

Mobile Crane

LTM 1100-4.2

Max. lifting capacity: 100 t
Max. lifting height: 91 m
Max. working radius: 58 m



LIEBHERR

Mobile crane LTM 1100-4.2

Strong and compact



A long telescopic boom, high capacities, an extraordinary mobility as well as a comprehensive comfort and safety configuration distinguish the mobile crane LTM 1100-4.2 from Liebherr. The 100-ton crane offers state of the art technology for more convenience for the practical operation.

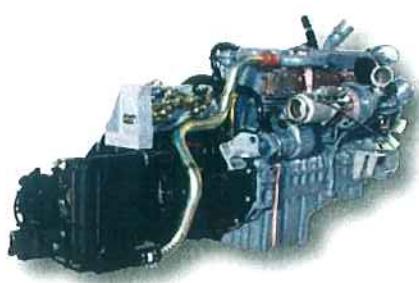
- 60 m long telescopic boom
- Capacity 10.2 t at the 60 m long telescopic boom
- 19 m long double swing-away jib, optional hydraulically adjustable
- 91 m hook height with telescopic boom extension and swing-away jib
- Great operational flexibility due to top capacities with full and partial counterweights
- Chassis width 2.75 m with tyres 16.00 R 25
- Active, speed depending rear axle steering
- Air operated disk brakes





Drive train

- 6-cylinder Liebherr turbo diesel engine, 350 kW/476 HP at 1900 rpm, max. torque 2230 Nm at 1100 - 1500 rpm
- Automated ZF-gearbox AS-TRONIC, 12 forward-, 2 reverse speeds
- ZF-intarder directly installed at gearbox
- 2-stage transfer gearbox, crawl speed 0.46 km/h
- Axles 2, 3 and 4 driven, optional axle 1



Most modern chassis and drive technology



High mobility and efficiency

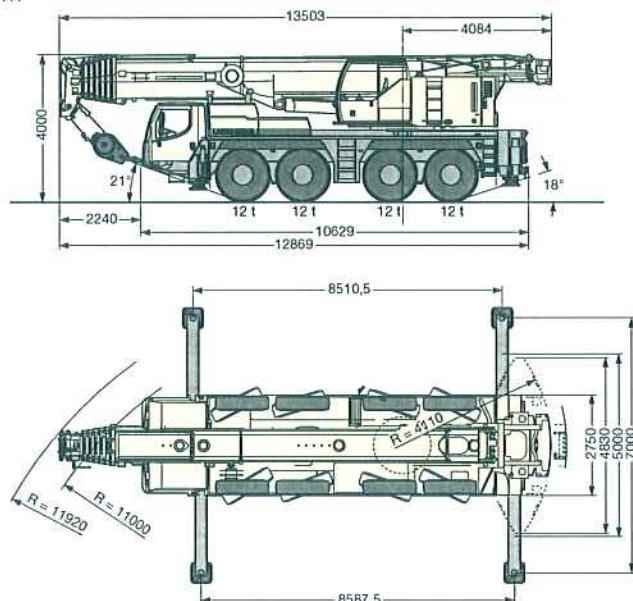
A high performance 6-cylinder Liebherr turbo diesel engine with 350 kW/476 HP provides for dynamic driving performance. The 12-speed ZF-gearbox with automatic gear change system AS-TRONIC grants high efficiency and best comfort.

- Reduced fuel consumption due to high number of gears and high degree of efficiency of the dry clutch
- Best manoeuvrability and minimum crawl speed by means of the 2-stage transfer gearbox
- Wear free braking by ZF retarder
- ABV - automatic blocking preventer with ASR anti-slip control

Compact, mobile and weight optimized

Due to its extreme compact design the LTM 1100-4.2 can also manoeuvre on the tightest job sites.

- Chassis length only 10.6 m
- Minimum turning radius only 8.3 m
- Chassis width only 2.75 m, even with tyres 16.00 R 25
- Tail swing only 4.1 m



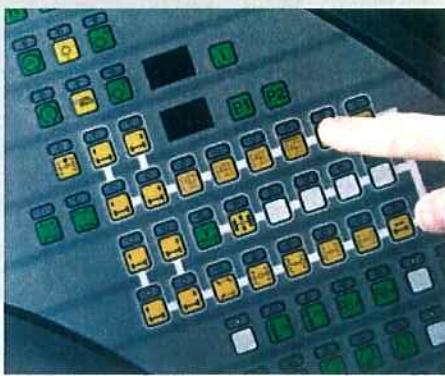
Hydro pneumatic axle suspension „Niveumatik“

- Maintenance free suspension cylinders
- Heavy layout for axle loads up to 40 t
- Spring travel +150/-100 mm
- High side stability at cornering
- Choice of the driving conditions by fix programs



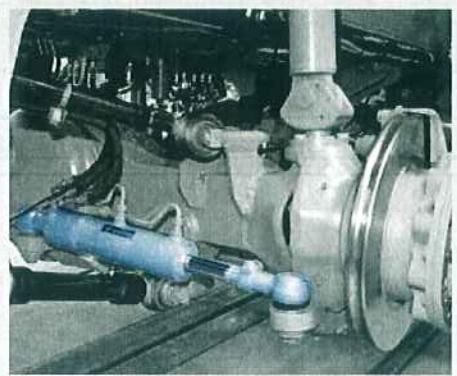
Air operated disk brakes

- Higher braking power, better brake control
- Improved track stability
- No brake fading at higher operation temperatures
- Higher service life
- Shorter working time for changing of the brake pads
- Braking pads with wear indicators



5 steering programs

- Program selection by simple push button
- Clear arrangement of the control elements and displays
- Programs changeable during driving
- Crab steering controlled comfortably by the steering wheel



Variable steering concept



Centring cylinder at the rear axles

- Automatic straight positioning of the rear axles in case of failure

Active rear axle steering

The rear axles are electro-hydraulically actively steered depending on the speed and the steering angle of the front axles.

5 steering programs (P) are preselectable by push button.

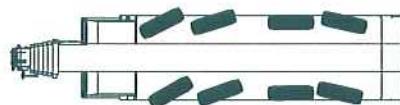
- Distinct reduction of the tyre wear
- Improvement of the manoeuvrability
- Stable driving performance also at high speeds
- All 4 axles steerable

High safety standards – complete know-how from Liebherr

- Centring cylinders for automatic straightening of the rear axles in case of failure
- Two independent hydraulic circuits with wheel driven and motor driven hydraulic pumps
- Two independent steering computers

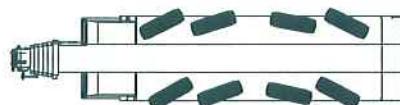
P1 road steering

The axles 1 and 2 are mechanically steered by the steering wheel. The axle 4 is actively steered depending on the speed and on the steering angle of the front axle. From 30 km/h it will be adjusted to straight driving and fixed. Axle 3 is none steered for road driving.



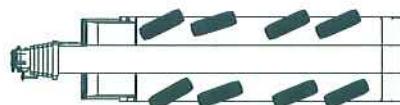
P2 all-wheel steering

The axles 3 and 4 are turned by the steering wheel depending on the steering angle of the front axle to provide for the smallest turning radius.



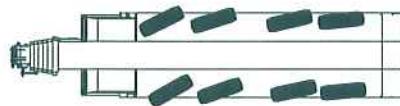
P3 crab steering

The axles 3 and 4 are turned by the steering wheel to the same direction as the steering position of axle 1 and 2.



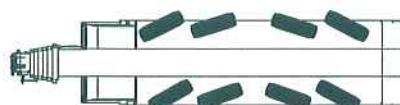
P4 reduced swing out

The axles 3 and 4 are turned depending on the wheel turn of the front axles to minimize the back swing of the rear of the chassis.



P5 independent rear axle steering

The axles 1 and 2 are steered by the steering wheel, the axles 3 and 4 are steered by push buttons independently from the steering angle of the axles 1 and 2.





The driver's cab

- Corrosion resistant steel plate execution, cataphoretic dip primed
- Doors in glass fibre compound structure with electric window lifters
- All around safety glazing
- Tinted windows
- Heatable and electrically adjustable mirrors
- Air cushioned driver's seat with lumbar support

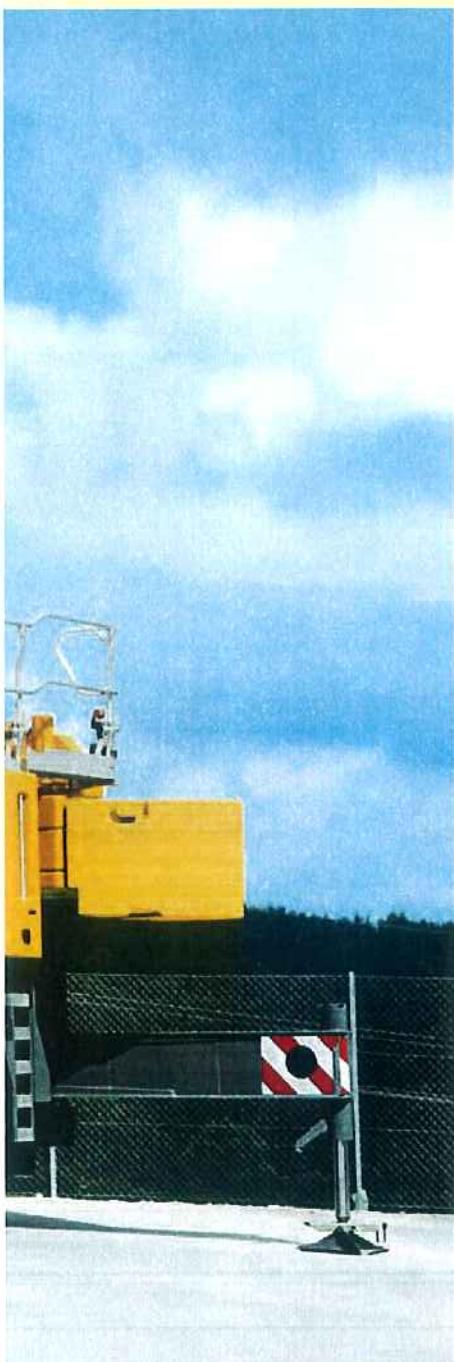
Comfort and functionality

Modern driving cab and crane cab

The modern driving cab as well as the backwards tiltable crane cab offer a comfortable and functional working place. The control elements and displays are arranged according to ergonomic factors. Thus a safe and wear free working is assured.

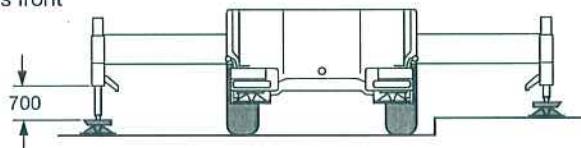
Fast and safe erection

The supporting, the counterweight assembly as well as the mounting of the additional equipment are designed for speed, safety and comfort. For the safety of the operator's pedestals, hand holds and railings are provided.



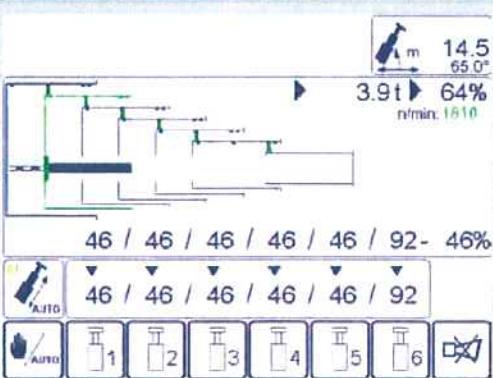
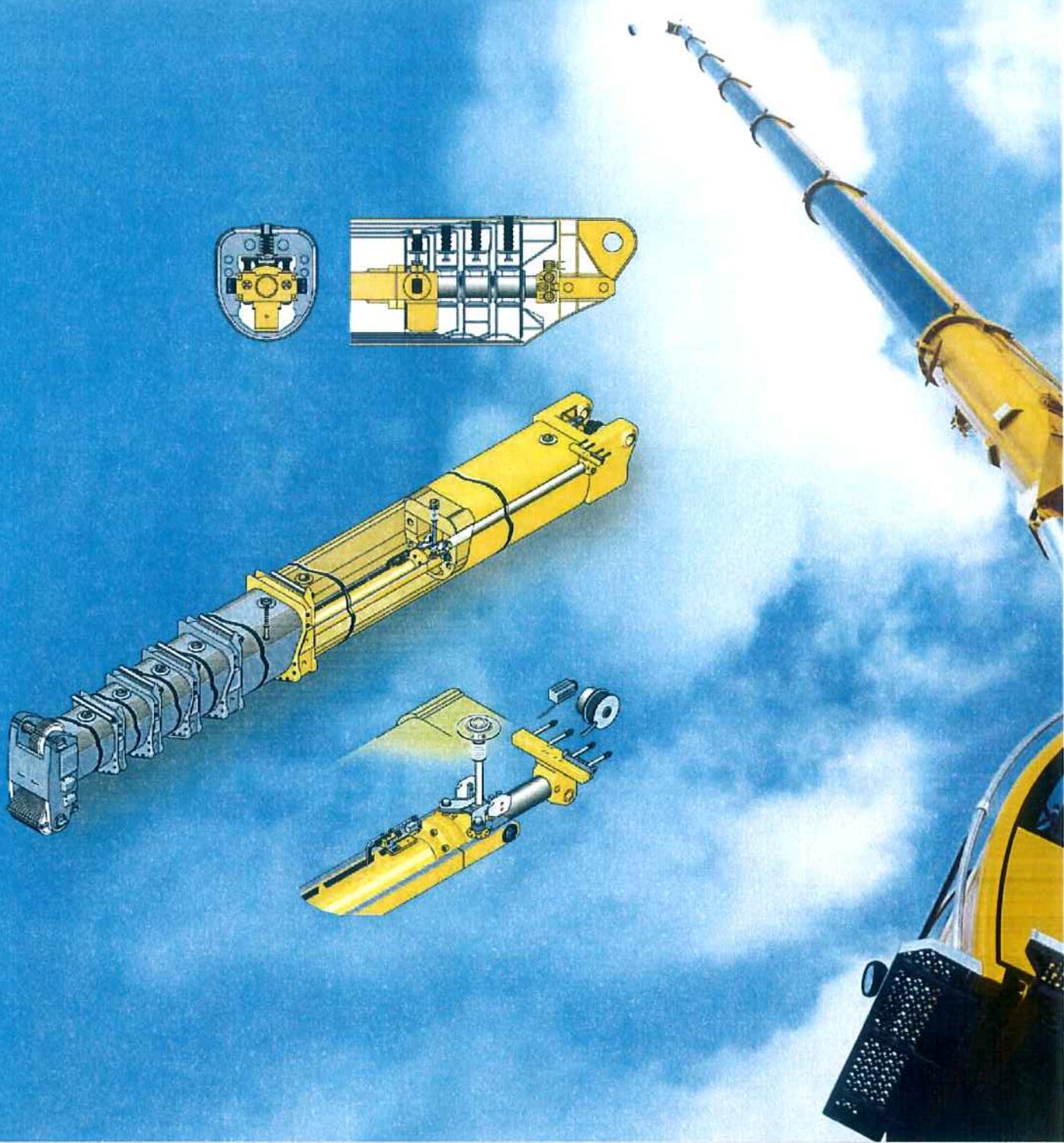
Crane supporting – fast, comfortable and safe

- BTT - Bluetooth Terminal, mobile control and display unit
- Electronic levelling display
- Fully automatic levelling by push button
- Engine-start/stop and speed regulation
- Lighting of support area with 4 integrated floodlights
- Stroke of supporting cylinders front 650 mm, rear 700 mm
- Outriggers 1-stage, fully hydraulic, low maintenance extending system



The crane cab

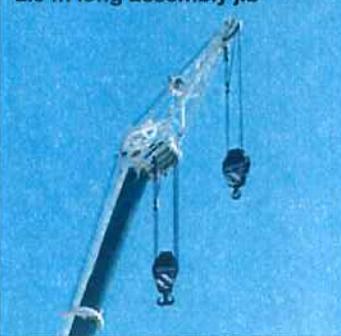
- Corrosion resistant, galvanized steel plate execution, powder-coated
- All around safety glazing
- Tinted windows, front screen can be opened
- Skylight with bullet proof glass
- Crane driver's seat with lumbar support
- Sidewise extendable running board
- 20° tiltable to the rear



The fully automatic telescoping system „TELEMATIK“

- Improvement of capacities at long booms and large radii due to lightweight telescoping system
- 1-stage hydraulic cylinder with hydraulically operated drive pin
- Low maintenance telescoping system
- Telescoping fully automatic
- Simple operation, supervision of telescoping at the LICCON monitor

2.9 m long assembly jib



High capacities and flexible boom system



Powerful, long telescopic boom and functional lattice extensions

The telescopic boom consists of the base section and 6 telescopic sections, which can be comfortably and automatically extended and pinned to the requested length by the thousand fold proven single cylinder telescoping system TELEMATIK.

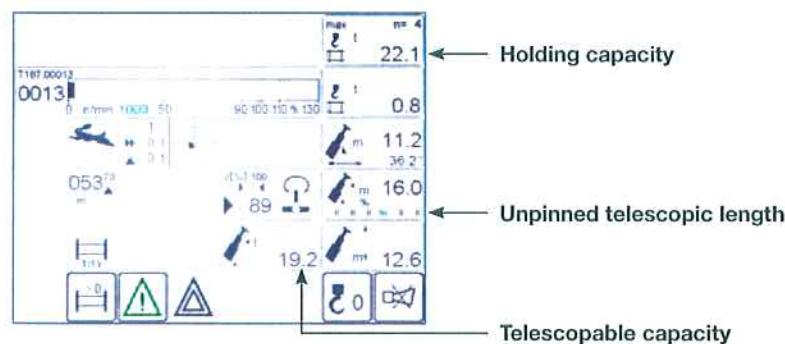
- 60 m long telescopic boom
- 10.8 m – 19 m long double swing-away jib, attachable at 0°, 20° and 40°
- Hydraulic adjustment of the swing-away jib at full load from 0° to 40° (optional), interpolation of capacities
- Hydraulic assistance for assembly of the swing-away jib with BTT
- 2 intermediate sections 7 m each for extension of the telescopic boom for operation with swing-away jib

High capacities with full counterweight as well as with partial counterweight offer a wide application of operations

- High lateral stability due to the oval boom profile
- Optimized capacities due to the numerous extension variations
- Capacity 10.2 t at 60 m long telescopic boom

High capacities at unpinned telescopic lengths

- High telescopic capacities due to interpolation
- Separate charts for holding of the load at unpinned telescopic lengths
- Display at LICCON monitor



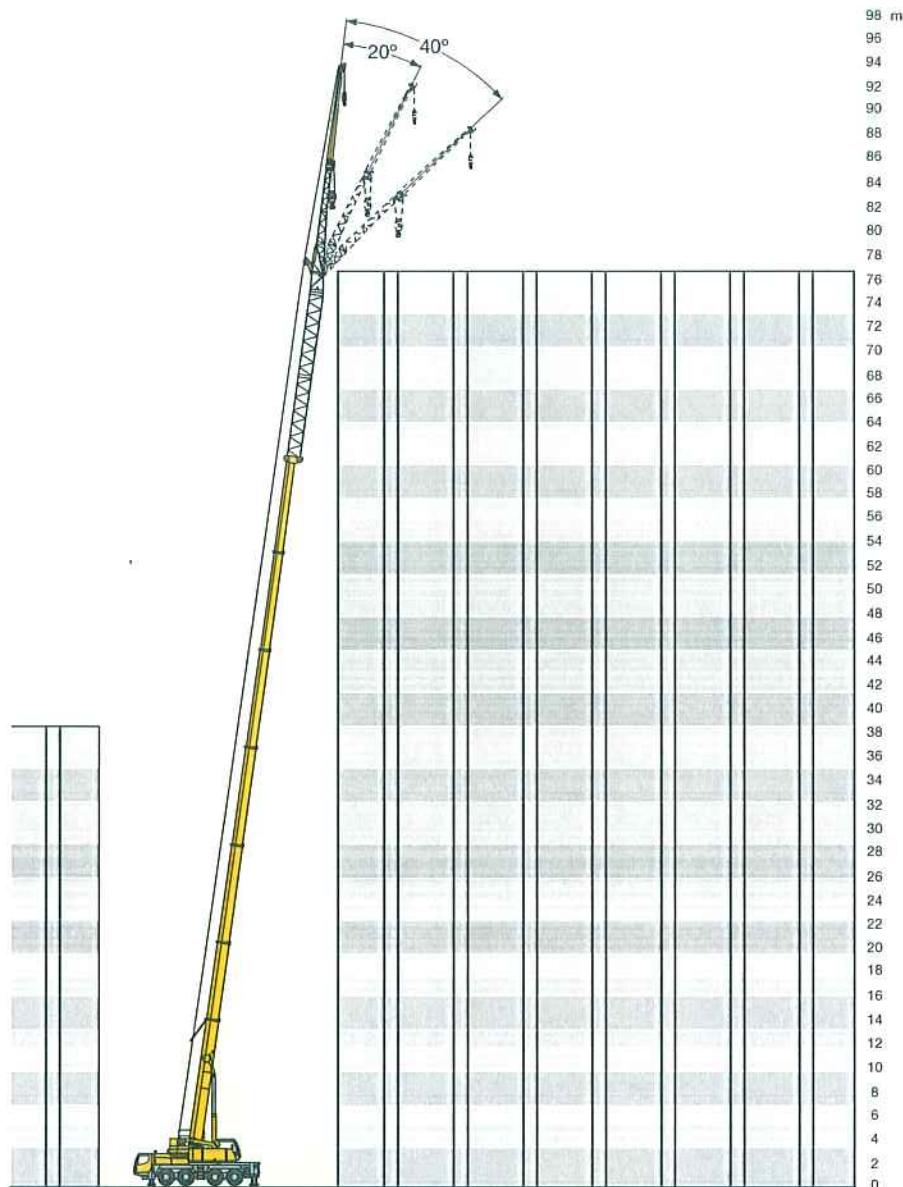
Rooster sheave, foldable sideways



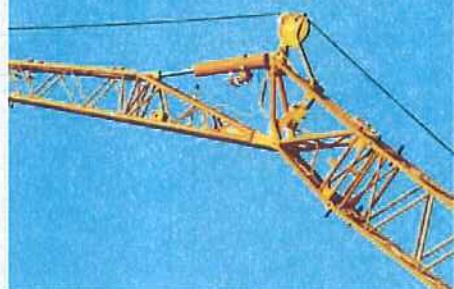
Hydraulic assistance for assembly of the swing-away jib with BTT



Hydraulic swing-away jib



Hydraulically adjustable
swing-away jib (0° - 40°)



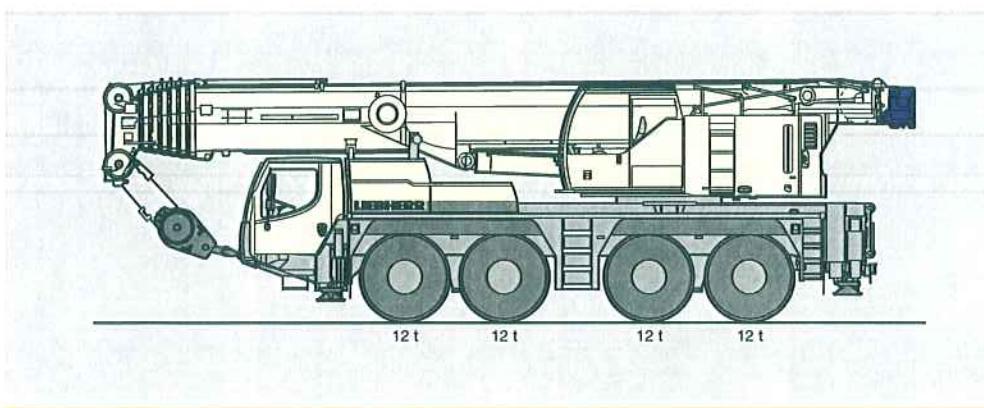
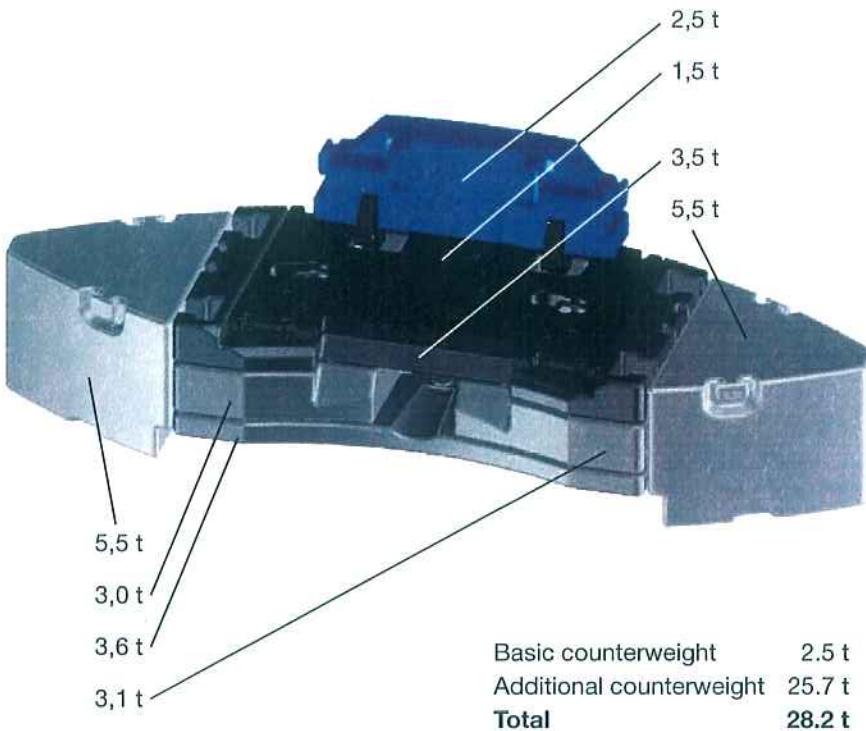
Hose reel for
hydraulic cylinder



Variable counterweight

Mounting of counterweight - only a matter of minutes

- Multitude of counterweight variations from 2.5 t to 28.2 t
- Fast ballasting with keyhole-technology from the crane cabin
- Compact counterweight dimensions, at 17.2 t of counterweight only 2.65 m wide
- Tail swing only 4.1 m



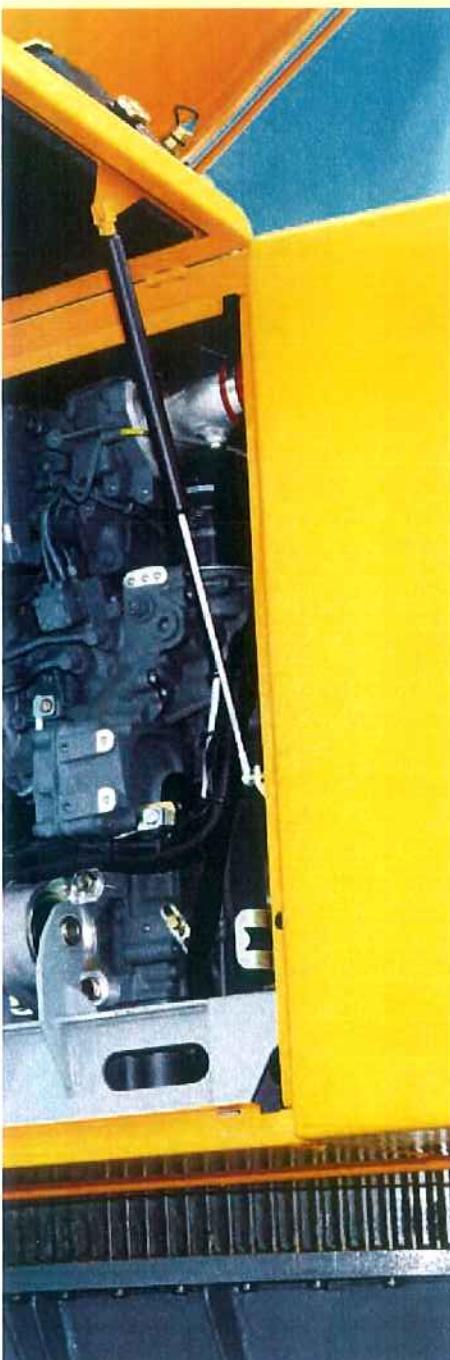


The hoist gear

- Liebherr hoist winch with internal planetary gear and spring loaded multi disk brake
- Rope pull 77 kN at the outer layer
- Max. rope speed 110 m/min
- 2. hoist gear optional



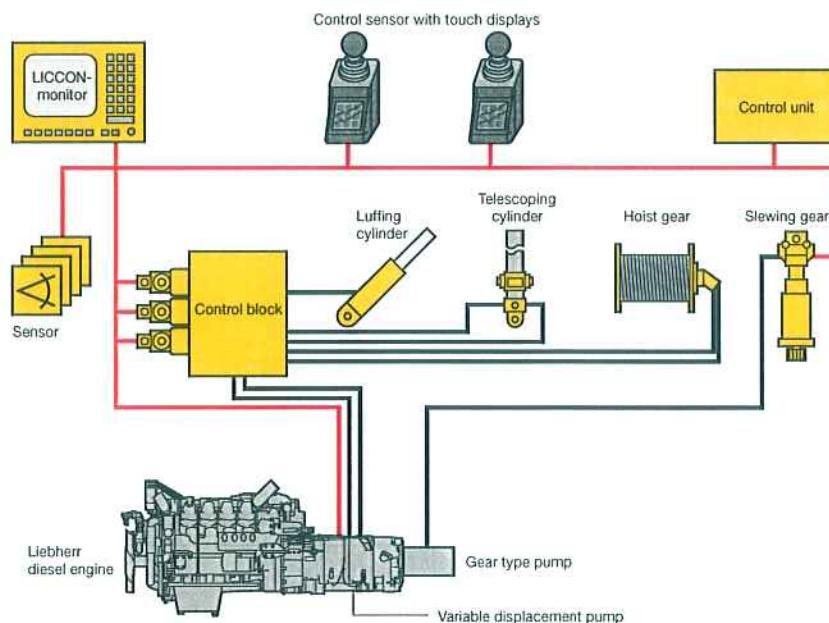
Powerful crane drive



With proven components

The drive components for the crane operation are designed for high performance and provide for sensitive and precise handling of the load. They are specially tuned for the crane operation and proved in severe long-term tests.

- Crane engine: 4-cylinder Liebherr turbo diesel engine, 129 kW/175 HP at 1800 rpm, max. torque 920 Nm at 1100 – 1500 rpm, optimized fuel consumption by electronic engine management
- Diesel-hydraulic crane drive, open hydraulic circuits with electric „LOAD SENSING“-control, 4 working motions simultaneously possible
- Electric/electronic SPS-crane control via the LICCON-computer system
- Slewing gear reversible from open to hydraulically locked, so the slewing motion can be optimal adapted for the different operation conditions, e. g. sensitive for installation work or fast for cycle work
- In-house fabricated Liebherr winches, 77 kN rope pull at the outer layer, less reeving necessary due to high line pull



The slewing gear

- Liebherr planetary gearbox, spring loaded multi disk brake
- Reversible open or hydraulically locked as standard
- Slewing speed from 0 – 1.7 rpm infinitively variable



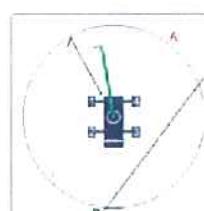
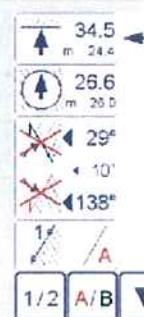
The central greasing

- Standard central greasing device for slewing bearing, boom bearing, luffing cylinder and winch bearing
- Even supply of grease
- Filling quantity visible at any time in transparent reservoir



The LICCON test system

- Fast locating of failures at the computer screen without measuring equipment
- Display of failure codes and failure descriptions
- Comfortable dialog functions for supervision of all in and out terminals
- Display of functions and allocation of sensors and actors



LICCON
TEST SYSTEM - Version 0.00
LIEBHERR-WERK THUNEN 2000

LT 1100-4.2-111
DEUTSCHE FESTIGKEITEN
NETZ: 16.48.25 2000-06-12 00

NETZ: 16.48.25 2000-06-11 11



>SPRACHE DEUTSCH<

DATA: 0000000000
EVNT: V 81.21.12
16.01.00

SPW1 SPW2 SPW3 SPW4 SPW5

Intelligent crane control

For functional and safe crane operation, the LICCON-computer system

The soft- and hardware of the mobile crane control is developed by Liebherr in house. The central point is the LICCON-computer system (Liebherr Computed Controlling). The system undertakes extensive information, control and supervision tasks. The control components have proved themselves in the diverse climate conditions worldwide.

LICCON erection and operation program

- Operation programs:
 - Overload limiter (LMB)
 - Erection program with erection display
 - Operation program with operation display
 - Telescoping program with telescoping display
- Setting up of the erection status by comfortable dialog functions
- Display of all important data with graphic symbols
- Reliable cut-off at exceeding of the permissible load moments
- Winch display for exact hoisting/lowering of the load within centimetres

The data bus technology

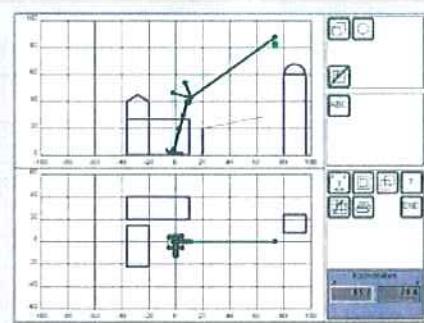
Liebherr mobile cranes are completely linked through the data bus system. All important electric and electronic components are equipped with own microprocessors and communicate over only a few data cables. For the special requirements of the mobile cranes Liebherr has developed its own bus systems (LSB-Liebherr-System-Bus). The data bus system technology improves the reliability, the comfort and the safety of the drive and crane operation:

- Higher reliability due to much less electric cables and contacts
- Continuous self testing of the „intelligent sensors“
- Extensive diagnosis possibilities, fast fault finding



The LICCON working range limiting system (Option)

- Relief for the crane driver by automatic supervision of the working range boundaries like bridges, roofs etc.
- Simple programming
- Four different limiting functions:
 - Boom head height limiting
 - Radius limiting
 - Slewing angle limiting
 - Border limiting



The LICCON working planner (Option)

- Computer program for planning, simulation and documentation of crane operations at the computer
- Display of all load charts belonging to a specific crane
- Automatic search of a suitable crane by input of the load case parameters load, radius and hoisting height
- Simulation of crane operations with drawing functions and display of support forces

The new control generation - LICCON2



The new generation of the Liebherr crane control offers extended customer benefits and higher operational comfort by additional possibilities of use. The base for this is the modern and future oriented control architecture with components, which are optimized regarding the computing power as well as their capacities.



Attaching and detaching of the hook block

The BTT – Bluetooth terminal – offers the crane driver the possibility to attach the hook block to or detach it from the front bumper within sight by remote control of the hoist winch and the luffing cylinder of the telescopic boom.

Supporting the crane

By use of the BTT the mobile crane can be comfortably and safely supported on the outriggers. Engine start/stop, speed regulation, electronic level display and automatic support levelling are available as standard. Optionally also the supporting forces can be displayed on the BTT.



Colour monitor

The readability of the data on the monitor of the LICCON2 control system in the crane cab is enhanced by the colour display. Warnings and crane utilization are considerably better recognized.



Touch displays

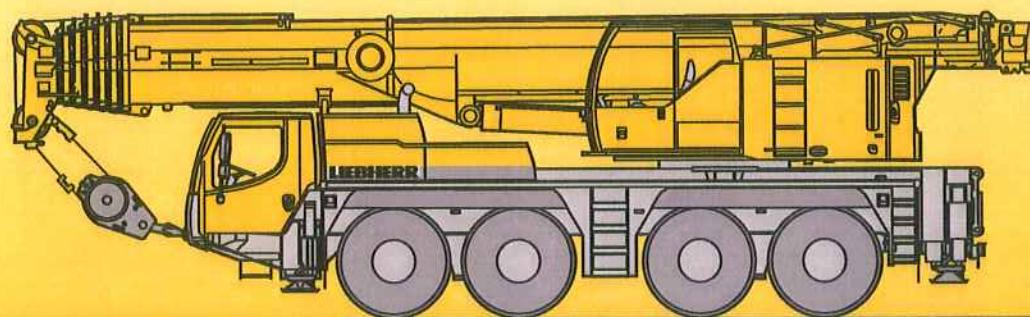
Below the joysticks integrated in the armrests the touch displays are installed, with which the various operational functions can be selected. This are beside others the drive and steering programs of the chassis, the axle suspension, the supporting of the crane, the adjustment of the working floodlights as well as heater and air condition controls.

Mobile Crane

Grue mobile

LTM 1100-4.2

Technical Data
Caractéristiques techniques



LIEBHERR

Lifting capacities on telescopic boom Forces de levage à la flèche télescopique

T

	38 - 197 ft	50 ft	62 ft	74 ft	86 ft	99 ft	111 ft	123 ft	135 ft	148 ft	156 ft	160 ft	170 ft	172 ft	182 ft	184 ft	197 ft			
ft	* T	38 ft	50 ft	62 ft	74 ft	86 ft	99 ft	111 ft	123 ft	135 ft	148 ft	156 ft	160 ft	170 ft	172 ft	182 ft	184 ft	197 ft		
9		143.8	142.3	142.9	142.3													9		
10	223.4	141.8	141.6	141.4	141.2													10		
11	172.1	139.2	139	138.8	138.7	137.2												11		
12	164.6	136	135.9	135.6	135.6	134.9												12		
13	156.4	132.1	132.3	131.9	131.9	131	113.4											13		
14	148.6	126.2	126.7	126.6	126.5	126	113											14		
15	141.5	120.1	120.8	121.1	120.9	120.9	112.3											15		
16	134.8	114.5	115.3	115.5	115.8	115.5	110.7											16		
17	128.2	109.5	110.5	110.8	111.2	110.7	107.8	92.5										17		
18	121.8	105	106.2	106.7	106.8	106.2	104.1	92.6	76.5									18		
20	110.6	96.3	97.8	98.6	98.4	97.8	96.9	92.2	76									20		
22	101	89.2	90.6	91.9	92	91.6	90.9	88	75.6	62.1	50.7							22		
24	93	82.6	84.2	85.6	85.9	85.6	84.9	83.2	74.9	61.7	50.5							24		
26	85.8	76.4	78.5	79.7	80.1	79.9	79	77.8	74	61.3	51.1							26		
28	78.7		73.5	74.6	74.9	73.9	72.9	70.2	60.7	50.9	36.6	42.2						28		
30	62.9		68.6	69.7	69.9	69.7	69	68.2	66	59.8	50.6	36	42					30		
32			63.9	65.1	65.5	65.3	64.5	64.1	61.9	58.2	50.4	35.3	41.8	30.9	35.1	27.8	28.7	32		
34			59.6	60.9	61.3	61	60.2	60.1	58.2	55.5	49.7	34.7	41.6	30.7	34.9	27.6	28.6	34		
36			55.5	56.8	57.3	56.8	56.2	56.2	54.8	52.2	48.8	34.2	41.5	30.4	34.6	27.4	28.5	36		
38				53.5	53.8	53.5	53.3	53.3	51.5	49	46	33.5	40.9	30	34.5	27.2	28.3	38		
40				50.3	50.5	50.3	50.6	50.5	48.4	46	43.5	32.9	40.1	29.6	34.3	27.1	28.2	36		
45				43.6	44	43.6	44.6	43.8	42.7	40.5	39	31.2	36.6	28.4	33.5	26.6	27.8	45		
50					38.4	38.9	39.1	38.5	37.6	36.3	34.7	29.5	32.9	27.3	30.7	25.8	27.2	50		
55						33.7	34.8	34.4	34.1	33.3	32.5	31.1	27.8	29.7	26	27.9	24.9	26	55	
60							30	30.9	30.5	30.5	29.8	29	28.1	26.2	26.8	24.7	25.5	23.8	60	
65								27.5	27.1	27.5	26.6	26.2	25.3	24.7	23.9	23.3	22.8	21.3	65	
70									24.8	24.8	24.9	24.5	23.9	22.9	22.6	21.5	21.2	20.4	70	
75										22.7	22.5	22.4	21.7	20.7	20.5	19.4	19.2	18.4	75	
80											20.7	20.3	19.6	18.7	18.5	17.4	16.6	16.3	80	
85												18.6	18.4	18	16.9	15.8	15.8	14.9	14.7	85
90												16.9	16.7	16.3	15.5	15.3	14.2	14.2	13.3	90
95													15.3	14.8	14.2	14	12.9	12.9	12.1	10.5
100														14	13.5	12.9	11.8	10.9	100	
105															12.8	12.1	11.7	10.8	105	
110																11.1	10.7	10.7	110	
115																	10.2	9.8	9.8	115
120																		8.9	8.9	120
125																		8.1	8.1	125
130																		7.3	7.4	130
135																		6.8	5.7	135
140																		5.1	5.2	140
145																		4.5	4.6	145
150																		4.1	3.2	150
155																		2.7	2.9	155
160																		2.4		160

* over rear - en arrière

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Lifting capacities on telescopic boom Forces de levage à la flèche télescopique

11

	38 - 197 ft	T	360°	37900 lbs	85%	ft	38 ft	50 ft	62 ft	74 ft	86 ft	99 ft	111 ft	123 ft	135 ft	148 ft	156 ft	160 ft	170 ft	172 ft	182 ft	184 ft	197 ft											
9	153.1	151.2	144.3																						9									
10	151.9	150.7	144.3	143.7																					10									
11	145.2	144.7	142	142.3	136.8																				11									
12	138.2	138	137.3	137.8	133.8																				12									
13	130.8	130.8	130.3	130.5	129.1	113.4																			13									
14	124.3	124.8	124.7	124.9	124.2	113																			14									
15	118.2	119.1	119.3	119.5	119.1	112.1																			15									
16	112.8	113.7	114	114.2	113.7	109.8	92.3																		16									
17	107.9	108.9	109.2	109.4	108.9	106.1	91.9																		17									
18	103.3	104.5	104.9	105	104.5	101.5	91	76.5																	18									
20	94.2	95.8	96.6	96.6	95.9	92.4	88.2	75.5																	20									
22	86.1	88.3	89.6	89.7	88.9	84.1	80	72	62.1	50.7															22									
24	78.5	81	82.5	82.7	81.3	76.4	72.9	67.8	60.8	50.5															24									
26	71.2	73.9	75.4	75.6	73.1	69.4	66.7	62.8	58.7	51.1															26									
28		68.1	69.6	69.6	66.7	64	61.3	58.3	55	49.4	36.6	42.2													28									
30		62.8	64.1	63.8	60.8	59	56.3	54	51.2	47.2	36	41.9													30									
32		57.8	59.3	58.6	55.8	54.8	52	50.2	47.7	44.7	35.3	40.9	30.9	35.1	27.8	28.7									32									
34		53.4	54.9	54	52.1	51	48.6	46.9	44.7	42.2	34.7	39.4	30.7	34.7	27.6	28.6									34									
36		49.3	50.9	49.8	49.3	47.3	45.8	43.8	42	39.8	34.2	37.6	30.4	34.2	27.4	28.5	23.6	36							36									
38			47.5	46.4	46.2	44.2	42.8	41.1	39.7	37.9	33.5	35.7	30	32.8	27.2	28.3	23.6	38							38									
40				44.4	43.4	43.3	41.4	40.1	38.6	37.5	36	32.8	33.8	29.6	31.3	27.1	27.9	23.6	40							40								
45					37.6	37.7	36.9	35.9	34.9	33.8	32.5	31.1	30.2	29.3	28.3	27.8	26.6	25.6	23.2							45								
50						33	32	31.7	30.5	29.6	28.4	27.1	26.8	25.4	25.1	24.1	23.7	22.4	21.4	50							50							
55						28.8	28.1	28	26.8	26	24.9	23.6	23.4	22.2	21.9	20.9	20.7	19.4	18.9	55							55							
60							25	24.8	24.6	23.7	22.9	21.8	20.7	20.5	19.4	19.2	18.3	18.1	16.8	16.3	60							60						
65								22	21.9	21.1	20.4	19.3	18.4	18.2	17	16.8	15.9	15.7	14.6	14.2	65							65						
70									19.4	19.8	19	18.2	17.2	16.3	16.1	15	14.9	14	13.8	12.7	12.4	70							70					
75										17.8	17	16.3	15.4	14.5	14.4	13.3	13.3	12.4	12.2	11.1	10.8	75							75					
80										15.9	15.3	14.7	13.8	12.9	12.9	11.8	11.7	10.9	10.7	9.6	9.4	80							80					
85											13.8	13.3	12.4	11.5	11.5	10.4	10.2	9.6	9.3	8.2	8	85							85					
90											12.4	12	11.1	10.4	10.2	9.1	9	8.4	8.2	7.1	6.8	90							90					
95												10.7	10	9.2	9.1	8	8	7.3	7.1	6	5.8	95							95					
100													9.6	9	8.1	8.1	7	7	6.3	6.1	5	4.8	100							100				
105														8.6	8.2	7.3	7.3	6.2	6.2	5.3	5.3	4.2	4	105							105			
110															7.2	6.4	6.4	5.3	5.5	4.6	4.6	3.4	3.3	110							110			
115																6.3	5.7	5.7	4.6	4.7	4	4	2.6	2.6	115							115		
120																	5	4	4	3.3	3.3					120							120	
125																		4.4	4.4	3.5	3.5	2.6					125							125
130																		3.7	3.7	2.8	2.8	2.1					130							130
135																		3.2	2.3	2.3							135							135

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Lifting capacities on telescopic boom Forces de levage à la flèche télescopique

T

	38 - 197 ft			16800 lbs	85%													
	38 ft	50 ft	62 ft	74 ft	86 ft	99 ft	111 ft	123 ft	135 ft	148 ft	156 ft	160 ft	170 ft	172 ft	182 ft	184 ft	197 ft	
9	149.8	143.6	137.5	136.8														9
10	144.9	142.7	137.3	136.7														10
11	137	136.1	134.2	134	129.7													11
12	129.5	129.7	129.6	129.2	126.3													12
13	122.6	123.4	123.5	122.5	121.2	107.9												13
14	116.5	117.3	117.5	117.2	115.3	104.2												14
15	110.7	111.5	111.6	112	108.7	99.2												15
16	105.2	106.3	106.2	106.3	100.4	91.7	84.7											16
17	99.7	101.2	101.3	100.7	93.9	86.2	81.3											17
18	94.3	95.9	96.8	94.9	88.6	82.2	77.2	69.9										18
20	83.7	85.8	87.5	83.8	78.4	74.2	69.3	65.4										20
22	75.1	77.8	77.6	74.1	69.4	66.8	62.4	59.2	54.4	46.7								22
24	66.5	69.7	68.8	65.7	62.4	60.1	56.6	53.8	50.5	44.7								24
26	57.7	61.6	61.1	58.4	57.3	54.1	51.7	49.1	46.6	43								26
28	54.5	55.1	53.1	52.3	49.2	47.7	45.4	43.1	40.5	34.8	37.3							28
30	47.9	49.5	48.3	47.6	45	44	42	39.9	37.9	34.2	35.1							30
32	42.7	44.4	44.8	43.5	42.3	40.6	39	36.9	35.1	33.2	32.7	29.6	30.3	26.5	26.8		32	
34	38.2	40	41.3	40.1	39.4	37.6	36.1	34.2	32.4	31.6	30.3	28.7	28.6	26	25.7		34	
36	34.3	36.1	37.6	37	36.3	35	33.4	31.6	29.9	29.4	27.9	27.4	26.3	25.2	24.1	22.1	36	
38	33	34.5	34.3	33.8	32.5	31.1	29.5	27.8	27.4	25.9	25.4	24.4	23.6	22.4	20.6		38	
40	30.2	31.7	31.7	31.6	30.3	29	27.5	25.9	25.5	24	23.6	22.7	22	20.7	19.2		40	
45		24.6	26.2	26.7	25.4	24.4	23.1	21.7	21.5	20.1	19.9	18.8	18.3	17	15.8		45	
50			21.9	21.9	22.5	21.7	20.9	19.7	18.5	18.3	16.9	16.7	15.8	15.3	14.1	13.2		50
55			18.3	18.4	19	18.6	17.8	16.8	15.7	15.6	14.3	14.1	13.2	12.8	11.7	10.9		55
60			15.5	15.7	16.1	15.9	15.3	14.4	13.3	13.3	12	12	11.1	10.7	9.6	8.9		60
65			13.3	13.9	13.7	13.3	12.4	11.5	11.3	10.2	10.2	9.3	9	7.9	7.3		65	
70			11.4	12.1	11.8	11.5	10.7	9.9	9.7	8.6	8.6	7.7	7.6	6.4	5.9		70	
75				10.4	10.2	10	9.2	8.5	8.4	7.3	7.3	6.4	6.3	5.1	4.7		75	
80				9	8.7	8.5	7.9	7.2	7.2	6.1	6.1	5.3	5	3.9	3.7		80	
85					7.6	7.4	6.9	6	6	4.9	4.9	4.3	4	2.9	2.7		85	
90					6.6	6.3	5.7	5.2	5.2	4.1	4.1	3.2	3.2				90	
95						5.4	4.8	4.3	4.3	3.2	3.3	2.4	2.4				95	
100						4.6	4	3.5	3.5								100	
105						3.8	3.3	2.9	2.9								105	
110							2.6	2.2	2.2								110	
115							2.1										115	

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Lifting capacities on telescopic boom
Forces de levage à la flèche télescopique

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	38 - 197 ft	360°	8800 lbs	85%	38 ft	50 ft	62 ft	74 ft	86 ft	99 ft	111 ft	123 ft	135 ft	148 ft	156 ft	160 ft	170 ft	172 ft	182 ft	184 ft	197 ft		
9	149.4	143.5	137.5	136.8																	9		
10	144	142.4	137.2	136.6																	10		
11	136.1	135.6	133.6	133.6	128.6																11		
12	128.7	128.9	128.7	128.4	123.8																12		
13	121.9	122.5	122.7	121.5	116.8	104.6															13		
14	115.5	116.3	116.5	114.4	107	96.5															14		
15	109.2	110.3	110.3	106.9	97.6	88.7															15		
16	102.9	104.7	104	98.3	90.6	84.2	79.1														16		
17	97	99.2	97.7	91.4	84.6	79.9	74.6														17		
18	91.4	93.5	91.4	85.6	79.4	75.5	70.4	64.5													18		
20	80.4	82.3	79.3	74.4	69.5	67	62.3	59.2													20		
22	70.2	71.6	69.1	65.6	62.8	59.6	56.3	53.2	49.4	41.9											22		
24	60.3	62.3	60.6	58.4	56.5	53.6	51	48.3	45.2	39.5											24		
26	50.8	54.5	53.8	52.9	50.6	48.9	46.4	44.4	41.7	38.7											26		
28	47.9	48.3	48	45.9	44.6	42.4	40.5	38.2	35.8	33.9	33.2										28		
30	41.9	43.3	43.4	41.7	40.6	38.7	36.8	34.8	32.7	32	30.3										30		
32	37.2	38.8	39.5	37.9	37.1	35.3	33.7	31.8	30	29.3	27.7	26.6	25.2	24.8	23.4					32			
34	33.2	35	36.1	34.6	34	32.4	30.9	29.2	27.5	26.9	25.4	25	23.7	23.1	21.7					34			
36	29.7	31.5	33	31.7	31.2	29.9	28.3	26.8	25.2	24.8	23.2	22.8	21.7	21	19.7	18.4				36			
38		28.6	30.2	29.2	28.9	27.6	26.3	24.8	23.3	22.9	21.5	21	20.1	19.4	18.1	16.8				38			
40		26	27.6	27	26.8	25.5	24.4	22.9	21.6	21.2	19.8	19.4	18.5	17.9	16.6	15.3				40			
45		20.8	22.4	22.3	22.4	21.3	20.4	19	17.9	17.6	16.3	16.1	15	14.7	13.4	12.4				45			
50			18.4	18.4	18.9	18	17.2	16.1	15	14.8	13.6	13.4	12.3	12.1	10.9	10				50			
55				15.3	15.3	15.9	15.4	14.6	13.6	12.6	12.4	11.3	11.1	10.1	9.9	8.7	8			55			
60					12.9	12.9	13.5	13.1	12.4	11.4	10.5	10.3	9.2	9.2	8.3	8.1	6.8	6.3		60			
65						10.8	11.5	11.1	10.6	9.7	8.8	8.8	7.5	7.5	6.6	6.6	5.3	4.8		65			
70							9.1	9.8	9.5	9	8.2	7.4	7.3	6.1	6.2	5.4	5.2	4	3.6		70		
75								8.3	8	7.7	6.8	6.2	6	4.9	5.1	4.2	4.1	2.9			75		
80									7	6.6	6.5	5.7	5	5	3.9	3.9	3.1				80		
85										5.6	5.4	4.7	4	4	2.9	2.9		2				85	
90											4.7	4.5	3.8	3.2	3.2							90	
95												3.7	3.1	2.4	2.4								95
100													2.9	2.4								100	
105														2.4								105	

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Lifting capacities on telescopic boom Forces de levage à la flèche télescopique

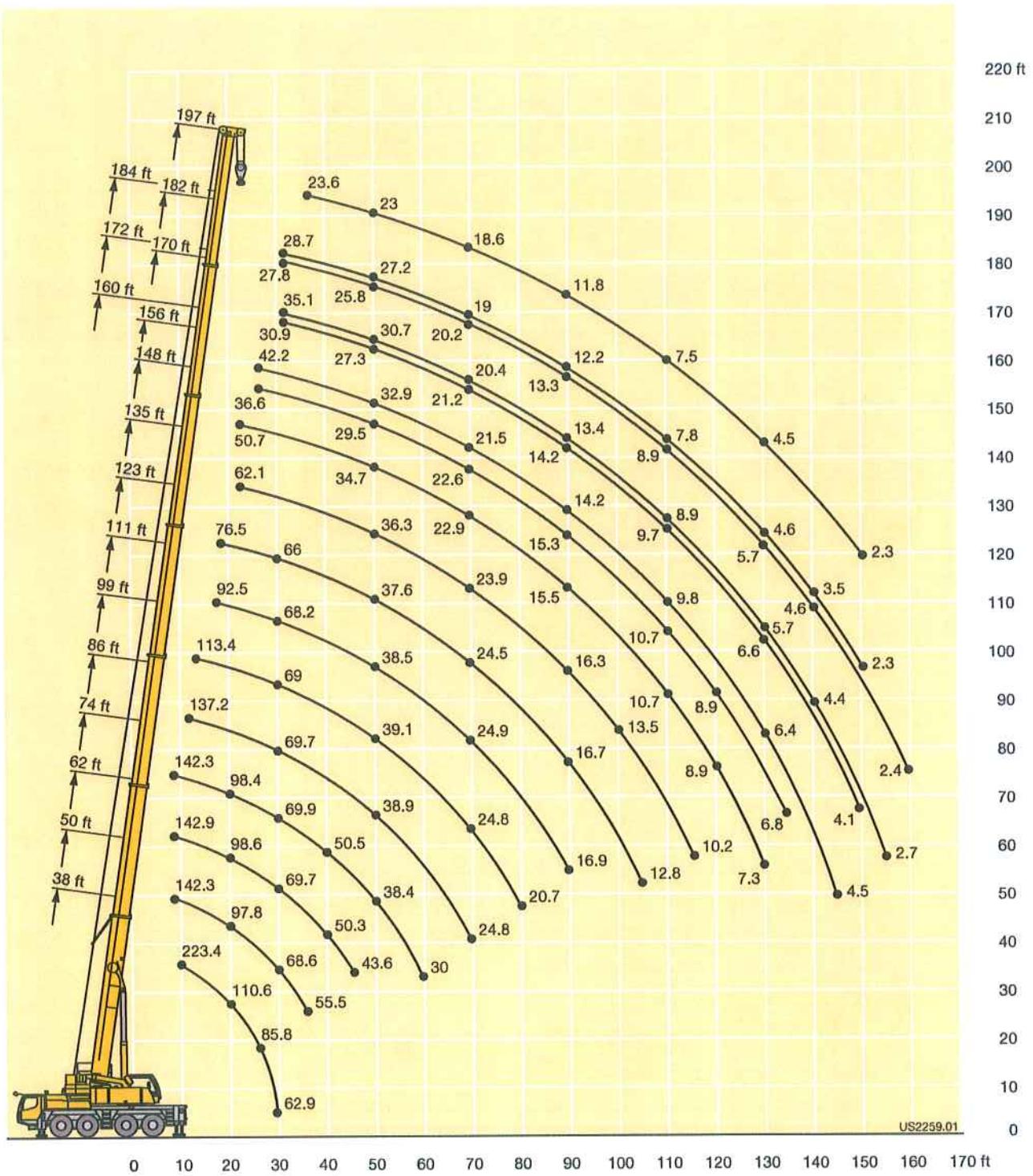
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	38 - 197 ft			360°		5500 lbs	85%											
	38 ft	50 ft	62 ft	74 ft	86 ft	99 ft	111 ft	123 ft	135 ft	148 ft	156 ft	160 ft	170 ft	172 ft	182 ft	184 ft	197 ft	
9	149.3	143.4	137.5	136.8														9
10	143.8	142.2	137.2	136.6														10
11	135.9	135.2	133.4	133.2	126.9													11
12	128.4	128.5	128.4	127.6	120.6													12
13	121.3	122.1	122.2	119.8	112.2	100.1												13
14	114.7	115.6	116.1	110.7	102	93.1												14
15	108.2	109.3	109.4	101.6	92.7	86.4												15
16	101.5	103.4	101.2	93.2	86.7	81.7	75.6											16
17	95.4	97.1	94	86.5	81.4	77	71.3											17
18	89.8	90.7	87.5	81	76.7	72.4	67.4	60.8										18
20	78.5	78.1	75	70.6	67.6	63.5	59.9	56										20
22	67	67.5	65.3	62.4	59.9	56.4	54	50.5	47.2	39.2								22
24	56.8	58.6	57.2	55.6	53.4	50.6	48.7	45.8	43	36.6								24
26	47.6	51.4	50.6	50.1	47.9	46.2	44	41.7	39.1	36.2								26
28	45.2	45.5	45.3	43.3	42	39.9	37.8	35.5	33.3	32.3	30.8							28
30	39.5	40.7	40.8	39.1	38	36.1	34.2	32.2	30.3	29.6	28.1							30
32	34.9	36.5	36.9	35.4	34.7	32.8	31.3	29.4	27.7	27.1	25.5	24.4	23.2	22.8	21.2	21.2		32
34	31	32.8	33.5	32.2	31.7	30.1	28.8	26.9	25.4	24.8	23.3	22.9	21.7	21.2	19.7			34
36	27.5	29.3	30.6	29.2	29	27.7	26.3	24.8	23.2	22.8	21.3	21	19.7	19.3	17.9	16.4		36
38		26.5	28	26.9	26.8	25.5	24.3	22.9	21.4	21	19.6	19.3	18.2	17.6	16.3	15		38
40		24.1	25.6	24.8	24.8	23.5	22.4	21.1	19.6	19.4	18.1	17.7	16.8	16.2	14.8	13.8		40
45		19	20.6	20.6	19.5	18.6	17.4	16.3	16.1	14.7	14.5	13.6	13.1	11.8	10.9			45
50			16.9	17	17.4	16.4	15.7	14.6	13.5	13.4	12.1	12	11	10.7	9.5	8.6		50
55			14	14	14.6	13.9	13.2	12.1	11.1	11.1	9.9	9.9	8.8	8.6	7.5	6.7		55
60			11.6	11.7	12.2	11.8	11.2	10.1	9.2	9.2	8.1	8.1	7	6.8	5.7	5.1		60
65			9.7	10.4	9.9	9.5	8.6	7.7	7.7	6.4	6.6	5.5	5.5	4.4	3.9			65
70				8.2	8.7	8.4	7.9	7.2	6.3	6.3	5.1	5.2	4.3	4.3	3	2.7		70
75					7.3	7.1	6.7	6	5.1	5.2	4.1	4.1	3.2	3.2				75
80					6.1	5.9	5.7	4.8	4	4.2	3.1	3.1						80
85						4.7	4.7	3.8	3.1	3.2	2	2.3						85
90						3.8	3.8	3.1	2.3	2.5								90
95						3	2.4											95
100						2.3												100

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Lifting heights Hauteurs de levage

T



Lifting capacities on the hydraulically or mechanically variable folding jib

Forces de levage à la fléchette pliante à variation hydraulique ou mécanique

TK/TNZK

		38 - 197 ft			35 ft			111 ft			360°			62200 lbs			85%									
		T			TNZK			K																		
		38 ft	35 ft	111 ft	35 ft	360°	62200 lbs	35 ft	35 ft	123 ft	35 ft	35 ft	85%	35 ft	35 ft	135 ft	35 ft	35 ft	148 ft	35 ft	35 ft	160 ft	35 ft			
		0°	20°	40°	0°	20°	40°	0°	20°	35 ft	0°	20°	40°	0°	20°	35 ft	0°	20°	40°	0°	20°	35 ft	0°			
	ft																									
9		32.6																						9		
10		32.6																						10		
11		32.6																						11		
12		32.6																						12		
13		32.6																						13		
14		32.6																						14		
15		32.6																						15		
16		32.6	30.9																					16		
17		32.5	30.3																					17		
18		32.2	29.7					32.6																18		
20		31.6	28.5					32.6																20		
22		30.5	27.4					32.6																22		
24		29.5	26.3					32.6																24		
26		28.6	25.3	22.8				32.6									29.6			26.2				26		
28		27.5	24.5	22.1				32.6	30.5								29.3			26.1				28		
30		26.4	23.8	21.5				32.6	30.3								29.1			26				30		
32		25.4	23	20.9				32.6	29.8								28.9			26				32		
34		24.3	22.3	20.4				32.6	29.2								28.8			25.9				34		
36		23.2	21.6	19.9				32.6	28.7								28.7			25.8				36		
38		22.3	21.1	19.5				32.6	28.2	22.9							31.8	27.5		28.3	26			38		
40		21.3	20.6	19.1				32.5	27.6	22.6							31.4	27		27.9	25.7			40		
45		19	19.2	18.4				31.9	26.3	22							30.2	26	21.7	27.2	24.7	21		45		
50		17.2	18.1	17.8				30.8	25.2	21.3							29.2	25	21.1	26.6	23.9	20.5		50		
55								29	24.2	20.7							27.3	24.1	20.5	25.7	23.2	20.1		55		
60								26.6	23.2	20.2							24.6	23.2	20	24.2	22.4	19.8		60		
65								23.7	22.4	19.7							21.7	22.4	19.7	21.7	20.9	21		65		
70								21.2	21.5	19.2							19.2	20.5	20.3	18.9	19.4	19.9		70		
75								18.9	20	18.8							17	18.5	18.6	18.5	17.7	18.6		75		
80								17	18.1	18.3							15.4	16.5	17.6	17.2	17.8	17.4		80		
85								15.3	16.4	17.3							14.6	14.7	15.8	15.5	16.6	16.8		85		
90								13.8	14.7	15.5							13.9	13.5	14.1	14.5	15.1	15.7		90		
95								12.4	13.3	13.9							13.3	12.7	12.8	13.6	13.7	14.4		95		
100								11.2	12	12.6							12.6	12.2	12	12.7	12.6	13.1		100		
105								10.1	10.8	11.2							12.1	11.7	11.5	11.7	11.9	10.8		105		
110								9.1	9.8	10.1							11.3	11.2	11.1	10.7	11.2	11.4		110		
115								8.1	8.8	8.9							10.4	10.6	10.7	9.8	10.3	10.7		115		
120								7.2	7.8	7.8							9.6	9.9	10	8.9	9.4	9.8		120		
125								6.3	6.8	6.7							8.8	9.2	9.2	8.1	8.5	8.8		125		
130								5.5	5.9								7.9	8.4	8.4	7.4	7.7	7.9		130		
135																	7.2	6.9	6.8	6.8	7	6.1		135		
140																			6.1	6.3	6.5	5.4	5.9	6.1		140
145																			5.5	5.7	5.8	4.8	5.2	5.4		145
150																			4.9	5.2	4.8	4.3	4.5	4.8		150
155																			3.8	4	4.1	3.4	3.8	4.1		155
160																			3.3	3.5		2.4	2.8	3		160
165																			2.8	3		1.9	2.1	2.3		165
170																						1.4	1.8	1.8		170

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Lifting capacities on the hydraulically or mechanically variable folding jib

Forces de levage à la fléchette pliante à variation hydraulique ou mécanique

TK/TNZK

		38 - 197 ft			35 ft			360°			62200 lbs			85%						
		170 ft			172 ft			182 ft			184 ft			197 ft						
		35 ft			35 ft			35 ft			35 ft			35 ft						
		0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	
32		15.7			18.8													32		
34		15.7			18.7													34		
36		15.7			18.7			14.1			14.8							36		
38		15.7			18.7			14.1			14.8							38		
40		15.7			18.7			14.1			14.8							40		
45		15.7			18.7			14.1			14.8							45		
50		15.5	15.6		18.6	18.6		14.1	14.1		14.6	15						50		
55		15.3	15.3		18.4	18.4	17.6	14	14		14.6	14.9		12.4				55		
60		15	14.9	14.7	18.2	18.3	17.4	13.9	13.9		14.5	14.7		12.3	12.4			60		
65		14.8	14.4	14.2	17.9	18.1	17.2	13.7	13.7	13.7	14.4	14.6	14.4	12.2	12.4	12.1		65		
70		14.5	13.9	13.8	16.8	17.6	16.9	13.5	13.4	13.4	14.3	14.3	13.9	12	12.4	12		70		
75		14.1	13.5	13.4	15.8	16.5	16.6	13.4	13	12.9	14.1	13.9	13.5	11.9	12.2	11.9		75		
80		13.5	13.1	12.9	14.8	14.9	15.9	13.1	12.7	12.5	13.4	13.5	13.1	11.8	11.9	11.9		80		
85		13	12.6	12.6	13.3	13.5	14.4	12.6	12.4	12.4	12.4	13	12.8	11.3	11.7	11.7		85		
90		12.5	12.3	12.1	12	12.8	13.1	11.8	12	11.8	11.1	12.1	12.5	10.5	11.2	11.4		90		
95		11.7	11.9	11.7	10.7	11.9	12.3	10.7	11.5	11.5	9.8	11	11.7	9.4	10.4	10.9		95		
100		10.7	11.4	11.4	9.6	10.9	11.5	9.6	10.7	11	8.7	9.8	10.7	8.3	9.4	10.2		100		
105		9.5	10.4	11	8.6	9.7	10.4	8.6	9.5	10.4	7.7	8.6	9.5	7.3	8.4	9		105		
110		8.6	9.4	10	7.8	8.7	9.4	7.8	8.6	9.4	6.7	7.6	8.5	6.4	7.4	8		110		
115		7.8	8.5	9.1	6.9	7.8	8.5	6.9	7.7	8.3	5.8	6.7	7.5	5.6	6.5	7.1		115		
120		7	7.6	8.3	6.1	7	7.6	6.1	6.8	7.4	5	5.9	6.5	4.8	5.6	6.3		120		
125		6.1	6.8	7.4	5.3	6.1	6.8	5.3	6.1	6.6	4.4	5.2	5.7	4.1	4.8	5.5		125		
130		5.5	6.1	6.6	4.6	5.5	5.9	4.8	5.5	5.9	3.7	4.4	5	3.5	4.1	4.8		130		
135		4.9	5.5	5.9	4	4.8	5.2	4.1	4.8	5.2	3.2	3.8	4.3	2.8	3.5	4.1		135		
140		4.4	4.9	5.2	3.5	4.2	4.6	3.5	4.1	4.6	2.6	3.2	3.7	2.2	2.9	3.5		140		
145		3.9	4.3	4.6	3	3.7	3.9	3	3.5	3.9	2.1	2.6	3		2.4	2.8		145		
150		3.4	3.8	4.1	2.5	3.2	3.4	2.5	3	3.4	1.6	2.1	2.3		1.9	2.3		150		
155		2.9	3.3	3.6	2	2.7	2.9	2	2.5	2.8		1.6	1.8			1.8		155		
160		2.4	2.8	3		2.2	2.4		2	2.3								160		
165		1.9	2.3	2.3														165		
170		1.6	1.8	1.8														170		

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Lifting capacities on the hydraulically or mechanically variable folding jib

Forces de levage à la fléchette pliante à variation hydraulique ou mécanique

TK/TNZK

		38 - 197 ft			62 ft			360°			62200 lbs			85%					
		38 ft			111 ft			123 ft			135 ft			148 ft			160 ft		
		62 ft			62 ft			62 ft			62 ft			62 ft			62 ft		
		0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°
	ft																		
9		14.7																9	
10		14.5																10	
11		14.4																11	
12		14.3																12	
13		14.1																13	
14		14.1																14	
15		14.1																15	
16		13.9																16	
17		13.8																17	
18		13.6																18	
20		13.2																20	
22		12.9			14.6													22	
24		12.7			14.5													24	
26		12.4			14.4			13.9			13							26	
28		12.1			14.2			13.8			13			12.4				28	
30		11.8	11		14.1			13.6			13			12.3				30	
32		11.6	10.7		13.9			13.5			12.8			12.2			11.2		32
34		11.3	10.4		13.7			13.4			12.7			12.1			11.2		34
36		11	10.2		13.5			13.2			12.6			12.1			11.2		36
38		10.9	10		13.3			13.1			12.4			12			11.1		38
40		10.7	9.9		13.2			13			12.3			11.9			11		40
45		10.2	9.4		12.9	10.6		12.6	10.6		12			11.7			10.8		45
50		9.7	9		12.4	10.3		12.2	10.3		11.8	10.2		11.4			10.7		50
55		9.2	8.7	8	12	10.1		11.8	10.1		11.5	10		11.2	9.8		10.5	9.4	55
60		8.7	8.3	7.7	11.6	9.9	8.4	11.6	9.9		11.2	9.7		11	9.6		10.3	9.2	60
65		8.2	8	7.7	11.3	9.5	8.2	11.3	9.5	8.2	10.8	9.5	8.2	10.6	9.3		10.2	9.1	65
70		7.7	7.8	7.6	11	9.3	8.2	11	9.3	8.2	10.7	9.2	8	10.4	9.1	8	10	8.9	70
75		7.2	7.7	7.5	10.6	9.2	8.1	10.6	9.2	8.1	10.4	8.9	7.9	10.2	8.9	7.9	9.7	8.7	7.8
80		6.8	7.7	7.5	10.3	9	7.9	10.3	9	7.9	10.1	8.8	7.9	9.9	8.8	7.9	9.4	8.6	7.7
85		6.4			10.2	8.6	7.7	10.2	8.8	7.7	9.9	8.6	7.7	9.7	8.6	7.7	9.3	8.4	7.7
90					9.8	8.4	7.7	9.8	8.7	7.7	9.8	8.4	7.7	9.5	8.4	7.7	9.3	8.4	7.6
95					9.5	8.4	7.7	9.6	8.5	7.7	9.6	8.4	7.7	9.4	8.4	7.6	9.1	8.3	7.5
100					9.2	8.3	7.7	9.4	8.3	7.7	9.4	8.3	7.7	9.2	8.3	7.5	8.8	8.1	7.5
105					9	8.2	7.5	9	8.2	7.5	9	8.2	7.5	8.8	8.2	7.5	8.6	7.9	7.5
110					8.7	8	7.5	8.5	8	7.5	8.7	8	7.5	8.7	8	7.5	8.3	7.9	7.5
115					8.4	7.9	7.5	8.2	7.9	7.5	8.5	7.9	7.5	8.4	7.9	7.5	8	7.8	7.5
120					8	7.9	7.5	7.9	7.8	7.5	8.3	7.9	7.5	8	7.9	7.5	7.6	7.7	7.5
125					7.7	7.7	7.5	7.7	7.5	7.5	7.9	7.7	7.5	7.7	7.7	7.5	6.8	7.5	7.5
130					7	7.5	7.5	7.4	7.1	7.3	7.6	7.5	7.5	7.2	7.4	7.5	6.1	7.1	7.3
135					6.3	7	7.2	7.2	6.9	7.2	7.2	7.2	7.5	6.6	7.2	7.2	5.6	6.6	7
140					5.7	6.3	6.7	6.9	6.8	7	6.8	6.9	7.3	6	6.8	7	5.1	6	6.6
145					5	5.7	5.8	6.6	6.6	6.8	6.1	6.6	6.8	5.5	6.3	6.8	4.6	5.4	6.1
150					4.3	5	5	6.2	6.4	6.6	5.6	6.2	6.5	4.9	5.6	6.3	4.1	4.8	5.4
155					3.8	4.3		5.8	6.1	6.2	5.1	5.8	6	4.4	5.1	5.6	3.6	4.2	4.9
160								5.3	5.7		4.6	5.3	5.4	3.9	4.6	5	3.1	3.8	4.4
165								4.8	5.2		4.1	4.7	4.8	3.5	4.1	4.5	2.6	3.4	3.9
170								4.5			3.8	4.1	4.3	3.1	3.6	4	2.3	2.9	3.4
175											3.3	3.7		2.6	3.2	3.4	1.9	2.4	2.9
180														2.2	2.8	2.8	2	2.4	180
185														1.9	2.3	2.3			185
190														1.6	1.8				190

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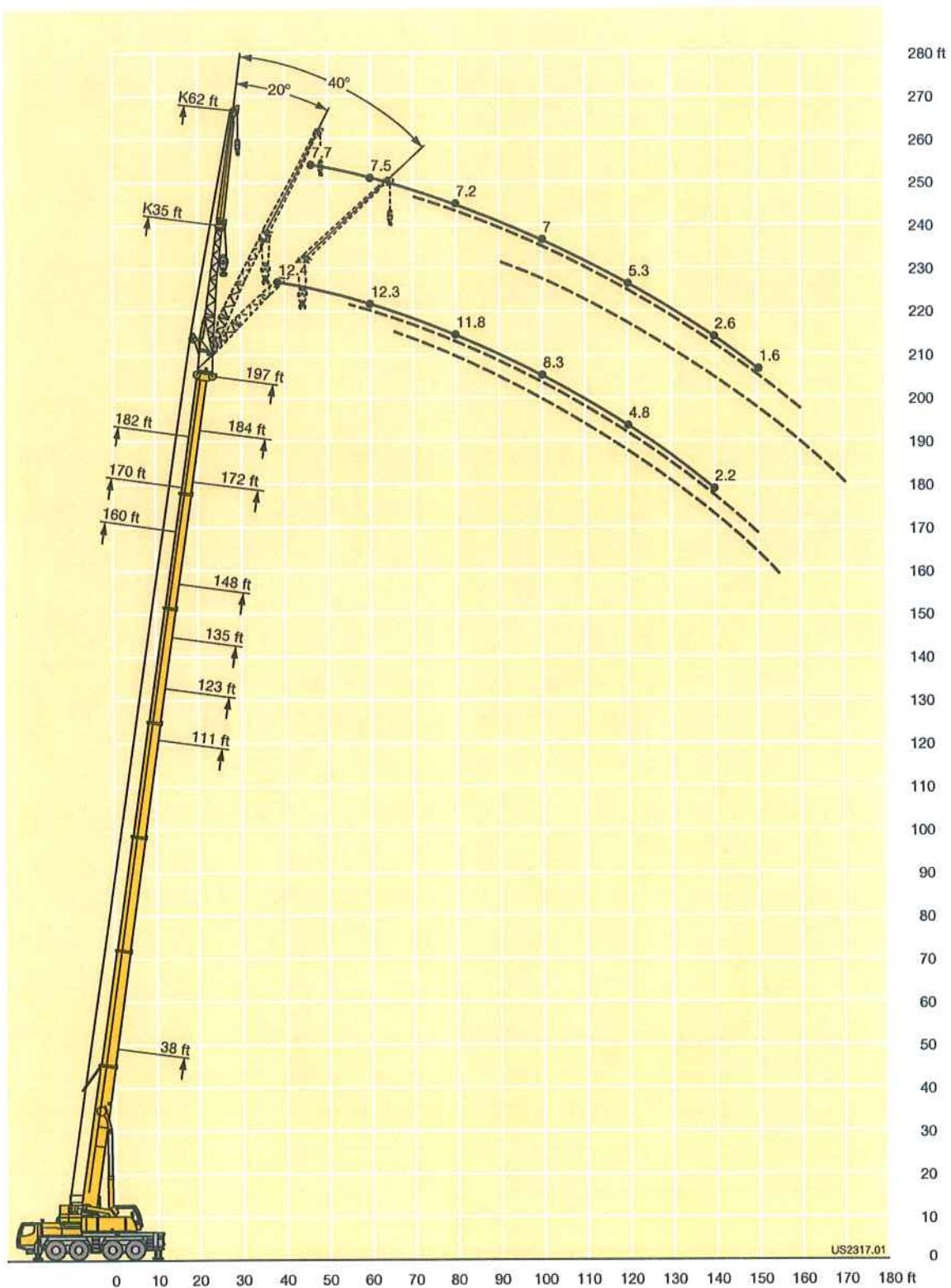
Lifting capacities on the hydraulically or mechanically variable folding jib

Forces de levage à la fléchette pliante à variation hydraulique ou mécanique

TK/TNZK

		38 - 197 ft			62 ft			360°			62200 lbs			85%						
		170 ft			172 ft			182 ft			184 ft			197 ft						
		62 ft			62 ft			62 ft			62 ft			62 ft			62 ft			
		0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	
36					10.1															36
38	9.3				10															38
40	9.2				9.9															40
45	9.1				9.9			8.4			8.8							7.7		45
50	8.9				9.8			8.4			8.7							7.6		50
55	8.8				9.6			8.3			8.6							7.5		55
60	8.8				9.5			8.2			8.6							7.5		60
65	8.6	8.2			9.3	8.6		8.2	7.9		8.4	8						7.5		65
70	8.6	8.2			9.3	8.5		8	7.8		8.4	7.9						7.4	7.3	70
75	8.5	8.1			9.2	8.4	7.7	7.9	7.7		8.3	7.8						7.3	7.3	75
80	8.3	7.9			9	8.3	7.7	7.9	7.7		8.2	7.7						7.2	7.2	80
85	8.2	7.9	7.5		8.8	8.2	7.5	7.9	7.5	7.3	8.2	7.7	7.3					7.1	7.1	85
90	8.2	7.8	7.5		8.7	8	7.5	7.8	7.5	7.3	8	7.7	7.3					7.1	7.1	90
95	8.1	7.7	7.4		8.5	7.9	7.5	7.7	7.5	7.3	7.9	7.6	7.3					7.1	7.1	95
100	7.9	7.7	7.3		8.3	7.9	7.4	7.7	7.4	7.3	7.8	7.5	7.3					7	7.1	100
105	7.9	7.5	7.3		8.2	7.7	7.3	7.5	7.3	7.3	7.5	7.5	7.3					6.8	7.1	105
110	7.8	7.5	7.3		7.8	7.7	7.3	7.3	7.3	7.3	7	7.3	7.3					6.5	6.9	110
115	7.6	7.5	7.3		7.3	7.6	7.3	6.9	7.3	7.3	6.3	7.3	7.3					5.9	6.7	115
120	7.2	7.4	7.3		6.6	7.4	7.3	6.4	7.2	7.2	5.5	7	7.2					5.3	6.4	120
125	6.6	7.3	7.3		5.9	7.2	7.3	5.7	7	7	4.8	6.4	7					4.6	5.9	125
130	5.9	6.9	7.1		5.2	6.6	7.3	5	6.3	6.9	4.1	5.7	6.5					3.9	5.2	130
135	5.4	6.3	6.9		4.7	5.9	6.8	4.5	5.7	6.5	3.6	5	5.9					3.2	4.6	135
140	4.8	5.7	6.5		4.2	5.2	6.1	4	5	5.9	3.1	4.3	5.2					2.6	4	140
145	4.1	5.2	5.9		3.7	4.6	5.4	3.5	4.3	5.2	2.6	3.7	4.5					2.1	3.4	145
150	3.6	4.5	5.4		3.2	4.1	4.8	3	3.8	4.7	2.1	3.2	3.9					1.6	2.8	150
155	3.3	4	4.7		2.7	3.6	4.2	2.5	3.3	4.1	1.6	2.7	3.3					2.2	3.1	155
160	2.8	3.6	4.2		2.2	3.1	3.6	2	2.8	3.5		2.2	2.8					1.8	2.6	160
165	2.4	3.2	3.7		1.7	2.6	3		2.4	3			2.3					2.1		165
170	2	2.7	3.2		1.4	2	2.7		2	2.5			1.8					1.6		170
175	1.7	2.4	2.6			1.7	2.2		1.5	2										175
180		1.9	2.2				1.7													180
185		1.9																		185
190		1.4																		190

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Lifting capacities on the hydraulically or mechanically variable folding jib with boom extension
Forces de levage à la fléchette pliante à variation hydraulique
ou mécanique avec télescopage rallongé

**TVK/
TVNZK**

		38-197 ft T	23 ft V	35 ft K NZK	360°	62200 lbs	85%	38 ft + 23 ft			160 ft + 23 ft			170 ft + 23 ft			172 ft + 23 ft			182 ft + 23 ft			184 ft + 23 ft			195 ft + 23 ft			197 ft + 23 ft		
		35 ft	35 ft	35 ft	35 ft	35 ft	35 ft	35 ft	35 ft	35 ft	35 ft	35 ft	35 ft	35 ft	35 ft	35 ft	35 ft	35 ft	35 ft	35 ft	35 ft	35 ft	35 ft	35 ft	35 ft	35 ft	35 ft	35 ft	35 ft		
	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°	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°	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°			
9		12.4																													9
10		12.4																													10
11		12.4																													11
12		12.4																													12
13		12.4																													13
14		12.4																													14
15		12.3																													15
16		12.2																													16
17		12.1																													17
18		12.1																													18
20		12.1																													20
22		11.8 12.4																													22
24		11.6 12.3																													24
26		11.5 12.1																													26
28		11.4 11.9																													28
30		11.2 11.6																													30
32		10.7 11.2 11.7																													32
34		10.4 10.9 11.4																													34
36		10.2 10.6 11	12.4																												36
38		9.8 10.2 10.6	12.4																												38
40		9.4 9.8 10.3	12.3																												40
45		8.7 9 9.4	12.2																												45
50		8.1 8.3 8.7	12.1 12.4																												50
55		7.4 7.6 8	12 12.2																												55
60		6.7 7 7.4	11.9 11.8																												60
65		6.2 6.5 6.7	11.7 11.5 11.3																												65
70		5.7 6.1 6.3	11.4 11.2 11																												70
75		5.2 5.6	11.2 10.8 10.5																												75
80		4.7 4.9	10.9 10.5 10.1																												80
85		4.0 4.1 4.2	9.7 9.5 9.3																												85
90		3.7 3.8 3.9	9.2 8.9 8.7																												90
95		3.2 3.3 3.4	8.8 8.6 8.4																												95
100		2.7 2.8 2.9	8.3 8.1 8.0																												100
105		2.3 2.4 2.5	7.9 7.7 7.5																												105
110		2.0 2.1 2.2	7.5 7.3 7.1																												110
115		1.7 1.8 1.9	7.1 6.9 6.7																												115
120		1.4 1.5 1.6	6.7 6.5 6.3																												120
125		1.1 1.2 1.3	6.3 6.1 5.9																												125
130		0.8 0.9 1.0	5.9 5.7 5.5																												130
135		0.5 0.6 0.7	5.5 5.3 5.1																												135
140		0.2 0.3 0.4	5.1 4.9 4.7																												140
145		0.1 0.2 0.3	4.8 4.6 4.4																												145
150		0.0 0.1 0.2	4.5 4.3 4.1																												150
155		-0.1 -0.2 -0.3	4.2 4.0 3.8																												155
160		-0.2 -0.3 -0.4	3.8 3.6 3.4																												160
165		-0.3 -0.4 -0.5	3.4 3.2 3.0																												165
170		-0.4 -0.5 -0.6	2.9 2.7 2.5																												170

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Lifting capacities on the hydraulically or mechanically variable folding jib with boom extension

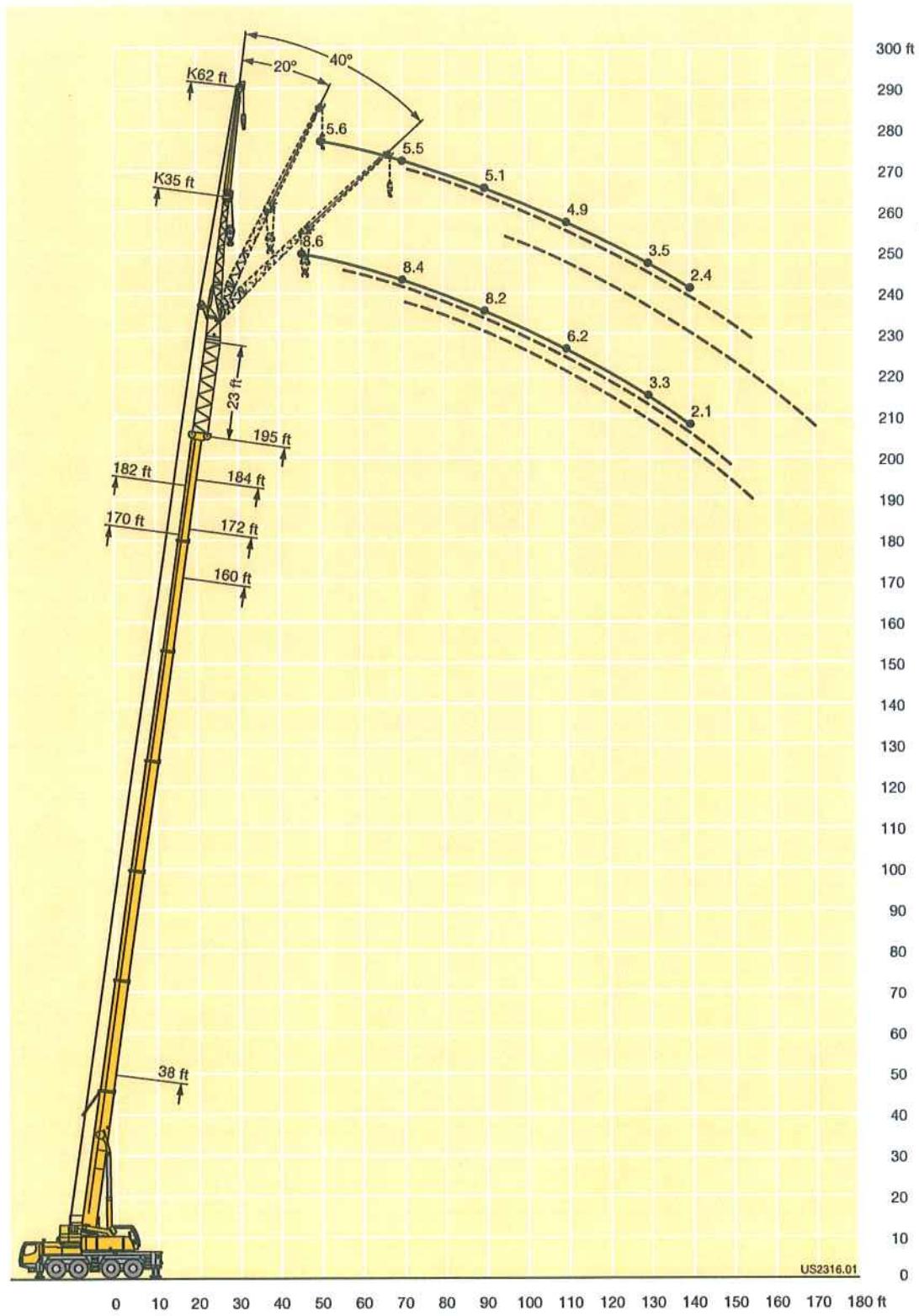
Forces de levage à la fléchette pliante à variation hydraulique ou mécanique avec télescope rallongé

**TVK/
TVNZK**



Jib length ft	38 ft + 23 ft			160 ft + 23 ft			170 ft + 23 ft			172 ft + 23 ft			182 ft + 23 ft			184 ft + 23 ft			195 ft + 23 ft			Jib length ft	
	62 ft			62 ft			62 ft			62 ft			62 ft			62 ft			62 ft				
	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°		
13	7.9																					13	
14	7.9																					14	
15	7.9																					15	
16	7.9																					16	
17	7.9																					17	
18	7.9																					18	
20	7.9																					20	
22	7.8																					22	
24	7.7																					24	
26	7.7																					26	
28	7.7																					28	
30	7.7																					30	
32	7.7																					32	
34	7.6																					34	
36	7.5	7.3																				36	
38	7.5	7.3																				38	
40	7.5	7.3																				40	
45	7.1	7.3	7.9				6.8			7.3												45	
50	6.8	7	7.8				6.8			7.1			6.2			6.4			5.6			50	
55	6.4	6.7	7.7				6.8			7.1			6.2			6.4			5.5			55	
60	5.9	6.3	6.6	7.7			6.6			7.1			6.2			6.4			5.5			60	
65	5.6	6	6.2	7.7			6.6			7.1			6.2			6.4			5.5			65	
70	5.2	5.7	5.9	7.7	7.3		6.6	6.2		7.1	6.6	6			6.4	6		5.5			70		
75	5	5.3	5.5	7.6	7.3		6.6	6.2	7	6.6	6	5.7		6.3	6		5.4	5.3			75		
80	4.8	5	5.3	7.5	7.3		6.6	6.2	6.8	6.6	6	5.7		6.2	6		5.3	5.3			80		
85	4.4	4.7	5.1	7.5	7.3	6.8	6.6	6.2	6.8	6.6	6	5.7		6.2	6		5.3	5.3			85		
90	4.3	4.5	4.8	7.3	7.1	6.7	6.5	6.2	6	6.8	6.6	6.4	6	5.7	5.5	6.2	6	5.7	5.1	5.3		90	
95	4	4.2	4.4	7.2	6.8	6.5	6.4	6.1	6	6.7	6.5	6.4	6	5.7	5.5	6.2	6	5.7	5.1	5.3	5.1		95
100	3.7	3.9	7	6.6	6.3	6.3	6	6	6.6	6.3	6.3	5.9	5.7	5.5	6.2	6	5.7	5	5.2	5.1		100	
105	3.5	3.8	6.8	6.4	6.2	6.2	6	6	6.4	6.2	6.2	5.7	5.5	5.5	6.2	6	5.7	4.9	5.1	5.1		105	
110			6.5	6.2	6	6	5.8	5.8	6.4	6.2	6	5.7	5.5	5.5	6	5.8	5.7	4.9	5.1	5.1		110	
115			6.3	6.1	6	5.8	5.6	5.6	6.2	6.1	5.8	5.6	5.5	5.4	5.6	5.7	5.6	4.7	5.1	5.1		115	
120			6.1	5.9	5.9	5.7	5.5	5.5	5.8	5.9	5.7	5.4	5.5	5.3	5	5.7	5.5	4.5	5	5.1		120	
125			5.9	5.7	5.7	5.5	5.3	5.3	5.5	5.7	5.5	5	5.3	5.3	4.4	5.5	5.5	4.1	4.8	5.1		125	
130			5.6	5.6	5.6	5.3	5.3	5.3	4.8	5.6	5.5	4.5	5.1	5.1	3.7	5.2	5.3	3.5	4.7	4.9		130	
135			5.1	5.4	5.4	4.8	5.2	5.2	4.3	5.3	5.4	4	4.9	5.1	3.2	4.6	5.2	2.9	4.3	4.9		135	
140			4.6	5.2	5.2	4.2	5	5	3.7	4.9	5.2	3.5	4.6	5	2.6	3.9	4.9	2.4	3.8	4.6		140	
145			3.9	5	5.1	3.7	4.8	4.8	3	4.3	5	2.8	4.1	4.8	2.1	3.2	4.3	3.2	4.1			145	
150			3.4	4.5	4.9	3.2	4.3	4.7	2.5	3.7	4.5	2.3	3.4	4.3	1.6	2.7	3.7	2.6	3.6			150	
155			3	4	4.6	2.7	3.8	4.4	2.2	3.1	4	1.9	2.9	3.8	2.2	3.1		2	3			155	
160			2.6	3.5	4.2	2.3	3.3	3.9	1.7	2.6	3.4	2.5	3.3		1.7	2.6			2.4			160	
165			2.1	3	3.7	1.9	2.8	3.4	2.1	2.8		2.1	2.8			2.1			1.9			165	
170			1.8	2.5	3.2	2.3	2.9		1.8	2.5	2	1.6	2.3	1.8			1.6			1.4		170	
175			2.1	2.6		1.9	2.4														175		
180			1.8	2.5	2.1		2														180		

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Lifting capacities on the hydraulically or mechanically variable folding jib with boom extension

Forces de levage à la fléchette pliante à variation hydraulique ou mécanique avec télescope rallongé

**TVK/
TVNZK**

		38-195 ft			46 ft			35 ft			T			V			K			360°			62200 lbs			85%			
		38 ft + 46 ft			160 ft + 46 ft			170 ft + 46 ft			172 ft + 46 ft			182 ft + 46 ft			184 ft + 46 ft			195 ft + 46 ft									
		35 ft			35 ft			35 ft			35 ft			35 ft			35 ft			35 ft			35 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°	
11		8.4																											11
12		8.4																											12
13		8.4																											13
14		8.4																											14
15		8.4																											15
16		8.2																											16
17		8.2																											17
18		8.2																											18
20		8.2																											20
22		8.2																											22
24		8.1																											24
26	8	8.4																											26
28	7.9	8.3																											28
30	7.9	8.2																											30
32	7.8	8.2																											32
34	7.6	8.1																											34
36	7.5	7.9	8.2																										36
38	7.4	7.8	8																										38
40	7.2	7.6	7.9																										40
45	6.9	7	7.4	8.2																									45
50	6.4	6.6	6.9	8.2																									50
55	5.9	6.1	6.4	8.1	8.2																								55
60	5.5	5.7	5.9	7.9	8.1																								60
65	5.1	5.3	5.6	7.9	8	8.2																							65
70	4.8	5	5.2	7.8	7.9	7.9																							70
75	4.4	4.7	4.9	7.6	7.8	7.6																							75
80	4.2	4.4	4.5	7.5	7.5	7.4																							80
85	4	4.2	4.2	7.5	7.3	7.1																							85
90	3.7	3.9	4	7.2	7	6.9																							90
95	3.4	3.5	3.8	7	6.7	6.6																							95
100				6.7	6.6	6.3																							100
105				6.4	6.4	6.2																							105
110				6.2	6.1	6																							110
115				6.1	5.8	5.8																							115
120				5.8	5.7	5.7																							120
125				5.5	5.5	5.5																							125
130				5	5.3	5.3																							130
135				4.3	4.9	5																							135
140				3.8	4.3	4.6																							140
145				3.2	3.7	4.1																							145
150				2.7	3.2	3.6																							150
155				2.2	2.7	3.1																							155
160				1.8	2.3	2.6																							160
165				1.9	2.1																								165
170				1.4	1.6																								170

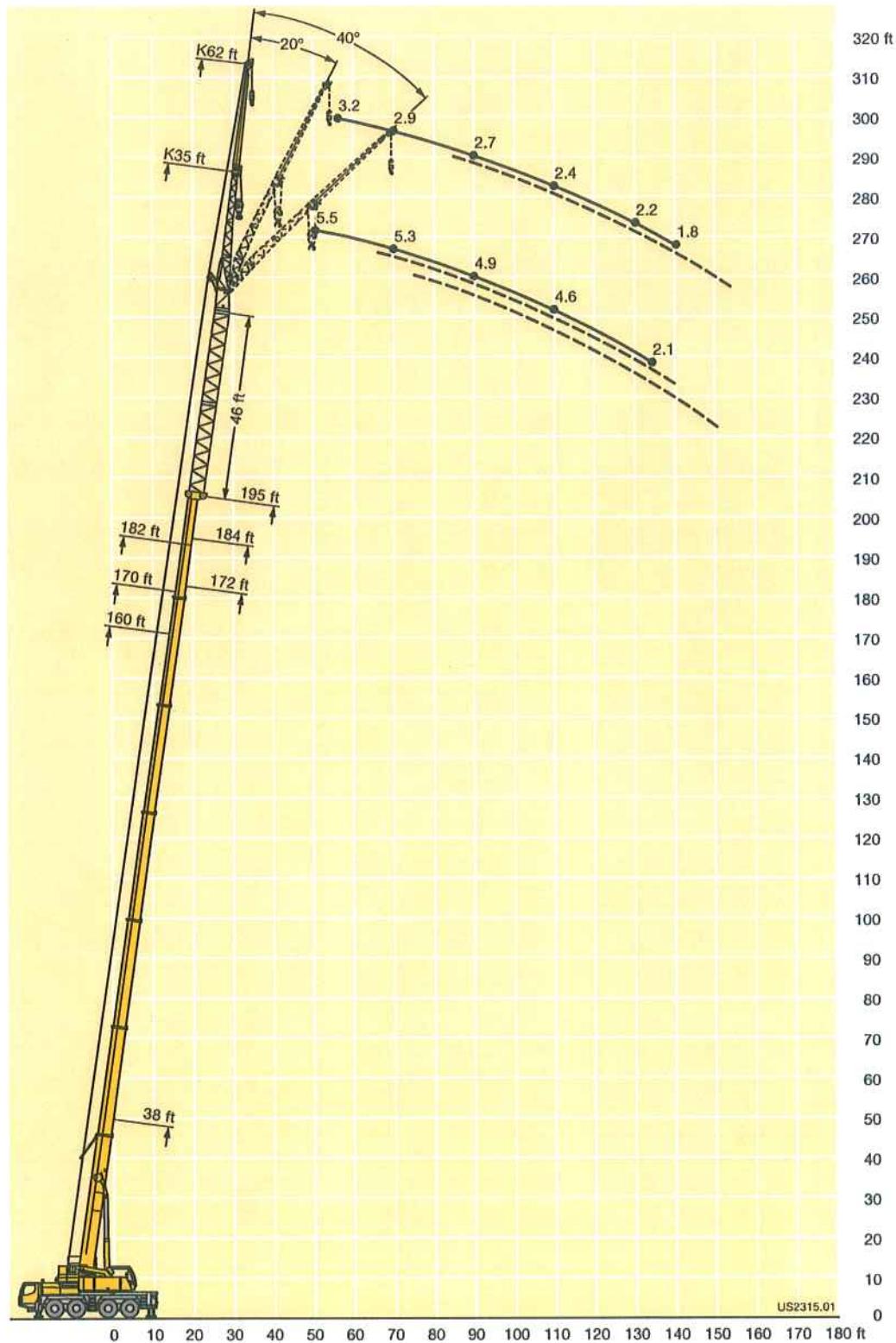
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Lifting capacities on the hydraulically or mechanically variable folding jib with boom extension
Forces de levage à la fléchette pliante à variation hydraulique ou mécanique avec télescopage rallongé

**TVK/
TVNZK**

		38 - 195 ft T	46 ft V	62 ft K NZK	360°	62200 lbs	85%												
ft	38 ft + 46 ft 62 ft	160 ft + 46 ft 62 ft			170 ft + 46 ft 62 ft			172 ft + 46 ft 62 ft			182 ft + 46 ft 62 ft			184 ft + 46 ft 62 ft			195 ft + 46 ft 62 ft		
		0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°
16	5.5																		16
17	5.5																		17
18	5.5																		18
20	5.5																		20
22	5.4																		22
24	5.3																		24
26	5.3																		26
28	5.3																		28
30	5.3																		30
32	5.3																		32
34	5.3																		34
36	5.3																		36
38	5.2																		38
40	5.1	5.5																	40
45	5.1	5.3	5.5																45
50	4.9	5.3	5.4		4.6	4.9									4.4				50
55	4.8	5.2	5.3		4.6	4.9									4.1	4.3		3.2	55
60	4.6	5	5.3		4.6	4.9									4	4.2		3.1	60
65	4.4	4.7	4.9	5.3		4.6	4.9								4	4.2		2.9	65
70	4.1	4.5	4.7	5.3	5.4		4.5	4.7							4	4.2		2.9	70
75	3.9	4.2	4.4	5.2	5.3		4.4	4.6	4.6	4.9					3.9	4	4.1	4.3	2.8
80	3.7	3.9	4.2	5.1	5.3		4.4	4.6	4.6	4.9					3.8	4	4	4.2	2.7
85	3.5	3.8	4	5.1	5.3		4.4	4.6	4.6	4.9					3.8	4	4	4.2	2.7
90	3.2	3.6	3.8	5.1	5.1	5.1		4.4	4.6	4.6	4.9				3.6	4	4	4.2	2.7
95	3	3.3	3.5	5.1	5.1	5		4.4	4.6	4.6	4.7	4.6			3.5	3.9	3.9	4.1	4.2
100	2.8	3	3.3	5	5	4.8		4.4	4.6	4.6	4.6	4.6			3.5	3.8	3.8	4	4.1
105	2.7	2.9	3.1	4.9	4.9	4.6		4.4	4.4	4.6	4.6	4.6			3.5	3.8	3.8	4	4
110	2.5	2.7	2.9	4.7	4.7	4.6		4.2	4.2	4.5	4.5	4.5			3.4	3.6	3.6	3.8	4
115	2.3	2.5	2.8	4.6	4.5	4.5		4.2	4.2	4.4	4.4	4.4			3.3	3.5	3.5	3.8	4
120	2.1	2.4	2.6	4.6	4.4	4.4		4.1	4.1	4.4	4.4	4.4			3.3	3.5	3.5	3.8	3.9
125	2	2.2	2.4	4.4	4.4	4.2		4	4	4.2	4.2	4.2			3.3	3.5	3.5	3.8	3.9
130	1.8			4.2	4.2	4.2		3.8	3.8	4	4	4			3.3	3.4	3.2	3.6	3.8
135				4.1	4.1	4.1		3.8	3.8	3.6	4	4			3.2	3.4	3.2	3.6	3.8
140				3.8	3.9	3.9		3.6	3.7	3.1	3.8	3.9			2.9	3.3	2.7	3.5	3.8
145				3.5	3.8	3.8		3.2	3.5	2.6	3.5	3.8			2.4	3.3	2.8	3.5	3.8
150				3	3.8	3.8		2.7	3.3	2.1	3.2	3.8			1.9	2.9	2.3	3.3	3.8
155					2.5	3.5	3.6	2.2	3	1.7	2.7	3.5			2.5		1.8	2.8	2.2
160					2	3.1	3.4	1.7	2.7		2.3	3.1			2			2.2	2.2
165						2.6	3.2		2.3			2.6							165
170						2	2.7		1.8			2							170
175							1.7	2.2							1.5				175
180								1.8											180

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Lifting capacities on the erection jib
Forces de levage à la fléchette de montage

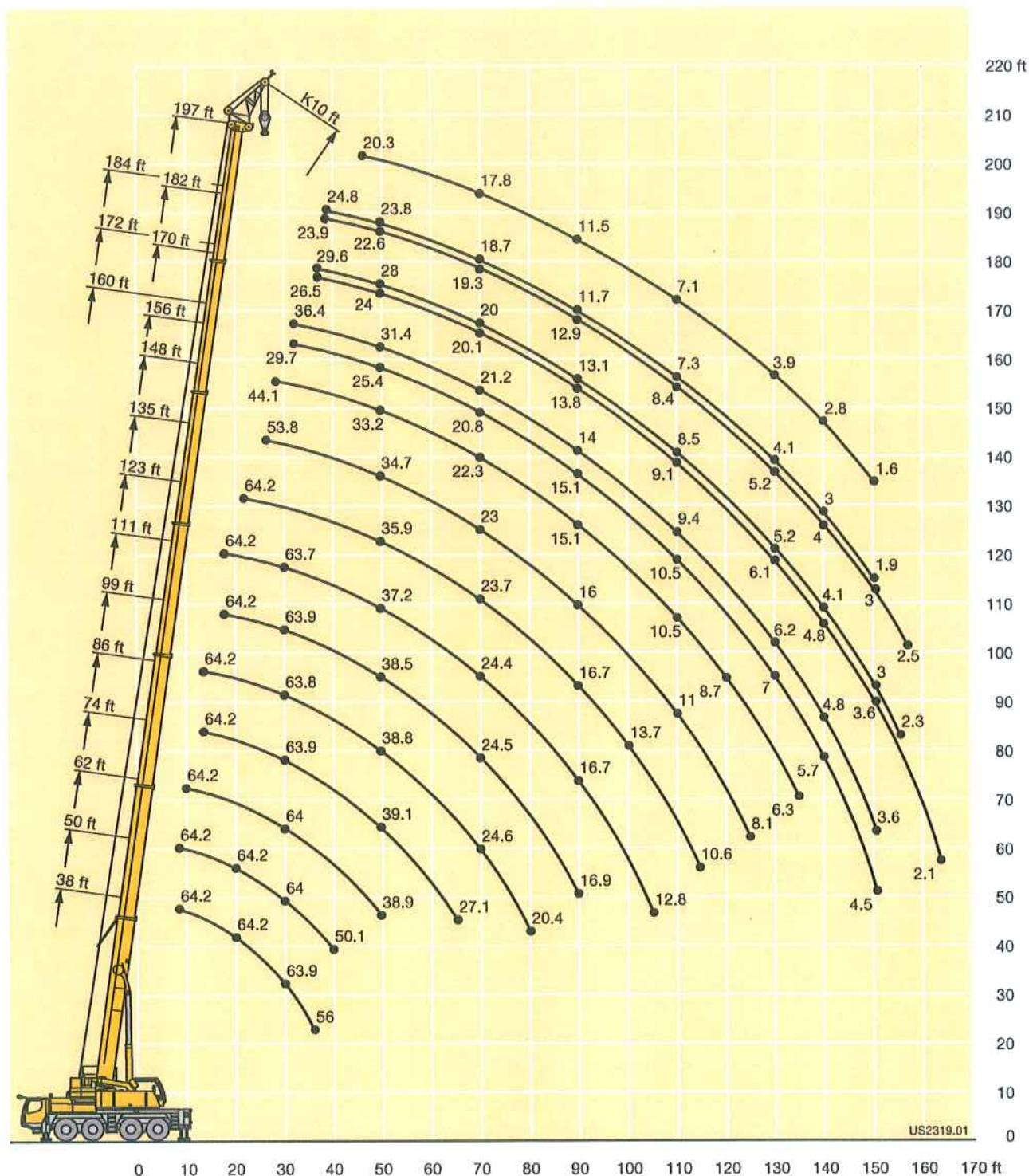
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	38 - 197 ft	10 ft	K	360°	62200 lbs	85%												
ft	38 ft	50 ft	62 ft	74 ft	86 ft	99 ft	111 ft	123 ft	135 ft	148 ft	156 ft	160 ft	170 ft	172 ft	182 ft	184 ft	197 ft	ft
9	64.2	64.2																9
10	64.2	64.2	64.2															10
11	64.2	64.2	64.2															11
12	64.2	64.2	64.2															12
13	64.2	64.2	64.2	64.2	64.2													13
14	64.2	64.2	64.2	64.2	64.2													14
15	64.2	64.2	64.2	64.2	64.2													15
16	64.2	64.2	64.2	64.2	64.2													16
17	64.2	64.2	64.2	64.2	64.2													17
18	64.2	64.2	64.2	64.2	64.2	64.2												18
20	64.2	64.2	64.2	64.2	64.2	64.2	64.2											20
22	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2										22
24	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.1									24
26	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64	53.8								26
28	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	63.5	53.3	44.1							28
30	63.9	64	64	63.9	63.8	63.8	63.9	63.7	62.4	52.8	43.8							30
32	63	63.2	63.3	62.8	62.3	62.7	62	59.7	52.1	43.5	29.7	36.4						32
34	60.1	60.5	60.8	60.3	60.1	60.3	59	56.5	50.9	43.2	29.3	36.1						34
36	56	56.6	57.1	56.8	57.2	57	55.1	52.9	49.2	42.8	28.9	35.7	26.5	29.6				36
38		53.2	53.5	53.8	54	53.5	52.1	49.5	46.7	42.1	28.5	35.6	26.1	29.4	23.9	24.8		38
40		50.1	50.4	51	51	50.3	49.2	46.4	44.3	41.1	28.1	35.3	25.7	29.3	23.8	24.7		40
45		44.2	44.6	44.2	43.6	42.3	40.6	39.1	36.9	36.7	34	24.9	28.8	23.2	24.3	20.3		45
50		38.9	39.1	38.8	38.5	37.2	35.9	34.7	33.2	25.4	31.4	24	28	22.6	23.8	20.2		50
55			34.4	34.1	34.1	33.1	32.1	31	29.6	24.1	28.4	23.1	26.4	21.9	23.3	19.9		55
60			30.5	30	30.1	29.7	29	27.9	26.5	23	25.4	22.1	24.1	21.2	22.4	19.5		60
65			27.1	26.7	27.3	26.8	26	25.2	24.1	22	23.4	21.1	22.3	20.4	20.9	19		65
70			24.6	24.5	24.4	23.7	23	22.3	20.8	21.2	20.1	20	19.3	18.7	17.8			70
75			22.6	22	22.1	21.5	21	20.5	19.5	19.1	18.7	17.9	17.7	16.6	16.2			75
80			20.4	19.8	20.1	19.5	19.2	18.5	18.1	17.2	17	16.1	15.9	14.8	14.4			80
85			18	18.4	18.2	17.5	16.7	16.6	15.5	15.3	14.4	14.2	13.1	12.9	12.5			85
90			16.9	16.7	16.7	16	15.1	15.1	14	13.8	13.1	12.9	11.7	11.5	11.5			90
95				15.3	15.1	14.6	13.8	13.7	12.7	12.5	11.7	11.6	10.5	10.3	10.3			95
100					14	13.7	13.3	12.6	12.5	11.5	11.3	10.5	10.4	9.3	9.1			100
105						12.8	12.6	12.1	11.5	11.5	10.4	10.1	9.5	9.3	8.2	7.9		105
110						11.6	11	10.5	10.5	9.4	9.1	8.5	8.4	7.3	7.1			110
115						10.6	9.9	9.6	9.6	8.5	8.2	7.6	7.5	6.5	6.3			115
120							8.9	8.7	8.7	7.7	7.5	6.7	6.6	5.6	5.4			120
125							8.1	7.9	7.9	7	6.8	5.9	5.9	4.8	4.6			125
130								7	7	6.2	6.1	5.2	5.2	4.1	3.9			130
135									6.3	6.3	5.5	5.5	4.7	4.6	3.6	3.4		135
140										5.7	4.8	4.8	4.1	4	3	2.8		140
145										5	4.1	3.5	3.5	2.4	2.1			145
150										4.5	3.6	3	3	1.9	1.6			150
155											3.1	2.3	2.5					155
160											2.6							160
165											2.1							165

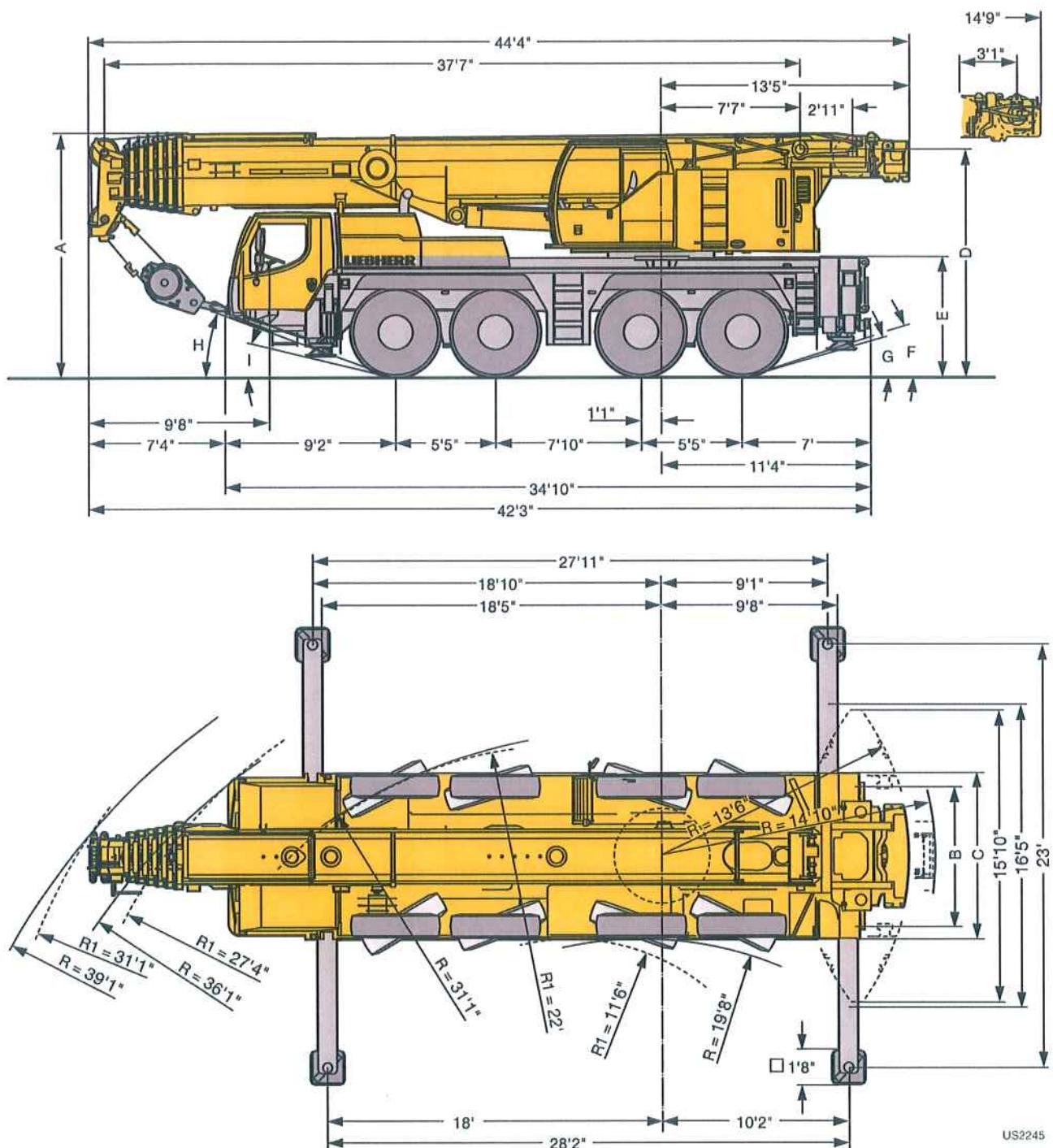
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Lifting heights
Hauteurs de levage

TK



**Dimensions
Encombrement**



R_i = All-wheel steering · Direction toutes roues

	A	B	C	D	E	F	G	H	I	Dimensions · Encombrement
16.00 R 25	13'1"	7'7"	9'	12'2"	6'4"	18°	14°	21°	15°	
20.5 R 25	13'1"	7'9"	9'6"	12'2"	6'4"	18°	17°	21°	15°	

Weights Poids



Axle Essieu	1	2	3	4	Total weight lbs Poids total lbs
lbs	26400	26400	26400	26400	105600 ^a

^a with 5500 lbs counterweight · avec contrepoids 5500 lbs



Load (kips) Forces de levage kips	No. of sheaves Poulies	No. of lines Brins	Weight lbs Poids lbs
220.5	7	14	2730
167.6	5	11	1540
110.2	3	7	1540
48.5	1	3	990
16.5	-	1	550

Working speeds Vitesses



16.00 R 25	20.5 mph	1	2	3	4	5	6	7	8	9	10	11	12	R 1	R 2	48 %
		1.28 - 3.7	4.8	6.2	8	10.1	13	17	21.9	28.2	36.2	46	50	1.4 - 4	5.2	



Drive Mécanismes	Infinitely variable en continu	Rope diameter / length Diamètre / Longueur du câble	Max. single line pull Effort au brin maxi.
	0 - 377 ft/min single line ft/min au brin simple	0'7" / 820'	17310 lbs
	0 - 377 ft/min single line ft/min au brin simple	0'7" / 820'	17310 lbs
	0 - 1.7 rpm		
	approx. 60 seconds to reach 82° boom angle env. 60 s jusqu'à 82°		
	approx. 400 seconds for boom extension from 38 ft - 197 ft env. 400 s pour passer de 38 ft - 197 ft		

Equipment Equipement

Crane carrier

Frame	Self-manufactured, torsion-resistant box-type design of high-tensile fine grained structural steel.
Outriggers	4-point supporting system, hydraulically telescopic into horizontal and vertical direction. Operation with remote control, automatic support leveling, electronic inclination display.
Engine	6-cylinder Diesel, make Liebherr, type D846 A7, watercooled, output 350 kW (476 h.p.) at 1900 rpm, max. torque 1645 lbs-ft at 1100 rpm – 1500 rpm. Exhaust emissions acc. to 97/68/EG stage 3 and EPA/CARB Tier 3. Fuel reservoir: 106 gallons.
Transmission	ZF 12-speed gear box with automatic control system AS-TRONIC. ZF-intarder fitted directly to the gear. Two-stage transfer case with lockable transfer differential.
Axes	Welded design, made of high-tensile fine grained steel. All axles steerable. Axles 2, 3 and 4 are planetary axles with differential locks.
Suspension	All axles are mounted on hydropneumatic suspension – "Niveumatik suspension" and are lockable hydraulically.
Tyres	8 tyres, size: 16.00 R 25.
Steering	ZF-servocom power steering, dual circuit system, with hydraulic servo system and auxiliary pump circuit. 1. and 2. axle mechanically, 3. and 4. axle hydromechanically speed regulated steered. Steering acc. to EC directive 70/311 EEC.
Brakes	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 1, 2 and 4. Sustained-action brake: Exhaust retarder with additional Liebherr braking system. Anti-lock device in conjunction with anti-skid control. Brakes acc. to EC directive 70/311 EEC.
Driver's cab	Spacious, steel made, corrosion resistant cab, cataphoretic dip-primed, on resilient suspension with hydraulic shock absorbers, sound and heat absorbing internal panelling acc. to EC directive, safety glazing, operating and control instruments, comfortably equipped.
Electrical system	Modern data bus technique, 24 Volt DC, 2 batteries of 170 Ah each, lighting acc. to traffic regulations.

Crane superstructure

Frame	Liebherr-manufactured, torsionally rigid steel construction made from high-tensile fine-grain steel. Triple-roller slewing rim.
Crane engine	4-cylinder Diesel, make Liebherr, type D934L A6, watercooled, output 129 kW (175 h.p.) at 1800 rpm, max. torque 601 lbs-ft at 1100 rpm – 1500 rpm. Exhaust emissions acc. to 97/68/EG stage 3a and EPA/CARB Tier 3. Fuel reservoir: 66 gallons.
Crane drive	Diesel-hydraulic, with 1 axial piston variable displacement pump, with servo-control and capacity control, 1 double gear pump, open controlled oil circuits. Compact hydraulic drive flanged to the Diesel engine. Drive assembly completely enclosed for noise abatement.
Control	Electric „Load Sensing“ control, simultaneous operation of 4 working motions, 2 self-centering hand control levers (joy-stick type).
Hoist gear	Axial piston fixed displacement motor, hoist drum with integrated planetary gear and spring-loaded static brake.
Luffing gear	1 differential ram with safety check valves.
Slewing gear	Axial piston fixed displacement motor, planetary gear, spring-loaded static brake. Slewing gear inversible from released to locked as standard feature.
Crane cab	All-steel construction, entirely galvanized, powder coated, with safety glazing, operating and control instruments, comfortably equipped, cab tilttable backwards.
Safety devices	LICCON2 safe load indicator, test system, hoist limit switch, safety valves to prevent pipe and hose ruptures.
Telescopic boom	Buckling and torsion resistant design of high-tensile structural steel, ovoid boom profile, 1 base section and 6 telescopic sections. All telescopic sections hydraulically extendable independent of one another. Rapid-cycle telescoping system "Telematik". Boom length: 38 ft – 197 ft.
Counterweight	37900 lbs basic counterweight.
Electrical system	Modern data bus technique, 24 Volt DC, 2 batteries of 170 Ah each.

Additional equipment

Swing-away jib	35 ft – 62 ft long, mountable to the telescopic boom at 0°, 20° or 40°. Hydraulic ram for operating the swing-away jib from 0° – 40° (option).
Telescopic boom extension	23 ft – 46 ft long lattice section, thus higher pinning point for swing-away jib.
2nd hoist gear	For two-hook operation or for operation with swing-away jib if the hoist rope shall remain reeved.
Tyres	8 tyres, size 20.5 R 25.
Drive 8 x 8	Additional drive of the 1 st axle.
Additional counterweight	24300 lbs for a total counterweight of 62200 lbs.

Other items of equipment available on request.

Equipment Equipement

Châssis porteur

Cadre	Châssis résistant à la torsion de fabrication Liebherr, en acier à grains fins très résistant.
Calage	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.
Moteur	Moteur diesel, 6 cylindres, fabriqué par Liebherr, de type D846 A7, à refroidissement par eau, de 350 kW (476 ch) à 1900 rpm, couple max. 1645 lbs·ft à 1100 rpm – 1500 rpm. Emissions des gaz d'échappement conformes aux directives 97/68/EG partie 3 et EPA/CARB Tier 3. Capacité du réservoir à carburant: 66 gallons.
Boîte de vitesse	Boîte de vitesses ZF à 12 rapports, mécanisme automatisé à commande AS-TRONIC. Ralentiisseur hydrodynamique ZF directement accouplé à la boîte. Boîte de transfert à 2 étages avec blocage de différentiel.
Essieux	Construction soudée en acier à haute résistance fins grains. Tous les essieux directeurs. Essieux 2, 3 et 4 planétaires avec blocage différentiel.
Suspension	Suspension hydropneumatique «Niveumatik» – sur tous les essieux. Chaque essieu peut être bloqué hydrauliquement.
Pneumatiques	8 pneus de taille: 16.00 R 25.
Direction	Direction hydraulique ZF-servocom, à deux circuits, assistée hydrauliquement, avec pompe auxiliaire entraînée par essieu. 1er et 2ème essieu dirigés mécaniquement en fonction de la vitesse, 3ème et 4ème essieu dirigés électrohydrauliquement en fonction de la vitesse. Direction conforme aux directives européennes CE 70/311 EWG.
Freins	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 1,2 et 4. Frein à régime continu: Ralentiisseur sur échappement avec système de freinage additionnel Liebherr. Dispositif anti-enrayeur avec contrôle antipatinage. Freins selon directive CE 70/311 EWG.
Cabine du conducteur	Cabine spacieuse en tôle d'acier, traitement anticorrosion par bain de cataphorèse, avec suspension élastique et amortisseurs hydrauliques, revêtement intérieur avec isolation phonique et thermique selon les directives européennes, glaces de sécurité, appareils de commande et de contrôle, équipement confortable.
Installation électrique	Technique moderne de transmission de données par BUS de données, courant continu 24 Volts, 2 batteries de 170 Ah chacune, éclairage conforme au code de la route.

Partie tournante

Cadre	Fabrication Liebherr, construction soudée indéformable, en acier à grain fin haute résistance. Couronne d'orientation à triple rangée de rouleaux.
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Moteur	Moteur diesel Liebherr, 4 cylindres, de type D934L A6, à refroidissement par eau, de 129 kW (175 ch) à 1800 rpm, couple max. 601 lbs·ft à 1100 rpm – 1500 rpm. Emissions des gaz d'échappement conformes aux directives 97/68/EG partie 3a et EPA/CARB Tier 3. Capacité du réservoir à carburant: 66 gallons.
Entraînement de la grue	Diesel hydraulique avec 1 pompe à débit variable à pistons axiaux, servocommande et régulation de la puissance, 1 double pompe à engrenages, circuits hydrauliques ouverts et réglés. Entraînement hydraulique compact, accouplé directement au moteur Diesel, mécanisme d'entraînement total fermé pour une bonneinsonorisation.
Commande	Direction électrique "Load Sensing", 4 mouvements de travail dirigeable simultanément, deux leviers de commande à 4 positions et à autocentrage.
Mécanisme de levage	Moteur à cylindrée constante et à pistons axiaux. Treuil équipé d'un engrenage planétaire et d'un frein d'arrêt commandé par ressort.
Mécanisme de relevage	1 vérin différentiel avec soupapes de retenue.
Dispositif de rotation	Moteur à cylindrée constante à pistons axiaux, réducteur planétaire, frein d'arrêt commandé par ressort. Commutation en série du mécanisme d'orientation: ouvert et en orientation freinée automatiquement.
Cabine du grutier	Construction en tôle d'acier entièrement zinguée avec peinture par poudrage et cuissage au four, avec glaces de sécurité, appareils de commande et de contrôle, équipement confortable. Cabine inclinable vers l'arrière.
Dispositif de sécurité	Contrôleur de charge, «LICCON2», système test, limitation de la course pour le levage, soupape de sûreté contre la rupture de tubes et de tuyaux.
Flèche télescopique	Flèche télescopique en acier à haute résistance à grains fins, à profil ovale, 1 élément de base et 6 éléments télescopiques. Tous les éléments télescopables indépendamment les uns des autres. Système de télescopage séquentiel rapide, «Telematik». Longueur de flèche: 38 ft – 197 ft.
Contrepoids	Plaque de base 37900 lbs.
Installation électrique	Technique moderne de transmission de données. Courant continu 24 Volts, 2 batteries de 170 Ah chacune.

Equipement supplémentaire

Flèchette pliante	Longueur: 35 ft – 62 ft, montable sous un angle de 0°, 20° ou 40°. Vérin hydraulique pour le relevage de la flèchette pliante de 0° à 40° (en option).
Rallonge flèche télescopique	Elément en treillis de 23 ft – 46 ft, de cette manière point d'articulation plus haute pour la flèche pliante.
2ème mécanisme de levage	Pour l'utilisation du deuxième crochet, ou bien pour une utilisation avec flèchette pliante lorsque le câble de levage principal rest mouflé.
Pneumatiques	8 pneus. Taille: 20.5 R 25.
Entraînement 8 x 8	Essieu 1 est entraîné additionnellement.
Contrepoids additionnel	24300 lbs pour un contrepoids total de 62200 lbs.

Autres équipements supplémentaires sur demande.

Remarks referring to load charts

1. The lifting capacities do not exceed 85 % of the tipping load according to ASME B 30.5.
2. The crane's structural steelwork is in accordance with EN 13000 and ASME B 30.5.
3. For the calculation of the load charts a minimum wind speed of 23 ft/s (7 m/s, 15.7 miles/hour) and regarding the load a sail area of 1.2 m² per ton of load are taken into account.
4. Lifting capacities are given in kips.
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 lifting capacities given for the telescopic boom apply if the folding jib is removed.
8. Subject to modification of lifting capacities.
9. Lifting capacities above 153.2 kips / 181.2 kips only with additional pulley block/special equipment.

Remarques relatives aux tableaux des charges

1. La capacité de charge ne doit pas dépasser 85 % de la charge de basculement conformément à ASME B 30.5.
2. La structure métallique de la grue est conforme à EN 13000 et ASME B 30.5.
3. Lors du calcul des tableaux des charges, un vent de 23 ft/s (7 m/s, 15,7 miles/hour) minimum et en ce qui concerne la charge, une surface au vent de 1,2 m² par tonne de capacité de charge sont respectés.
4. Les charges sont indiquées en kips.
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 charges indiquées pour la flèche télescopique sont valables lorsque la fléchette pliante est démontée.
8. Charges données sous réserve de modification.
9. Forces de levage plus de 153,2 kips / 181,2 kips seulement avec moufle additionnel/équipement supplémentaire.

Subject to modification / Sous réserve de modifications

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