

# Mobile Crane/Grue mobile **LTM 1090-4.2**

**All-Rounder – Ready for anything**



**110 USt**



**197 ft**



**203 ft**



**249 ft**



# **LIEBHERR**

# Table of content

## Tables des matières

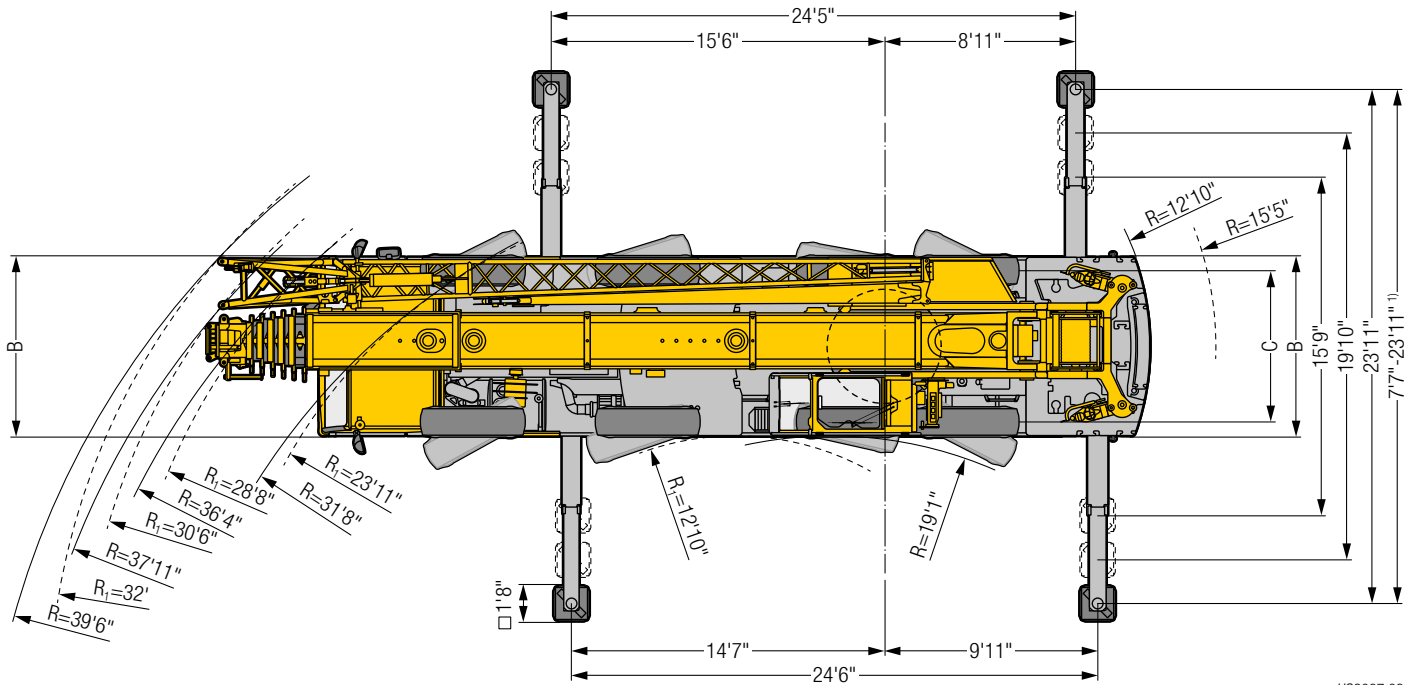
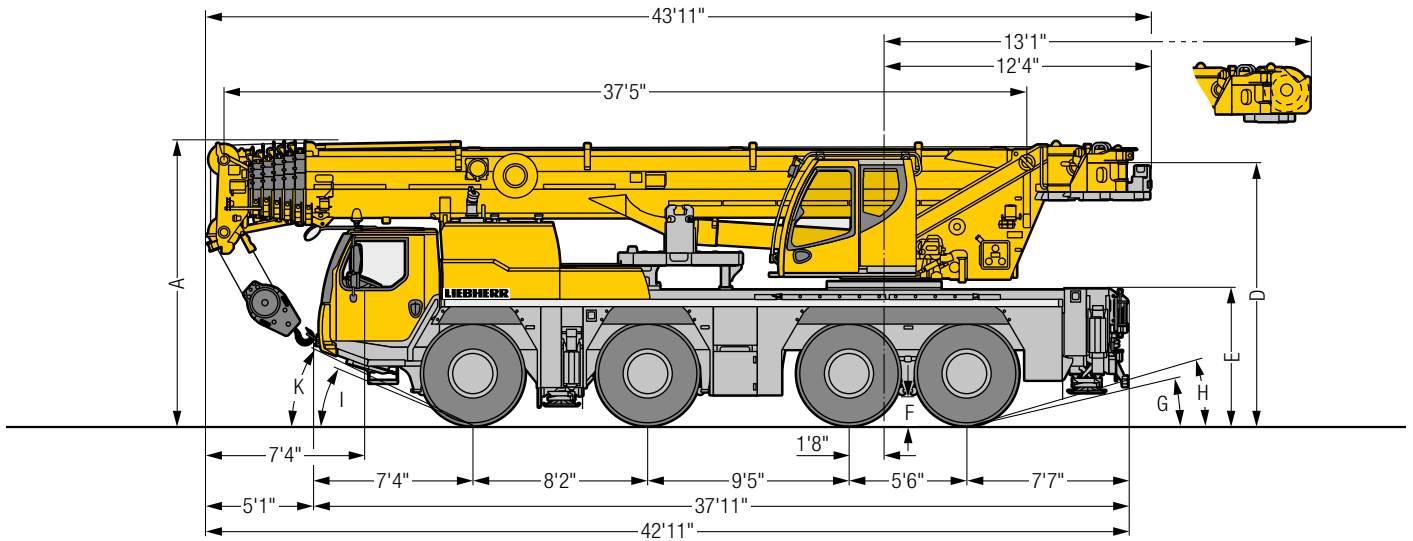
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### Technical Data/Caractéristiques technique

Dimensions/Encombrement	3
Mobile Crane/Grue mobile	4 – 5
Fuel saving and noise reduction/Economie de carburant et réduction du bruit	6
Weights/Poids Working speeds/Vitesses	7
VarioBallast – Counterweight radius/Rayon de contrepoids Counterweight/Contrepoids	8
On-road driving/Déplacement sur route Jobsite driving/Déplacement sur chantier	9
Boom/jib combinations/Configurations de flèche	10
T	11 – 17
TNZK	18 – 22
TK	23 – 27
Equipment/Equipement	28 – 29
Description of symbols/Explication des symboles	30

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# Dimensions Encombrement



US3087.03

R<sub>i</sub> = All-wheel steering · Direction toutes roues <sup>1)</sup> only with VarioBase® · seulement avec VarioBase®

## Dimensions/Encombrement

	A	A 4"*	B	C	D	E	F	G	H	I	K
445/95 R 25 (16.00 R 25)	13'1"	12'10"	8'4"	6'11"	12'1"	6'3"	1'4"	13°	17°	24°	27°
525/80 R 25 (20.5 R 25)	13'1"	12'10"	8'10"	7'1"	12'1"	6'3"	1'4"	13°	17°	24°	27°

\* lowered · abaissé



# Mobile Crane/Grue mobile

## LTM 1090-4.2



197 ft



31 ft – 52 ft



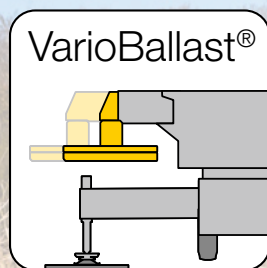
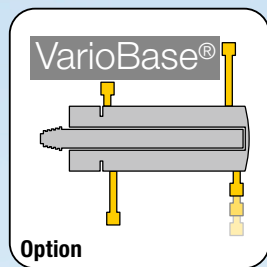
8.4 ft (445/95 R 25)



49,600 lbs

€COmode

€COdrive



### Counterweight/Contrepoids

Fast changing system for various driving situations

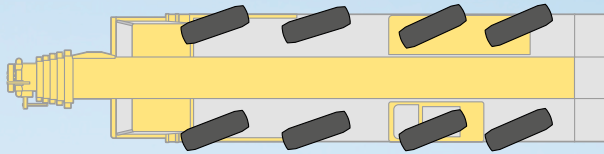
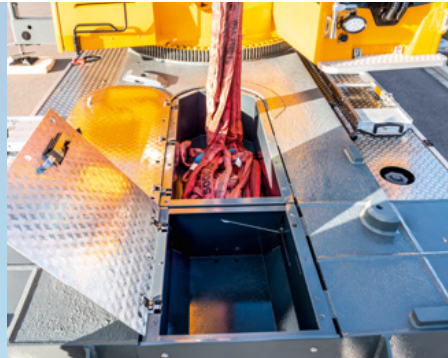
Système de changement rapide pour les configurations de conduite les plus diverses







Integrated storage areas for the daily operation  
Rangements intégrés pour l'usage quotidien



Variable steering concept  
Concept de direction variable



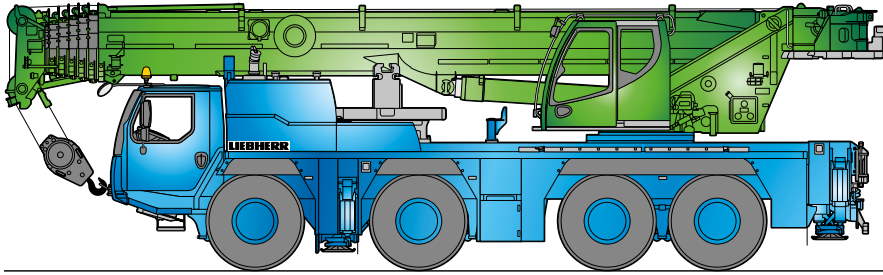
# Fuel saving and noise reduction

## Economie de carburant et réduction du bruit

### €COmode

Automatic regulation of the engine speed during crane mode reduce fuel about 10 %

Régulation automatique de la vitesse du moteur pendant les travaux avec la grue permet de réduire la consommation de carburant jusqu'à env. 10 %



S3093

### €COdrive

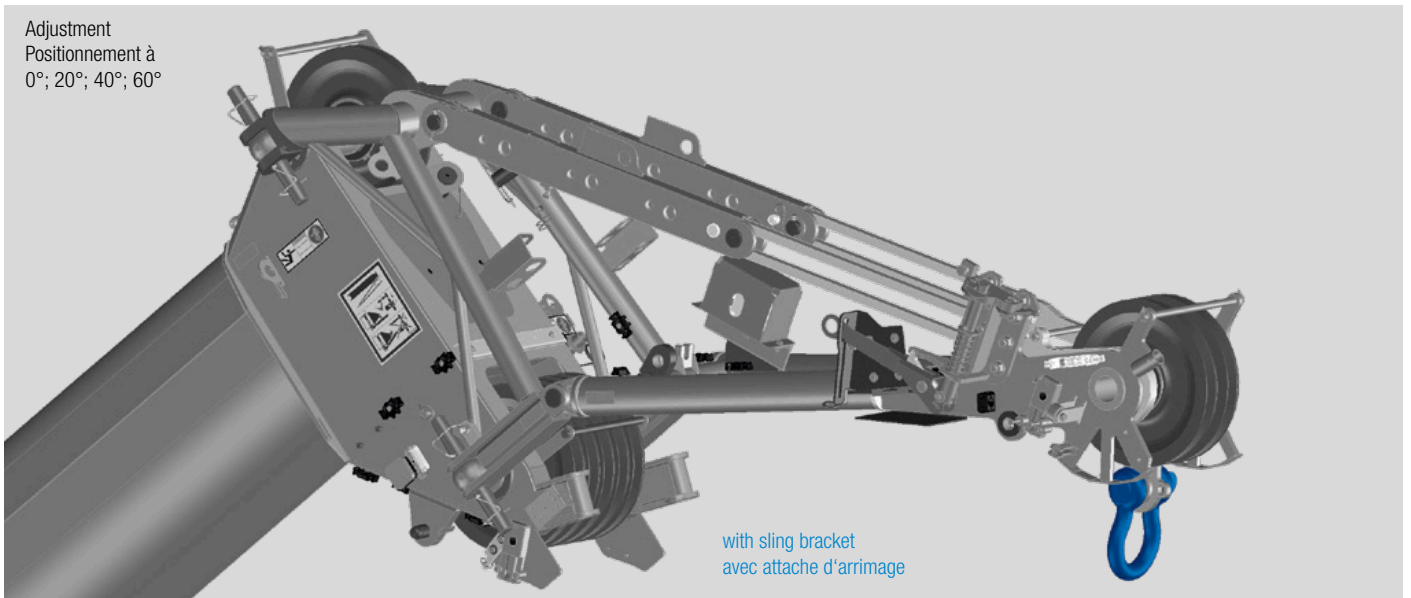
New ZF-TraXon transmission  
Nouvelle boîte ZF-TraXon

Driving strategy in the carrier with ECO- or Powermode 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

## Flexible assembly jib 6.5 ft

### Flèche de montage flexible 6.5 ft

Adjustment  
Positionnement à  
0°; 20°; 40°; 60°



# Weights Poids



## Hook block/Moufles à crochet

Load lbs Forces de levage lbs	No. of sheaves Poulies	No. of lines Brins	Weight lbs Poids lbs
149,900	7	12	1,675
130,500	5	10	1,170
93,250	3	7	990
41,225	1	3	660
13,900	–	1	310

# Working speeds Vitesses



## Crane carrier/Châssis porteur

	min.	max.	%
445/95 R 25 (16.00 R 25) 525/80 R 25 (20.5 R 25)	0.3	53	>60

Theoretical gradeability/Aptitude théorique en pente



12 / R2



4 / R2



## Crane superstructure/Partie tournante

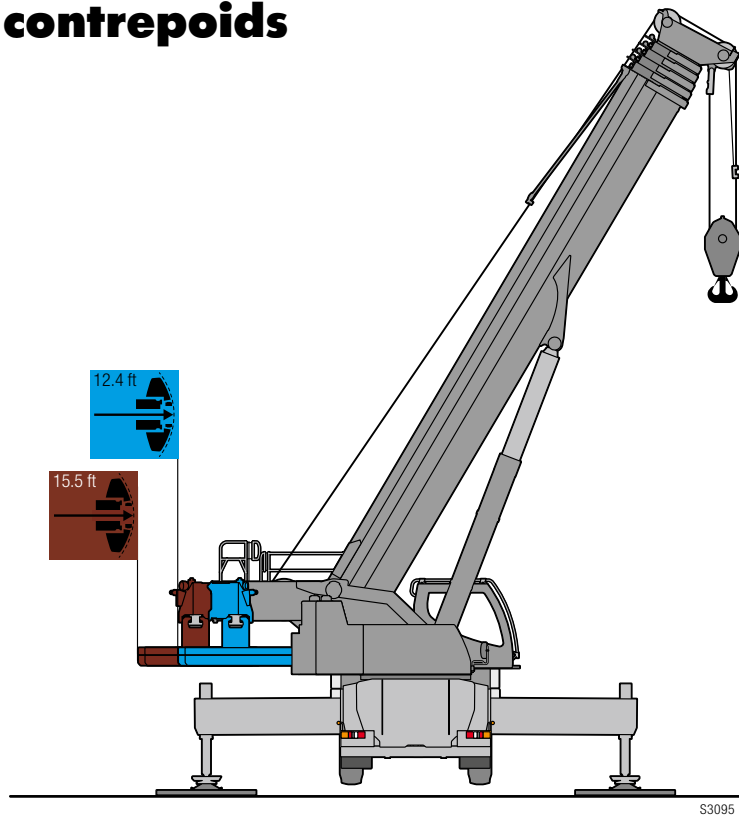
Drive Mécanismes	infinitely variable en continu	Rope diameter / length Diamètre / Longueur du câble	Max. single line pull Effort au brin maxi.
	0 – 410 ft/min single line ft/min au brin simple	0.67" / 804 ft	14,160 lbs
	0 – 410 ft/min single line ft/min au brin simple	0.67" / 804 ft	14,160 lbs
	0 – 1.5 rpm		
	approx. 57 seconds to reach 85° boom angle env. 57 s jusqu'à 85°		
	approx. 395 seconds for boom extension from 37 ft – 197 ft env. 395 s pour passer de 37 ft – 197 ft		



# VarioBallast

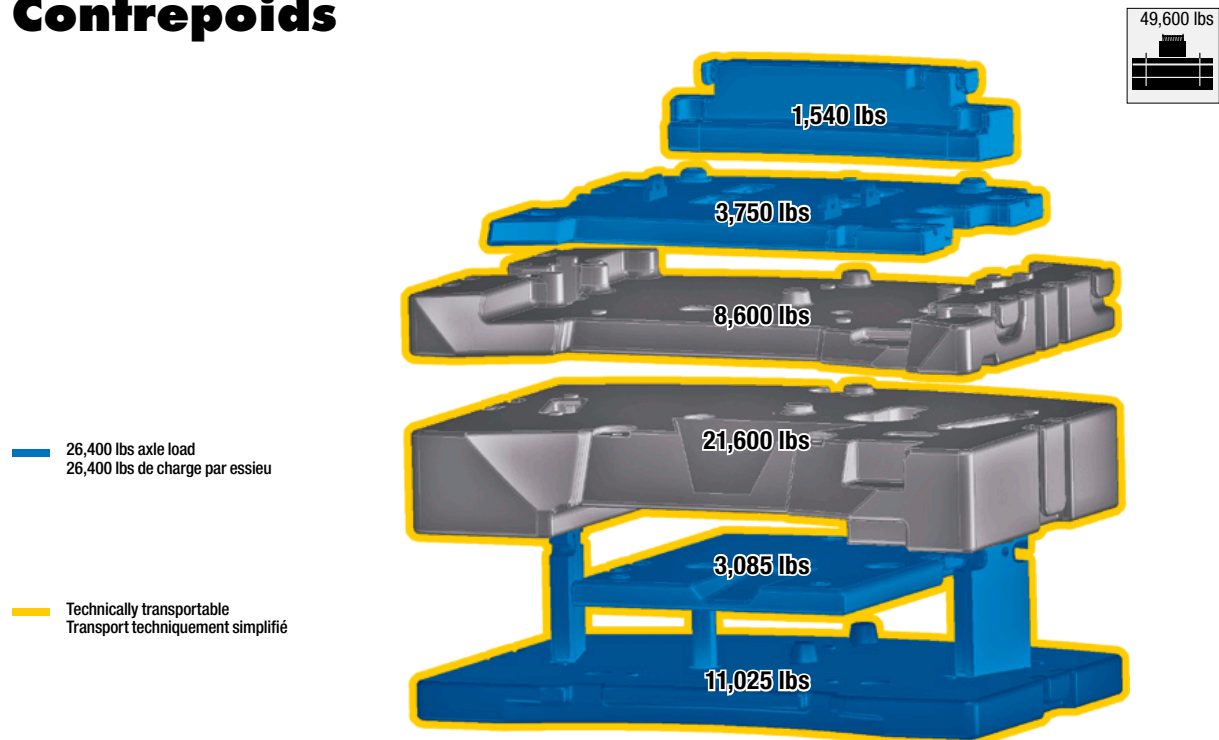
## Counterweight radius

## Rayon de contrepoids



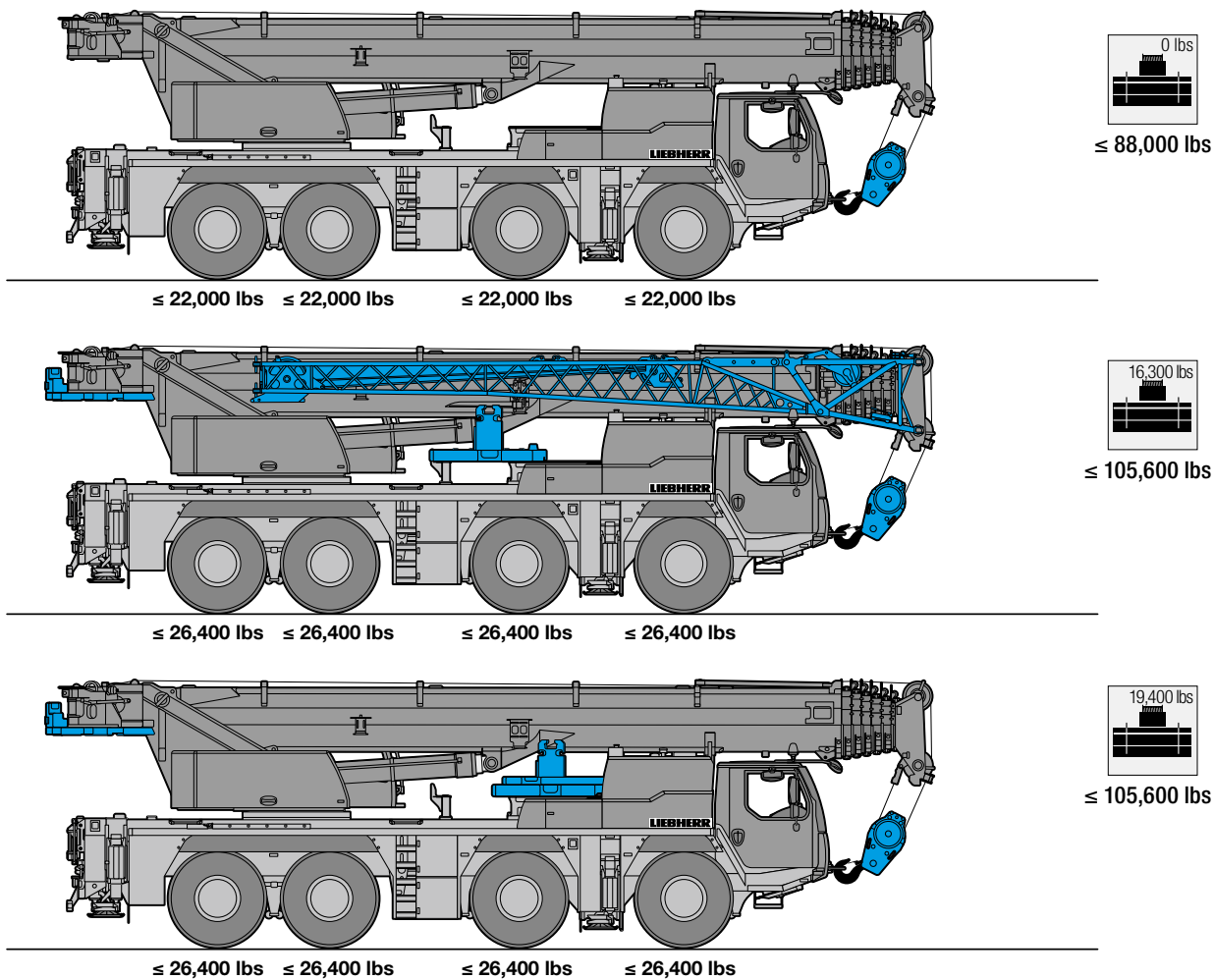
# Counterweight

# Contrepoids



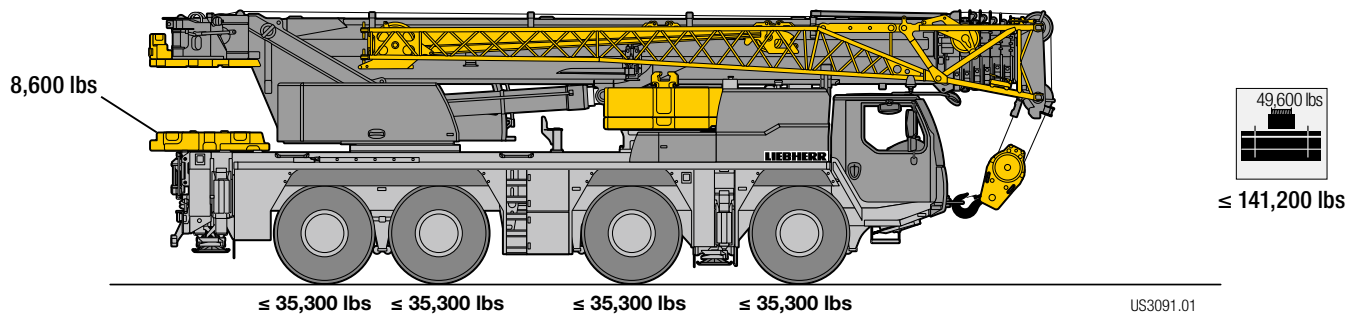


# On-road driving Déplacement sur route



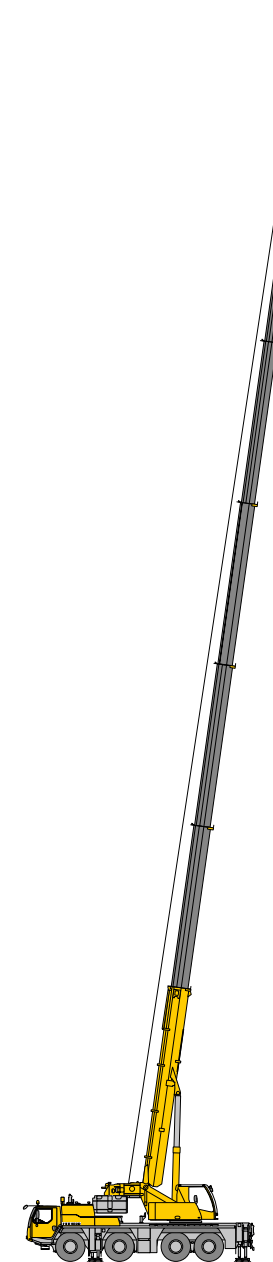
# Jobsite driving Déplacement sur chantier

optional · en option

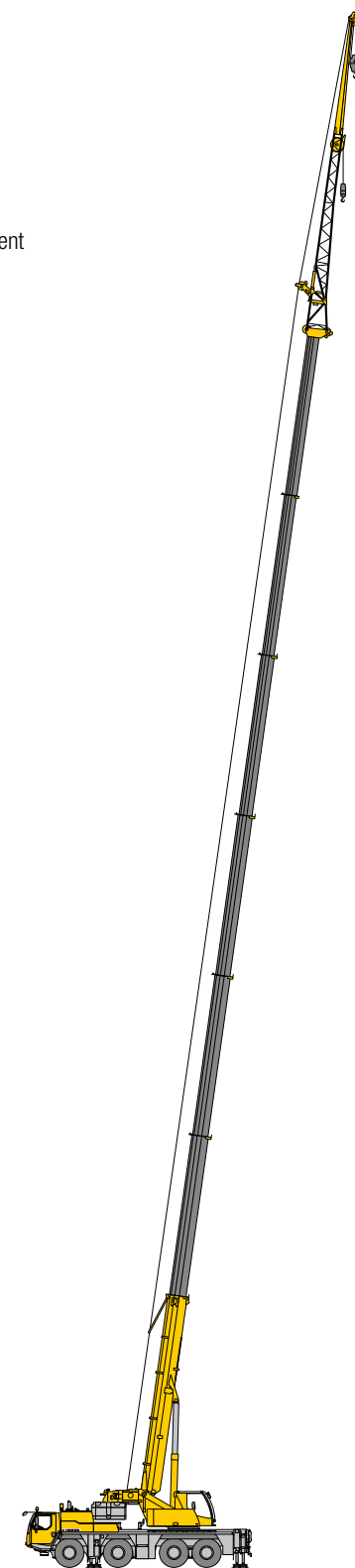


# Boom/jib combinations Configurations de flèche

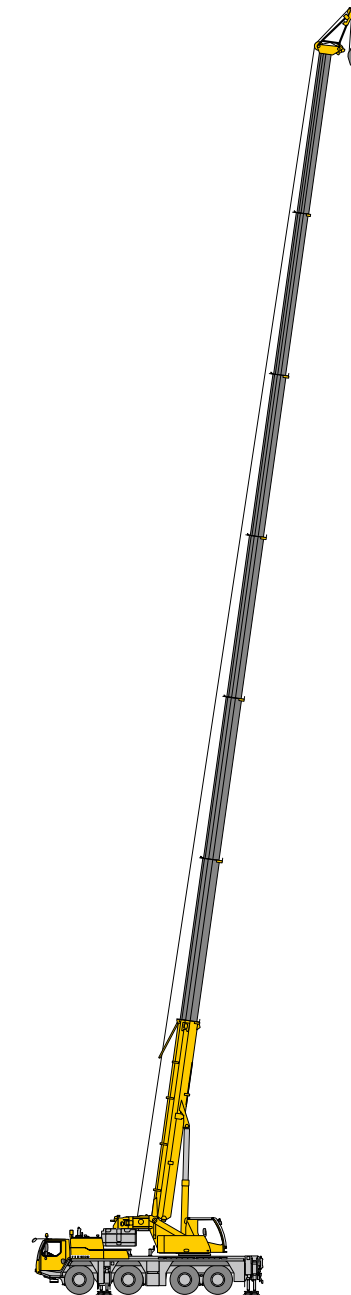
- T** Telescopic boom  
Flèche télescopique
- K/NZK** Mechanical/hydraulic swing away jib  
Fléchette pliante mécanique/hydraulique
- K** Mechanically adjustable assembly jib  
Fléchette de montage réglable mécaniquement



**T**  
11 – 17



**TK/TNZK**  
18 – 22



**TK**  
23 – 27

S3149.01

# Lifting capacities

## Forces de levage

T

37 - 197 ft  
360°  
15.5 ft  
12.4 ft  
49,600 lbs  
85%

	37 ft	50 ft	62 ft	74 ft	86 ft	98 ft	111 ft	123 ft	135 ft	147 ft	160 ft	172 ft	182 ft	184 ft	195 ft	197 ft	
9	220																9
10	198.4	130.4	130.4	130.4	105.9												10
11	141.1	130.4	130.2	127	105.9	80.6											11
12	132.5	127.5	125.5	120.4	105.8	80.6											12
13	123.7	121.7	118.2	113.3	104.8	80.6											13
14	116.2	115.8	112.3	107.8	102.7	80.6	67.3										14
15	111.1	110.1	106.8	101.8	98.5	80.6	66.9										15
16	106.6	104.9	101.7	96.8	93.5	80.4	66.4	54.2									16
17	102.5	100.1	97.8	92.9	89.4	79.8	65.7	53.8									17
18	98.6	95.6	94.1	89.6	86	79	64.8	53.3									18
19	95	91.6	90.8	86.5	82.9	78.1	64	52.8	42.5								19
20	91.5	87.8	87.6	83.5	80	76.9	63.2	52.3	42.5								20
22	84.5	80.9	82	78.2	76.2	73.4	61.6	51.1	42.2	33.6							22
24	76.9	74.5	75.7	73.4	71.7	68.8	60	50	41.9	33.5	24.1						24
26	70.5	68.7	70	69	67.7	64.8	58.4	48.9	41.7	33.4	25.7						26
28	65	63.3	64.6	64.5	64	61.3	56.7	47.8	41.3	33.2	25.5	20.3					28
30	56.9	56.9	59.8	60.5	60.2	58.2	54.7	46.7	40.9	32.9	25.2	20.1	13.9				30
32			55.4	56.1	56.2	55.1	52.7	45.6	40.2	32.1	24.8	19.9	16.1	10.9	11.7		32
34			51.5	52.1	52.3	51.9	50.6	44.6	39	31.3	24.3	19.6	15.9	10.8	11.7	9.3	34
36			47.9	48.6	48.7	48.4	48.7	43.5	37.7	30.5	23.9	19.3	15.8	10.8	11.6	9.3	36
38			45.1	45.4	45.4	45.1	46	42.5	36.3	29.8	23.3	19	15.6	10.7	11.5	9.3	38
40			42.1	42.4	42.5	42.6	43.1	41.4	35	29	22.8	18.7	15.4	10.6	11.4	9.3	40
45				36.2	36.6	37.3	36.8	36.2	32	27.3	21.1	17.7	14.8	10.4	11.2	9.2	45
50				32.1	32.5	32.3	31.9	31.4	29.2	25.7	19.5	16.6	13.9	10.1	10.8	9	50
55				26.6	28.5	28.4	27.9	27.3	26.6	24.2	17.9	15.5	12.4	9.7	10.5	8.9	55
60					25	24.9	24.4	23.8	23.1	22.7	16.5	14.5	11.7	9.2	10	8.7	60
65					22.1	22	21.5	20.9	21.4	20.9	15.3	13.5	11.1	8.8	9.6	8.4	65
70						19.5	19.1	19.1	19.2	18.5	14.1	12.6	10.4	8.4	9.1	8.1	70
75						17.5	17	17.7	17.1	16.3	13.4	11.7	9.8	8	8.7	7.7	75
80							15.9	15.9	15.2	14.5	12.8	10.8	9.3	7.6	8.4	7.4	80
85							14.8	14.3	13.6	12.9	12.2	10.1	8.9	7.3	8	7.1	85
90							13.4	12.9	12.2	11.5	11.7	9.5	8.4	6.9	7.7	6.8	90
95								11.6	10.9	10.8	10.7	8.9	8	6.6	7.4	6.5	95
100								10.5	9.8	10.2	9.6	8.6	7.7	6.3	7.1	6.3	100
105									9.4	9.3	8.7	8.3	7.3	6	6.8	6	105
110									9	8.5	8	8	6.9	5.7	6.5	5.8	110
115									8.4	7.9	7.4	7.4	6.6	5.5	6.2	5.5	115
120										7.2	7.2	6.8	6.4	5.2	5.9	5.3	120
125										6.7	6.8	6.3	6.1	5	5.7	5.1	125
130											6.3	5.9	5.8	4.8	5.4	4.9	130
135											5.8	5.7	5.3	4.6	5.1	4.7	135
140											5.4	5.3	5	4.4	4.7	4.5	140
145												4.9	4.7	4.2	4.3	4.3	145
150												4.5	4.4	4	3.9	4	150
155													4	3.9	3.6	3.7	155
160													3.7	3.7	3.3	3.3	160
165														3.4	2.9	3	165
170														3.2	2.6	2.7	170
175														2.9	2.3	2.4	175
180															2.1	2	180
185																1.8	185

\* ± 0° over rear - en arrière

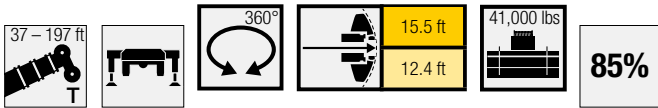
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# Lifting capacities

## Forces de levage

T



	37 ft	50 ft	62 ft	74 ft	86 ft	98 ft	111 ft	123 ft	135 ft	147 ft	160 ft	172 ft	182 ft	184 ft	195 ft	197 ft	
10	130.4	130.4	130.4	105.9													10
11	130	130.2	127	105.9	80.6												11
12	126.3	125.5	120.4	105.8	80.6												12
13	119.6	118.2	113.3	104.8	80.6												13
14	113.5	112.3	107.8	102.7	80.6	67.3											14
15	107.8	106.8	101.8	98.5	80.6	66.9											15
16	102.7	101.7	96.8	93.5	80.4	66.4	54.2										16
17	98	97.8	92.9	89.4	79.8	65.7	53.8										17
18	93.6	94.1	89.6	86	79	64.8	53.3										18
19	89.6	90.2	86.5	82.9	78.1	64	52.8	42.5									19
20	85.5	86.7	83.5	80	76.9	63.2	52.3	42.5									20
22	78	79.2	78	76.2	73.4	61.6	51.1	42.2	33.6								22
24	70.9	72.2	72	71.7	68.8	60	50	41.9	33.5	24.1							24
26	64.6	66	66.7	66.6	64.8	58.4	48.9	41.7	33.4	25.7							26
28	59	60.3	61.1	61.2	60.5	56.7	47.8	41.3	33.2	25.5	20.3						28
30	53.9	55.4	56.2	56.3	56	54.7	46.7	40.9	32.9	25.2	20.1	13.9					30
32		51.5	51.8	52	51.6	51.8	45.6	40.2	32.1	24.8	19.9	16.1	10.9	11.7			32
34		47.6	47.9	48	48.6	48.6	44.6	39	31.3	24.3	19.6	15.9	10.8	11.7	9.3		34
36		44.2	44.5	44.6	45.5	45.1	43	37.7	30.5	23.9	19.3	15.8	10.8	11.6	9.3	9.1	36
38		41.1	41.5	42.2	42.5	42.1	41.3	36.3	29.8	23.3	19	15.6	10.7	11.5	9.3	9.1	38
40		38.4	39.4	39.8	39.7	39.3	38.7	35	29	22.8	18.7	15.4	10.6	11.4	9.3	9.1	40
45			33.4	33.8	33.6	33.2	32.5	31.3	27.3	21.1	17.7	14.8	10.4	11.2	9.2	9	45
50			28.5	28.9	28.7	28.3	27.7	26.9	25.7	19.5	16.6	13.9	10.1	10.8	9	8.9	50
55			24.6	24.9	24.8	24.4	23.7	24	23.6	17.9	15.5	12.4	9.7	10.5	8.9	8.7	55
60				21.8	21.6	21.1	21.6	21.3	20.5	16.5	14.5	11.7	9.2	10	8.7	8.5	60
65				19	18.9	18.8	19.2	18.5	17.8	15.3	13.5	11.1	8.8	9.6	8.4	8.3	65
70					16.6	17.4	16.9	16.2	15.5	14.1	12.6	10.4	8.4	9.1	8.1	8	70
75					15.3	15.4	14.9	14.2	13.5	13.4	11.7	9.8	8	8.7	7.7	7.7	75
80						13.7	13.2	12.5	12.5	12.3	10.8	9.3	7.6	8.4	7.4	7.4	80
85						12.3	11.8	11.2	11.5	10.8	9.9	8.9	7.3	8	7.1	7.1	85
90						11	10.5	10.7	10.2	9.6	9.3	8.4	6.9	7.7	6.8	6.8	90
95							9.5	9.7	9.2	8.7	8.8	8	6.6	7.4	6.5	6.5	95
100							9.2	8.9	8.4	8.3	7.9	7.4	6.3	7.1	6.3	6.2	100
105								8.2	7.6	7.7	7.2	7.1	6	6.8	6	6	105
110								7.5	7.3	7.1	6.9	6.5	5.7	6.3	5.8	5.7	110
115								6.9	6.9	6.5	6.4	6.2	5.5	5.7	5.5	5.5	115
120									6.4	6	5.8	5.6	5.2	5.1	5.2	5.1	120
125									5.9	5.8	5.3	5.1	5	4.6	4.7	4.6	125
130										5.3	5	4.7	4.7	4.2	4.2	4.1	130
135										4.9	4.6	4.2	4.3	3.7	3.8	3.7	135
140										4.5	4.2	3.8	3.9	3.3	3.4	3.3	140
145											3.8	3.5	3.5	3	3	3	145
150											3.5	3.1	3.2	2.5	2.6	2.6	150
155												2.7	2.8	2.2	2.3	2.2	155
160												2.4	2.4	1.8	1.9	1.8	160
165													2.1				165
170													1.8				170

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# Lifting capacities

## Forces de levage

T

37 - 197 ft  
360°  
15.5 ft  
12.4 ft  
19,400 lbs  
85%

	37 ft	50 ft	62 ft	74 ft	86 ft	98 ft	103 ft	111 ft	117 ft	123 ft	129 ft	135 ft	142 ft	147 ft	156 ft	160 ft	168 ft	172 ft	182 ft	184 ft	195 ft	197 ft		
10	130.4	130.4	130.4	105.9																			10	
11	127.9	129.8	127	105.9	80.6																			11
12	122.5	122.5	120.4	105.8	80.6																			12
13	115.9	115.9	113.3	104.8	80.6																			13
14	109.9	110.1	107.8	102.7	80.6	67.3																		14
15	104.3	105	101.8	98.5	80.6	66.9	27.7																	15
16	98.6	99.4	96.8	93.5	80.4	66.4	27.7	54.2																16
17	93.3	94	92.9	89.4	79.8	65.7	27.7	53.8																17
18	88	88.8	88.8	86	79	64.8	27.6	53.3																18
19	82.9	83.9	84.1	82.6	77.9	64	27.1	52.8	23.4	42.5														19
20	78.2	79.6	79.4	79	75.8	63.2	26.6	52.3	22.9	42.5														20
22	69.5	71	71.9	71.8	67.6	61.6	25.4	51.1	21.9	42.2	21	33.6												22
24	62	63.6	64.6	64.1	61.7	58.9	24.2	50	20.9	41.9	20.3	33.5	18.6	24.1										24
26	55.8	58	58.3	57.7	56.4	53.3	23.1	48.7	20	41.7	19.6	33.4	18.2	25.7	14									26
28	50.1	52.5	52.8	53.2	51.4	48.6	22	45.7	19.1	41.3	18.9	33.2	17.7	25.5	14	20.3								28
30	45	47.4	48.7	49.1	47.1	44.5	21.1	41.9	18.3	39.1	18.2	32.9	17.1	25.2	14	20.1	12.7	13.9						30
32		43	44.3	44.8	43.3	41.1	20.2	38.6	17.5	36.5	17.5	32.1	16.6	24.8	13.9	19.9	12.6	16.1	10.9	11.7				32
34		39.2	40.4	40.9	39.9	37.9	19.4	35.6	16.7	34.2	16.8	31.3	16.1	24.3	13.9	19.6	12.5	15.9	10.8	11.7	9.3			34
36		35.7	37.1	37.5	37.1	35.1	18.7	33.1	16	31.7	16.2	30.5	15.6	23.9	13.6	19.3	12.4	15.8	10.8	11.6	9.3	9.1		36
38		32.6	34	34.4	34.3	32.7	17.9	30.9	15.4	30.4	15.6	28.6	15.1	23.3	13.3	19	12.2	15.6	10.7	11.5	9.3	9.1		38
40		29.9	31.2	31.7	31.6	30.4	17.3	28.8	14.8	28.6	15.1	26.6	14.6	22.8	13	18.7	12.1	15.4	10.6	11.4	9.3	9.1		40
45			25.7	26.1	26	25.4	15.8	25.8	13.4	24.2	13.8	22.5	13.5	20.9	12.2	17.7	11.5	14.8	10.4	11.2	9.2	9		45
50			21.5	21.8	21.7	22.6	14.5	22.1	12.2	20.6	12.7	19.1	12.5	17.7	11.5	16.6	10.9	13.9	10.1	10.8	9	8.9		50
55			18.2	18.5	19.4	19.2	13.3	18.6	11.1	17.7	11.7	16.6	11.6	16.3	10.8	14.9	10.4	12.4	9.7	10.5	8.9	8.7		55
60				16.1	16.6	16.3	12.3	15.7	10.3	15	10.8	15.2	10.7	14.2	10.2	12.9	9.8	11.7	9.2	10	8.7	8.5		60
65				14.2	14.2	14	11.4	13.3	9.5	13.7	10.1	12.9	10	12.1	9.6	11.8	9.3	10.9	8.8	9.6	8.4	8.3		65
70					12.3	12	10.7	12.3	8.8	11.8	9.4	11.1	9.3	11	9.1	10.3	8.8	9.7	8.4	9.1	8.1	8		70
75					10.6	10.7	10	10.7	8.3	10.1	8.8	10	8.7	9.4	8.7	9.2	8.3	8.8	8	8.4	7.7	7.7		75
80						9.6	9.5	9.3	7.8	9	8.4	8.9	8.2	8.7	8.2	8.3	7.9	8	7.6	7.4	7.2	7.1		80
85						8.6	8.7	8.3	7.4	8.3	7.9	7.9	7.7	7.7	7.8	7.4	7.4	7	7	6.4	6.5	6.4		85
90						7.8	7.8	7.5	7	7.5	7.5	7.1	7.2	6.9	7	6.5	6.6	6.1	6.1	5.6	5.6	5.5		90
95							7.1	6.8	6.6	6.7	6.8	6.3	6.4	6.1	6.2	5.7	5.8	5.4	5.4	4.8	4.8	4.7		95
100								6.1	6.2	6	6.1	5.7	5.7	5.4	5.5	5.1	5.1	4.7	4.7	4.2	4.2	4.1		100
105									5.5	5.4	5.5	5.1	5.1	4.8	4.9	4.5	4.5	4.1	4.1	3.5	3.6	3.5		105
110									5	4.9	5	4.5	4.6	4.3	4.4	3.9	4	3.5	3.6	3	3	2.9		110
115										4.4	4.5	4	4.1	3.8	3.9	3.4	3.5	3.1	3.1	2.5	2.5	2.4		115
120											4	3.6	3.7	3.4	3.5	3	3.1	2.6	2.7	2	2	1.9		120
125												3.2	3.3	3	3.1	2.5	2.7	2.2	2.3					125
130														2.9	2.5	2.7	2.1	2.2		1.8				130
135															2.1	2.3		1.8						135
140																1.8	1.9							140

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# Lifting capacities

## Forces de levage

T

37 - 197 ft  
360°  
15.5 ft  
12.4 ft  
16,300 lbs  
85%

	37 ft	50 ft	62 ft	74 ft	86 ft	98 ft	103 ft	111 ft	117 ft	123 ft	129 ft	135 ft	142 ft	147 ft	156 ft	160 ft	168 ft	172 ft	182 ft	184 ft	195 ft	197 ft		
10	130.4	130.4	130.4	105.9																			10	
11	127.5	129	127	105.9	80.6																			11
12	121.8	121.8	120.4	105.8	80.6																			12
13	115.2	115.3	113.3	104.8	80.6																			13
14	109.1	109.3	107.8	102.7	80.6	67.3																		14
15	103.2	104	101.8	98.5	80.6	66.9	27.7																	15
16	97.5	98.4	96.8	93.5	80.4	66.4	27.7	54.2																16
17	92	92.8	92.4	89.4	79.8	65.7	27.7	53.8																17
18	86.4	87.3	87.6	85.8	79	64.8	27.6	53.3																18
19	81.2	82.6	82.6	80.8	77.3	64	27.1	52.8	23.4	42.5														19
20	76.4	78	77.9	77.5	72.6	63.2	26.6	52.3	22.9	42.5														20
22	67.6	69.3	70.1	68.5	64.2	61.5	25.4	51.1	21.9	42.2	21	33.6												22
24	60.3	62.1	62.9	60.9	59.4	55.9	24.2	50	20.9	41.9	20.3	33.5	18.6	24.1										24
26	54	56.2	56.6	56	53.6	50.6	23.1	47.4	20	41.7	19.6	33.4	18.2	25.7	14									26
28	48.1	50.5	51.8	51.2	48.8	46	22	43.3	19.1	40.1	18.9	33.2	17.7	25.5	14	20.3								28
30	43.1	45.5	46.8	46.7	44.6	42.1	21.1	39.6	18.3	37.6	18.2	32.9	17.1	25.2	14	20.1	12.7	13.9						30
32		41.2	42.5	42.8	41	38.8	20.2	36.4	17.5	34.8	17.5	32.1	16.6	24.8	13.9	19.9	12.6	16.1	10.9	11.7				32
34		37.3	38.6	39.2	37.8	35.8	19.4	33.7	16.7	32.4	16.8	31.1	16.1	24.3	13.9	19.6	12.5	15.9	10.8	11.7	9.3			34
36		33.8	35.2	35.7	35	33	18.7	31.2	16	30.7	16.2	28.7	15.6	23.9	13.6	19.3	12.4	15.8	10.8	11.6	9.3	9.1		36
38		30.9	32.2	32.7	32.4	30.6	17.9	29.5	15.4	28.6	15.6	26.6	15.1	23.3	13.3	19	12.2	15.6	10.7	11.5	9.3	9.1		38
40		28.3	29.6	30	29.9	28.3	17.3	28.1	14.8	26.6	15.1	24.7	14.6	22.6	13	18.7	12.1	15.4	10.6	11.4	9.3	9.1		40
45			24.3	24.7	24.6	25.1	15.8	24	13.4	22.4	13.8	20.7	13.5	19.2	12.2	17.7	11.5	14.8	10.4	11.2	9.2	9		45
50			20.2	20.6	21.2	21.3	14.5	20.5	12.2	19	12.7	17.7	12.5	17.3	11.5	16	10.9	13.9	10.1	10.8	9	8.9		50
55			17	17.4	18.1	17.8	13.3	17.1	11.1	16.4	11.7	16.4	11.6	15.2	10.8	13.8	10.4	12.4	9.7	10.5	8.9	8.7		55
60				15.2	15.3	15	12.3	14.4	10.3	14.6	10.8	13.8	10.7	12.9	10.2	12.7	9.8	11.5	9.2	10	8.7	8.5		60
65				13	13	12.7	11.4	13	9.5	12.5	10.1	11.8	10	11.6	9.6	11	9.3	10.2	8.8	9.6	8.4	8.3		65
70					11.1	11.4	10.7	11.2	8.8	10.6	9.4	10.5	9.3	10	9.1	9.7	8.8	9.3	8.4	8.7	8	8		70
75					9.6	10	10	9.6	8.3	9.6	8.8	9.2	8.7	9	8.7	8.6	8.3	8.2	8	7.6	7.5	7.4		75
80						8.8	8.9	8.5	7.8	8.5	8.4	8.1	8.1	7.9	8	7.5	7.5	7.1	7.1	6.5	6.5	6.5		80
85						7.8	7.9	7.6	7.4	7.5	7.6	7.2	7.3	6.9	7.1	6.5	6.6	6.2	6.2	5.6	5.6	5.5		85
90						7	7.1	6.8	6.8	6.7	6.8	6.3	6.4	6.1	6.2	5.7	5.8	5.3	5.4	4.8	4.8	4.7		90
95							6.4	6	6	6	6	5.6	5.7	5.4	5.5	5	5.1	4.6	4.6	4.1	4.1	4		95
100								5.4	5.4	5.3	5.4	5	5.1	4.7	4.9	4.4	4.4	4	4	3.4	3.4	3.3		100
105									4.9	4.7	4.8	4.4	4.5	4.2	4.3	3.8	3.9	3.4	3.5	2.8	2.8	2.7		105
110									4.4	4.3	4.3	3.9	4	3.7	3.8	3.3	3.4	2.9	3	2.2	2.3	2.1		110
115										3.8	3.9	3.4	3.5	3.2	3.3	2.8	2.9	2.5	2.5					115
120											3.5	3	3.1	2.8	2.9	2.4	2.5	2	2					120
125												2.6	2.7	2.3	2.5	1.9	2.1							125
130													2.3	1.9	2.1									130

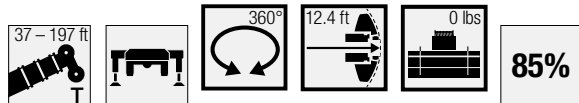
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# Lifting capacities

## Forces de levage

T



	37 ft	50 ft	62 ft	74 ft	86 ft	98 ft	103 ft	111 ft	117 ft	123 ft	129 ft	135 ft	142 ft	147 ft	156 ft	160 ft	168 ft	172 ft	182 ft	184 ft	195 ft	197 ft		
10	130.4	130.4	130.2	105.9																				10
11	125.7	125.8	125.3	105.9	80.6																			11
12	118.3	118.4	117.7	105.6	80.6																			12
13	110.7	110.9	110.1	102.4	80.6																			13
14	103.3	103.5	102.3	93.2	80.2	67.3																		14
15	95.7	96.6	92.7	84.2	77.1	66.9	27.7																	15
16	88.7	89.7	83.8	77.9	72.4	64.5	27.7	54.2																16
17	81.9	82.6	77.8	72.4	66.8	63.8	27.7	53.8																17
18	76	76.4	72.1	66.8	62.8	59.5	27.6	52.7	24.6															18
19	70.8	70.4	66.6	63.1	59.7	55.4	27.1	50.4	24.2	42.5														19
20	65.6	65.4	62.9	59.6	55.8	51.9	26.6	47.6	23.6	42.4														20
22	56.1	56.9	55	52.2	48.9	45.1	25.4	41.7	22.5	39	21	33.6												22
24	47.9	49.6	48.1	45.6	42.7	39.9	24.2	37.8	21.5	35.6	20.3	32.1	18.6	24.1										24
26	41.3	43.1	42.2	40.3	37.8	36.1	23.1	34.7	20.5	31.9	19.6	29.1	18.2	25.2	14									26
28	35.9	37.9	37.3	35.8	33.8	33.4	22	31.2	19.6	28.5	18.9	25.9	17.7	23.4	14	20.3								28
30	30.7	33.6	33.3	32.1	31.1	30.2	21.1	28	18.7	25.7	18.2	23.9	17.1	22.5	14	19.9	12.7	13.9						30
32		29.6	30	28.9	28.9	27.3	20.2	25.1	17.9	23.1	17.5	22.5	16.6	20.4	13.9	18.4	12.6	16.1	10.9	11.7				32
34		26	26.9	26.3	26	24.6	19.4	22.7	17.2	22.1	16.8	20.5	16.1	18.9	13.9	17.4	12.5	15.5	10.8	11.7	9.3			34
36		23	24.2	24.5	23.6	22.3	18.7	21	16.4	20.4	16.2	18.7	15.6	17.7	13.6	16.3	12.4	14.5	10.8	11.6	9.3	9.1		36
38		20.1	21.7	22.3	21.5	20.4	17.9	19.9	15.8	18.6	15.6	17.6	15.1	16.4	13.3	15.6	12.2	13.4	10.7	11.5	9.3	9.1		38
40		17.6	19.2	20.3	19.7	18.6	17.3	18.4	15.1	17.1	15.1	16.5	14.6	15.7	13	14.3	12.1	12.8	10.6	11.4	9.3	9.1		40
45			14.3	15.6	15.7	16	15.7	15.1	13.7	14.6	13.8	13.7	13.5	12.8	12.2	11.9	11.5	10.9	10.2	9.8	9.1	8.9		45
50			10.9	12.1	12.4	12.7	12.9	12.4	12.5	12.1	12.1	11.3	11.2	10.6	10.6	9.7	9.7	8.8	8.7	7.8	7.6	7.5		50
55			8.6	9.5	9.7	10.1	10.2	9.8	10	9.7	9.9	9.2	9.3	8.7	8.8	8	7.9	7.1	7.1	6.2	6.1	5.9		55
60				7.8	8	8.3	8.4	8.1	8.2	8	8.1	7.6	7.7	7.2	7.3	6.5	6.5	5.8	5.7	4.8	4.8	4.6		60
65				6.5	6.7	7	7.1	6.8	6.9	6.7	6.8	6.3	6.4	6	6.1	5.3	5.3	4.6	4.5	3.7	3.7	3.6		65
70					5.6	5.9	6	5.7	5.8	5.6	5.7	5.2	5.3	4.9	5	4.3	4.3	3.6	3.6	2.8	2.7	2.6		70
75					4.7	5	5.1	4.8	4.9	4.7	4.8	4.3	4.4	4	4.1	3.4	3.4	2.8	2.7					75
80						4.2	4.3	4	4.1	3.9	4	3.6	3.7	3.2	3.3	2.6	2.7	1.9	1.9					80
85						3.6	3.7	3.4	3.5	3.3	3.4	2.9	3	2.5	2.7	1.8	1.9							85
90						3	3.1	2.8	2.9	2.7	2.8	2.3	2.4	1.8	2									90
95							2.5	2.2	2.3	2.2	2.3			1.8										95
100									1.8		1.8													100

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### Remarks

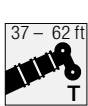




- The lifting capacities do not exceed 85 % of the tipping load according to ASME B 30.5. The crane's structural steelwork is in accordance with EN 13000 and ASME B 30.5.
- For the calculation of the load charts at least a wind speed of 30 ft/s (9 m/s, 20 mph) and regarding the load a sail area of 1 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.
- Lifting capacities are given in kips.
- The weight of the hook blocks and hooks must be deducted from the lifting capacities.
- Working radii are measured from the slewing centre.
- The stated lengths of the telescopic boom are maximum values and may deviate slightly.
- The lifting capacities given for the telescopic boom apply if the folding jib is removed.
- Subject to modification of lifting capacities.
- Lifting capacities above 130,400 lbs/148,600 lbs only with additional pulley block/special equipment.
- The data of this brochure serves only for general information. All information is provided without warranty. Instructions for the correct commissioning of the crane please take from the operation manual and the load chart book.

### Remarques

- 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.
- 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.
- Les forces de levage sont données en kips.
- Les poids des mouffes et crochets doit être soustrait des charges indiquées.
- Les portées sont calculées à partir de l'axe de rotation.
- Les longueurs indiquées pour la flèche télescopique sont des valeurs maximales et peuvent légèrement varier dans la réalité.
- Les charges indiquées pour la flèche télescopique sont valables lorsque la fléchette pliante est démontée.
- Charges données sous réserve de modification.
- Forces de levage plus de 130,400 lbs/148,600 lbs seulement avec moufle additionnel/équipement supplémentaire.
- 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.

# Lifting capacities Forces de levage

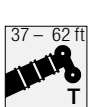




T






85%

	37 ft	50 ft	62 ft	
10	35.5	35.1	32.3	10
11	31.5	32.3	30.4	11
12	28.2	29.9	28.3	12
13	25.3	27.6	26.4	13
14	22.8	25.2	24.7	14
15	20.6	22.9	23.2	15
16	18.7	21.1	21.8	16
17	16.9	19.3	20.4	17
18	15.4	17.7	19.1	18
19	14	16.3	17.7	19
20	12.8	15.1	16.4	20
22	10.6	12.9	14.1	22
24	8.8	11	12.3	24
26	7.2	9.4	10.7	26
28	5.8	8	9.3	28
30	4.5	6.8	8.1	30
32		5.8	7	32
34		4.8	6.1	34
36		3.7	5.3	36
38		2.7	4.5	38
40		2	3.6	40
45			1.8	45

0° = over rear · en arrière

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85%

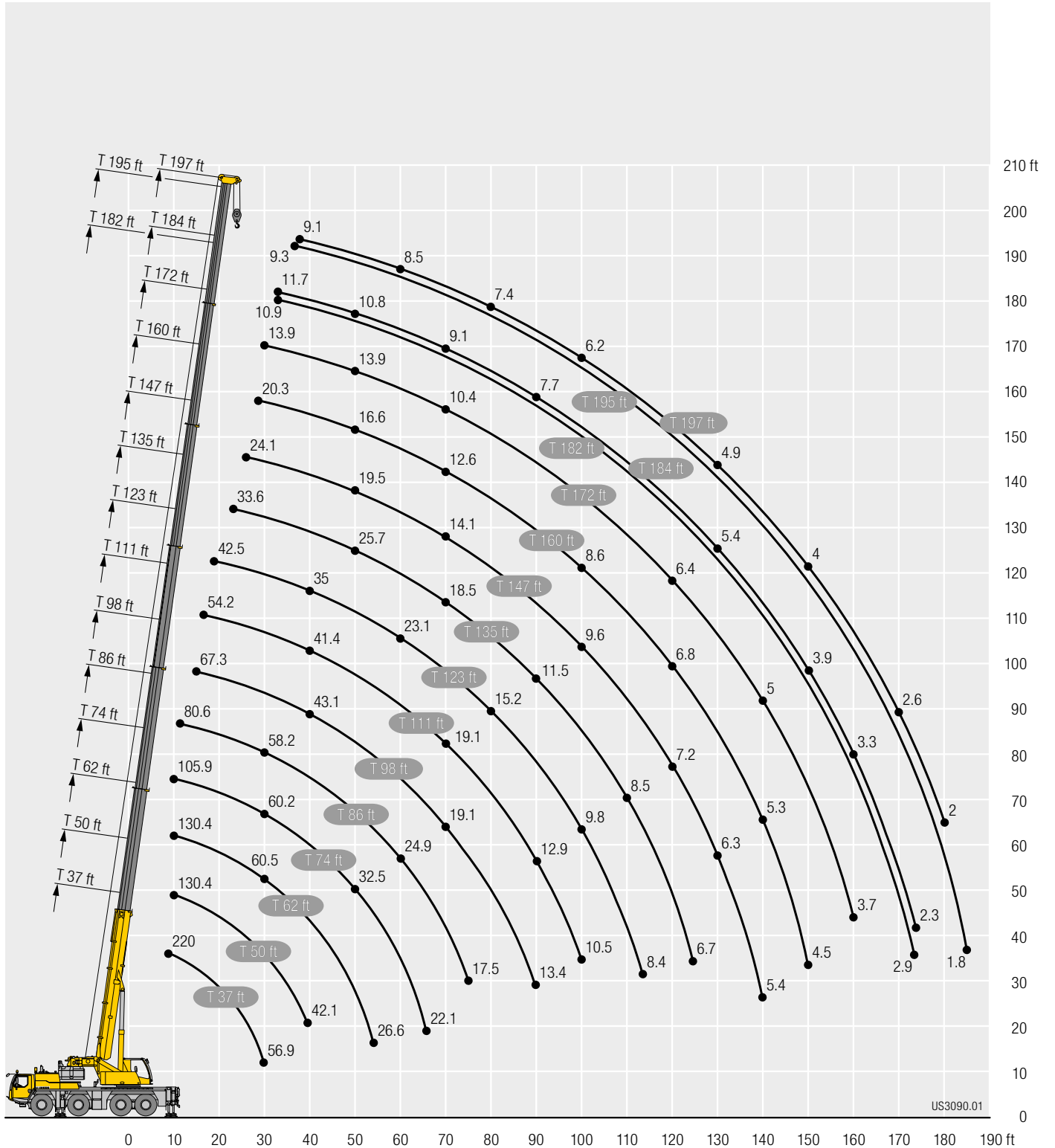
	37 ft	50 ft	62 ft	
10	32.3	32.8	30.7	10
11	28.7	30.2	28.4	11
12	25.5	27.8	26.4	12
13	22.8	25.2	24.6	13
14	20.5	22.9	23	14
15	18.5	20.8	21.5	15
16	16.6	19	20.1	16
17	15	17.4	18.7	17
18	13.6	15.9	17.2	18
19	12.3	14.6	15.9	19
20	11.1	13.4	14.7	20
22	9.1	11.4	12.6	22
24	7.4	9.6	10.9	24
26	5.8	8.1	9.4	26
28	4.1	6.8	8.1	28
30	2.8	5.7	6.9	30
32		4.5	6	32
34		3.3	5.1	34
36		2.4	4.1	36
38			3.2	38
40			2.3	40

0° = over rear · en arrière

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# Lifting heights Hauteurs de levage

T

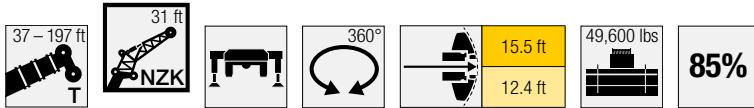


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# Lifting capacities Forces de levage

**TNZK**

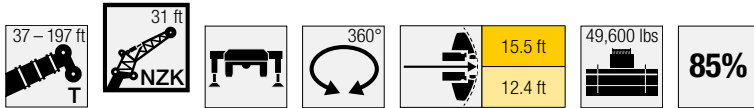


↙	37 ft			50 ft			62 ft			74 ft			86 ft			98 ft			111 ft			123 ft			↘
	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	
12	27.7			27.7			27.7			27.7														12	
13	27.7			27.7			27.7			27.7														13	
14	27.7	23.1		27.7			27.7			27.7			26.3											14	
15	27.7	22.6		27.7			27.7			27.7			26.3		24.6									15	
16	27.7	22.1		27.7			27.7			27.7			26.3		24.7									16	
17	27.7	21.6		27.7			27.7			27.7			26.3		24.7									17	
18	27.7	21.1		27.7	21.1		27.7			27.5			26.2		24.8			22.5						18	
19	27.7	20.7		27.7	20.7		27.7	20.8		27.2			26		24.8			22.6						19	
20	27.5	20.1		27.7	20.3		27.7	20.4		27			25.9		24.7			22.6						20	
22	26.3	18.8	12.8	27.4	19.5		27.3	19.8		26.5	19.9		25.5		24.5			22.7			19.9			22	
24	24.2	17.7	12.3	26.3	18.5	12.4	26.6	19.2		26	19.4		25.1	19.3	24.2			22.6			19.9			24	
26	22.2	16.7	11.8	25	17.6	12	25.8	18.4		25.4	18.9		24.7	18.9	23.9			22.4			19.9			26	
28	20.5	15.8	11.4	23.5	16.8	11.7	24.8	17.6	11.9	24.9	18.2	12.1	24.3	18.5	23.6	18.5		22.2	18.1		19.9			28	
30	19	15	11	21.9	16	11.3	23.8	16.9	11.6	24.2	17.5	11.8	23.8	18	23.2	18.1	11.9	21.9	17.9		19.8			30	
32	17.4	14.3	10.6	20.3	15.3	11	22.8	16.2	11.3	23.5	16.9	11.5	23.3	17.4	22.8	17.7		21.6	17.5		19.6	16.8		32	
34	16	13.5	10.3	18.9	14.7	10.7	21.6	15.6	11	22.7	16.3	11.2	22.8	16.9	22.3	17.3	11.6	21.3	17.2		19.3	16.6		34	
36	14.9	13	10	17.8	14.1	10.4	20.3	15	10.8	21.9	15.7	11	22.2	16.3	21.9	16.8	11.3	20.9	16.9	11.4	19.1	16.3		36	
38	13.9	12.4	9.8	16.7	13.5	10.2	19.1	14.5	10.5	21	15.2	10.8	21.6	15.8	21.5	16.3	11.1	20.6	16.6	11.3	18.9	16.1	11.2	38	
40	12.9	11.9	9.5	15.6	13	9.9	18	14	10.3	20	14.7	10.6	21	15.3	21	15.9	10.9	20.3	16.2	11.1	18.7	15.8	11.1	40	
45	11.1	10.8	9.1	13.5	11.9	9.4	15.8	12.9	9.8	17.7	13.6	10.1	19.3	14.3	19.9	14.8	10.5	19.5	15.2	10.6	18.1	15.2	10.7	45	
50	9.7	9.9	8.8	11.8	10.9	9.1	13.8	11.9	9.4	15.8	12.7	9.7	17.3	13.4	18.6	13.9	10.1	18.7	14.3	10.3	17.5	14.5	10.3	50	
55	8.6	9.2	8.7	10.4	10.2	8.9	12.3	11.1	9.1	14.1	11.9	9.3	15.6	12.6	17	13.1	9.8	17.8	13.5	9.9	17	13.7	10	55	
60	7.7	8.9		9.4	9.6	8.7	11.1	10.4	8.9	12.7	11.2	9.1	14.2	11.8	15.4	12.4	9.5	16.5	12.9	9.6	16.4	13	9.7	60	
65				8.5	9.2	8.7	10	9.8	8.7	11.5	10.6	8.9	12.9	11.2	14.1	11.8	9.3	15.2	12.2	9.4	15.6	12.4	9.5	65	
70				7.9	8.9		9.2	9.4	8.7	10.6	10	8.8	11.9	10.7	13.1	11.2	9.1	14.1	11.7	9.2	14.6	11.9	9.3	70	
75							8.5	9.1	8.7	9.7	9.6	8.7	10.9	10.2	12.1	10.7	8.9	13.1	11.2	9	13.6	11.4	9.1	75	
80							8	8.9		9	9.3	8.7	10.1	9.8	11.2	10.3	8.8	12.2	10.7	8.9	12.8	11	9	80	
85							7.5	8.9		8.5	9	8.7	9.5	9.4	10.4	9.9	8.7	11.4	10.3	8.8	12	10.6	8.9	85	
90										8	8.9	4.6	8.9	9.2	9.2	9.3	8.6	10.7	9.9	8.7	11.1	10.2	8.8	90	
95										7.6	8.9		8.4	9	9.2	8.7	8.6	10	9.6	8.7	10.3	9.9	8.7	95	
100													8	8.9	8.8	9.1	8.6	9.5	9.4	8.6	9.3	9.5	8.6	100	
105													7.7	8.8	8.4	8.9	8.6	8.8	9.1	8.6	8.5	8.9	8.6	105	
110													7.4		8	8.8	5.5	8.1	8.4	8.5	7.8	8.1	8.3	110	
115															7.7	8.2		7.4	7.7	7.7	7.5	7.4	7.6	115	
120															7.4	7.5		6.8	7	5.9	7.1	7.1	7.1	120	
125																		6.3	6.4		6.5	6.7	6.8	125	
130																		5.8	5.9		6	6.2	6	130	
135																		5			5.5	5.7		135	
140																					5.1	5.2		140	
145																					4.7	4.8		145	

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# Lifting capacities Forces de levage

TNZK

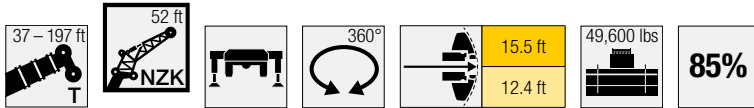


Lift Height (ft)	135 ft			147 ft			160 ft			170 ft			172 ft			182 ft			184 ft			195 ft			197 ft			Lift Height (ft)
	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	
24	16.9																										24	
26	17																											26
28	17			12.9																								28
30	17			13			10.2																					30
32	17			13			10.3																					32
34	16.9	11.3		13.1			10.3		7.1			8.3																34
36	16.7	15.2		13.1			10.4		7.1			8.3																36
38	16.6	15.1		13.1	12.8		10.4		7.1			8.4			6.4			6.8										38
40	16.5	14.9		13.1	12.7		10.4		7.1			8.4			6.4			6.9			5.7							40
45	16.1	14.4	10.6	13.1	12.5		10.4	10.5	7.1			8.5	8.4		6.4			6.9			5.7			5.6				45
50	15.7	13.9	10.3	12.8	12.3	11.7	10.2	10.3	7.9	7	6.9		8.4	8.3		6.4	6.2		6.9		6.7	5.7		5.6				50
55	15.3	13.4	10	12.4	12.1	11.4	10	9.9	9.9	6.8	6.7	6.6	8.2	8.2	8.2	6.4	6.2		6.8		6.7	5.7	5.7	5.6	5.5			55
60	14.6	12.9	9.7	11.8	11.6	11.1	9.6	9.6	9.5	6.6	6.5	6.4	8	8	8	6.3	6.2	6.2	6.7	6.6	6.7	5.7	5.6		5.5	5.5		60
65	13.6	12.4	9.5	11.2	10.9	10.8	9.2	9.1	9.1	6.4	6.2	6.2	7.8	7.7	7.7	6.1	6	6	6.6	6.4	6.5	5.6	5.6	5.7	5.5	5.5	5.6	65
70	12.6	11.9	9.3	10.5	10.3	10.2	8.8	8.7	8.7	6.1	6	5.9	7.6	7.5	7.4	5.9	5.8	5.8	6.4	6.2	6.3	5.5	5.5	5.6	5.4	5.4	5.5	70
75	11.7	11.3	9.1	9.9	9.7	9.7	8.4	8.3	8.4	5.9	5.8	5.7	7.3	7.2	7.2	5.8	5.6	5.6	6.2	6.1	6.1	5.4	5.4	5.4	5.3	5.3	5.3	75
80	10.9	10.7	9	9.3	9.1	9.2	8	8	8	5.7	5.5	5.5	7	6.9	6.9	5.6	5.4	5.4	6	5.9	5.9	5.3	5.2	5.2	5.2	5.2	5.2	80
85	10.1	10.1	8.9	8.8	8.7	8.8	7.6	7.6	7.7	5.4	5.3	5.3	6.7	6.7	6.6	5.3	5.2	5.2	5.8	5.7	5.7	5.1	5.1	5.1	5.1	5	5	85
90	9.5	9.5	8.8	8.3	8.3	8.4	7.3	7.3	7.3	5.2	5.1	5.1	6.4	6.4	6.4	5.1	5.1	5	5.6	5.5	5.5	4.9	4.9	4.9	4.9	4.9	4.9	90
95	9	8.9	8.7	7.9	7.9	8	6.9	6.9	7	4.9	4.9	4.9	6.1	6.1	6.1	4.9	4.9	4.9	5.4	5.3	5.4	4.8	4.8	4.8	4.7	4.7	4.7	95
100	8.6	8.4	8.5	7.4	7.5	7.6	6.6	6.6	6.7	4.7	4.7	4.8	5.8	5.9	5.9	4.7	4.7	4.7	5.2	5.2	5.2	4.6	4.6	4.6	4.5	4.5	4.6	100
105	8.3	8	8.1	7	7.1	7.2	6.3	6.3	6.4	4.4	4.5	4.5	5.6	5.6	5.7	4.5	4.5	4.5	5	5	5	4.4	4.4	4.5	4.3	4.4	4.4	105
110	7.7	7.7	7.6	6.6	6.7	6.8	6	6	6.1	4.2	4.3	4.3	5.3	5.4	5.4	4.2	4.3	4.4	4.8	4.8	4.8	4.2	4.2	4.3	4.2	4.2	4.3	110
115	7.1	7.4	7.4	6.3	6.4	6.5	5.7	5.7	5.8	4	4.1	4.1	5.1	5.1	5.2	4	4.1	4.2	4.6	4.7	4.6	4	4.1	4.1	4	4	4.1	115
120	6.5	6.8	6.9	5.9	6	6.1	5.4	5.5	5.5	3.7	3.8	3.9	4.9	4.9	5	3.8	3.9	4	4.4	4.5	4.4	3.8	3.9	3.9	3.8	3.9	3.9	120
125	5.9	6.2	6.3	5.4	5.7	5.8	5.1	5.2	5.2	3.5	3.6	3.7	4.6	4.7	4.8	3.7	3.7	3.8	4.2	4.3	4.2	3.6	3.7	3.8	3.6	3.7	3.8	125
130	5.4	5.6	5.8	4.9	5.2	5.3	4.8	4.9	5	3.3	3.4	3.5	4.4	4.5	4.5	3.5	3.5	3.6	4	4.1	4.1	3.5	3.5	3.6	3.5	3.5	3.6	130
135	4.9	5.1	5.2	4.8	4.7	4.8	4.5	4.6	4.7	3.2	3.2	3.3	4.2	4.3	4.3	3.3	3.4	3.4	3.8	4	3.9	3.3	3.4	3.4	3.3	3.4	3.4	135
140	4.5	4.7	4.7	4.6	4.5	4.6	4.1	4.3	4.5	3	3.1	3.1	4	4.1	4.1	3.1	3.2	3.3	3.7	3.8	3.7	3.2	3.2	3.3	3.2	3.2	3.3	140
145	4.3	4.3		4.3	4.4	4.5	4	3.9	4	2.8	2.9	2.9	3.8	3.9	3.9	3	3	3.1	3.5	3.6	3.6	3	3.1	3.1	3	3.1	3.1	145
150	4.2	4.2		3.9	4.1	4.1	3.8	3.8	3.9	2.6	2.7	2.7	3.6	3.6	3.7	2.8	2.9	2.9	3.4	3.5	3.4	2.9	2.9	3	2.9	2.9	3	150
155	4.1	4.2		3.6	3.7	3.7	3.6	3.7	3.7	2.5	2.5	2.6	3.4	3.4	3.5	2.7	2.7	2.8	3.2	3.3	3.3	2.7	2.8	2.8	2.7	2.8	2.8	155
160				3.5	3.5		3.2	3.4	3.5	2.3	2.4	2.4	3.1	3.3	3.3	2.5	2.6	2.6	2.9	3.2	3.1	2.6	2.7	2.7	2.6	2.7	2.7	160
165				3.4	3.4		3	3.1	3.1	2.2	2.3	2.3	2.8	3	3.1	2.4	2.4	2.5	2.5	2.9	2.8	2.5	2.5	2.6	2.4	2.5	2.6	165
170				3.2	3.2		2.9	2.9		2.1	2.1	2.1	2.7	2.7	2.8	2.3	2.3	2.3	2.2	2.5	2.4	2.2	2.4	2.5	2.1	2.3	2.4	170
175							2.8	2.8		1.9	2	2	2.4	2.6	2.6	2.1	2.2	2.2	1.9	2.2	2.1	1.9	2.1	2.2	1.8	2	2.1	175
180							2.5	2.5		1.8	1.9		2.1	2.3		2	2.1	2.1	1.6	1.8	1.7	1.6	1.8	1.9	1.5	1.7	1.8	180
185										1.7	1.7		1.8	2		1.8	1.9	2		1.5	1.4				1.4	1.5		185
190										1.7	1.7		1.6	1.7		1.6	1.7											190
195													1.3						1.4									195

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# Lifting capacities Forces de levage

TNZK

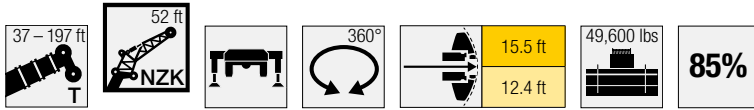


T	37 ft			50 ft			62 ft			74 ft			86 ft			98 ft			111 ft			123 ft			T	
	52 ft			52 ft			52 ft			52 ft			52 ft			52 ft			52 ft							
	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°		
12	13.6			12.8			12.2																		12	
13	13.4			12.7			12.2																			13
14	13.2			12.6			12.2			11.7																14
15	13			12.4			12.1			11.7																15
16	12.9			12.3			12			11.7			11.2													16
17	12.7			12.2			11.9			11.6			11.3													17
18	12.5			12			11.8			11.5			11.2			10.9										18
19	12.3			11.9			11.7			11.5			11.2			10.9										19
20	12.1			11.8			11.6			11.4			11.1			10.9			10.3							20
22	11.7			11.5			11.4			11.2			11			10.8			10.4							22
24	11.2			11.2			11.1			11			10.8			10.7			10.3			9.5				24
26	10.8	8.4		10.8			10.9			10.8			10.7			10.5			10.1			9.5				26
28	10.3	8.1		10.5	8.1		10.6			10.6			10.5			10.3			10			9.4				28
30	9.9	7.8		10.1	7.9		10.3	7.9		10.3			10.3			10.2			9.9			9.4				30
32	9.5	7.6		9.8	7.7		10	7.7		10.1	7.8		10			10			9.7			9.2				32
34	9.1	7.4		9.4	7.5		9.7	7.6		9.8	7.6		9.8	7.6		9.8			9.6			9.2				34
36	8.8	7.2		9.1	7.3		9.4	7.4		9.6	7.5		9.6	7.5		9.6			9.4			9.1				36
38	8.5	7	5.9	8.9	7.1		9.2	7.2		9.4	7.3		9.4	7.3		9.4	7.4		9.3	7.4		9				38
40	8.2	6.8	5.8	8.6	7	5.8	8.9	7.1		9.2	7.2		9.3	7.2		9.3	7.3		9.2	7.3		8.9				40
45	7.5	6.4	5.6	8	6.6	5.6	8.4	6.7	5.6	8.6	6.8	5.6	8.8	6.9		8.9	7		8.9	7		8.6	6.9			45
50	6.7	6.1	5.3	7.4	6.2	5.4	7.8	6.4	5.4	8.1	6.5	5.5	8.4	6.6	5.5	8.5	6.7	5.5	8.5	6.7		8.3	6.7			50
55	6	5.8	5.1	6.8	6	5.2	7.3	6.1	5.3	7.7	6.3	5.3	8	6.4	5.4	8.1	6.5	5.4	8.2	6.5	5.4	8.1	6.5	5.4		55
60	5.5	5.5	4.9	6.2	5.7	5	6.9	5.9	5.1	7.3	6	5.2	7.6	6.1	5.2	7.8	6.2	5.3	7.9	6.3	5.3	7.8	6.3	5.3		60
65	5	5.2	4.7	5.7	5.5	4.8	6.4	5.7	4.9	6.8	5.8	5.1	7.2	5.9	5.1	7.4	6	5.2	7.6	6.1	5.2	7.5	6.1	5.2		65
70	4.6	5	4.6	5.3	5.3	4.7	5.9	5.5	4.8	6.4	5.6	4.9	6.8	5.7	5	7.1	5.9	5	7.3	5.9	5.1	7.3	5.9	5.1		70
75	4.3	4.8	4.5	4.9	5.1	4.6	5.5	5.3	4.7	6	5.5	4.8	6.5	5.6	4.9	6.8	5.7	4.9	7	5.7	5	7	5.8	5		75
80	3.9	4.6		4.5	4.9	4.5	5.1	5.1	4.6	5.6	5.3	4.7	6.1	5.4	4.8	6.5	5.5	4.8	6.7	5.6	4.9	6.8	5.6	4.9		80
85				4.2	4.7	4.5	4.8	5	4.5	5.3	5.2	4.6	5.8	5.3	4.7	6.2	5.4	4.8	6.4	5.5	4.8	6.5	5.5	4.8		85
90				4	4.6		4.5	4.8	4.5	5	5	4.6	5.4	5.2	4.6	5.9	5.2	4.7	6.2	5.3	4.7	6.3	5.4	4.8		90
95				3.8			4.2	4.7	4.5	4.7	4.9	4.5	5.2	5	4.6	5.6	5.1	4.6	5.9	5.2	4.7	6.1	5.3	4.7		95
100							4	4.6	4.2	4.5	4.8	4.5	4.9	4.9	4.5	5.3	5	4.6	5.6	5.1	4.6	5.9	5.1	4.6		100
105							3.8	4.6		4.2	4.7	4.5	4.6	4.9	4.5	5	4.9	4.5	5.4	5	4.5	5.6	5.1	4.6		105
110										4.1	4.6	4.5	4.4	4.8	4.5	4.8	4.9	4.5	5.1	4.9	4.5	5.4	5	4.5		110
115										3.9	4.6		4.2	4.7	4.5	4.6	4.8	4.5	4.9	4.9	4.5	5.2	4.9	4.5		115
120													4.1	4.6	4.5	4.4	4.7	4.5	4.7	4.8	4.5	5	4.8	4.5		120
125													3.9	4.6		4.2	4.7	4.5	4.5	4.8	4.5	4.8	4.8	4.5		125
130															3.8	4.1	4.6	4.5	4.4	4.7	4.5	4.6	4.7	4.5		130
135																3.9	4.6		4.2	4.6	4.5	4.4	4.7	4.5		135
140																3.8	4.6		4.1	4.6	4.5	4.3	4.7	4.5		140
145																		3.9	4.6		4.2	4.6	4.5			145
150																			3.8	4.6		4	4.5	4.5		150
155																			3.8			3.9	4.5			155
160																						3.8	4.2			160
165																						3.7	3.8			165

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# Lifting capacities Forces de levage

TNZK

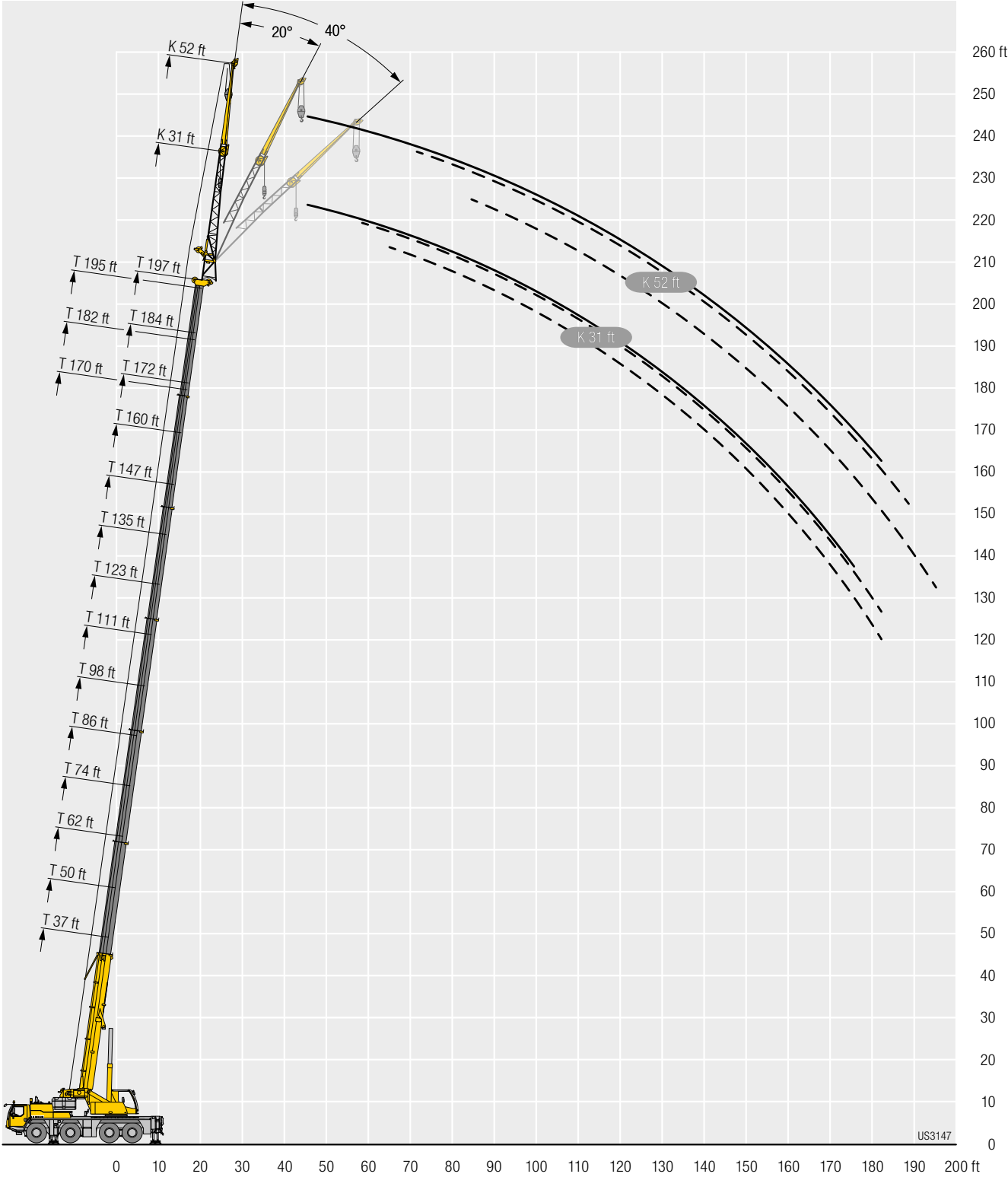


Lift Height (ft)	135 ft			147 ft			160 ft			170 ft			172 ft			182 ft			184 ft			195 ft			197 ft			Lift Height (ft)	
	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°		
26	8.7																										26		
28	8.7																											28	
30	8.7			7.7																								30	
32	8.6			7.7																								32	
34	8.6			7.7			6.7																					34	
36	8.5			7.7			6.7																					36	
38	8.4			7.7			6.7		4.9			5.6																38	
40	8.4			7.6			6.7		4.9			5.7		4.5			4.7											40	
45	8.1	6.7		7.5			6.7		4.9			5.7		4.5			4.7			3.9			3.8				45		
50	8	6.6		7.4	6.3		6.6		4.9			5.7		4.5			4.7			3.9			3.7				50		
55	7.7	6.3		7.2	6.1		6.5	5.8		4.9		5.8		4.5			4.7			3.8			3.6				55		
60	7.5	6.2	5.2	7.1	6		6.4	5.7		4.8	4.7		5.7	5.2		4.4			4.7			3.8			3.6		60		
65	7.3	6	5.1	6.9	5.8	5	6.3	5.5		4.7	4.7		5.6	5.2		4.3		4.3	4.6	4.5		3.7			3.5		65		
70	7.1	5.8	5	6.7	5.7	5	6.2	5.4	4.8				5.6	5.1		4.3		4.3	4.6	4.5		3.7	3.9		3.5	3.7	70		
75	6.9	5.7	5	6.5	5.6	4.9	6.1	5.3	4.8		4.6	4.6	4.4	5.5	5	4.6	4.3		4.3	4.5	4.5	3.6	3.8		3.4	3.7	75		
80	6.7	5.6	4.9	6.4	5.5	4.8	6	5.2	4.7		4.6	4.5	4.4	5.4	4.9	4.6	4.2	4.2	4.3	4.5	4.5	4.3	3.6	3.8		3.4	3.6	80	
85	6.5	5.4	4.8	6.2	5.3	4.8	5.9	5.1	4.7		4.5	4.3	4.2	5.4	4.9	4.5	4.2	4.1	4.2	4.5	4.5	4.3	3.5	3.8	4	3.3	3.6	4	85
90	6.3	5.3	4.8	6.1	5.2	4.7	5.7	5	4.6		4.3	4.2	4.1	5.2	4.8	4.5	4.1	4	4.1	4.5	4.4	4.2	3.4	3.7	3.9	3.3	3.5	3.9	90
95	6.1	5.2	4.7	5.9	5.1	4.7	5.6	5	4.6		4.1	4.1	4	5.1	4.7	4.5	4	3.9	4	4.4	4.2	4.2	3.4	3.7	3.8	3.2	3.5	3.8	95
100	5.9	5.1	4.7	5.8	5.1	4.6	5.5	4.9	4.5		4	3.9	3.9	5	4.7	4.4	3.9	3.8	3.9	4.3	4.1	4	3.4	3.6	3.7	3.2	3.4	3.7	100
105	5.7	5	4.6	5.6	5	4.6	5.4	4.8	4.5		3.8	3.8	3.8	4.9	4.6	4.4	3.8	3.7	3.7	4.2	4	3.9	3.3	3.6	3.6	3.1	3.4	3.6	105
110	5.5	5	4.6	5.5	4.9	4.5	5.2	4.8	4.5		3.7	3.7	3.7	4.7	4.5	4.4	3.7	3.6	3.6	4	3.9	3.9	3.3	3.5	3.6	3.1	3.3	3.5	110
115	5.3	4.9	4.5	5.3	4.8	4.5	5.1	4.7	4.5		3.5	3.5	3.5	4.5	4.4	4.4	3.5	3.5	3.5	3.9	3.8	3.8	3.3	3.4	3.5	3	3.3	3.4	115
120	5.1	4.8	4.5	5.2	4.8	4.5	4.9	4.6	4.5		3.4	3.4	3.4	4.3	4.3	4.3	3.4	3.4	3.4	3.8	3.7	3.7	3.2	3.3	3.4	3	3.3	3.3	120
125	5	4.8	4.5	5	4.7	4.5	4.7	4.5	4.4		3.2	3.3	3.3	4.1	4.2	4.2	3.2	3.3	3.3	3.6	3.6	3.6	3.1	3.2	3.3	2.9	3.2	3.2	125
130	4.8	4.7	4.5	4.8	4.7	4.5	4.4	4.4	4.4		3	3.1	3.2	3.9	4	4.1	3.1	3.2	3.2	3.5	3.5	3.5	3	3.1	3.2	2.9	3.1	3.2	130
135	4.6	4.7	4.5	4.6	4.6	4.5	4.3	4.3	4.4		2.9	3	3.1	3.8	3.9	4	2.9	3.1	3.1	3.4	3.4	3.4	2.9	3	3.1	2.8	3	3.1	135
140	4.4	4.6	4.5	4.4	4.6	4.4	4	4.1	4.3		2.7	2.8	3	3.6	3.7	3.8	2.8	3	2.9	3.2	3.3	3.3	2.8	2.9	3	2.7	2.9	3	140
145	4.3	4.6	4.5	4	4.4	4.4	3.8	3.9	4.1		2.5	2.7	2.8	3.4	3.5	3.6	2.6	2.9	2.8	3.1	3.2	3.2	2.7	2.8	2.9	2.6	2.8	2.8	145
150	4.1	4.5	4.5	3.6	4	4.2	3.6	3.8	3.9		2.4	2.5	2.6	3.3	3.4	3.5	2.5	2.7	2.6	3	3.1	3.1	2.5	2.6	2.7	2.5	2.6	2.7	150
155	3.8	4.1	4.2	3.5	3.6	3.8	3.3	3.6	3.7		2.3	2.4	2.5	3.1	3.2	3.3	2.4	2.6	2.5	2.9	2.9	3	2.4	2.5	2.6	2.4	2.5	2.6	155
160	3.5	3.7	3.8	3.3	3.4	3.5	2.9	3.3	3.5		2.1	2.2	2.3	3	3.1	3.2	2.2	2.5	2.4	2.7	2.8	2.9	2.3	2.4	2.5	2.3	2.4	2.5	160
165	3.2	3.4	3.4	3.1	3.2	3.3	2.8	3	3.1		2	2.1	2.2	2.7	2.9	3	2.1	2.3	2.2	2.6	2.7	2.8	2.2	2.3	2.4	2.2	2.3	2.3	165
170	2.9	3.1		3	3	3.1	2.8	2.8	2.8		1.9	2	2	2.6	2.7	2.9	2	2.2	2.1	2.5	2.6	2.6	2.1	2.2	2.2	2.1	2.2	2.2	170
175	2.9	2.9		2.7	2.9	2.9	2.6	2.7	2.8		1.8	1.8	1.9	2.4	2.5	2.6	1.9	2.1	2	2.2	2.4	2.5	2	2	2.1	1.9	2.1	2.1	175
180	2.8			2.5	2.6		2.3	2.6	2.6		1.6	1.7	1.8	2.2	2.4	2.5	1.8	1.9	1.9	1.8	2.3	2.4	1.8	1.9	2	1.7	1.9	2	180
185				2.4	2.5		2.2	2.3	2.3		1.5	1.6	1.6	2	2.2	2.3	1.7	1.8	1.8	1.6	1.9	2.1	1.5	1.8	1.9	1.5	1.8	1.9	185
190				2.4			2.1	2.2			1.4	1.5	1.5	1.8	2	2	1.6	1.7	1.7		1.6	1.8		1.6	1.8		1.6	1.7	190
195							1.9	2.1				1.4	1.4	1.6	1.8	1.9	1.5	1.6	1.6		1.4	1.5		1.4	1.5			1.5	195
200							1.7	1.8						1.4	1.5			1.5	1.4										200

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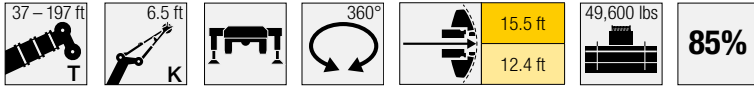
# Lifting heights Hauteurs de levage



US3147

# Lifting capacities Forces de levage

TK



	37 ft 6.5 ft				50 ft 6.5 ft				62 ft 6.5 ft				64 ft 6.5 ft				74 ft 6.5 ft				76 ft 6.5 ft						
	0°	20°	40°	60°	0°	20°	40°	60°	0°	20°	40°	60°	0°	20°	40°	60°	0°	20°	40°	60°	0°	20°	40°	60°			
12			54.5	43.6			54.5	43.6			54.5	43.6			40.4	38.4			54.5	43.6				12			
13			54.5	43.6			54.5	43.6			54.5	43.6			39.1	37			54.5	43.6			38.4	13			
14			54.5	43.6			54.5	43.6			54.5	43.6			37.6	35.7			54.5	43.6			37.3	35.2	14		
15			54.5	43.6			54.5	43.6			54.5	43.6			36.3	34.5			54.5	43.6			36.2	34.3	15		
16			54.5	43.2			54.5	43.6			54.5	43.6			34.9	33.3			54.5	43.6			35.1	33.4	16		
17			54.5	42.6			54.5	43.6			54.5	43.6			33.8	32.2			54.5	43.6			34.1	32.5	17		
18		54.5	54.5	42			54.5	43.6			54.5	43.6			32.6	31.2			54.5	43.6			33.2	31.6	18		
19		54.5	54.5	41.4			54.5	43.6			54.5	43.6			31.5	30.3			54.5	43.6			32.2	30.8	19		
20		54.5	54.5	40.8			54.5	43.5			54.5	43.6			30.5	29.3			54.5	43.6			31.4	30	20		
22		54.5	54.5	39.7			54.5	42.6			54.5	43.6			28.6	27.6			54.5	43.6			29.8	28.5	22		
24		54.5	54.5	38.7			54.5	41.7			54.5	43.6			27	26.1			54.5	43.6			28.2	27.2	24		
26		54.5	54.5	37.9		54.5	54.5	40.8			54.5	43			25.4	24.7			54.5	43.6			26.7	25.9	26		
28	54.5	54.5	54.5	37.4		54.5	54.5	40			54.5	42.3			24.2	23.4			54.5	43.6			25.4	24.7	28		
30	54.5	54.5	54.5	37.2		54.5	54.5	39.2			54.5	41.5			22.9	22.3			54.5	43.3			24.1	23.6	30		
32	54.5	54.5	54.5	37.2		54.4	54.5	38.5		54.3	54.1	40.8			21.7	21.2			54.3	42.7			23	22.5	32		
34	50.9	51.3	51.5	37.2		52	52.3	37.9		51.6	52	40.1		21.5	20.7	20.3			51.7	42.1			22	21.5	34		
36	44.4	47.6	47.8	36.9		48.4	48.7	37.5		48.1	48.4	39.5		20.4	19.8	19.4			48.4	41.4			21	20.6	36		
38					44.8	45.1	45.4	37.2		45.6	45.1	38.8		19.5	18.8	18.5			41.2	45.8	40.8		20.1	19.8	38		
40					41.8	42.2	42.4	37.2		42.6	42.8	38.3		18.6	18	17.7			42.6	42.8	40.2		19.6	19.3	40		
45					35.8	36	36.1	36.2		36.4	36.7	36.8		16.7	16.2	16			36.3	36.6	36.8		17.8	17.4	45		
50									31.3	31.5	31.7	31.8	15.4	15	14.7	14.6			31.5	31.7	31.8		16.1	15.8	50		
55									27.4	27.6	27.7	27.7	14	13.7	13.4	13.4			28.1	27.9	27.9		14.7	14.5	55		
60									24.8	24.9	24.8	24.9	12.7	12.5	12.4	12.5			24.9	25	25.1	25.2	13.7	13.5	13.3	60	
65																			22	22.1	22.2	22.2	12.6	12.4	12.3	65	
70																			19.6	19.7	19.7	19.7	11.7	11.6	11.5	70	
75																							11	10.9	10.9	11.1	75

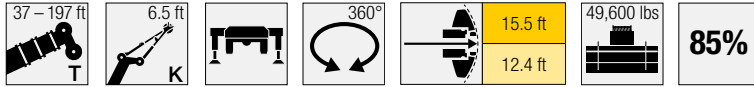
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	86 ft 6.5 ft				89 ft 6.5 ft				91 ft 6.5 ft				98 ft 6.5 ft				103 ft 6.5 ft				111 ft 6.5 ft					
	0°	20°	40°	60°	0°	20°	40°	60°	0°	20°	40°	60°	0°	20°	40°	60°	0°	20°	40°	60°	0°	20°	40°	60°		
13			54.5																						13	
14			54.5																						14	
15			54.5	43.6			27.2																		15	
16			54.5	43.6			26.6				25.8			54.5											16	
17			54.5	43.6			25.8	24.8			25.1	24		54.5											17	
18			54.5	43.6			25	24.1			24.4	23.5		54.5	43.6										18	
19			54.5	43.6			24.3	23.4			23.7	22.9		54.5	43.6				23.1				45.6		19	
20			54.5	43.6			23.6	22.8			23	22.2		54.5	43.6				22.6	21.8			46.8		20	
22			54.5	43.6			22.3	21.5			21.8	21.1		54.5	43.6				21.5	20.8			46	43.6	22	
24			54.5	43.6			21.1	20.4			20.6	20		54	43.6				20.5	19.9			45.1	43.6	24	
26			54.5	43.6			20	19.4			19.5	19		53	43.6				19.6	19			44.2	43.6	26	
28			54.5	43.6			18.9	18.4			18.6	18.1		51.7	43.6				18.8	18.2			43.3	43.5	28	
30			54.3	43.6			18	17.6			17.7	17.2		50.4	43.6				18	17.5			42.4	42.9	30	
32			53.8	43.6			17.2	16.8			16.8	16.4		49	43.6				17.2	16.8			41.5	42	32	
34			51.6	43.5			16.4	16			16.1	15.7		47.8	43.6				16.5	16.1			40.6	41.1	34	
36			48.8	43			15.6	15.3			15.3	15		46.5	43.6				15.9	15.5			39.8	40.2	36	
38			45.4	42.4			15	14.7			14.7	14.4		44.4	43.6				15.3	14.9			38.9	39.3	38	
40			42.5	41.5			14.3	14.1			14.1	13.8		41.8	41.6				14.7	14.4			38.1	38.5	40	
45			36.3	36.4			12.8	12.7			12.6	12.4		36.9	36.8				13.4	13.1			36	35.9	45	
50			32.2	32.4	32.5		11.8	11.7	11.5		11.6	11.4	11.3		32	32.2			12.2	12.1			31.3	31.5	50	
55			28.3	28.4	28.5		10.7	10.6	10.5		10.5	10.4	10.2		27.4	28	28.1		11.2	11.1			27.3	27.5	55	
60			24.8	25	25.1		9.8	9.7	9.7		9.6	9.5	9.5		24.4	24.5	24.6		10.4	10.4	10.3		19.4	23.8	23.9	60
65			21.9	22	22.1		9.1	9	9		8.9	8.8	8.8		21.5	21.5	21.6		9.6	9.6	9.5		20.8	20.8	21	65
70	19.3	19.4	19.5	19.6		8.6	8.5	8.4	8.4		8.3	8.3	8.2		19	19	19.1		9	9	9		18.3	18.3	18.5	70
75	17.3	17.3	17.4	17.4		8.1	7.9	7.9	7.9	7.9	7.9	7.8	7.8		16.9	16.9	17		8.5	8.5	8.5		16.2	16.2	16.3	75
80	15.5	15.5	15.5	15.5		7.6	7.5	7.5	7.5	7.5	7.4	7.3	7.3	7.3	14.9	15.1	15.1	15.1	8	8.1	8.1		14.4	14.4	14.5	80
85			14			7.2	7.1	7.2	7.2	7.2	7	6.9	7	7	13.4	13.5	13.5	13.5	7.7	7.6	7.7	7.7	13.7	13.6	13.5	85
90															12	12.1	12.1	12.1	7.4	7.3	7.3	7.4	12.6	12.6	12.7	90
95															11.5	11.6	11.6	11.8	7.1	7	7.1	7.1	11.3	11.4	11.4	95
100																			6.8	6.7	6.9	6.9	10.2	10.2	10.2	100
105																							9.3	9.3	9.3	105
110																							7.6	8.6	8.6	110

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# Lifting capacities Forces de levage

TK

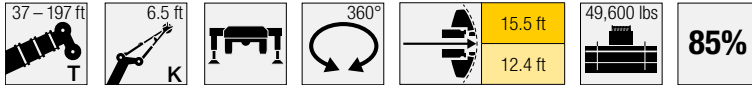


Lift Height (ft)	115 ft 6.5 ft				117 ft 6.5 ft				123 ft 6.5 ft				129 ft 6.5 ft				135 ft 6.5 ft				142 ft 6.5 ft				Lift Height (ft)
	0°	20°	40°	60°	0°	20°	40°	60°	0°	20°	40°	60°	0°	20°	40°	60°	0°	20°	40°	60°	0°	20°	40°	60°	
22			19.9				19.3				37.7													22	
24			19	18.8			18.5	18.2			37.5	30.6			17.7				21.9					24	
26			18.2	17.9			17.7	17.4			37.3	37.7			17.2	16.9			29.8	20.6				26	
28			17.4	17.1			16.9	16.7			37.1	37.5			16.6	16.3			29.5	29.6		15.4	13.9	28	
30			16.6	16.4			16.2	16			36.8	37.2			16	15.8			29	29.1		15	13.7	30	
32			15.9	15.7			15.5	15.3			36.3	36.8			15.4	15.2			28.3	28.4		14.5	13.3	32	
34			15.2	15.1			14.8	14.7			35.7	36			14.8	14.6			27.6	27.5		14	13	34	
36			14.6	14.4			14.2	14.1			34.9	34.8			14.2	14.1			26.7	26.6		13.6	12.6	36	
38			14	13.8			13.6	13.5			33.7	33.6			13.7	13.6			25.8	25.7		13.2	12.2	38	
40			13.4	13.3			13.1	13			32.5	32.5			13.2	13.1			24.9	24.8		12.8	11.9	40	
45			12.1	12			11.8	11.7			29.8	29.8			12.1	12			22.7	22.7		11.8	11	45	
50			11	11			10.8	10.7			27.4	27.4			11.1	11			21.1	20.8		10.9	10.3	50	
55			10.1	10			9.9	9.8			25.1	25.1			10.2	10.1			19.9	19.5		10.1	9.6	55	
60			9.2	9.2			9	9			22.9	23.1			9.5	9.4			18.9	18.5		9.5	9	60	
65		8.5	8.6	8.6		8.3	8.4	8.4			20.2	20.4			8.9	8.8			17.9	17.6		8.9	8.6	65	
70		8	8	8		7.8	7.9	7.9		17.8	17.9	17.9		8.3	8.3			17	16.8		8.4	8.1	70		
75		7.5	7.5	7.5		7.3	7.4	7.4		16.2	16.1	16.2		7.7	7.9	7.8		13.5	16	15.9		7.9	7.7	75	
80		7	7.1	7		6.9	6.9	6.9		15	15	15		7.3	7.4	7.4		14.3	14.4	14.5		7.2	7.4	80	
85		6.6	6.6	6.6		6.5	6.5	6.5		13.4	13.4	13.5		6.9	7	7		12.7	12.8	12.9		6.9	7	85	
90		6.2	6.3	6.3		6.1	6.2	6.2		11.9	12	12		6.6	6.7	6.7		11.2	11.4	11.4		6.5	6.6	90	
95	5.9	5.9	5.9	6	5.8	5.8	5.8	5.8		10.7	10.7	10.7		6.3	6.3	6.3		10	10	10.1		6.2	6.2	95	
100	5.6	5.6	5.6	5.7	5.5	5.5	5.5	5.5	9.5	9.5	9.6	9.6		6	6	6		8.9	9	9.1		5.8	5.9	100	
105	5.3	5.3	5.4	5.4	5.2	5.2	5.3	5.3	8.7	8.7	8.7	8.7	5.7	5.7	5.7	5.8		8.2	8.3	8.3		5.5	5.6	105	
110	5.1	5.1	5.1	5.2	5	5	5	5	8	8	8	8	5.5	5.4	5.5	5.5	8	7.9	8	8		5.3	5.3	110	
115					4.8	4.8	4.9	4.9	7.4	7.3	7.5	7.5	5.2	5.2	5.3	5.3	7.5	7.6	7.6	7.6	5	5	5	115	
120									7.3	7.1	7.3	7.5	5	5	5.1	5.1	6.9	7	7	7	4.8	4.8	4.8	120	
125													4.9	4.9	4.9	5	6.4	6.4	6.4	6.4	4.5	4.5	4.6	125	
130																	5.9	5.9	5.9	5.9	4.3	4.3	4.4	130	
135																					4.1	4.1	4.2	135	
140																					4	4	4.1	140	

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# Lifting capacities Forces de levage

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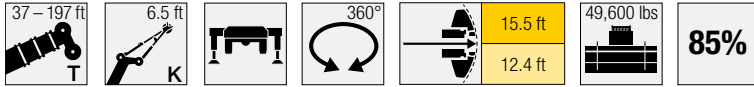
T K	144 ft 6.5 ft				147 ft 6.5 ft				156 ft 6.5 ft				160 ft 6.5 ft				168 ft 6.5 ft				170 ft 6.5 ft				T K
	0°	20°	40°	60°	0°	20°	40°	60°	0°	20°	40°	60°	0°	20°	40°	60°	0°	20°	40°	60°	0°	20°	40°	60°	
28			15				22.8																	28	
30			14.7	13.4			22.6	22.6			12.6			13.4										30	
32			14.3	13.1			22.3	22.3			12.4	12.3			17.8	13.7			11.1					32	
34			13.8	12.8			21.9	21.9			12.2	12.1			17.6	17.7			11			10.7		34	
36			13.4	12.4			21.5	21.5			11.9	11.8			17.3	17.4			10.9	10.9		10.6	10.6	36	
38			13	12			21.1	21			11.6	11.5			17	17.1			10.7	10.7		10.5	10.5	38	
40			12.6	11.7			20.6	20.5			11.4	11.3			16.8	16.8			10.5	10.5		10.3	10.3	40	
45			11.7	10.9			19.3	19.2			10.6	10.6			16	16			10	10		9.8	9.8	45	
50			10.8	10.1			17.9	17.8			10	9.9			15	15			9.5	9.5		9.4	9.3	50	
55			10	9.5			16.6	16.6			9.4	9.4			14	14			9.1	9		9	9	55	
60			9.4	9			15.3	15.3			8.9	8.9			13.1	13.1			8.7	8.7		8.6	8.6	60	
65			8.9	8.5			14.1	14.1			8.5	8.5			12.2	12.2			8.3	8.3		8.2	8.2	65	
70			8.4	8.1			13	13.1			8.1	8.1			11.5	11.4			8	7.9		7.7	7.8	70	
75			7.9	7.7			12	12.1			7.8	7.8			10.7	10.7			7.6	7.6		7.3	7.3	75	
80			7.5	7.3			11.1	11.1			7.4	7.4			10	10			7.2	7.2		6.9	6.9	80	
85		6.9	7.1	6.9		10	10.4	10.4			7.1	7.1			9.2	9.3			6.8	6.8		6.6	6.6	85	
90		6.5	6.6	6.5		9.4	9.6	9.7		6.7	6.8	6.8			8.7	8.7			6.5	6.5		6.2	6.2	90	
95		6.2	6.3	6.2		9	9.2	9.1		6.4	6.4	6.4		7.6	8.2	8.2			6.1	6.1		5.9	5.9	95	
100		5.9	5.9	5.9		8.7	8.8	8.8		6.1	6.1	6.1		7.3	7.7	7.7		5.7	5.8	5.8		5.6	5.6	100	
105		5.6	5.6	5.5		8.4	8.4	8.4		5.9	5.8	5.9		7	7.3	7.3		5.4	5.5	5.5		5.3	5.3	105	
110		5.3	5.3	5.3		7.7	7.7	7.8		5.6	5.6	5.6		6.8	6.9	6.9		5.2	5.2	5.2		5	5	110	
115		5	5.1	5		7.1	7	7.1		5.3	5.3	5.3		6.5	6.7	6.7		4.9	4.9	4.9		4.7	4.7	115	
120		4.8	4.8	4.8	6.4	6.4	6.4	6.5		5.1	5.1	5.1		6.3	6.5	6.5		4.6	4.6	4.7		4.5	4.5	120	
125		4.5	4.6	4.6	5.9	5.9	6	6		4.9	4.9	4.9		6	6	6		4.4	4.4	4.4		4.2	4.2	125	
130		4.3	4.4	4.4	5.7	5.7	5.8	5.9		4.7	4.6	4.7	5.1	5.5	5.5	5.5		4.2	4.2	4.2		4	4	130	
135		4.2	4.2	4.2	5.5	5.5	5.5	5.5		4.5	4.5	4.5	4.9	5	5	5		4	4	4		3.8	3.8	135	
140		4	4	4	5	5.1	5	5.1		4.3	4.3	4.3	4.7	4.7	4.8	4.7		3.8	3.8	3.8		3.6	3.6	140	
145					4.6	4.7	4.7	4.6		4.1	4.2	4.2	4.5	4.5	4.6	4.5		3.6	3.6	3.6		3.4	3.4	145	
150										4	4	4	4.2	4.2	4.2	4.2		3.4	3.4	3.4		3.2	3.2	150	
155										3.9	4		3.8	3.9	3.9	3.9		3.2	3.2	3.3		3.1	3.1	155	
160																		3.1	3.1	3.1		2.9	2.9	160	
165																		3	3	3		2.8	2.8	165	

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# Lifting capacities Forces de levage

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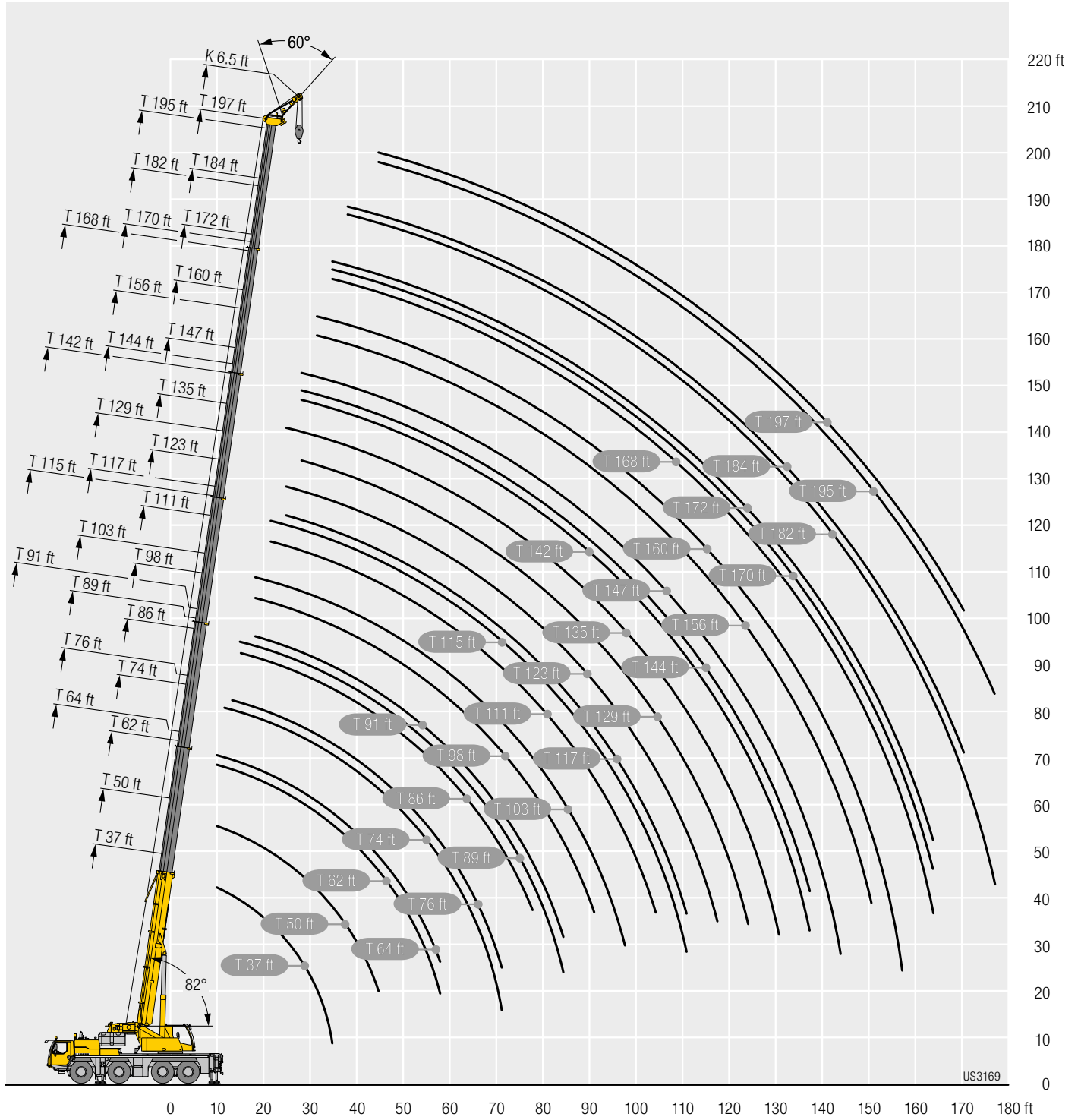


37-197 ft T	172 ft 6.5 ft				182 ft 6.5 ft				184 ft 6.5 ft				195 ft 6.5 ft				197 ft 6.5 ft				37-197 ft T
	0°	20°	40°	60°	0°	20°	40°	60°	0°	20°	40°	60°	0°	20°	40°	60°	0°	20°	40°	60°	
34			12.9																		34
36			12.8	12.9			9.4				10.2										36
38			12.7	12.7			9.4	9.5			10.1	10.2			8.3						38
40			12.5	12.6			9.4	9.4			10	10.1			8.3				8.1		40
45			12.1	12.2			9.2	9.2			9.8	9.8			8.3	8.3			8	8.1	45
50			11.7	11.7			9	9			9.5	9.5			8.1	8.2			7.9	8	50
55			11.1	11.2			8.7	8.6			9.2	9.2			8	8			7.8	7.9	55
60			10.5	10.5			8.4	8.3			8.9	8.9			7.8	7.8			7.6	7.7	60
65			9.9	9.9			8	8			8.6	8.6			7.6	7.6			7.4	7.5	65
70			9.3	9.4			7.6	7.6			8.3	8.3			7.3	7.3			7.2	7.2	70
75			8.9	8.9			7.3	7.3			7.9	7.9			7	7			6.9	6.9	75
80			8.5	8.5			6.9	6.9			7.6	7.6			6.7	6.7			6.6	6.7	80
85			8.1	8.1			6.6	6.6			7.3	7.3			6.4	6.4			6.4	6.4	85
90			7.7	7.7			6.3	6.3			7	7			6.1	6.1			6.1	6.1	90
95			7.3	7.3			6	6			6.7	6.7			5.9	5.9			5.8	5.9	95
100		6.4	7	7			5.7	5.7			6.4	6.4			5.6	5.6			5.6	5.6	100
105		6.1	6.7	6.7			5.4	5.4			6.1	6.1			5.4	5.4			5.4	5.4	105
110		5.8	6.3	6.3			5.1	5.2			5.8	5.9			5.1	5.1			5.1	5.1	110
115		5.5	6	6			4.9	4.9			5.6	5.6			4.9	4.9			4.9	4.9	115
120		5.2	5.7	5.7			4.6	4.7			5.3	5.3			4.7	4.7			4.7	4.7	120
125		5	5.5	5.4			4.4	4.4			5.1	5.1			4.5	4.5			4.5	4.5	125
130		4.8	5.2	5.3			4.2	4.2			4.9	4.9			4.3	4.3			4.3	4.3	130
135		4.5	5	5			4	4			4.6	4.6			4.1	4.1			4.1	4.1	135
140		4.3	4.6	4.6			3.8	3.8			4.4	4.4			3.9	4			3.9	3.9	140
145		4.1	4.2	4.2			3.7	3.7			4	4			3.8	3.8			3.7	3.7	145
150		3.9	4	4			3.5	3.5			3.6	3.6			3.6	3.6			3.5	3.5	150
155		3.7	3.7	3.7			3.3	3.3			3.2	3.3			3.3	3.3			3.3	3.3	155
160		3.3	3.3	3.3			3.2	3.2			2.9	2.9			3	3			2.9	2.9	160
165		3	3	3			3	3			2.5	2.5			2.6	2.6			2.5	2.5	165
170		2.7	2.7	2.7			2.7	2.7			2.1	2.1			2.2	2.2			2.2	2.2	170
175							2.4	2.4			1.8	1.8			1.9	1.9			1.8	1.8	175
180							2.1	2.1													180

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# Lifting heights Hauteurs de levage

TK



US3169

# Equipment Equipment

## Crane carrier

<b>Frame</b>	Self-manufactured, torsion-resistant box-type design of high-tensile fine grained structural steel.
<b>Outriggers</b>	4-point supporting system, hydraulically telescopic into horizontal and vertical direction. Operation with remote control, automatic support leveling, electronic inclination display.
<b>Engine</b>	6-cylinder Diesel, make Liebherr, watercooled, output 330 kW (449 h.p.), max. torque 1722 lbs-ft. Exhaust emissions acc. to (EU) 2016/1628, EPA/CARB or ECE-R.96. Fuel reservoir: 145 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 4 axles steered. Axle 2, 3 and 4 are equipped with planetary gears, all driven axles with transverse differential locks.
<b>Cardan shaft</b>	All cardan shafts with 70° diagonal toothing and maintenance free.
<b>Suspension</b>	All axles are hydro-pneumatically suspended with automatic leveling. Suspension hydraulically lockable.
<b>Tyres</b>	8 tyres, size: 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. Hand brake: Spring-loaded, acting on all wheels of axles 2, 3 and 4. Additional brakes: exhaust flap brake, intarder in gearbox.
<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, 2 batteries of 170 Ah each.

## 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>	Diesel-hydraulic with axial variable displacement pumps with automatic capacity control, 1 double gear pump, driven by the carrier Diesel engine, open regulated oil circuits with electrically controlled "load sensing", operation of 4 movements simultaneously.
<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, hoist drum with integrated planetary gear and spring-loaded static brake.
<b>Luffing gear</b>	1 differential ram with safety check valves.
<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 tilttable 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 6 telescopic sections. All telescopic sections hydraulically extendable independent of one another. Rapid-cycle telescoping system Telematik. Boom length: 37 ft – 197 ft.
<b>Counterweight</b>	19,400 lbs basic counterweight.
<b>Electrical system</b>	Modern data bus technique, 24 Volt DC, 2 batteries of 170 Ah each.

## Operating modes

<b>K</b>	Double swing-away jib 31 ft – 52 ft Adjustment 0°, 20°, 40°
<b>K</b>	Assembly jib 6.5 ft Adjustment 0°, 20°, 40°, 60°
<b>NZK</b>	Hydraulically adjustable swing-away jib 31 ft – 52 ft Hydraulically adjustment 0° – 40°

## Additional equipment

<b>2<sup>nd</sup> hoist gear</b>	For two-hook operation or for operation with swing-away jib if the hoist rope shall remain reeved.
<b>Additional counterweight</b>	30,200 lbs for a total counterweight of 49,600 lbs.
<b>Tyres</b>	8 tyres, size 525/80 R 25 (20.5 R 25).

Other items of equipment available on request.

The pictures contain also accessories and special equipment not included in the standard scope of delivery.

# Equipment Equipment

## Châssis porteur

<b>Cadre</b>	Châssis résistant à la torsion de fabrication Liebherr, en acier à grains fins très résistant.
<b>Calage</b>	Dispositif de calage horizontal et vertical en 4 points, entièrement déployable hydrauliquement. Utilisation avec commande à distance, mise à niveau automatique du calage, inclinomètre électronique.
<b>Moteur</b>	Moteur diesel, 6 cylindres, fabriqué par Liebherr, à refroidissement par eau, de 330 kW (449 ch), couple max. 1722 lbs-ft. Emissions des gaz d'échappement conformes au directive (EU) 2016/1628, EPA/CARB ou ECE-R.96. Capacité du réservoir à carburant: 145 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 4 essieux sont directeurs. Les essieux 2, 3 et 4 sont des essieux planétaires, tous les essieux moteurs avec différentiel transversal.
<b>Arbres articulés</b>	Tous les flasques de croisillons avec denture en croix 70° et sans entretien.
<b>Suspension</b>	Tous les essieux sont à suspension hydropneumatique avec mise à niveau automatique. Suspension blocable hydrauliquement.
<b>Pneumatiques</b>	8 pneus de 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. Frein à main: par cylindres à ressorts, agissant sur les roues des essieux 2, 3 et 4. Freins auxiliaire: par clapet sur échappement, ralentisseur monté sur boîte de vitesse.
<b>Cabine</b>	Spacieuse cabine, traitement anticorrosion, équipement «grand confort», suspension par silentbloks, vitrage de sécurité.
<b>Installation électrique</b>	Technique moderne de transmission de données par BUS de données, courant continu 24 Volts, 2 batteries de 170 Ah chacune.

## Partie tournante

<b>Cadre</b>	Fabrication Liebherr, construction soudée indéformable, en acier à grain fin haute résistance. Couronne d'orientation à triple rangée de rouleaux.
<b>Entraînement</b>	Diesel hydraulique avec pompes à débit variable et régulation de puissance automatique, 1 pompe à engrenages double, entraînés par le moteur Diesel du porteur, circuits hydrauliques ouverts avec «load sensing», régulé électriquement. 4 mouvements simultanés praticables.
<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 équipé d'un engrenage planétaire et d'un frein d'arrêt commandé par ressort.
<b>Mécanisme de releavage</b>	1 vérin différentiel avec soupapes de retenu.
<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>	Large champ de vision, vitrage de sécurité, équipement pour un confort idéal, cabine inclinable de 20° 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>	1 élément de base et 6 éléments télescopiques. Tous les éléments télescopiques indépendamment les uns des autres. Système de télescopage séquentiel rapide, Telematik. Longueur de flèche: 37 ft – 197 ft.
<b>Contrepoids</b>	Plaque de base 19,400 lbs.
<b>Installation électrique</b>	Technique moderne de transmission de données. Courant continu 24 Volts, 2 batteries de 170 Ah chacune.

## Modes de fonctionnement

<b>K</b>	Double fléchette pliante 31 ft – 52 ft Positionnement à 0°, 20°, 40°
<b>K</b>	Fléchette de montage 6.5 ft Positionnement à 0°, 20°, 40°, 60°
<b>NZK</b>	Fléchette pliante à positionnement hydraulique 31 ft – 52 ft Positionnement hydraulique à 0° – 40°

## Equipement supplémentaire

<b>2ème mécanisme de levage</b>	Pour l'utilisation du deuxième crochet, ou bien pour une utilisation avec fléchette pliante lorsque le câble de levage principal rest moufflé.
<b>Contrepoids additionnel</b>	30,200 lbs pour un contrepois total de 49,600 lbs.
<b>Pneumatiques</b>	8 pneus. Taille: 525/80 R 25 (20.5 R 25).

### Autres équipements supplémentaires sur demande.

Les figures contiennent également des accessoires et des équipements spéciaux non inclus de série dans la livraison.



# Description of symbols

## Explication des symboles

### General symbols/Symboles généraux



Outriggers  
Calage



Driving speed – Onroad gear  
Vitesse de translation – Vitesse de route



Outriggers – free on tyres  
Calage – libre sur pneus



Max. lifting capacity  
Capacité max.



Axle  
Essieu



Driving speed – Crawl speed  
Vitesse de translation – Marche lente



Radius  
Portée



Transmission  
Boîte de vitesse



Boom length  
Longueur de la flèche



Gear  
Vitesse



Boom position  
Position de la flèche



Hookblock / Capacity  
Moufle à crochet / Capacité de charge



Counterweight  
Contrepoids



Hoist gear  
Treuil de levage



Tyres  
Pneumatiques



Crane carrier  
Châssis porteur



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



Crane superstructure  
Partie tournante de la grue



Standard  
Norme



Gradability  
Aptitude à gravir les pentes



Driving speed  
Vitesse de translation

### Crane specific symbols/Symboles spécifiques à la grue



Telescopic boom  
Flèche télescopique



Assembly jib  
Fléchette de montage



Hydraulic swing away jib  
Fléchette pliante hydraulique

Subject to modification / Sous réserve de modifications