



POWERLIFT 3000 · 拓力 3000

90 t capacity · 90 t 起重能力

Crawler Crane
履带起重机

DATASHEET METRIC

参数表 (公制)

POWERLIFT 3000

拓力 3000



WORKS FOR YOU.™

Key · 关键词汇	3
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Highlights · 技术亮点	4
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Specifications · 技术参数	5
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Specifications · 技术参数	5
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Main boom configurations · 主臂的配置	7
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Boom combinations · 臂杆组合	9
--------------------------	---

Main boom · 主臂	10
-----------------------	----

Working ranges · 工作范围	10
-----------------------	----

Lifting capacities · 起重能力	11
---------------------------	----

Fixed jib · 固定副臂	12
-------------------------	----

Working ranges · 工作范围	12
-----------------------	----

Lifting capacities · 起重能力	13
---------------------------	----

Technical description · 技术描述	14
-------------------------------------	----

Transport example · 运输实例	16
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Track · 履带



Load radius · 载荷半径



Main boom · 主臂



Fixed jib · 固定副臂



Main boom angle · 主臂角度



Fixed jib angle · 固定副臂角度

„D“



H: Main boom · 主臂

F: Fixed jib · 固定副臂

HIGHLIGHTS · 技术亮点

POWERLIFT 3000
拓力 3000

- ▶ 90 t lifting capacity at 4 m radius
- ▶ Closed circle slew system
- ▶ Imported load moment indicator for real time monitoring
- ▶ With colored touch screen
- ▶ Easy assembly and short rigging time

- ▶ 4 m半径内的90吨履带起重机
- ▶ 采用独立闭式回转系统，回转更稳定
- ▶ 进口力矩限制器，对作业力矩实时监控
- ▶ 进口控制器配以彩色显示屏
- ▶ 自拆装功能使组装拆卸极为简化，缩短装配拆卸时间



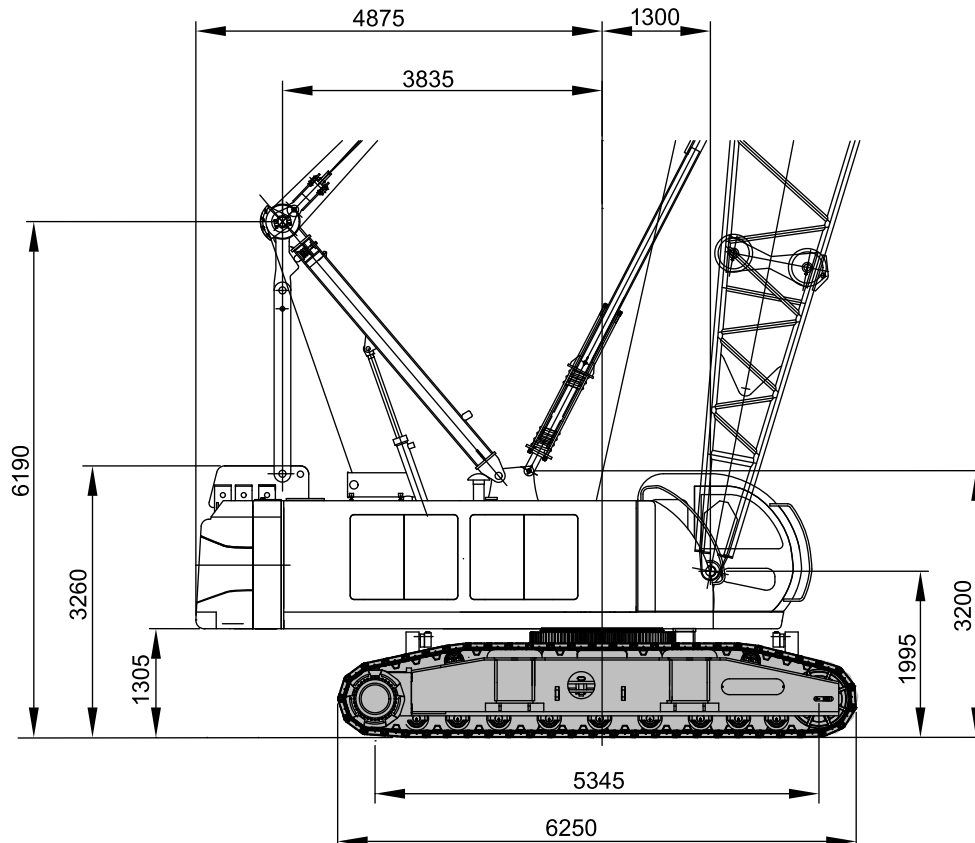
Working speeds · 工作速度

Mechanisms 机械部分	Rope \varnothing 钢绳 \varnothing	Speeds ¹⁾ 速度 ¹⁾	Single line pull ²⁾ 单绳拉力 ²⁾	Length of hoist rope 卷扬钢绳的长度
Hoist I (H1) 卷扬 I (H1)	26 mm	max. 77 m / min	111 kN / 100 kN	200 m
Hoist II (H2) 卷扬 II (H2)	26 mm	max. 77 m / min	141 kN / 125 kN	150 m
Boom derricking (W2) 主臂变幅 (W2)	22 mm	max. 17 m / min	90.2 kN / 78.5 kN	150 m
Slewing (rpm) 回转 (rpm)		1.9		

¹⁾ top layer · 顶层

²⁾ without / with reeving effect considered · 不考虑 / 考虑穿绳效率

Basic crane dimensions · 起重机基本尺寸

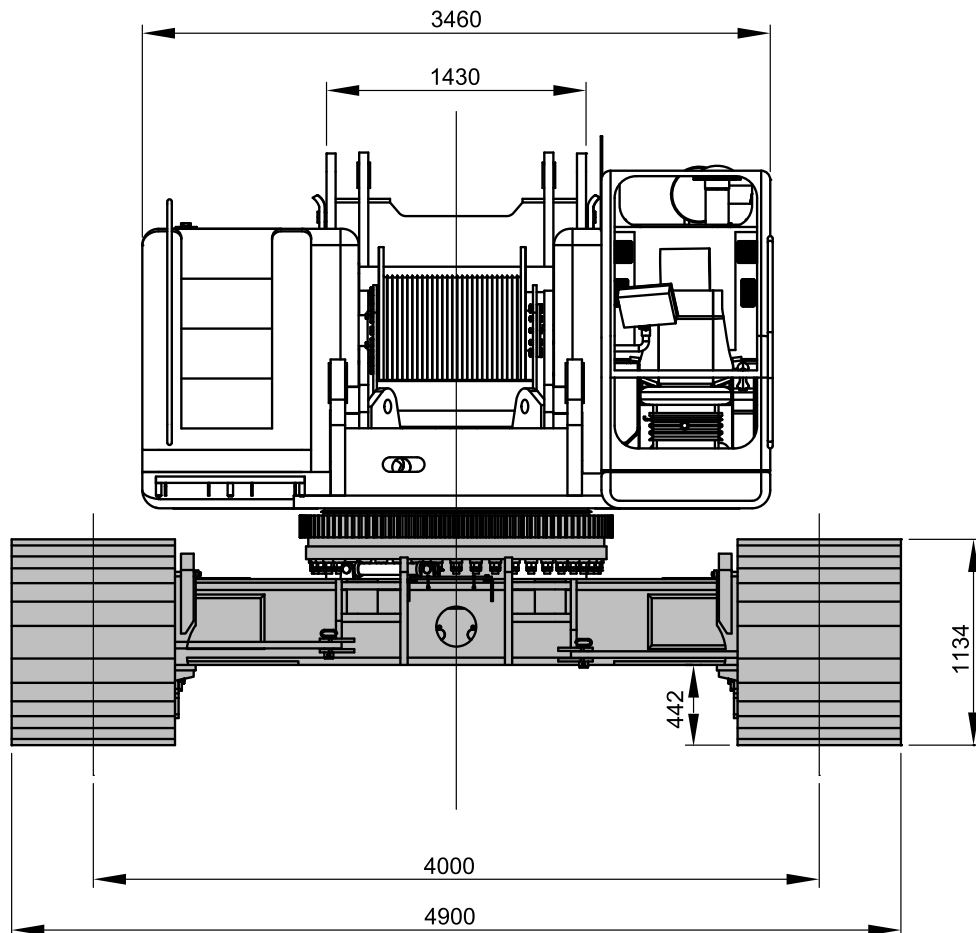


Carrier performance with standard drive · 带标准驱动的底盘性能

Travel speed · 行走速度	0-1.4 km/h
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Hook blocks · 吊钩

Type 类型	Possible load 可能的载荷	Number of sheaves 滑轮组数	Number of lines 绳数	Weight 重量	„D“
90	90 t	5	10	1.20 t	4,0 m
35	35 t	1	3	1.13 t	3,5 m
13.5	12 t	-	1	0.42 t	3,0 m



MAIN BOOM CONFIGURATIONS · 主臂的配置

POWERLIFT 3000
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Weights · 重量

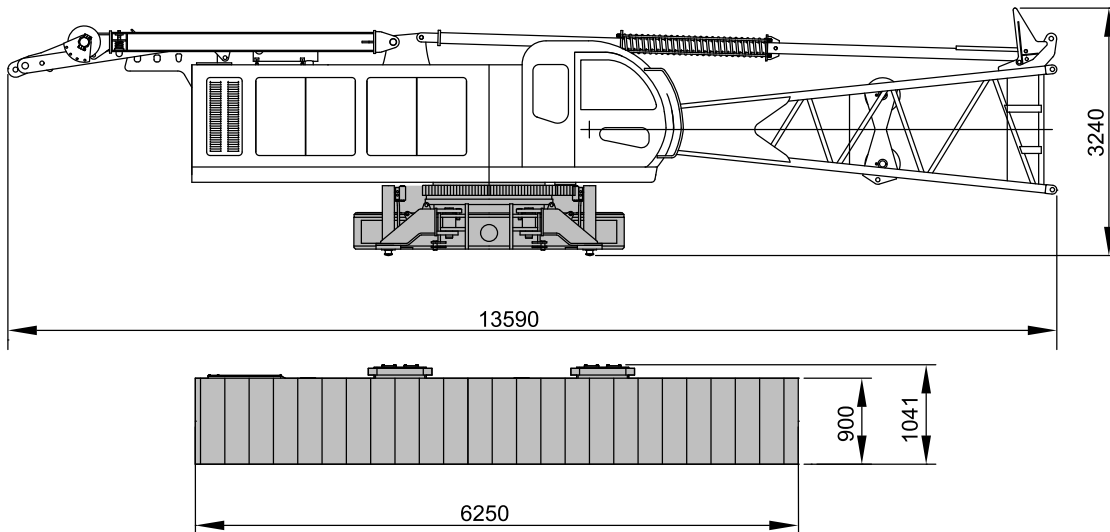
Total weight incl. counterweight 29.9 t, 12 m boom and hook block 总重量包括29.9吨的配重、12m的主臂和吊钩	95 t
Superstructure (with three drums, A-frame, A-frame cylinder, boom foot and boom backstops) 上车 (带有三个卷扬、A型架、A型架油缸、主臂根和主臂防后倾)	30.6 t
Car body 车体	12.4 t
Crawlers with standard drive 履带带有标准驱动器	10.4 t*2 t
Counterweight 配重	29.9 t

Ground pressure · 接地比压

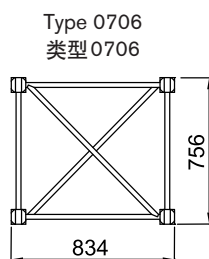
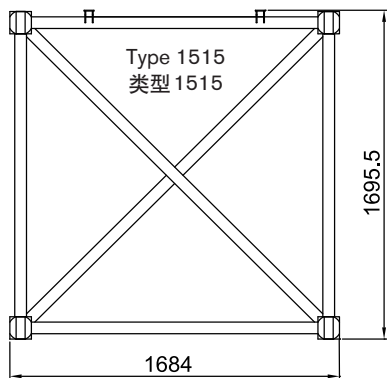
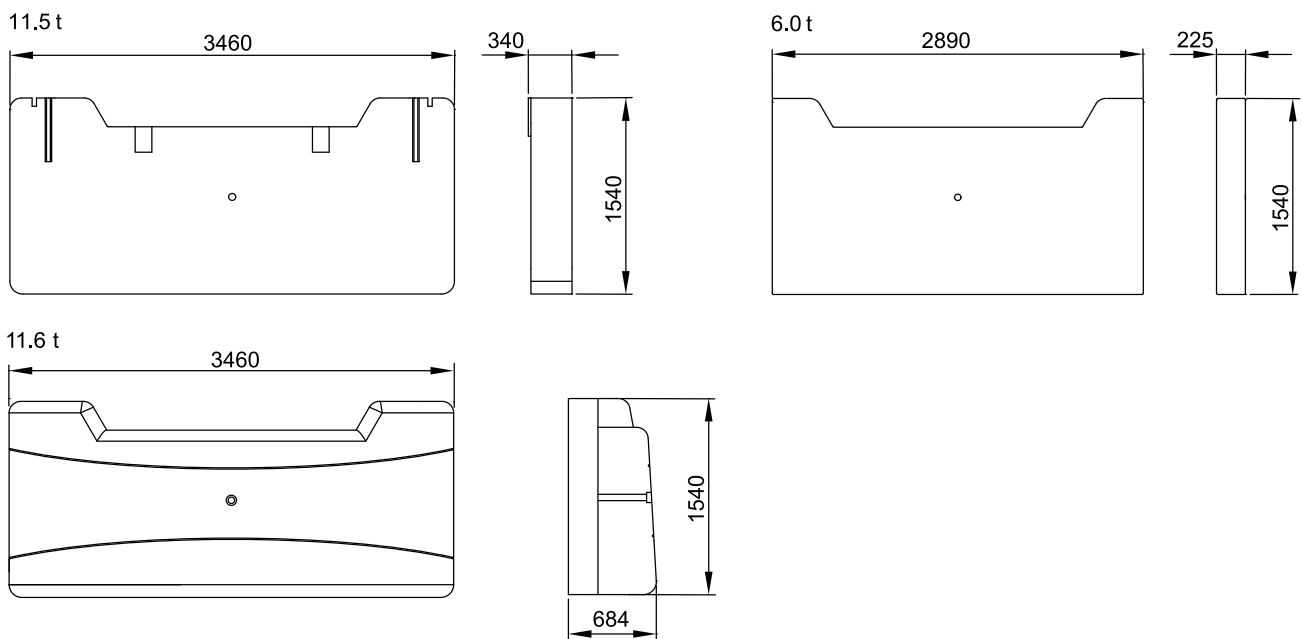
Ground pressure, based on 95 t total weight 基于 95 吨总重时的接地比压	9.02 N/cm ²
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MAIN BOOM CONFIGURATIONS · 主臂的配置

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拓力 3000

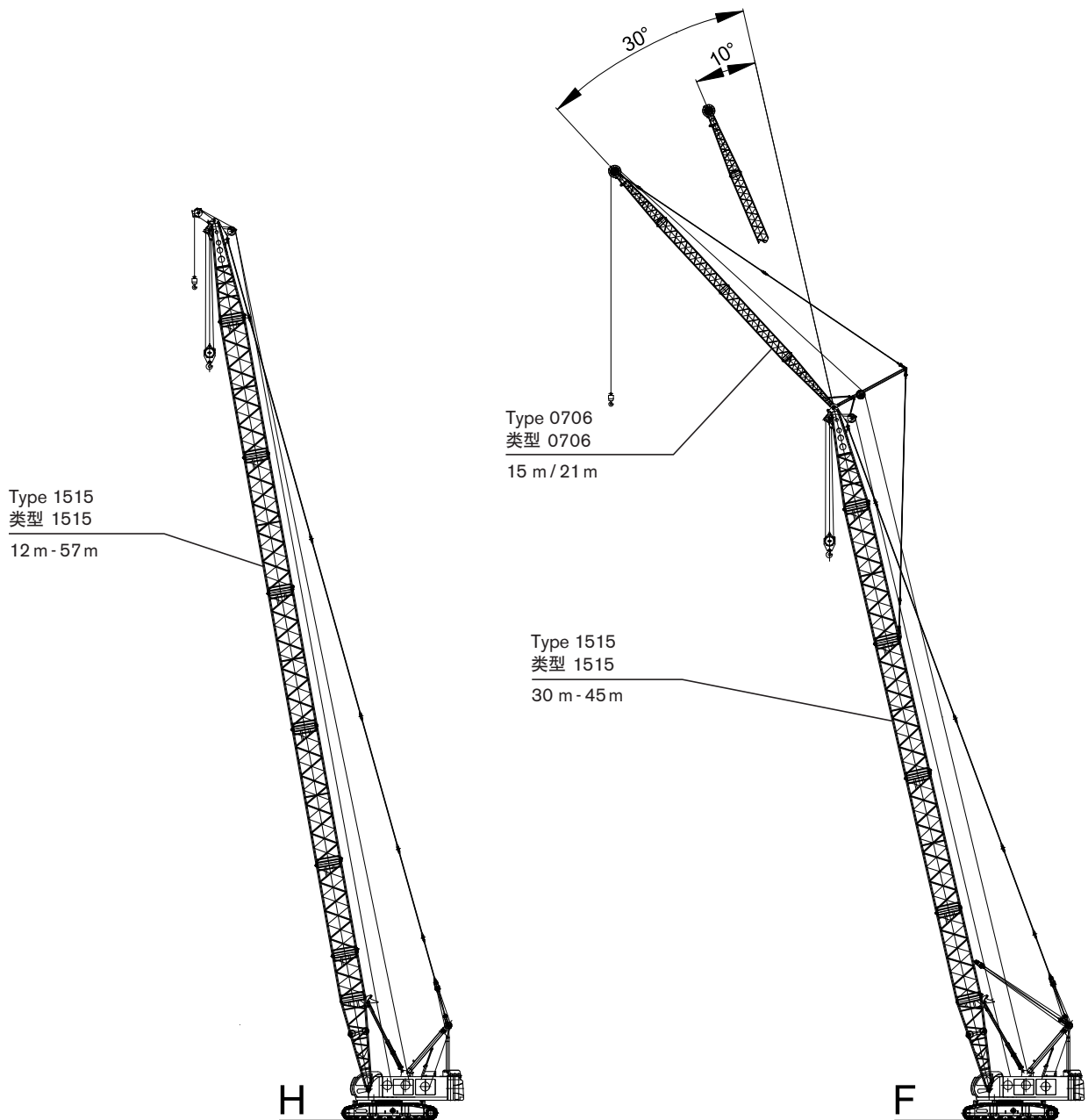


Counterweights on upper · 上车配重



BOOM COMBINATIONS · 臂杆组合

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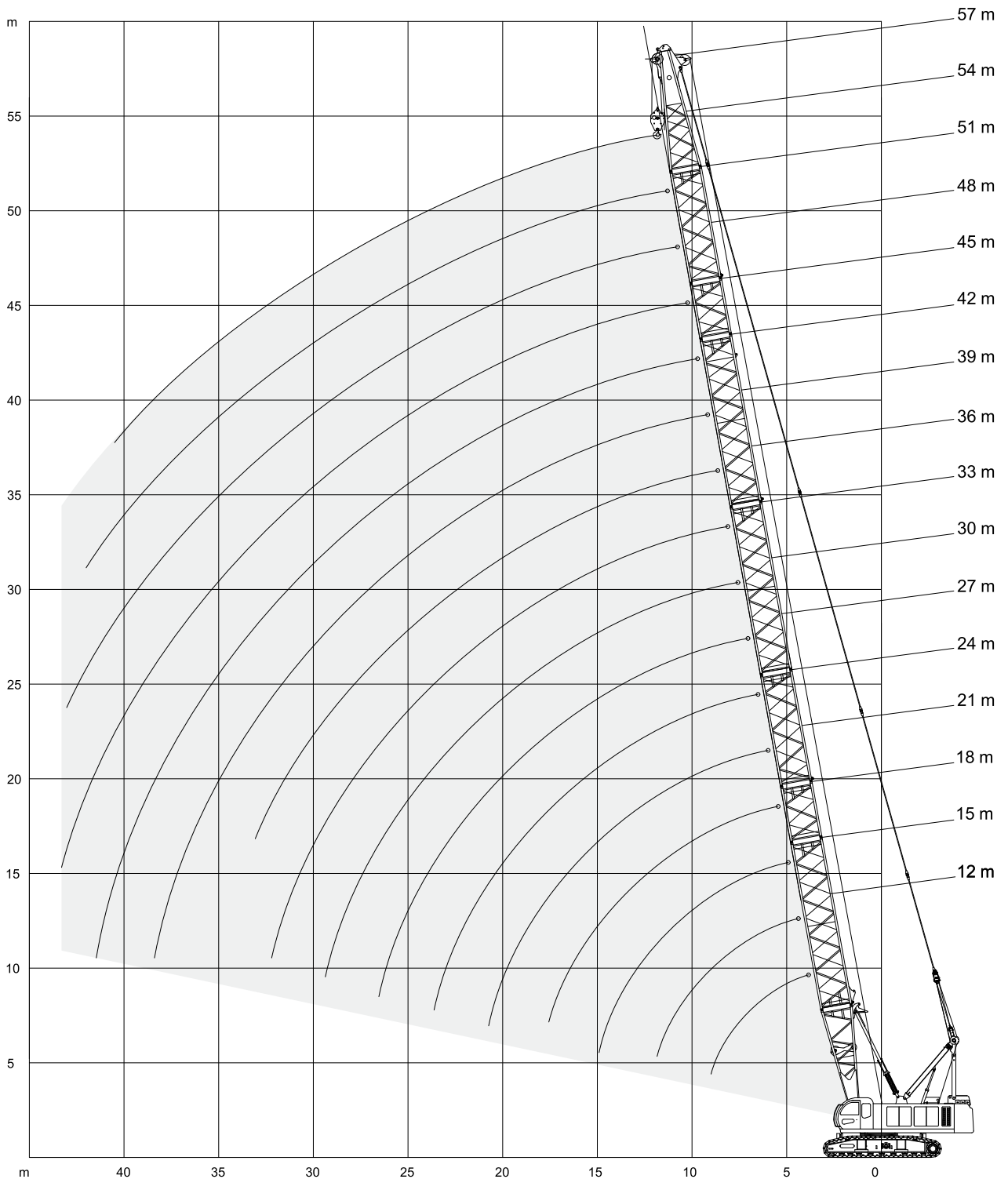


MAIN BOOM · 主臂

Working ranges · 工作范围

POWERLIFT 3000







拓力 3000









MAIN BOOM · 主臂

Lifting capacities · 起重能力

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29.9 t		4.0 m		360°						GB / ISO	
											
12 m		15 m	18 m	21 m	24 m	27 m	30 m	33 m			
m	t	t	t	t	t	t	t	t	m		
4	90.0	-	-	-	-	-	-	-	4		
4.5	80.0	79.0	-	-	-	-	-	-	4.5		
5	68.5	68.5	67.0	-	-	-	-	-	5		
6	52.5	52.4	52.4	52.4	52.4	-	-	-	6		
7	42.5	42.0	42.0	41.8	41.7	41.7	41.7	-	7		
8	35.0	34.7	34.6	34.5	34.3	34.3	34.3	34.3	8		
9	29.7	29.5	29.4	29.3	29.2	29.1	29.1	29.1	9		
10	25.7	25.6	25.5	25.3	25.2	25.2	25.2	25.2	10		
12	19.8	19.8	19.8	19.8	19.7	19.5	19.5	19.5	12		
14	-	16.4	16.3	16.2	16.0	15.9	15.9	15.8	14		
16	-	-	13.7	13.6	13.4	13.3	13.3	13.2	16		
18	-	-	11.8	11.7	11.4	11.3	11.3	11.1	18		
20	-	-	-	10.2	9.9	9.8	9.7	9.6	20		
22	-	-	-	-	8.7	8.6	8.5	8.3	22		
24	-	-	-	-	7.8	7.7	7.6	7.3	24		
26	-	-	-	-	-	6.8	6.7	6.5	26		
28	-	-	-	-	-	-	6.0	5.8	28		
30	-	-	-	-	-	-	5.2	5.2	30		
32	-	-	-	-	-	-	-	4.8	32		

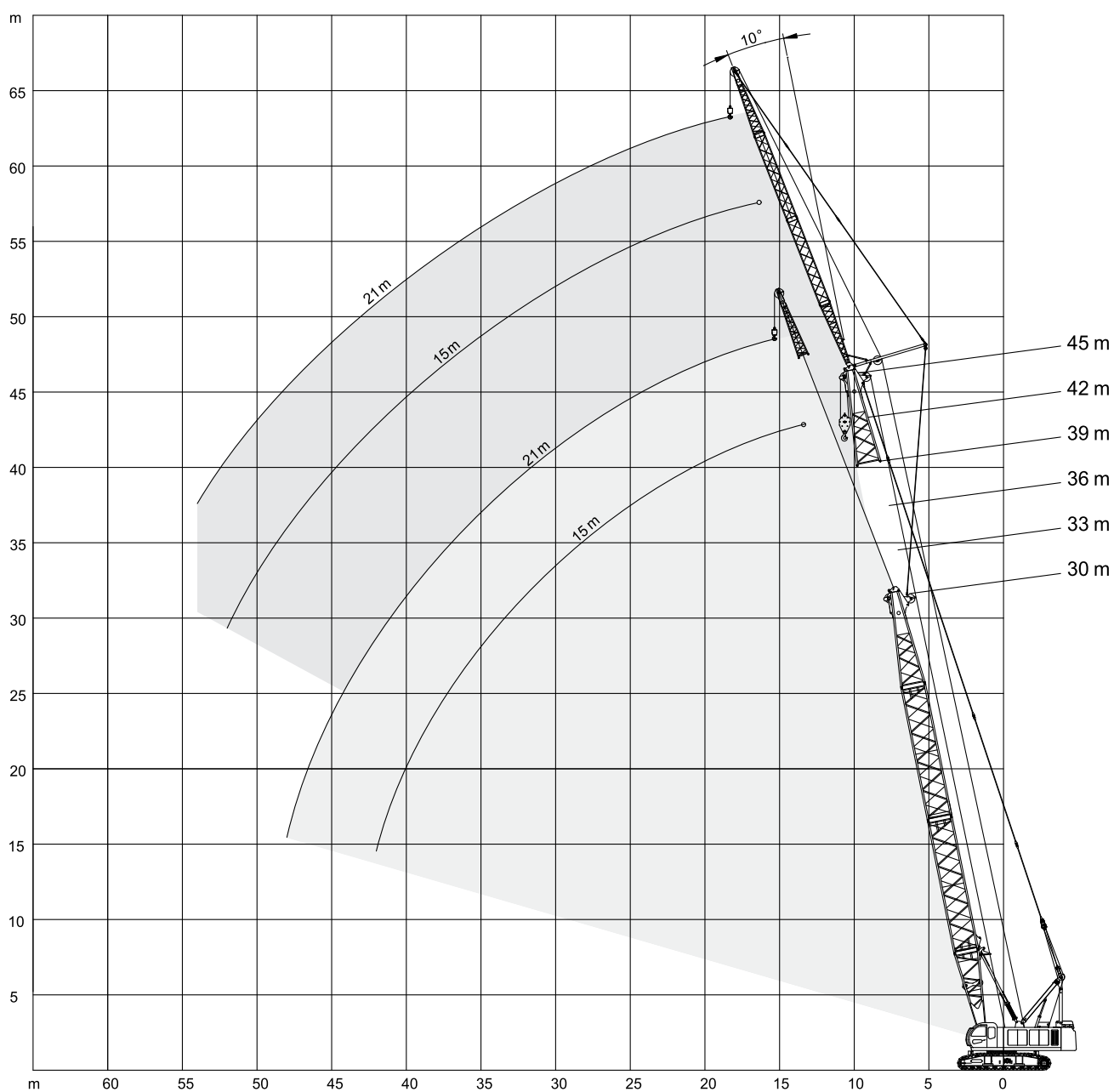
											
36 m		39 m	42 m	45 m	48 m	51 m	54 m	57 m			
m	t	t	t	t	t	t	t	t	m		
7	-	-	-	-	-	-	-	-	7		
8	32.5	-	-	-	-	-	-	-	8		
9	29.0	28.9	-	-	-	-	-	-	9		
10	25.1	25.0	24.8	24.7	-	-	-	-	10		
12	19.5	19.4	19.2	19.2	19.0	18.9	18.8	18.7	12		
14	15.8	15.7	15.4	15.4	15.3	15.2	15.1	15.0	14		
16	13.2	13.1	12.9	12.8	12.7	12.6	12.5	12.3	16		
18	11.1	11.0	10.8	10.8	10.7	10.6	10.5	10.4	18		
20	9.6	9.5	9.3	9.3	9.2	9.1	9.0	8.7	20		
22	8.3	8.2	8.0	8.0	8.0	7.8	7.7	7.5	22		
24	7.3	7.2	7.0	7.0	6.9	6.8	6.6	6.4	24		
26	6.5	6.4	6.2	6.2	6.0	5.8	5.7	5.5	26		
28	5.8	5.6	5.4	5.4	5.4	5.2	5.0	4.8	28		
30	5.2	5.1	4.9	4.9	4.8	4.5	4.3	4.2	30		
32	4.6	4.5	4.3	4.3	4.2	4.0	3.8	3.6	32		
34	4.2	4.1	3.9	3.8	3.7	3.5	3.3	3.0	34		
36	-	3.7	3.5	3.5	3.2	3.0	2.8	2.5	36		
38	-	3.2	3.1	3.0	2.9	2.6	2.4	2.1	38		
40	-	-	2.8	2.7	2.5	2.2	1.9	1.7	40		
42	-	-	-	2.4	2.2	1.8	1.6	-	42		
44	-	-	-	1.7	1.7	-	-	-	44		

FIXED JIB · 固定副臂

Working ranges · 工作范围

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Lifting capacities · 起重能力

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29.9 t		15 m		4.0 m		360°		GB / ISO					
Hand icon	30 m		33 m		36 m		39 m		42 m		45 m		Hand icon
	10°	30°	10°	30°	10°	30°	10°	30°	10°	30°	10°	30°	
m	t	t	t	t	t	t	t	t	t	t	t	t	m
14	11.2	-	11.3	-	-	-	-	-	-	-	-	-	14
15	11.1	-	11.1	-	11.2	-	11.3	-	11.4	-	-	-	15
16	10.9	-	11.0	-	11.1	-	11.1	-	11.0	-	11.0	-	16
18	9.7	9.3	9.6	9.4	9.5	-	9.4	-	9.3	-	9.3	-	18
20	8.4	8.8	8.3	8.7	8.2	8.7	8.1	8.6	8.0	-	8.1	-	20
22	7.3	7.7	7.2	7.6	7.1	7.6	7.0	8.2	6.9	7.4	7.9	7.4	22
24	6.5	6.8	6.3	6.7	6.3	6.6	6.2	7.1	6.1	6.5	6.9	6.4	24
26	5.8	6.0	5.6	5.9	5.5	5.9	5.5	6.2	5.4	5.7	6.0	5.7	26
28	5.2	5.4	5.0	5.3	4.9	5.2	4.8	5.2	4.7	5.1	4.6	5.0	28
30	4.6	4.8	4.5	4.7	4.4	4.7	4.3	4.6	4.2	4.5	4.1	4.4	30
32	4.2	4.4	4.1	4.3	4.0	4.2	3.9	4.1	3.8	4.0	3.7	3.9	32
34	3.8	3.9	3.7	3.8	3.6	3.8	3.5	3.7	3.4	3.6	3.3	3.5	34
36	3.4	3.6	3.3	3.5	3.2	3.4	3.1	3.3	3.0	3.2	2.9	3.1	36
38	3.1	3.2	3.0	3.1	2.9	3.1	2.8	3.0	2.7	2.9	2.6	2.8	38
40	2.8	2.9	2.7	2.8	2.6	2.7	2.5	2.7	2.4	2.6	2.3	2.5	40
42	2.6	2.6	2.5	2.5	2.4	2.5	2.3	2.4	2.2	2.3	2.1	2.2	42
44	-	-	2.2	2.3	2.1	2.2	2.0	2.2	1.9	2.1	1.8	2.0	44
46	-	-	-	-	1.9	2.0	1.8	1.9	1.7	1.8	1.6	1.7	46
48	-	-	-	-	1.7	1.8	1.6	1.7	1.5	1.6	1.4	1.5	48
50	-	-	-	-	1.6	-	1.5	-	1.4	1.4	1.2	1.3	50
52	-	-	-	-	1.4	-	1.3	-	1.2	1.2	1.1	1.2	52
54	-	-	-	-	-	-	-	-	1.0	1.1	-	1.0	54
56	-	-	-	-	-	-	-	-	-	-	-	-	56

29.9 t		21 m		4.0 m		360°		GB / ISO					
Hand icon	30 m		33 m		36 m		39 m		42 m		45 m		Hand icon
	10°	30°	10°	30°	10°	30°	10°	30°	10°	30°	10°	30°	
m	t	t	t	t	t	t	t	t	t	t	t	t	m
15	10.1	-	10.2	-	-	-	-	-	-	-	-	-	15
16	10.0	-	10.0	-	10.1	-	10.2	-	-	-	-	-	16
18	9.9	-	9.8	-	9.7	-	9.6	-	9.5	-	9.5	-	18
20	8.6	7.9	8.5	7.9	8.4	-	8.3	-	8.2	-	8.1	-	20
22	7.5	7.5	7.4	7.5	7.3	7.6	7.2	7.6	7.1	-	7.0	-	22
24	6.6	7.1	6.5	7.0	6.4	7.0	6.3	6.9	6.3	6.8	6.2	-	24
26	5.9	6.3	5.8	6.2	5.7	6.2	5.6	6.1	5.5	6.0	5.4	6.0	26
28	5.3	5.6	5.2	5.6	5.1	5.5	5.0	5.4	4.9	5.4	4.8	5.3	28
30	4.8	5.1	4.7	5.0	4.6	4.9	4.5	4.9	4.4	4.8	4.3	4.7	30
32	4.3	4.6	4.2	4.5	4.1	4.4	4.0	4.4	3.9	4.3	3.8	4.2	32
34	3.9	4.2	3.8	4.1	3.7	4.0	3.6	3.9	3.5	3.9	3.4	3.8	34
36	3.6	3.8	3.4	3.7	3.3	3.6	3.3	3.6	3.2	3.5	3.1	3.4	36
38	3.3	3.4	3.1	3.3	3.0	3.3	2.9	3.2	2.8	3.1	2.7	3.0	38
40	3.0	3.1	2.8	3.0	2.8	3.0	2.7	2.9	2.6	2.8	2.4	2.7	40
42	2.7	2.9	2.6	2.8	2.5	2.7	2.4	2.6	2.3	2.5	2.2	2.5	42
44	2.5	2.6	2.4	2.5	2.3	2.4	2.2	2.4	2.1	2.3	2.0	2.2	44
46	2.3	2.4	2.2	2.3	2.1	2.2	2.0	2.1	1.9	2.0	1.8	2.0	46
48	2.1	2.1	2.0	2.1	1.9	2.0	1.8	1.9	1.7	1.8	1.6	1.7	48
50	-	-	1.8	1.8	1.7	1.8	1.6	1.7	1.5	1.6	1.4	1.5	50
52	-	-	-	-	1.5	1.6	1.4	1.5	1.3	1.4	1.2	1.4	52
54	-	-	-	-	1.4	-	1.3	1.4	1.2	1.3	1.1	1.2	54
56	-	-	-	-	-	-	1.1	-	1.0	1.1	-	1.0	56
58	-	-	-	-	-	-	-	-	-	-	-	-	58

Crawler Carrier

	3-section carrier comprising of carbody and two crawlers. Hydraulic pin cylinder connections between crawlers and carbody to minimise width for transportation.
Carbody	Bending- and torsion-resistant welded structure of box type construction, fabricated of high-strength structural steel.
Crawlers	Side frames: bending-resistant welded structure of structural steel. Track pads, idler and drive sprockets are fabricated of heat treated high-strength cast steel. 9 rollers on each side frame with hardened rolling surfaces.
Power System	Designed with inclined-shaft piston fixed displacement/variable motor; and the plug-in double way brake valve is installed face to face, and the brake relief valve is arranged, which shall automatically switch brake according to various main oil pressure, simplifying operation procedure. Built-in motor almost driven wheel by planetary reducer to drive crawler. Each cylinder equipped with 4 assembly jacks on basic machine (folding into 3m with).

Superstructure

Counterweight	Three casted counterweights on the basic machine, and total weight is 29.9 t, incl. 11.5 t. 11.6 t and 6 t counterweight as well as other attachments.
Frame	Welded with high-strength structure fabricated of structural steel. Connected to carrier by triple-row roller bearing slew ring.
Drive	BENZ diesel engine type OM 906LA, 202 kW, 2100 rpm. The engine complies with EUROMOT 2a regulations.
Rope drums	Equipped with 3 drums on the basic machine included hoist 1, hoist 2 and boom hoist. The drum is driven with motor by planetary gear reducer, internal-mounted normal closed wet disc brake. LEBUS drum is adopted to ensure normal reeving in multiple layers. Luffing drum is designed with ratchet locking device.
Slew unit	Pinion of slewing reducer externally engaged with slewing bearing, and the pinion is driven with slewing motor by planetary gear reducer; normal-closed disc brake with buffer braking oil circuit shall enable more stable slewing brake. The designed slewing inertia valve may function accurate slewing, which may realize the function of alignment load's center of gravity.
Control system	Imported controller equipped with color LCD screen, easy control and monitor. Controller receives information from joystick and dominates action of the crane. Information of engine operating, hydraulic system and load moment can be showed on the display, and the screen will display the relevant fault code when the system works in abnormal condition. CAN BUS communication system transfers the data among the electrical equipments. Designed with independent limit load adjustment controller which can adjust hydraulic system according to load to regulate hydraulic system in order to prevent engine stalling. The crane is controlled by dual-axial joystick and CAN BUS transfers the data. All the working speeds are infinitely variable controlled by the lever position, enabling more comfortable. Provided with guard switch to prevent misoperation.
Cabin	The cabin is fully closed with large windscreen and designed with front light, rear view mirror, air conditioner, heater, stereo and adjusted seat. The colorful touched display and monitor make operation more convenient.
Electrical equipment	24 V DC system (2 x storage batteries 12 V, 165 Ah).

Boom configurations

H:	12-57 m main boom	
	Boom foot:	6 m
	Insert boom:	3 m
	Insert boom:	6 m
	Insert boom:	9 m*4
	Boom head:	6 m
F:	15 m / 21 m fixed jib	
	Fixed jib foot:	4.5 m
	Insert jib:	6.0 m*2
	Fixed jib head:	4.5 m
	Fixed jib installed on main boom, boom length:	30-45 m
Operator aids	Load moment indicator, independent LCD monitor, boom limit switch, height limit switch, anemoscope and indicator lamp.	

底盘

底盘	底盘由三部分组成，车体和两个履带。车体和履带间由液压油缸连接，以减少运输宽度。
车身	箱型结构抗弯、抗扭，由高强度结构钢焊接制造。
履带	履带架：结构钢焊接制成。履带板、从动轮和驱动轮均由高强度热处理铸钢制造。在每边有9个经表面硬化处理过的支重轮。
行走系统	斜轴式柱塞定量/变量马达。贴面安装插装式双向制动阀，并带有制动释放阀。制动器释放阀可以根据主油路压力自动打开制动器，简化操作步骤。内藏式马达使自身几乎全部插入减速机中，大大减小了结构尺寸。每侧的液压马达通过行星减速机带动驱动轮来驱动两侧的履带。每个履带在车身（折叠在 3 m 宽之内）上具有四个顶升油缸。

上车

配重	三块铸造式配重安装在上车，总重量为 29.9 t，包括一块 11.5 t、一块 11.6 t 和一块 6 t 及其它附件
机台	由高强度结构钢焊接制成。使用三列滚子轴承的回转滚盘连接于底盘上。
驱动	奔驰 OM 906LA, 2100 rpm 时的功率 202 kW, 符合 EUROMOT 2a 标准。
钢丝绳卷扬	上车设备包括三个钢丝绳卷扬：起升 1、起升 2 和起重臂的起升。该卷扬由液压马达通过行星减速机驱动，内藏湿式常闭盘式制动器。采用LEBUS 卷筒，保证多层缠绕不乱绳。变幅卷筒带有棘轮锁定装置。
回转装置	回转减速机小齿轮与回转轴承为外啮合，小齿轮有回转马达通过行星减速机驱动，常闭盘式制动器。具有缓冲制动油路，使回转制动更平稳。带有回转惯性阀，可精确回转，可实现自动正钩的功能。
控制系统	采用进口控制器配以彩色液晶显示器控制，便于控制及监视。控制器接受操作手柄控制信息并对吊车的动作进行控制，显示器显示发动机运行信息，液压系统信息，力矩信息以及吊车工作异常时相应的报警图标等。显示器所有电器设备之间通过CAN总线进行通讯。设置有极限负载调节功能，根据发动机负载情况调节液压系统，防止发动机憋车。进口液控先导手柄，所有工作速度均可以通过控制拉杆位置进行变速控制，操作平稳方便，具有保安开关，可以避免碰撞引起的误操作。
驾驶室	全封闭式驾驶室，冷暖风空调、立体声音响、全方位调整的座椅使操作更舒适，大面积玻璃窗、前照灯、后视镜，使视野更开阔。彩色液晶显示屏、监视器使监控更加方便安全。
电气设备	24 V d.c. 系统（2 个蓄电池，12 V, 165 Ah）。

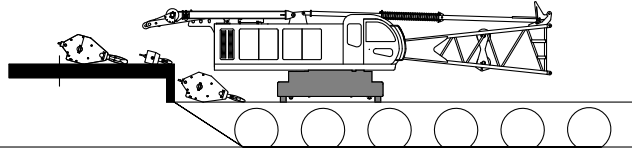
臂杆组合

主臂臂杆组合:	12-57 m 主臂
	主臂根: 6 m x 1
	标准节: 3 m x 1
	标准节: 6 m x 1
	标准节: 9 m x 4
	主臂头: 6 m x 1
固定副臂臂杆组合:	15 m / 21 m 固定副臂
	固定副臂根: 4.5 m x 1
	标准节: 6.0 m x 2
	固定头部: 4.5 m x 1
	副臂安装在主臂上, 主臂长度: 30-45 m
操作员辅助设备	安全电子载荷显示器、起升限制器、限位开关、主臂防后倾、风速计，安全灯。






TRANSPORT EXAMPLE · 运输实例

POWERLIFT 3000
拓力 3000

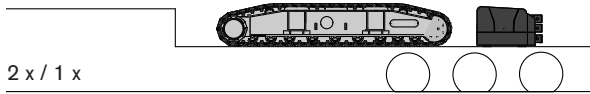
Load approx. 45.55 t
重量约为 45.55 t



1 x

-  Hook · 吊钩
-  Basic machine · 主机
-  Boom combination · 臂杆
-  Crawler · 履带
-  Counterweight · 配重
-  Wooden blocks · 枕木

Load 40.3 t
重量 40.3 t



2 x / 1 x

Load 1.1 t
重量 1.1 t



1 x

Load 1.0 t
重量 1.0 t



1 x

Load 2.01 t
重量 2.01 t



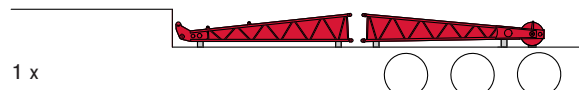
1 x

Load 1.0 t
重量 1.0 t



1 x

Load 0.72 t
重量 0.72 t



1 x

Load 1.0 t
重量 1.0 t



2 x

Load 0.21 t
重量 0.21 t



2 x

NOTES TO LIFTING CAPACITY · 起重能力注释

POWERLIFT 3000
拓力 3000

Ratings are in compliance with ISO 4305 and GB3811.

Weight of hook blocks and slings is part of the load, and is to be deducted from the capacity ratings.

Consult operation manual for further details.

Note: Data published herein is intended as a guide only and shall not be construed to warrant applicability for lifting purposes.

额定起重能力符合 ISO 4305 和 GB3811.

吊钩和吊具的重量是载荷的一部分，应从额定起重能力中扣除。

具体细节请参阅操作手册。

备注： 在此所印数据仅供参考，不完全适用实际吊装操作。

POWERLIFT 3000 拓力 3000

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Effective Date: November 2010. Product specifications and prices are subject to change without notice or obligation. The photographs and/or drawings in this document are for illustrative purposes only. Refer to the appropriate Operator's Manual for instructions on the proper use of this equipment. Failure to follow the appropriate Operator's Manual when using our equipment or to otherwise act irresponsibly may result in serious injury or death. The only warranty applicable to our equipment is the standard written warranty applicable to the particular product and sale and Terex makes no other warranty, express or implied. Products and services listed may be trademarks, service marks or trade-names of Terex Corporation and/or its subsidiaries in the USA and other countries. All rights are reserved. Terex® is a registered trademark of Terex Corporation in the USA and many other countries. Copyright 2010 Terex Corporation.

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Terex (China) Investment Co., Ltd

8th Floor, Tower B, GATEWAY, No 18 Xiaguangli, North Road, East 3rd Ring, Chaoyang District, Beijing, 100027 China
Phone: +86 10 5907 9000, Fax: +86 10 8440 0628, Email: cranes@terex.com, Web: www.terexcranes.com

特雷克斯（中国）投资有限公司

中国，北京市朝阳区东三环北路霞光里18号佳程广场B座8层，邮编100027
电话：+86 10 5907 9000，传真：+86 10 8440 0628，邮箱：cranes@terex.com，网址：www.terexcranes.com

Terex Topower (Shandong) Heavy Machinery Manufacture Co., Ltd.

Topower Industrial Park, Ming Shui Economic Development Area, Zhangqiu City, Shandong Province
Phone: +86 531 8372 5000, 8372 5016

特雷克斯拓能（山东）重机制造有限公司

山东省章丘市明水经济开发区拓能工业园，电话：+86 531 8372 5000, 8372 5016

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手册参考：TC-DS-M-E/C-拓力3000 - 11.10



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