



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

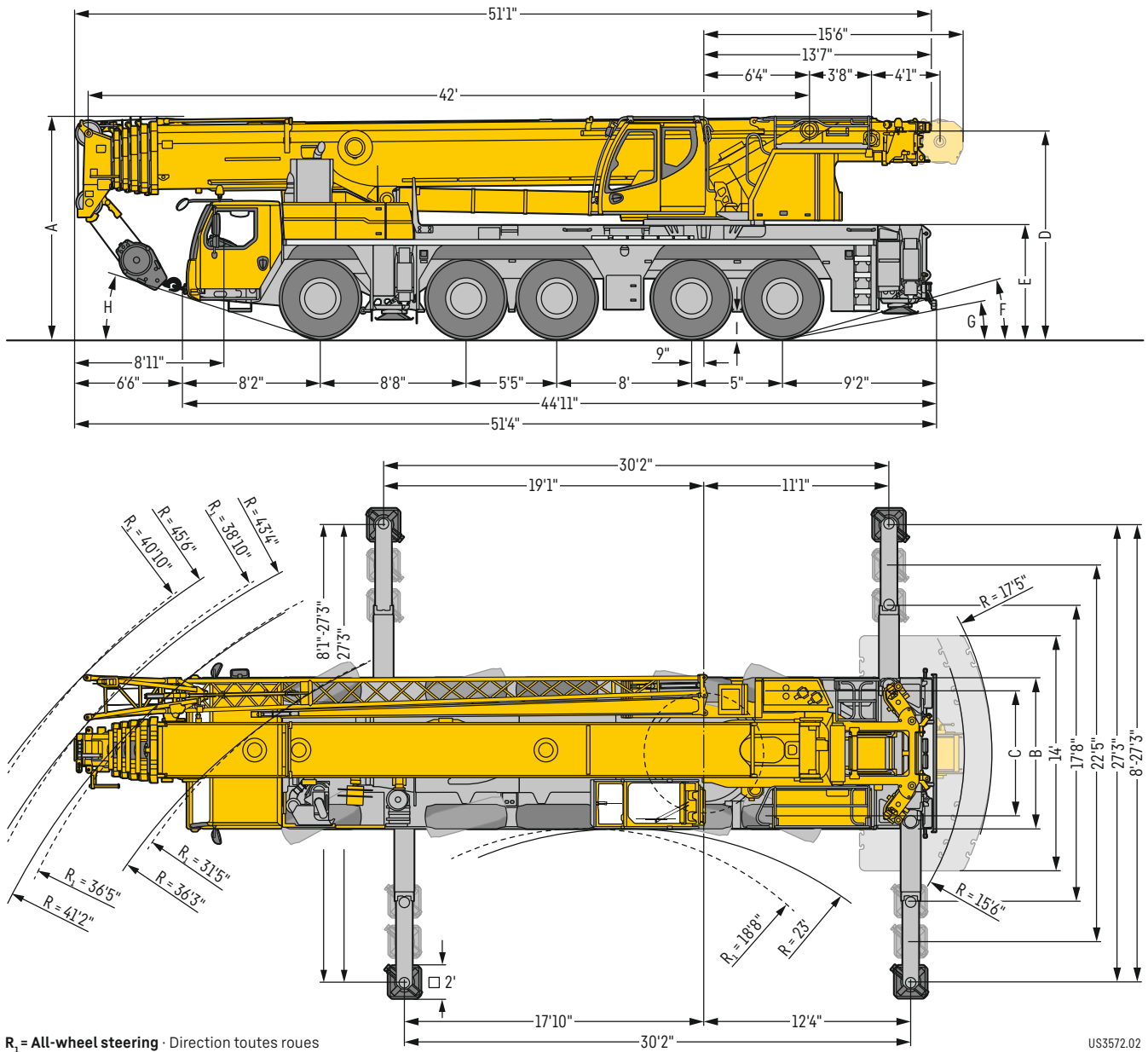


# Technical data

## Caractéristiques technique

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

# Dimensions Encombrement



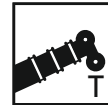
## Dimensions · Encombrement

	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

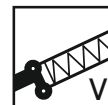




203 ft



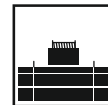
35 ft – 62 ft



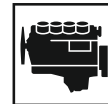
3 x 23 ft



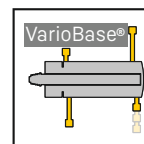
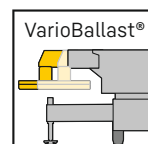
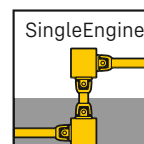
9 ft 6 in



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

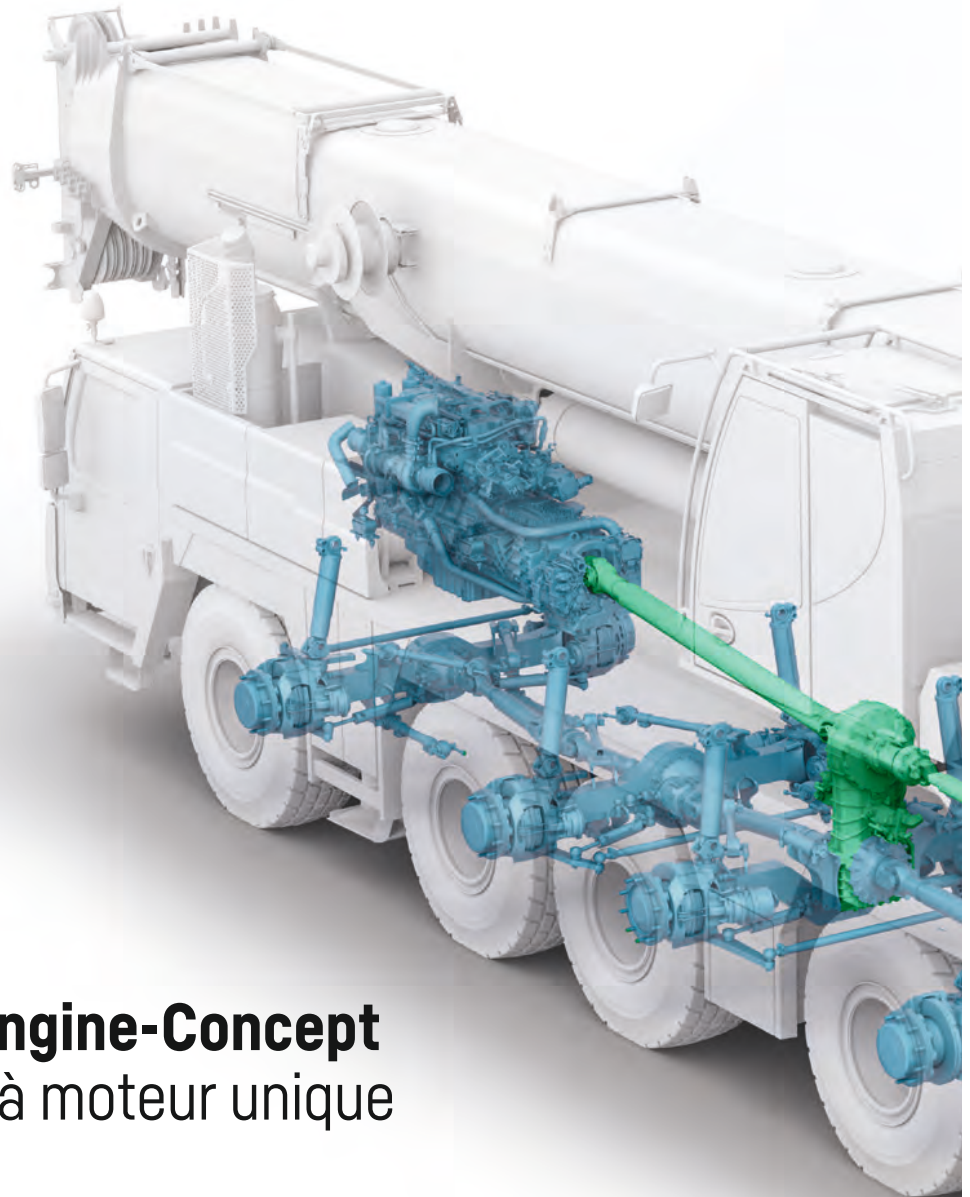
Boîte de vitesses automatisée,  
12 vitesses avant, 2 vitesses arrière

## 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

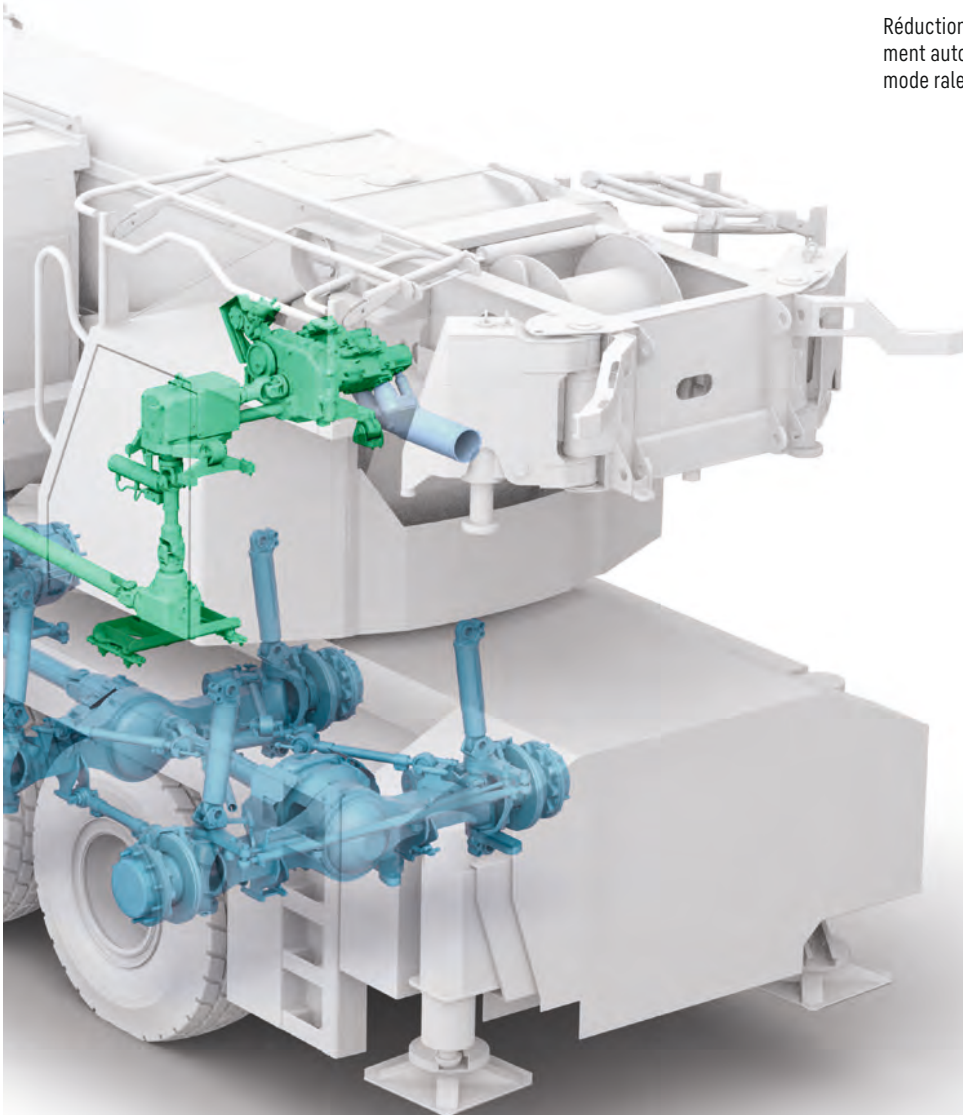
Entraînement du moteur du châssis par le biais d'un  
arbre mécanique particulièrement performant  
Rentabilité accrue et entretien nettement réduit



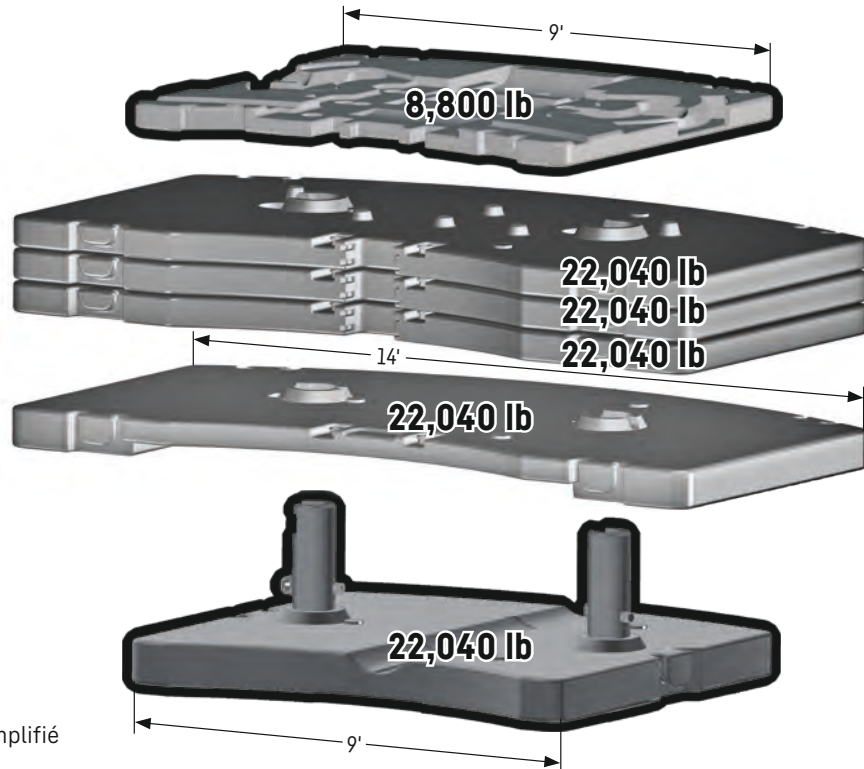
## ECOmode

**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

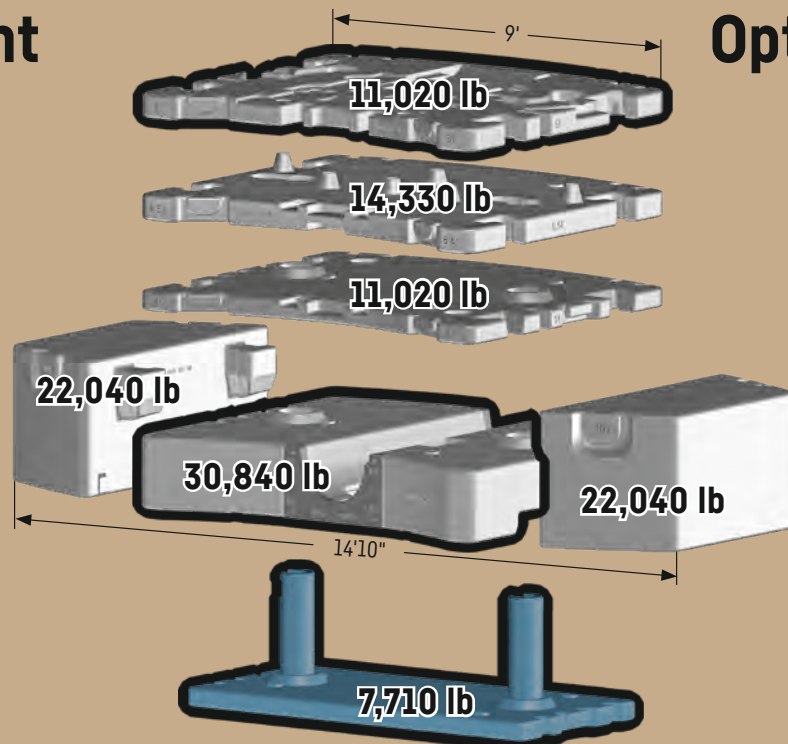


# Counterweight Contrepoids



Technically transportable  
Transport techniquement simplifié

# UK-Counterweight UK-Contrepoids



Option

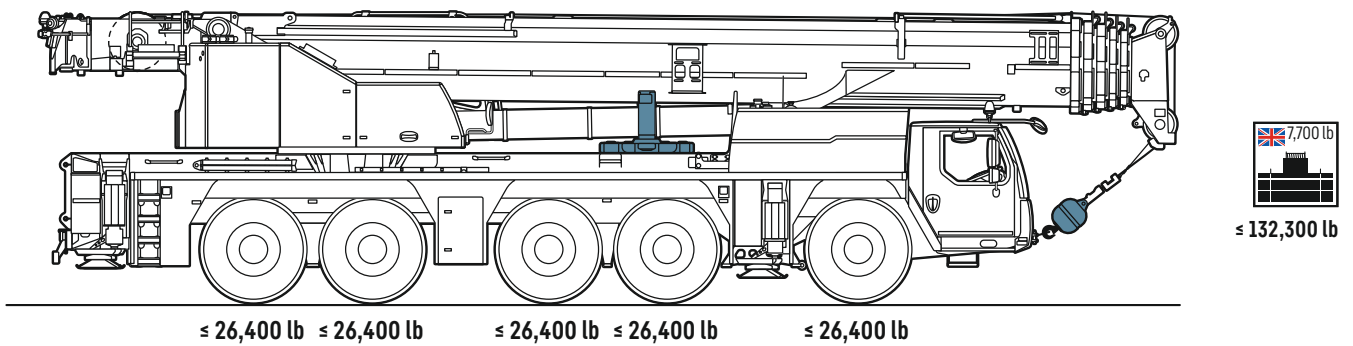
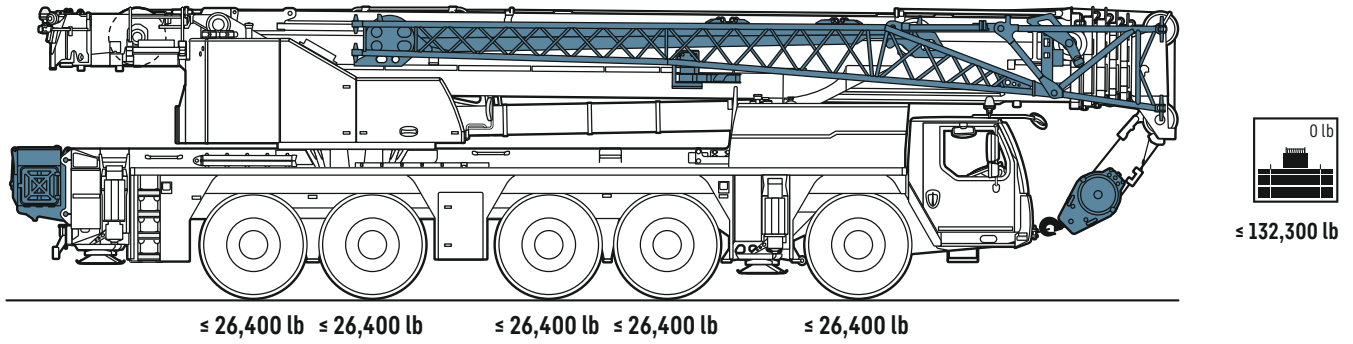
26,400 lb axle load  
26,400 lb de charge par essieu

Technically transportable  
Transport techniquement simplifié



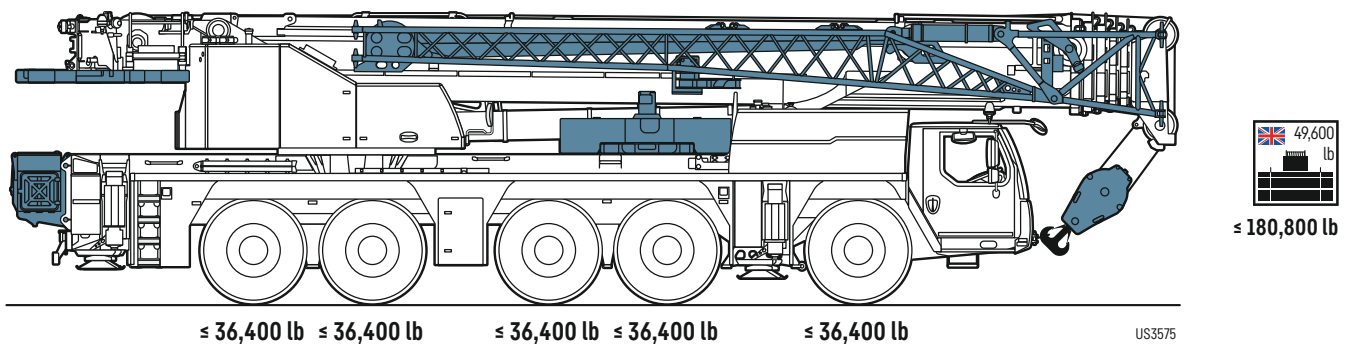
# On-road driving

## 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

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.

	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

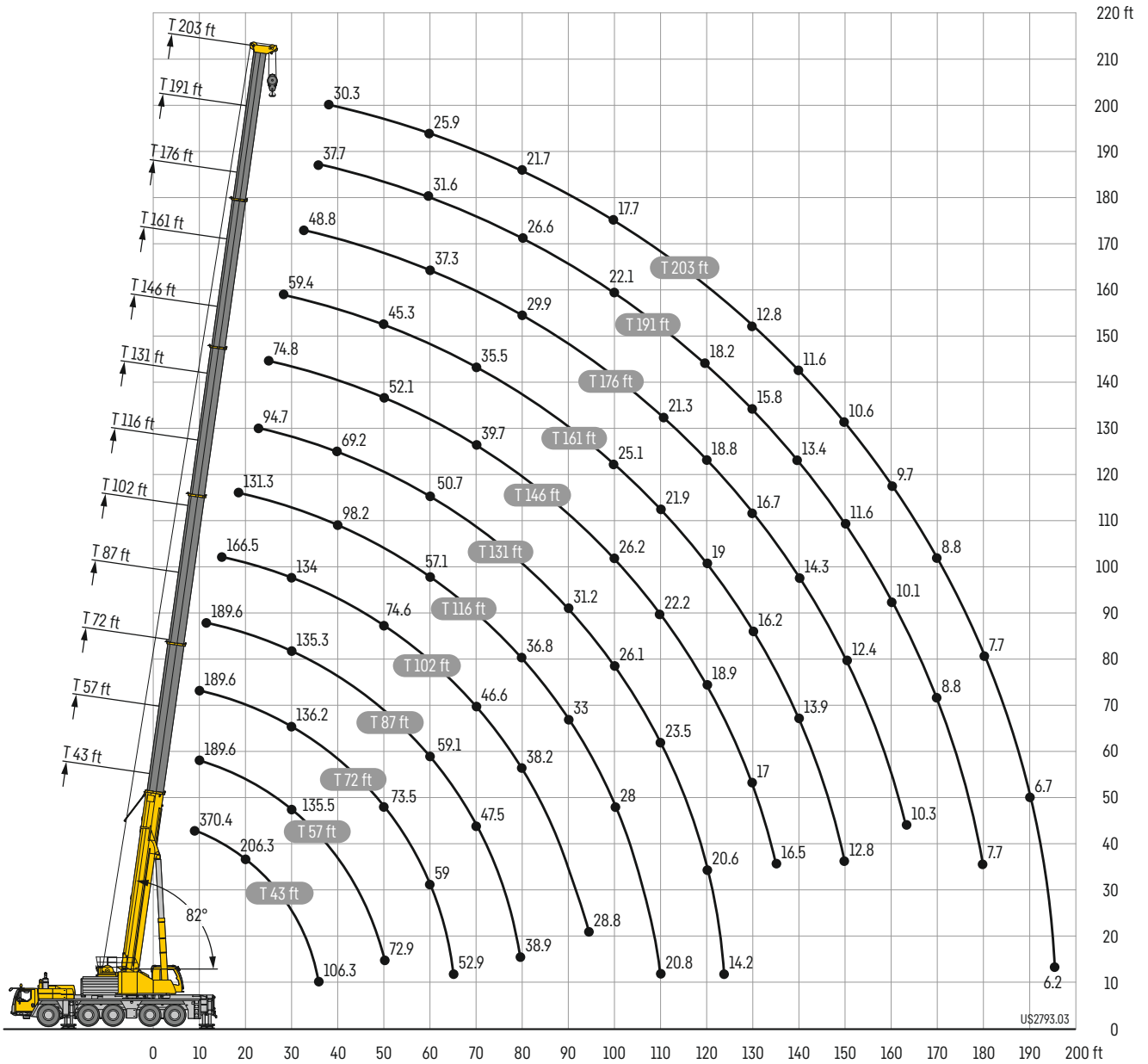
**K** Assembly jib · Fléchette de montage



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	38	
40			97.9	98.4	97.8	99.6	98.2	69.2	60.2	51.9	45.2	36.7	40	
45			84	84.6	85.8	85.6	84.2	63.9	55.6	48.6	43	35.4	45	
50			72.9	73.5	75.4	74.6	73.5	58.9	52.1	45.3	41.1	34.2	50	
55				64.6	66.3	65.6	64.3	54.7	48.4	42.6	39.1	32.9	55	
60				59	59.1	58.2	57.1	50.7	45.3	40	37.3	31.6	60	
65				52.9	52.9	51.9	50.6	47.4	42.4	37.7	35.3	30.3	65	
70					47.5	46.6	45.4	44.5	39.7	35.5	33.4	29	70	
75					42.9	42	40.7	41.6	37.3	33.3	31.6	27.8	75	
80					38.9	38.2	36.8	37.6	35	31.4	29.9	26.6	80	
85						35.7	34.8	34.2	32.8	29.7	28.3	25.4	85	
90						32.8	33	31.2	30.8	28.1	26.8	24.3	90	
95						28.8	30.4	28.5	28.6	26.6	25.4	23.1	95	
100							28	26.1	26.2	25.1	24	22.1	100	
105							25.9	24.5	24.1	23.1	22.8	21	105	
110							20.8	23.5	22.2	21.9	21.3	20	110	
115								22.2	20.4	20.6	19.7	19.1	115	
120								20.6	18.9	19	18.8	18.2	120	
125								14.2	17.6	17.6	17.9	17.1	125	
130									17	16.2	16.7	15.8	130	
135									16.5	15	15.5	14.6	135	
140										13.9	14.3	13.4	140	
145										13.3	13.3	12.4	145	
150										12.8	12.4	11.6	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	160	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



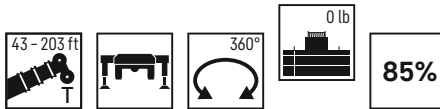
	43 ft	57 ft	72 ft	87 ft	102 ft	116 ft	131 ft	146 ft	161 ft	176 ft	191 ft	203 ft	
10	189.6	189.6	189.6										10
11	189.6	189.6	189.6	189.6									11
12	189.6	189.6	189.6	189.6									12
13	189.6	189.6	189.6	189.4									13
14	189.6	189.6	189.6	188.6									14
15	189.6	189.6	189.6	171.5	155.9								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



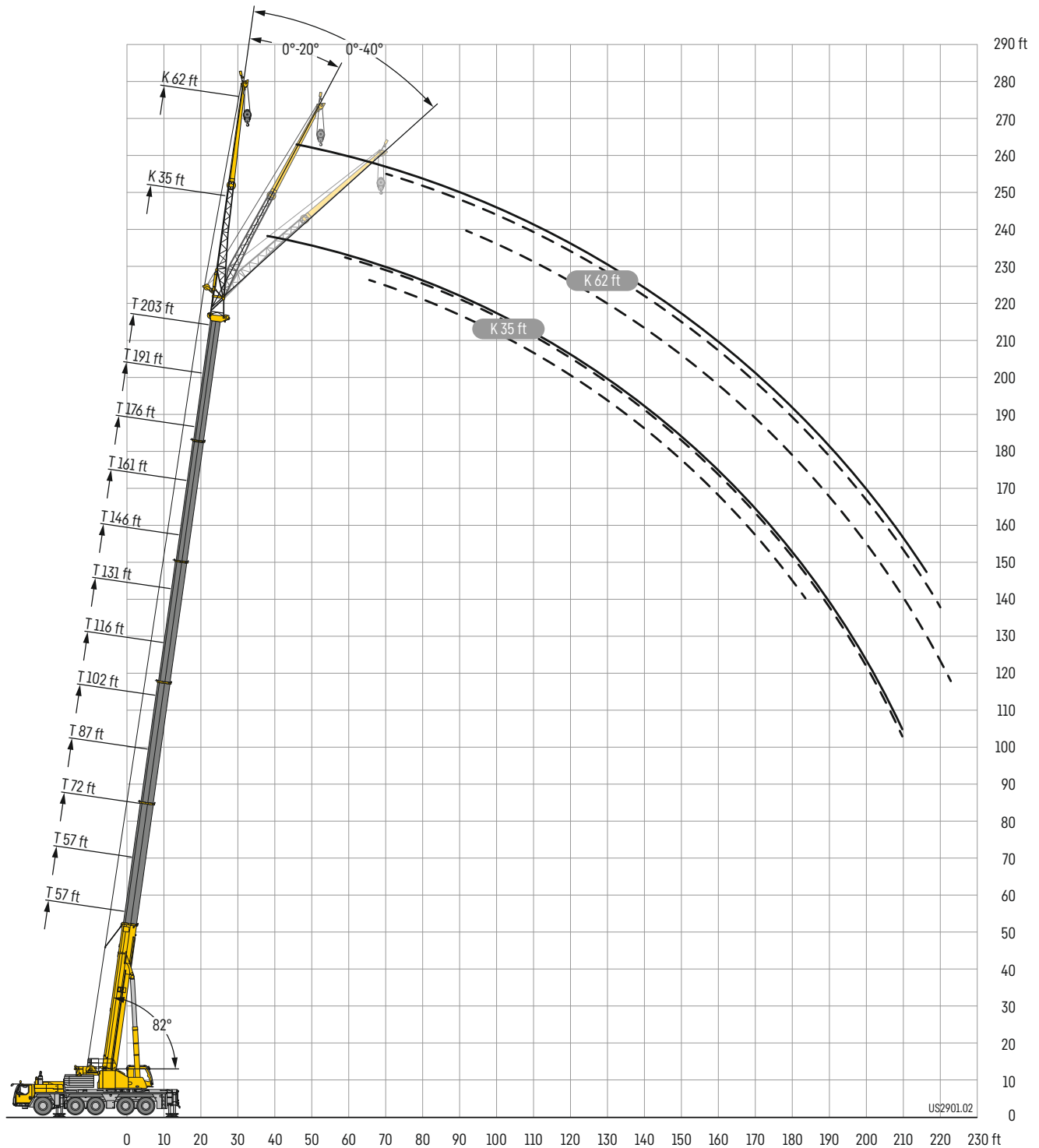
	43 ft	57 ft	72 ft	87 ft	102 ft	116 ft	131 ft	146 ft	161 ft	176 ft	191 ft	203 ft	
10	189.6	189.6	189.6										10
11	189.6	189.6	189.6	189.6									11
12	189.6	189.6	189.6	189.6									12
13	189.6	189.6	189.6	185.3									13
14	189.6	189.6	186.9	175.2									14
15	189.5	189.6	176.1	159.5	143.8								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

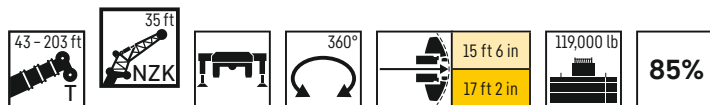
# TNZZK



# Lifting capacities

## Forces de levage

# TNZK



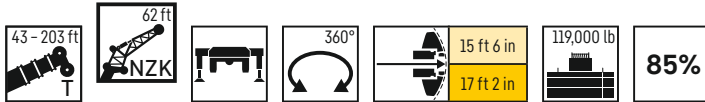
	43 ft			57 ft			72 ft			87 ft			102 ft			116 ft			
	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	
17	40.3	34.6		40.3			40.3			40.3			40.3						17
18	40	33.9		40.3			40.3			40.3			40.3						18
19	39.3	33		40.3	35		40.3			40.3			40.3						19
20	38.4	32.1		40.3	34.2		40.3			40.3			40.3						20
22	36.7	30.7		40.1	32.8		40.3	34.5		40.3			40.3						22
24	35	29.4		39.1	31.5		40.3	33.3		40.3	34.7		40.3						24
26	33.4	28.2	24	37.6	30.3		40.2	32.1		40.3	33.6		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					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		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	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	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	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	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	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	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	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	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	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	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	80
85				11.8			14.6	16.5	16.1	17.3	17.7	16.3	20	18.7	16.7		21.5	19	85
90							13.4	15.9		16	17.2	16.1	18.5	18.1	16.4		20.1	18.4	90
95							12.4	15.4		14.9	16.7	16	17.2	17.5	16.1		18.9	17.9	95
100							11.7			13.9	16.2		16.1	17	16		17.7	17.4	100
105										13	15.7		15.1	16.6	15.9		16.6	16.9	105
110										12.2	15.3		14.2	16.1			15.7	16.6	110
115										11.6			13.4	15.7			14.9	16.2	115
120													12.6	15.4			14.1	15.8	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			
	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								36
38	35.5	28.1		31.2	26.5		27.5				23.9						15.9		38
40	34.8	27.6		30.8	26.1		27.3				23.7						15.9		40
45	33.2	26.3	20.8	29.8	25		26.7	23.7			23.4						15.8		45
50	31.9	25.1	20.2	28.8	24	20	26.1	22.9	19.7		23.1	21.5					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					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					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					15.2	14.8	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					14.8	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					14.3	13.9	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					13.9	13.4	80
85	22.9	19.3	16.9	22.7	19	17.1	21.6	18.6	16.9	20	17.9	16.4					13.5	13	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					13.1	12.6	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					12.7	12.2	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					12.3	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					12.1	11.6	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					11.6	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					11.2	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					10.9	10.7	120
125	14.7	15.9	15.4	15.5	15.9	15.6	16	15.8	15.4	15	15	15					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					10	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					9.6	9.7	135
140	12.7	14.5		13.6	14.4	14.7	13.4	13.5	13.9	12.6	13.1	13.4					9.2	9.4	140
145	12.3	13.9		12.8	13.3		12.6	13	13.1	11.7	12.3	12.7					8.8	9	145
150	11.9	13		12	12.3		11.8	12.2	12.5	11	11.4	11.9					8.4	8.6	150
155	11.5			11.2	11.5		11.1	11.4		10.6	10.7	11					8	8.2	155
160	8.6			10.6	10.7		10.3	10.7		10.3	10.4	10.4					7.6	7.9	160
165				10.3	10.3		9.7	9.9		9.8	10	10.1					7.3	7.5	165
170				9.8			9.1	9.3		9.2	9.5						6.9	7.1	170
175				4.8			8.6	8.7		8.6	8.9						6.6	6.8	175
180							8.3	8.4		8	8.3						6.3	6.5	180
185							8.1			7.5	7.7						6	6.2	185
190										7	7.2						5.7	5.9	190
195										6.6	6.7						5.4	5.6	195
200										6.2							4.6	5.3	200
205																	4.7	4.4	205
210																	4.2	3	210
215																	3.5		215

# Lifting capacities

## Forces de levage

# TNZK

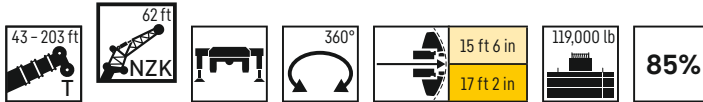


	43 ft			57 ft			72 ft			87 ft			102 ft			116 ft			
	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	
17	16.3			16.4			16.4			16.5									17
18	16.2			16.3			16.4			16.5									18
19	16.2			16.3			16.4			16.4			16.5						19
20	16.1			16.3			16.3			16.4			16.5						20
22	15.9			16.2			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

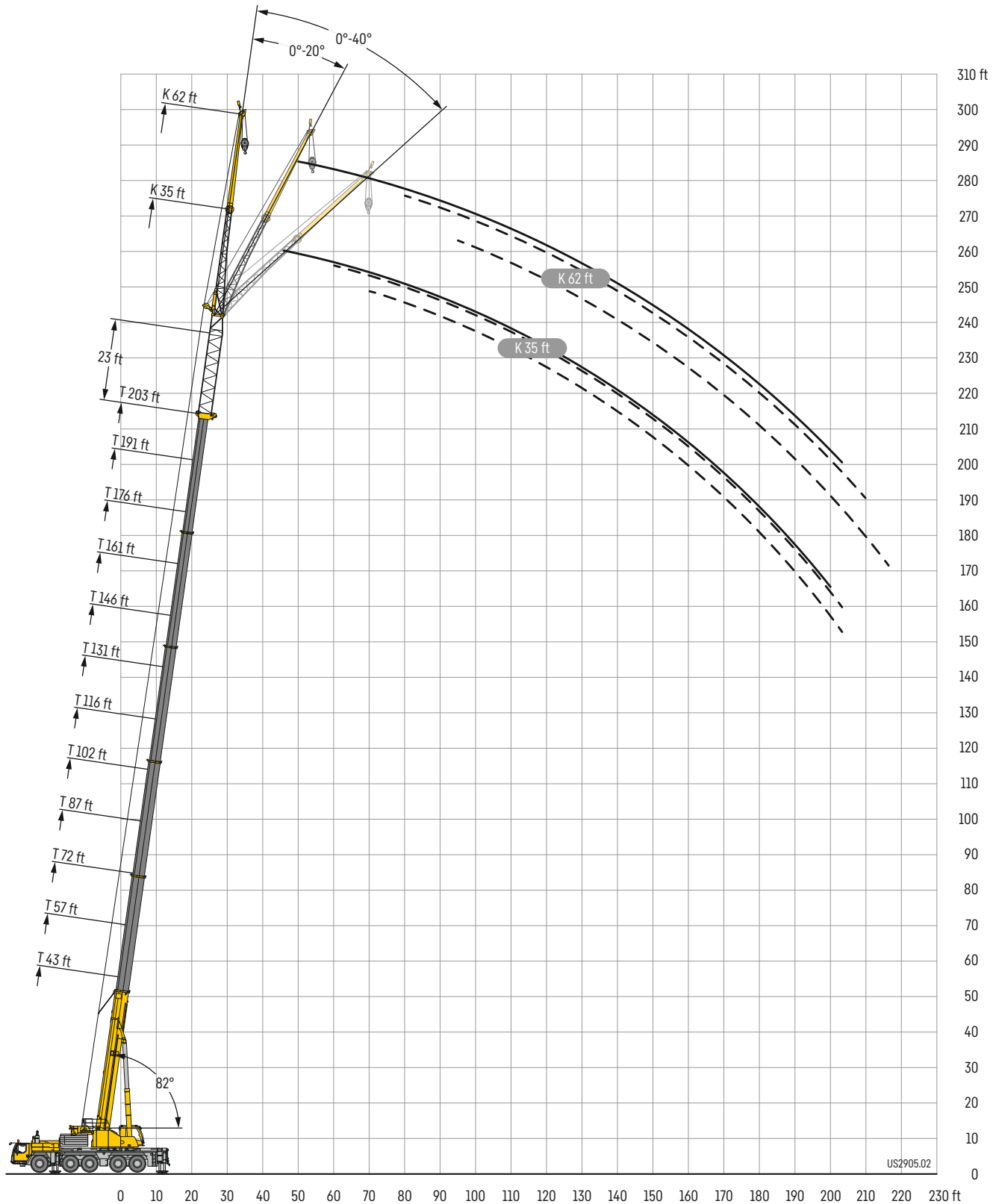


	131 ft			146 ft			161 ft			176 ft			191 ft			203 ft			
	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	
26	15.4																		26
28	15.2			14.1															28
30	15.1			14															30
32	15			13.9			13												32
34	14.9			13.8			12.9												34
36	14.7			13.7			12.8			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

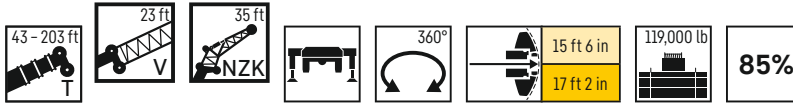
# TVNZK



# Lifting capacities

## Forces de levage

# TVNZK

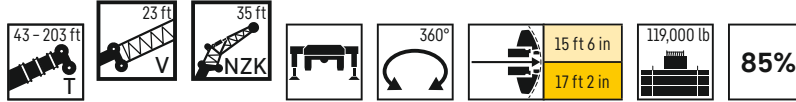


	43 ft + 23 ft			57 ft + 23 ft			72 ft + 23 ft			87 ft + 23 ft			102 ft + 23 ft			116 ft + 23 ft			
	35 ft																		
	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	
17	19.2			19.7			20.2			20.2									17
18	19.3			19.8			20.1			20.2									18
19	19.3			19.7			20.1			20.2			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

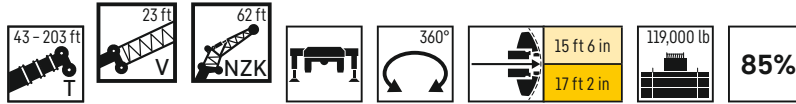


	131 ft + 23 ft			146 ft + 23 ft			161 ft + 23 ft			176 ft + 23 ft			191 ft + 23 ft			203 ft + 23 ft			
	35 ft																		
	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	
26	20.2																		26
28	20.1																		28
30	20.1			20.2															30
32	19.9			20.1			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

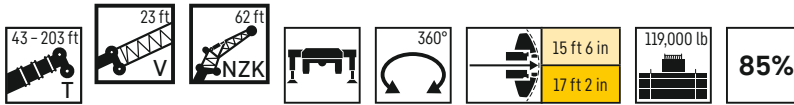
# Lifting capacities

## Forces de levage

# TVNZK

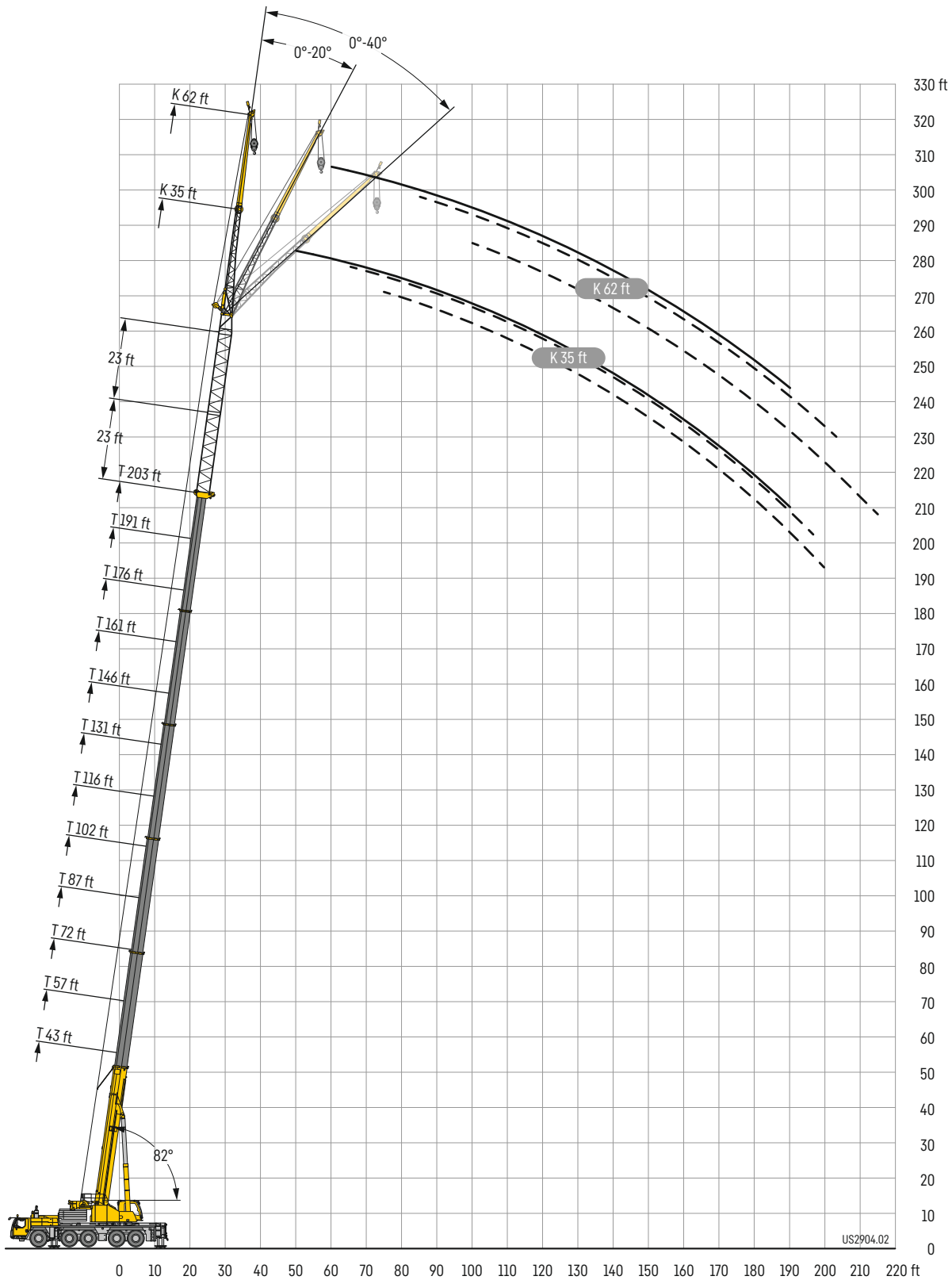


	43 ft + 23 ft			57 ft + 23 ft			72 ft + 23 ft			87 ft + 23 ft			102 ft + 23 ft			116 ft + 23 ft			
	62 ft																		
	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	
17	11			11															17
18	11			11			11												18
19	10.9			11			11												19
20	10.9			11			11			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			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		10.4	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



	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

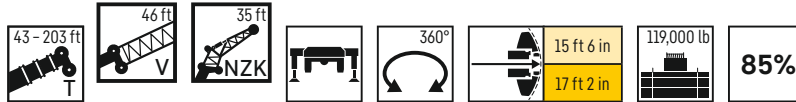




# Lifting capacities

## Forces de levage

# TVNZK

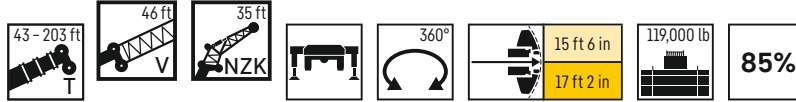


	43 ft + 46 ft			57 ft + 46 ft			72 ft + 46 ft			87 ft + 46 ft			102 ft + 46 ft			116 ft + 46 ft			
	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	
17	12.4			12.5															17
18	12.4			12.5			12.5												18
19	12.3			12.5			12.5												19
20	12.2			12.4			12.5			12.5									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

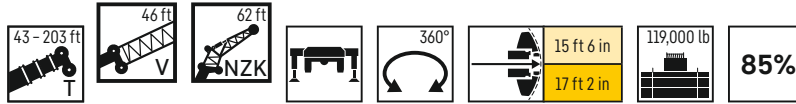


	131 ft + 46 ft			146 ft + 46 ft			161 ft + 46 ft			176 ft + 46 ft			191 ft + 46 ft			203 ft + 46 ft			
	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	
30	12.5																		30
32	12.5																		32
34	12.4			12.5															34
36	12.3			12.4			12.4												36
38	12.2			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



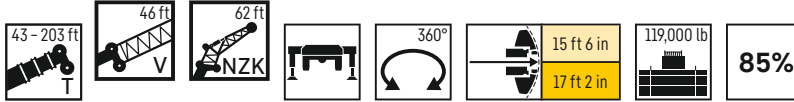
	43 ft + 46 ft			57 ft + 46 ft			72 ft + 46 ft			87 ft + 46 ft			102 ft + 46 ft			116 ft + 46 ft				
	62 ft																			
	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°		
17	8.4																		17	
18	8.4																		18	
19	8.4			8.4															19	
20	8.4			8.4															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	3.1		210
215																	3			215



# Lifting capacities

## Forces de levage

# TVNZK



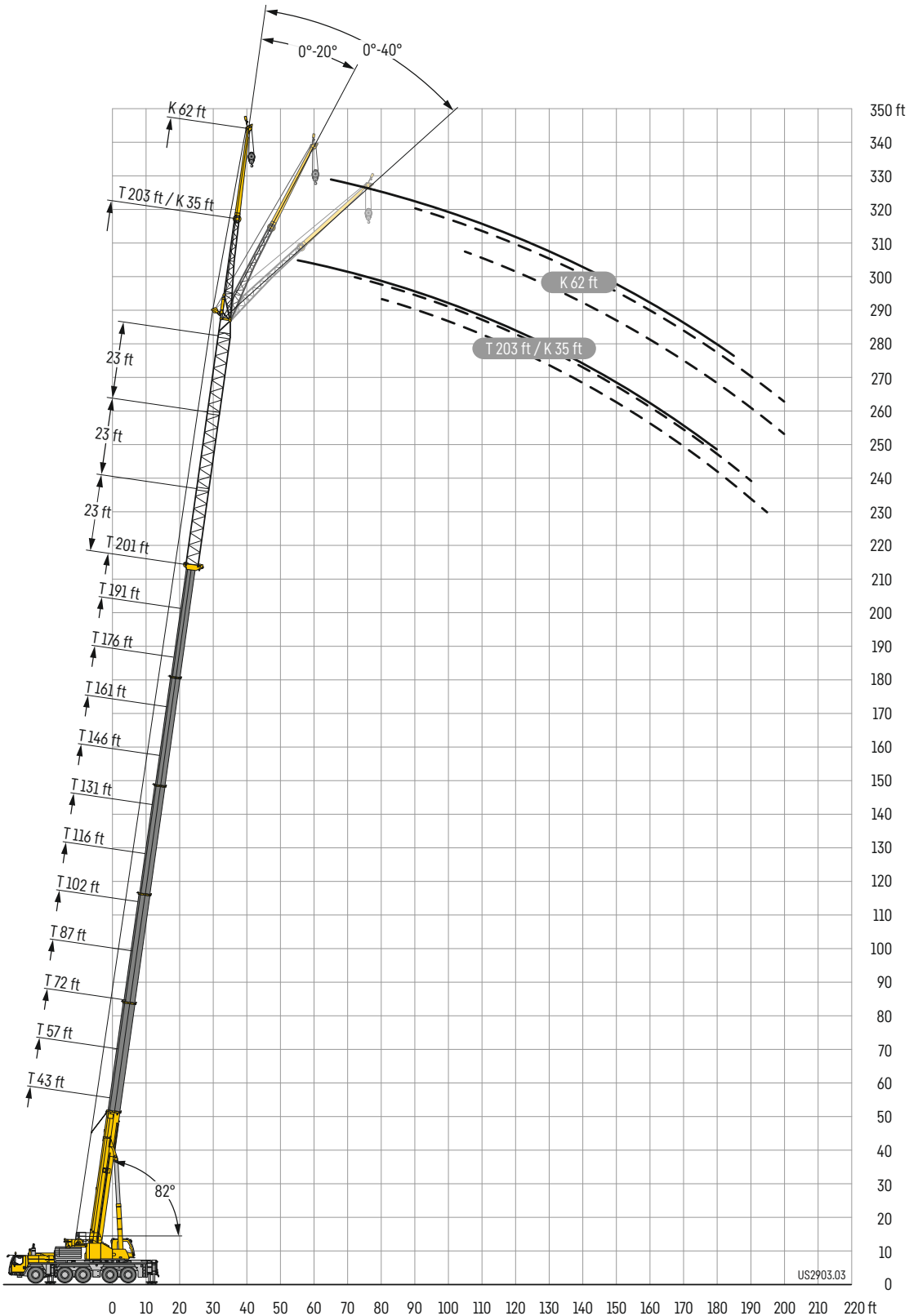
	131 ft + 46 ft			146 ft + 46 ft			161 ft + 46 ft			176 ft + 46 ft			191 ft + 46 ft			203 ft + 46 ft			
	62 ft																		
	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	
34	8.4																		34
36	8.4																		36
38	8.4			7.4															38
40	8.3			7.5															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

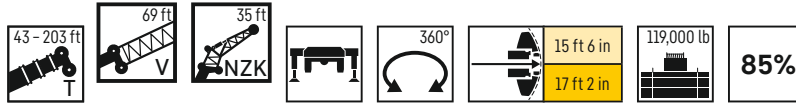
# TVNZK



# Lifting capacities

## Forces de levage

# TVNZK

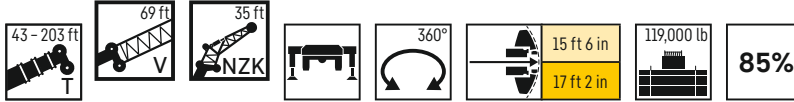


	43 ft + 69 ft			57 ft + 69 ft			72 ft + 69 ft			87 ft + 69 ft			102 ft + 69 ft			116 ft + 69 ft			
	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	
17	6.7																		17
18	6.8																		18
19	6.9			6.9															19
20	7			7															20
22	7.1			7.2			7.1												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

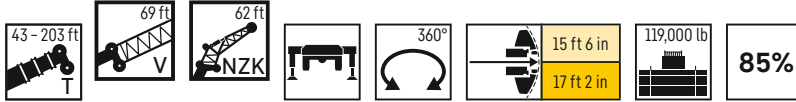


	131 ft + 69 ft			169 ft + 69 ft			161 ft + 69 ft			176 ft + 69 ft			191 ft + 69 ft			203 ft + 69 ft			
	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	
34	8.6																		34
36	8.8																		36
38	9			9.1															38
40	9.1			9.3															40
45	9.3			9.4			8.2												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				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	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

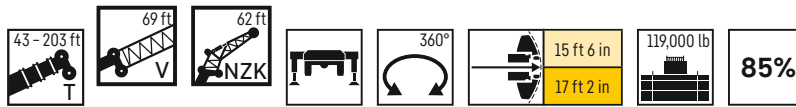
# Lifting capacities

## Forces de levage

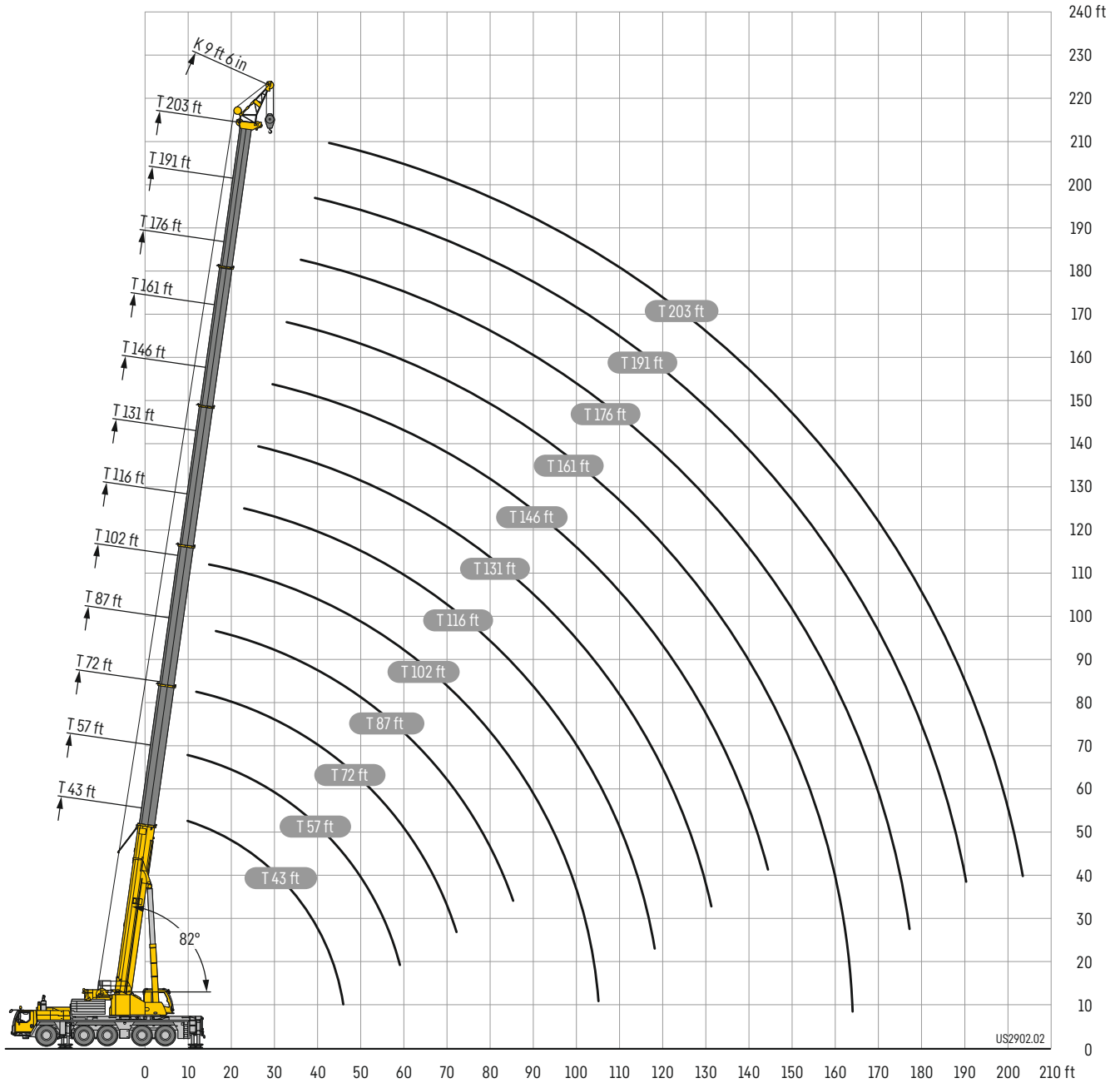
# TVNZK



	43 ft + 69 ft			57 ft + 69 ft			72 ft + 69 ft			87 ft + 69 ft			102 ft + 69 ft			116 ft + 69 ft			
	62 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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	175	
180				1.4			1.6	1.6		1.8	1.8	1.9	2	2	2.1	2.2	2.2	180	
185							1.5	1.6		1.7	1.7	1.8	1.9	1.9	2	2.1	2.1	185	
190							1.5	1.5		1.6	1.7		1.8	1.8	1.9	2	2	190	
195							1.4			1.6	1.6		1.7	1.8	1.8	1.9	2	195	
200										1.5	1.5		1.7	1.7		1.9	1.9	200	
205										1.5	1.5		1.6	1.6		1.8	1.8	205	
210										1.4			1.5	1.6		1.7	1.7	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	



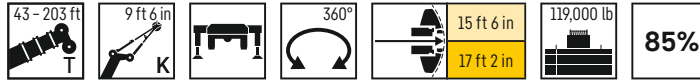
	131 ft + 69 ft			169 ft + 69 ft			161 ft + 69 ft			176 ft + 69 ft			191 ft + 69 ft			203 ft + 69 ft			
	62 ft																		
	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	
38	6.7																		38
40	6.6																		40
45	6.6			5.4															45
50	6.5			5.7			4.7												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										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 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

<b>Frame</b>	Self-manufactured, weight-optimized and torsion resistant box-type design of high-tensile structural steel.
<b>Outriggers</b>	4-point supporting system, hydraulically telescopic into horizontal and vertical direction. Automatic levelling of crane. Electronic inclination indicator.
<b>Engine</b>	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.
<b>Transmission</b>	ZF 12-speed gear box with automatic control system. ZF-intarder fitted directly to the gear. Two-stage transfer case with lockable transfer differential.
<b>Axles</b>	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.
<b>Suspension</b>	All axles are mounted on hydropneumatic suspension - "Niveumatik suspension" and are lockable hydraulically.
<b>Tyres</b>	10 tyres. Size of tyres: 445/95 R 25 (16.00 R 25).
<b>Steering</b>	2-circuit system with hydraulic servo steering. Active speed depending rear axle steering, special steering programs for various driving situations.
<b>Brakes</b>	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.
<b>Driver's cab</b>	Spacious corrosion resistant with comfort furnishings, mounted on rubber shock absorbers, safety glazing.
<b>Electrical system</b>	Modern data bus technique, 24 Volt DC.

## Crane superstructure

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

## Additional equipment

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

Other items of equipment available on request.

# Équipement

## Châssis porteur

<b>Cadre</b>	Construction en caisse résistante à la torsion et optimisée en poids réalisée par Liebherr en acier de construction à grain fin très rigide.
<b>Calage</b>	Dispositif de calage horizontal et vertical en 4 points, entièrement déployable hydrauliquement. Nivellement automatique du calage. Indicateurs électroniques d'inclinaison.
<b>Moteur</b>	Moteur diesel, 6 cylindres, fabriqué par Liebherr, 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.
<b>Boîte de vitesse</b>	Boîte de vitesses ZF à 12 rapports, mécanisme automatisé à commande. Ralentisseur hydrodynamique ZF directement accouplé à la boîte. Boîte de transfert à 2 étages avec blocage de différentiel.
<b>Essieux</b>	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.
<b>Suspension</b>	Suspension hydropneumatique «Niveumatik» - sur tous les essieux. Chaque essieu peut être bloqué hydrauliquement.
<b>Pneumatiques</b>	10 pneus. Taille: 445/95 R 25 (16.00 R 25).
<b>Direction</b>	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.
<b>Freins</b>	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.
<b>Cabine</b>	Spacieuse cabine, traitement anticorrosion, équipement «grand confort», suspension par silentblochs, vitrage de sécurité.
<b>Installation électrique</b>	Technique moderne de transmission de données par BUS de données, courant continu 24 Volts.

## Partie tournante

<b>Cadre</b>	Fabrication Liebherr, construction soudée indéformable, en acier à grain fin haute résistance. Couronne d'orientation à triple rangée de rouleaux.
<b>Entraînement</b>	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.
<b>Commande</b>	Direction électrique "Load Sensing", 4 mouvements de travail dirigeable simultanément, deux leviers de commande à 4 positions et à autocentrage.
<b>Mécanisme de levage</b>	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.
<b>Mécanisme de relevage</b>	1 vérin différentiel avec clapet de frein commandé.
<b>Dispositif de rotation</b>	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.
<b>Cabine de grue</b>	Construction en tôle d'acier entièrement zinguée avec peinture par poudrage et cuisson au four, avec glaces de sécurité, appareils de commande et de contrôle, équipement confortable. Cabine inclinable vers l'arrière.
<b>Dispositif de sécurité</b>	Contrôleur de charge, «LICCON2», système test, limitation de la course pour le levage, soupape de sûreté contre la rupture de tubes et de tuyaux.
<b>Flèche télescopique</b>	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.
<b>Contrepoids</b>	Plaque de base 75,000 lb.
<b>Installation électrique</b>	Technique moderne de transmission de données. Courant continu 24 Volts.

## Équipement supplémentaire

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

# Description of symbols

## Explication des symboles

	<b>Max. capacity</b> Capacité max.		<b>Outriggers front</b> Calage avant		<b>Radius</b> Portée
	<b>Max. hoist height</b> Hauteur de levage max.		<b>Outriggers rear</b> Calage arrière		<b>Telescopic boom</b> Flèche télescopique
	<b>Max. radius</b> Portée max.		<b>Crane superstructure</b> Partie tournante de la grue		<b>Assembly jib</b> Flèche de montage
	<b>Tyres</b> Pneumatiques		<b>infinitely variable</b> en continu		<b>Hydraulic swing away jib</b> Flèche pliante hydraulique
	<b>Hookblock/Capacity</b> Moufle à crochet/Capacité de charge		<b>Rope diameter</b> Diamètre		<b>Telescopic boom extension</b> Rallonge flèche télescopique
	<b>No. of sheaves</b> Poulies		<b>Rope length</b> Longueur du câble		
	<b>No. of lines</b> Brins		<b>Max. single line pull</b> Effort au brin maxi.		
	<b>Weight</b> Poids		<b>Hoist gear</b> Treuil de levage		
	<b>Crane carrier</b> Châssis porteur		<b>Slewing speeds</b> Vitesses d'orientation		
	<b>Driving speed</b> Vitesse de translation		<b>Boom length</b> Longueur de la flèche		
	<b>Gradability</b> Aptitude à gravir les pentes		<b>Boom position</b> Position de la flèche		
	<b>Transmission</b> Boîte de vitesse		<b>Counterweight</b> Contrepoids		
	<b>Gear</b> Vitesse		<b>Counterweight radius</b> Rayon de contrepoids		
	<b>Onroad gear</b> Vitesse de route		<b>Outriggers</b> Calage		
	<b>Crawl speed</b> Marche lente		<b>Slewing gear / Working area</b> Mécanisme d'orientation / Plage de travail		
	<b>Max. supporting forces</b> Forces d'appui max.		<b>Standard</b> 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 m<sup>2</sup> per ton load and a wind resistance coefficient of 1.2 on the load have been taken into account. For lifting of loads with large sail areas and/or high wind resistance coefficients the maximum wind speed as stated in the load charts has to be reduced.
3. 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 m<sup>2</sup> par tonne ainsi qu'un coefficient de résistance au vent de la charge 1.2 sont pris en compte pour le calcul des tableaux de charge. Lorsque des charges ayant une surface de prise au vent et/ou un coefficient de résistance au vent plus élevé(e)s sont levées, la vitesse de vent maximale indiquée dans les tableaux de charge doit être réduite.
3. 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 supplémentaire.
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](http://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](http://www.liebherr.com)

MyLiebherr



Printed in Germany (1)  
lwe-1d-253-04-us10-2023

