	4.1	4.4	4.3	4.3	105
110	2.7	2.8	3	3	3.1	3.3	3.4	3.4	3.5	3.7	3.7	3.7	4	3.9	3.9	4.2	4.2	4.1	110
115	2.5	2.7	2.8	2.9	3	3.1	3.2	3.2	3.3	3.5	3.5	3.6	3.8	3.7	3.8	4	4	4	115
120	2.4	2.5	2.6	2.7	2.8	2.9	3	3.1	3.1	3.3	3.3	3.4	3.6	3.6	3.6	3.9	3.8	3.8	120
125	2.2	2.3	2.5	2.5	2.6	2.7	2.8	2.9	3	3.1	3.2	3.2	3.4	3.4	3.4	3.7	3.6	3.6	125
130	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.7	2.8	3	3	3.1	3.3	3.2	3.3	3.5	3.5	3.5	130
135	2	2	2.2	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	2.9	3.1	3.1	3.1	3.4	3.3	3.3	135
140	1.8	1.9	2	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.7	2.8	2.9	2.9	3	3.2	3.2	3.2	140
145	1.7	1.8	1.9	2	2.1	2.2	2.3	2.3	2.4	2.5	2.6	2.6	2.8	2.8	2.9	3.1	3	3	145
150	1.6	1.7	1.8	1.9	1.9	2	2.1	2.2	2.3	2.4	2.5	2.5	2.7	2.7	2.7	2.9	2.9	2.9	150
155	1.5	1.6	1.7	1.8	1.8	1.9	2	2.1	2.2	2.3	2.3	2.4	2.5	2.6	2.6	2.8	2.8	2.8	155
160	1.5	1.5	1.7	1.7	1.7	1.8	1.9	2	2.1	2.2	2.2	2.3	2.4	2.4	2.5	2.7	2.7	2.7	160
165	1.4	1.5		1.6	1.7		1.8	1.9	2	2.1	2.1	2.2	2.3	2.3	2.4	2.5	2.5	2.6	165
170				1.5	1.6		1.7	1.8	1.9	2	2	2.1	2.2	2.2	2.3	2.4	2.4	2.5	170
175				1.5	1.5		1.7	1.7		1.9	1.9	2	2.1	2.1	2.2	2.3	2.3	2.4	175
180				1.4			1.6	1.6		1.8	1.8	1.9	2	2	2.1	2.2	2.2	2.3	180
185							1.5	1.6		1.7	1.7	1.8	1.9	1.9	2	2.1	2.1	2.2	185
190							1.5	1.5		1.6	1.7		1.8	1.8	1.9	2	2	2.1	190
195							1.4			1.6	1.6		1.7	1.8	1.8	1.9	2	2	195
200										1.5	1.5		1.7	1.7		1.9	1.9	1.9	200
205										1.5	1.5		1.6	1.6		1.8	1.8	1.9	205
210										1.4			1.5	1.6		1.7	1.7	1.8	210
215													1.5	1.5		1.6	1.7		215
220													1.5	1.5		1.6	1.6		220
225													1.4			1.5	1.6		225
230																1.5	1.5		230
235																1.4	1.5		235
240																1.4			240

Lifting capacities

Forces de levage

TVNZK

43 - 203 ft

69 ft

62 ft

360°

15 ft 6 in

17 ft 2 in

119,000 lb

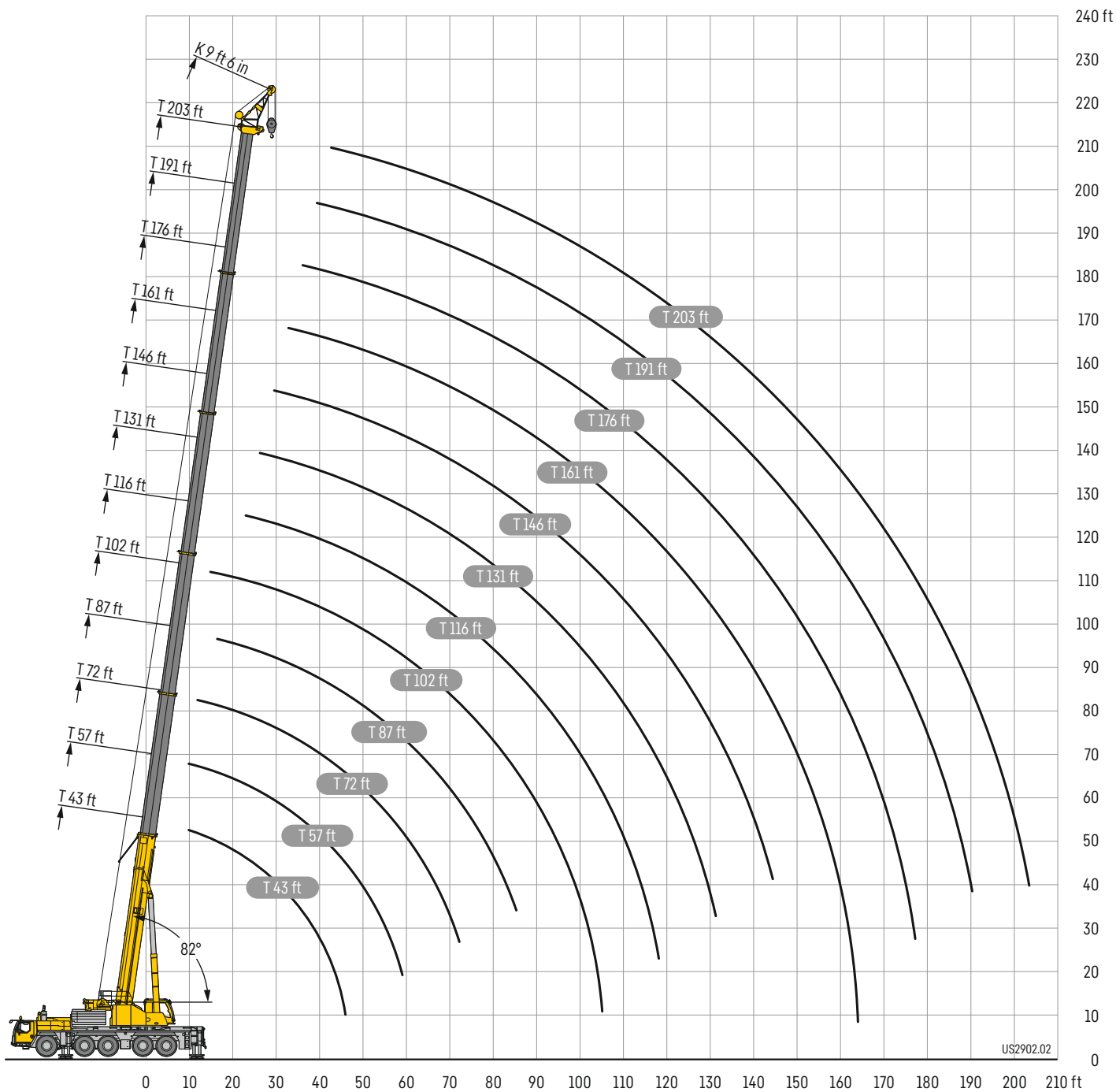
85%

	131 ft + 69 ft			169 ft + 69 ft			161 ft + 69 ft			176 ft + 69 ft			191 ft + 69 ft			203 ft + 69 ft			
	62 ft																		
	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	
38	6.7																		38
40	6.6																		40
45	6.6			5.4															45
50	6.5			5.7			4.7												50
55	6.3			5.8			4.9			3.9									55
60	6.3			6			5			3.9			3.1						60
65	6.1	6.3		6.1			5.1			4.1			3.1			2.5			65
70	6	6.1		6.1	6.2		5.2			4.2			3.1			2.6			70
75	5.9	5.8		6	6		5.3	5.5		4.3			3.2			2.6			75
80	5.8	5.6	5.4	5.9	5.8		5.3	5.4		4.3	4.6		3.2			2.6			80
85	5.6	5.4	5.2	5.7	5.5	5.3	5.3	5.3		4.4	4.6		3.3	3.5		2.6			85
90	5.4	5.1	5	5.6	5.3	5.1	5.2	5.1	5	4.4	4.6		3.4	3.6		2.6	2.8		90
95	5.2	4.9	4.8	5.4	5.1	5	5.1	4.9	4.8	4.5	4.6	4.5	3.4	3.6		2.6	2.8		95
100	4.9	4.7	4.6	5.2	4.9	4.8	5	4.8	4.6	4.5	4.4	4.3	3.5	3.6	3.8	2.7	2.9		100
105	4.7	4.5	4.5	5	4.7	4.6	4.8	4.6	4.5	4.4	4.3	4.2	3.5	3.6	3.7	2.7	2.9	3.1	105
110	4.5	4.4	4.3	4.7	4.6	4.4	4.6	4.4	4.3	4.3	4.1	4.1	3.5	3.6	3.6	2.8	3	3.1	110
115	4.3	4.2	4.1	4.5	4.4	4.3	4.4	4.3	4.2	4.1	4	3.9	3.5	3.5	3.5	2.8	3	3.1	115
120	4.1	4	4	4.4	4.2	4.1	4.3	4.1	4	4	3.9	3.8	3.4	3.4	3.4	2.8	2.9	3	120
125	3.9	3.8	3.8	4.2	4	4	4.1	3.9	3.9	3.9	3.8	3.7	3.4	3.3	3.3	2.8	2.9	3	125
130	3.8	3.7	3.7	4	3.9	3.8	3.9	3.8	3.7	3.7	3.6	3.6	3.3	3.2	3.2	2.7	2.9	2.9	130
135	3.6	3.5	3.5	3.9	3.7	3.7	3.8	3.7	3.6	3.6	3.5	3.5	3.2	3.1	3.1	2.7	2.8	2.8	135
140	3.5	3.4	3.4	3.7	3.6	3.5	3.6	3.5	3.5	3.5	3.4	3.3	3.1	3.1	3	2.7	2.7	2.7	140
145	3.3	3.2	3.2	3.6	3.4	3.4	3.5	3.4	3.3	3.4	3.2	3.2	3	2.9	2.9	2.6	2.6	2.7	145
150	3.2	3.1	3.1	3.4	3.3	3.3	3.4	3.3	3.2	3.2	3.1	3.1	2.9	2.8	2.9	2.6	2.6	2.6	150
155	3	3	3	3.3	3.2	3.2	3.2	3.1	3.1	3.1	3	3	2.8	2.7	2.8	2.5	2.5	2.5	155
160	2.9	2.9	2.9	3.1	3.1	3	3.1	3	3	3	2.9	2.9	2.7	2.6	2.7	2.4	2.4	2.4	160
165	2.8	2.7	2.8	3	2.9	2.9	3	2.9	2.9	2.9	2.8	2.8	2.6	2.5	2.6	2.4	2.3	2.3	165
170	2.7	2.6	2.7	2.9	2.8	2.8	2.9	2.8	2.8	2.8	2.7	2.7	2.5	2.4	2.5	2.3	2.2	2.3	170
175	2.5	2.5	2.6	2.8	2.7	2.7	2.8	2.7	2.7	2.7	2.6	2.6	2.4	2.4	2.4	2.2	2.2	2.2	175
180	2.4	2.4	2.5	2.7	2.6	2.6	2.7	2.6	2.6	2.6	2.5	2.5	2.3	2.3	2.3	2.1	2.1	2.1	180
185	2.3	2.3	2.4	2.5	2.5	2.5	2.6	2.5	2.5	2.5	2.4	2.4	2.2	2.2	2.3	2	2	2.1	185
190	2.2	2.2	2.3	2.4	2.4	2.4	2.5	2.4	2.4	2.4	2.3	2.3	2.1	2.1	2.2		1.9	2	190
195	2.1	2.1	2.2	2.3	2.3	2.3	2.4	2.3	2.3	2.3	2.2	2.2		2	2.1		1.9	1.9	195
200	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.1	2.2		2	2		1.8	1.9	200
205	2	2	2	2.1	2.1	2.1	2.1	2.1	2.2	2.1	2	2.1		1.9	1.9				205
210	1.9	1.9	2	2	2	2	2	2	2.1		2	2			1.9				210
215	1.8	1.8	1.9	1.9	1.9	2	2	1.9	2		1.9	1.9							215
220	1.7	1.7	1.8	1.8	1.8	1.9	1.8	1.8	1.9			1.9							220
225	1.7	1.7		1.8	1.7	1.8	1.6	1.8	1.9			1.8							225
230	1.6	1.6		1.7	1.7	1.8	1.3	1.7	1.8										230
235	1.6	1.6		1.6	1.6				1.6										235
240	1.5	1.5		1.5	1.6														240
245	1.5	1.5		1.3	1.5														245
250	1.4	1.5			1.3														250
255	1.4																		255

Lifting heights

Hauteurs de levage

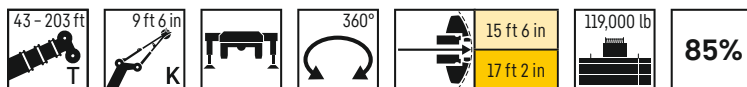
TK



Lifting capacities

Forces de levage

TK



	43 ft	57 ft	72 ft	87 ft	102 ft	116 ft	131 ft	146 ft	161 ft	176 ft	191 ft	203 ft	
	9 ft 6 in												
10	76.2	76.2											10
11	76.2	76.2											11
12	76.2	76.2	76.2										12
13	76.2	76.2	76.2										13
14	76.2	76.2	76.2	76.2									14
15	76.2	76.2	76.2	76.2									15
16	76.2	76.2	76.2	76.2									16
17	76.2	76.2	76.2	76.2	76.2								17
18	76.2	76.2	76.2	76.2	76.2								18
19	76.2	76.2	76.2	76.2	76.2								19
20	76.2	76.2	76.2	76.2	76.2	76.2							20
22	76.2	76.2	76.2	76.2	76.2	76.2							22
24	76.2	76.2	76.2	76.2	76.2	76.2	64.8						24
26	76.2	76.2	76.2	76.2	76.2	76.2	76.2						26
28	76.1	76.2	76.2	76.2	76.2	76.2	75.2	57.2					28
30	75.5	76.2	76.2	76.2	76.2	76.2	73.2	56					30
32	74.6	76.2	76.2	76.2	76.2	76.2	71.1	54.8	49.2				32
34	72.6	76.2	76.2	76.2	76.2	76.2	68.9	53.4	48.3				34
36	70.2	76.2	76.2	76.2	76.2	75.8	67	52.2	47.4	41.7			36
38	67.6	75.6	76.2	76.2	76.2	74.8	65	50.9	46.5	41.3			38
40	64	74.4	76.2	76.2	76.2	73.3	63.3	49.7	45.7	40.5	32		40
45	53.5	71.5	76	76.2	76.2	69.3	58.6	47.3	43.4	38.7	30.9	25.3	45
50		66.8	73.6	74.4	72.6	65.6	54.6	44.9	41.3	36.9	29.7	24.5	50
55		59.9	66.2	65.5	64.2	62.5	50.7	42.9	39	35.4	28.6	23.7	55
60		50.9	58.7	58	57.7	57.9	47.3	40.9	37	33.8	27.7	22.8	60
65			52.4	51.7	53.1	51.6	44.1	39	34.9	32.3	26.9	22.1	65
70			47	48.4	47.6	46.2	41.3	36.9	32.8	30.9	26	21.3	70
75			43.1	43.8	42.8	41.6	38.7	34.8	31.1	29.3	25.1	20.5	75
80				39.7	38.9	37.6	36	32.9	29.3	27.8	24.1	19.7	80
85				36.3	35.4	34.1	32.8	31	27.7	26.4	23.2	18.9	85
90				31.6	32.4	31	31.1	29.3	26.2	25.1	22.3	18.1	90
95					29.7	28.6	28.8	27.6	24.9	23.8	21.4	17.2	95
100					27.3	27.2	26.4	25.6	23.5	22.6	20.5	16.4	100
105					22.5	25.5	24.2	24.2	22.3	21.4	19.6	15.5	105
110						23.6	22.3	22.4	21	20.3	18.7	14.7	110
115						22.3	20.5	20.6	19.5	19.3	17.8	14	115
120							19.5	19	18.3	18	17	13.2	120
125							18.7	17.5	17.4	16.5	16.2	12.5	125
130							17.8	16.2	16.2	15.8	15.4	11.9	130
135								14.9	14.9	15.1	14.4	11.4	135
140								14.1	13.8	14.3	13.3	10.8	140
145								13.7	12.7	13.2	12.3	10.3	145
150									11.9	12.3	11.4	9.9	150
155									11.3	11.5	10.7	9.4	155
160									10.9	10.8	9.9	9	160
165										10.1	9.3	8.6	165
170										9.5	8.6	8.2	170
175										8.9	8	7.8	175
180											7.5	7.4	180
185											6.9	6.9	185
190											6.5	6.4	190
195												5.9	195
200												5.5	200
205												4.8	205

Equipment



Crane carrier

Frame	Self-manufactured, weight-optimized and torsion resistant box-type design of high-tensile structural steel.
Outriggers	4-point supporting system, hydraulically telescopic into horizontal and vertical direction. Automatic levelling of crane. Electronic inclination indicator.
Engine	6-cylinder Diesel, make Liebherr, watercooled, output 400 kW (544 h.p.), max. torque 1855 lb-ft. Exhaust emissions to (EU 2016/1628 and EPA/CARB or ECE-R.96, spark arrestor. Fuel reservoir: 198 gallons.
Transmission	Automated 12-speed manual gearbox with oil-cooled multi-disk clutch including intarder. Distributor gear, two-stage, with locking differential.
Axles	Low maintenance carrier axles, all 5 axles steered. Axle 2, 4 and 5 are equipped with planetary gears, all driven axles with transverse differential locks, axle 4 with longitudinal differential lock.
Suspension	All axles are mounted on hydropneumatic suspension – “Niveaumatik suspension” and are lockable hydraulically.
Tyres	10 tyres. Size of tyres: 445/95 R 25 (16.00 R 25).
Steering	2-circuit system with hydraulic servo steering. Active speed depending rear axle steering, special steering programs for various driving situations.
Brakes	Service brake: all-wheel servo-air brake, all axles are equipped with disc brakes, dual circuit. Additional brakes: exhaust flap brake, Telma Eddy current brake (optional), intarder in gearbox. Hand brake: Spring-loaded, acting on all wheels of axles 2 to 5.
Driver's cab	Spacious corrosion resistant with comfort furnishings, mounted on rubber shock absorbers, safety glazing.
Electrical system	Modern data bus technique, 24 Volt DC.



Crane superstructure

Frame	Liebherr-manufactured, torsionally rigid steel construction made from high-tensile fine-grain steel. Triple-roller slewing rim.
Crane drive	Mechanical drive of the crane hydraulic from the chassis. Variable axial piston pumps with servo control and power regulation.
Control	Electric „Load Sensing“ control, simultaneous operation of 4 working motions, 2 self-centering hand control levers (joy-stick type).
Hoist gear	Axial piston fixed displacement motor, Liebherr hoist drum with integrated planetary gear and spring-loaded static brake.
Luffing gear	1 differential ram with pilot-controlled brake valve.
Slewing gear	Axial piston fixed displacement motor, planetary gear, spring-loaded static brake. Slewing gear inversible from released to locked as standard feature.
Crane cab	Large screen area, compound glass, comfort furnishing, cabin tiltable 20° to rear.
Safety devices	LICCON2 safe load indicator, test system, hoist limit switch, safety valves to prevent pipe and hose ruptures.
Telescopic boom	1 base section and 5 telescopic sections. All telescopic sections extendable individually by means of the rapid-cycle telescoping system TELEMATIK. Boom length 43 ft – 203 ft.
Counterweight	75,000 lb basic counterweight.
Electrical system	Modern data bus technique, 24 Volt DC.

Additional equipment

K	Assembly jib 9 ft 6 in.
K	Single folding jib, 35 ft. Double swing-away jib 35 ft – 62 ft. Mechanical adjustment 0°; 20°; 40°.
NZK	Single folding jib, 35 ft. Double swing-away jib 35 ft – 62 ft. Hydraulic adjustment 0° – 40°.
V	Telescopic boom extension 3 x 23 ft.
2nd hoist gear	For two-hook operation.
Tyres	10 tyres, size 525/80 R 25 (20.5 R 25).
Drive 10 x 8	Additional drive of the 1 st axle.
Additional counterweight	44,000 lb for a total counterweight of 119,000 lb.
Other items of equipment available on request.	

Equipement



Châssis porteur

Cadre	Construction en caisse résistante à la torsion et optimisée en poids réalisée par Liebherr en acier de construction à grain fin très rigide.
Calage	Dispositif de calage horizontal et vertical en 4 points, entièrement déployable hydrauliquement. Nivellement automatique du calage. Indicateurs électroniques d'inclinaison.
Moteur	Moteur diesel, 6 cylindres, fabriqué par Liebherr, à refroidissement par eau, de 400 kW (544 ch), couple max. 1855 lb-ft. Emissions des gaz d'échappement conformes aux directives (EU) 2016/1628 et EPA/CARB ou ECE-R.96, pare-étincelles. Capacité du réservoir à carburant: 198 gallons.
Boîte de vitesse	Boîte de vitesses 12 rapports automatisée avec embrayage multidisque sous bain d'huile, incl. ralentisseur. Mécanisme de distribution deux étages avec blocage du différentiel de distribution.
Essieux	Essieux nécessitant peu d'entretien, les 5 essieux sont directeurs. Les essieux 2, 4 et 5 sont des essieux planétaires, tous les essieux moteurs avec différentiel transversal et l'essieu 4 avec différentiel longitudinal.
Suspension	Suspension hydropneumatique «Niveaumatik» - sur tous les essieux. Chaque essieu peut être bloqué hydrauliquement.
Pneumatiques	10 pneus. Taille: 445/95 R 25 (16.00 R 25).
Direction	2 circuits avec direction assistée hydraulique. Direction active des essieux arrière et dépendante de la vitesse, programmes de direction spéciaux pour les différents modes de déplacement.
Freins	Freins de service: servofrein à air comprimé, tous les essieux sont munis de freins à disque, à 2 circuits. Freins auxiliaire : par clapet sur échappement, frein Telma (option), ralentisseur monté sur boîte de vitesse. Frein de secours et frein à main: par cylindres à ressorts sur les essieux 2 à 5.
Cabine	Spacieuse cabine, traitement anticorrosion, équipement «grand confort», suspension par silentblochs, vitrage de sécurité.
Installation électrique	Technique moderne de transmission de données par BUS de données, courant continu 24 Volts.



Partie tournante

Cadre	Fabrication Liebherr, construction soudée indéformable, en acier à grain fin haute résistance. Couronne d'orientation à triple rangée de rouleaux.
Entraînement	Entraînement mécanique de l'hydraulique de la grue par le châssis de la grue. Pompes réglables à pistons axiaux avec servocommande et réglage de puissance.
Commande	Direction électrique "Load Sensing", 4 mouvements de travail dirigeable simultanément, deux leviers de commande à 4 positions et à autocentrage.
Mécanisme de levage	Moteur à cylindrée constante et à pistons axiaux. Treuil de marque Liebherr équipé d'un engrenage planétaire et d'un frein d'arrêt commandé par ressort.
Mécanisme de relevage	1 vérin différentiel avec clapet de frein commandé.
Dispositif de rotation	Moteur à cylindrée constante à pistons axiaux, réducteur planétaire, frein d'arrêt commandé par ressort. Commutation en série du mécanisme d'orientation: ouvert et en orientation freinée automatiquement.
Cabine de grue	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.
Dispositif de sécurité	Contrôleur de charge, «LICCON2», système test, limitation de la course pour le levage, soupape de sûreté contre la rupture de tubes et de tuyaux.
Flèche télescopique	Un élément de base et de 5 télescopes. Chaque partie peut être télescopée individuellement à l'aide du système de télescopage séquentiel rapide TELEMATIK. Longueur de flèche: 43 ft - 203 ft.
Contrepoids	Plaque de base 75,000 lb.
Installation électrique	Technique moderne de transmission de données. Courant continu 24 Volts.

Equipement supplémentaire

K	Flechette de montage 9 ft 6 in.
K	Flechette pliante simple, longueur 35 ft. Double flechette pliante 35 ft - 62 ft. Reglage mecanique 0°; 20°; 40°.
NZK	Flechette pliante simple, longueur 35 ft. Double flechette pliante 35 ft - 62 ft. Reglage hydraulique 0° - 40°.
V	Rallonge flèche télescopique 3 x 23 ft.
2ème mécanisme de levage	Pour l'utilisation du deuxième crochet.
Pneumatiques	10 pneus. Taille: 525/80 R 25 (20.5 R 25).
Entraînement 10 x 8	Essieu 1 est entraîné additionnellement.
Contrepoids additionnel	44,000 lb pour un contrepoids total de 119,000 lb.
Autres équipements supplémentaires sur demande.	

Description of symbols

Explication des symboles



Max. capacity
Capacité max.



Outriggers front
Calage avant



Radius
Portée



Max. hoist height
Hauteur de levage max.



Outriggers rear
Calage arrière



Telescopic boom
Flèche télescopique



Max. radius
Portée max.



Crane superstructure
Partie tournante de la grue



Assembly jib
Flèche de montage



Tyres
Pneumatiques



infinitely variable
en continu



Hydraulic swing away jib
Flèche pliante hydraulique



Hookblock/Capacity
Moufle à crochet/Capacité de charge



Rope diameter
Diamètre



Telescopic boom extension
Rallonge flèche télescopique



No. of sheaves
Poulies



Rope length
Longueur du câble



No. of lines
Brins



Max. single line pull
Effort au brin maxi.



Weight
Poids



Hoist gear
Treuil de levage



Crane carrier
Châssis porteur



Slewing speeds
Vitesses d'orientation



Driving speed
Vitesse de translation



Boom length
Longueur de la flèche



Gradability
Aptitude à gravir les pentes



Boom position
Position de la flèche



Transmission
Boîte de vitesse



Counterweight
Contrepoids



Gear
Vitesse



Counterweight radius
Rayon de contrepoids



Onroad gear
Vitesse de route



Outriggers
Calage



Crawl speed
Marche lente



Slewing gear / Working area
Mécanisme d'orientation / Plage de travail



Max. supporting forces
Forces d'appui max.



Standard
Norme

Remarks

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 30 ft/s (9 m/s, 20 mph) and regarding the load a sail area of 1 m² 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.	The lifting capacities stated are valid for lifting operation only (corresponding with crane classification according to ISO 4301-1, crane group A1).
4.	Lifting capacities are given in kip.
5.	The weight of the hook blocks and hooks is part of the load and therefore it must be deducted from the lifting capacities.
6.	Working radii are measured from the slewing centre.
7.	The stated lengths of the telescopic boom are maximum values and may deviate slightly.
8.	The lifting capacities given for the telescopic boom apply if the folding jib is removed.
9.	Subject to modification of lifting capacities.
10.	Lifting capacities above 189600 lb/321900 lb only with additional pulley block/special equipment.
11.	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.
12.	The illustrations in this brochure may feature accessories and special equipment not included in the standard scope of delivery.

Remarques

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 30 ft/s (9 m/s, 20 mph) minimum, une surface de prise au vent de 1 m² 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.	Forces de levage pour application de grue de montage (correspond à la classification de grues selon ISO 4301-1, groupe de grues A1).
4.	Les charges sont indiquées en kip.
5.	Le poids du crochet de levage resp. de la moufle à crochet est une partie de la charge et doit donc être déduit de la capacité de charge.
6.	Les portées sont calculées à partir de l'axe de rotation.
7.	Les longueurs indiquées pour la flèche télescopique sont des valeurs maximales et peuvent légèrement varier dans la réalité.
8.	Les charges indiquées pour la flèche télescopique sont valables lorsque la fléchette pliante est démontée.
9.	Charges données sous réserve de modification.
10.	Forces de levage plus de 189600 lb/321900 lb seulement avec moufle additionnel/équipement supplé- mentaire.
11.	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.
12.	Les figures contiennent également des accessoires et des équipements spéciaux non inclus de série dans la livraison.

MyLiebherr

Our MyLiebherr portal is the easy way for you to access Liebherr's digital service world.
Take advantage of extensive basic and additional services for your mobile and crawler cranes.

Avec notre portail MyLiebherr, accédez facilement à l'univers numérique du service de Liebherr.
Bénéficiez dès maintenant d'un service global et de prestations complémentaires pour vos grues mobiles et sur chenilles.



One portal, all services MyLiebherr



Planning

Crane Finder



Operations

Performance



Planning

Crane Planner 2.0



Operations

Documents



Maintenance

Spare Parts Catalogue



Planning

LICCON Work Planner



Training

Digital Crane Operator



Maintenance

Parts Shop

Proposition 65



WARNING: This product can expose you to chemicals, including exhaust emissions, including lead and lead compounds, which are known to the State of California to cause cancer, birth defects or other reproductive harm.
For more information see: www.P65warnings.ca.gov/diesel

Änderungen vorbehalten • Subject to modification • Sous réserve de modifications • Con riserva di modifiche • Salvo modificaciones • Возможны изменения

Liebherr-Werk Ehingen GmbH • Postfach 1361 • 89582 Ehingen, Germany
+49 73 91 5 02-0 • www.liebherr.com

MyLiebherr



Printed in Germany (2)
lwe-td-253-04-us10-2023