



STB1000T5-EV

ELECTRIC TELESCOPIC BOOM
CRAWLER CRANE

三一伸缩臂电动履带式起重机



408 t·m



53.1 m



53.1 m + 17.5 m

www.sanygroup.com

QUALITY CHANGES THE WORLD

The parameters, pictures and standard/optional equipment are only for reference in this brochure, the actual machine is based on the effective price list and contract.

推介书内的参数、图片和配置仅供参考，实际配置以实物为准。

V1.2

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01 | Introduce

整机优势

Energy Saving and Environmental Protection 节能环保

- Pure electric, low emission, environmentally friendly and energy saving.
- 纯电驱动，低排放、更环保，整体能耗更低。

Long Battery Range 低运维

- Equipped with 281.9kWh high-capacity power battery, supporting 10h long time operation.
- 配备 281.9 kWh 大容量动力电池，支持 10 小时连续作业。

Lower Operating Cost 运营更省

- Reduces energy consumption costs by 37% compared to traditional fuel engine models and eliminates engine maintenance expenses.
- 相比传统燃油机型，能耗成本降低 37%，且无需发动机维护，全面降低运营支出。

Safe and Reliable 安全可靠

- High voltage safety design, real-time insulation monitoring by BMS, capable of actively disconnecting high voltage in the event of sudden leakage, third-generation intelligent control system, one-button start/stop, 10.1" dual touchscreen display, intelligent and convenient.

高压安全设计，BMS 实时绝缘监测，可在发生泄漏风险时主动切断高压；

第三代智能控制系统，一键启停；

配备 10.1 英寸双触控显示屏，操作智能便捷。



STB1000T5-EV

ELECTRIC TELESCOPIC BOOM CRAWLER CRANE

Range Extender (Optional) 增程器(选配)

- 100 kW charging power. Power generation efficiency is 3 kWh/h.
- Equipped with a 150 L fuel tank, providing up to 30 hours of operation with a full tank and full charge.
- Three charging modes available: 1. Pure electric mode: the range extender does not operate. 2. Range-extending mode: charging starts automatically when battery level drops below 25% and stops when battery level exceeds 35%. 3. Forced charging mode: charging continues until the battery reaches the preset upper limit, and the range extender restarts when the battery level drops below 20% again.
- 充电功率100kW,发电效率3kWh/h;
- 配备150L燃油箱,满油满电工作时间30h;
- 具有三种充电模式:(1)纯电模式:增程器不工作;(2)增程模式:电量低于25%自动补电,电量超过35%停止补电;(3)强制补电模式:电量自动补充至设定上限值时停止,直至电量再次低于20%时启动增程器。

Fast Charging 快速充电

- Support 240kW DC charging, charging time < 1.5h.
- 10kW, 20kW, 40kW, (optional) AC charging modes are available for customers, applicable to all site power configurations.
- 支持 240 kW 直流快充,充电时间小于 1.5 小时;
- 提供 10 kW、20 kW、40 kW(可选)的交流充电模式,适用于不同施工现场电源条件。

High Adaptability 高适应性

- Equipped with lower structure charging port, allowing an operation with charging plug in, meeting various customer usage scenarios.
- 配备下车结构充电接口,可实现“插电即用”,满足多种施工场景需求。

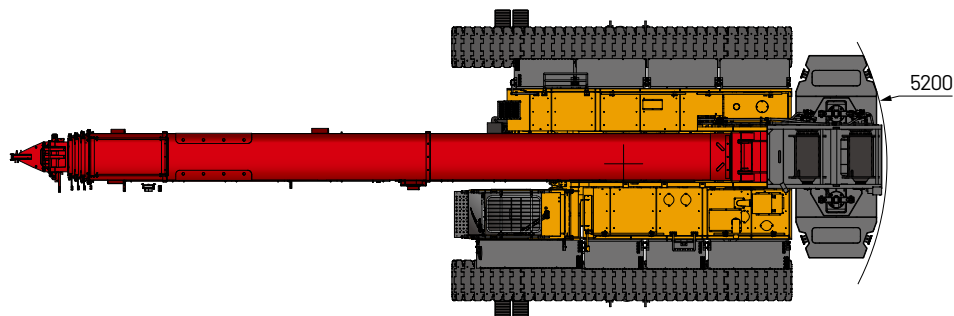
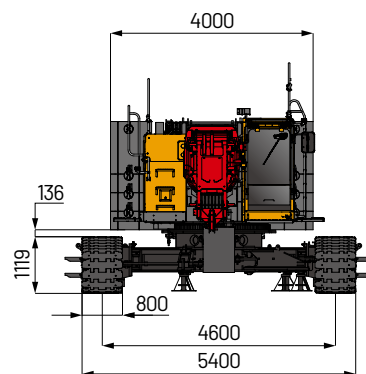
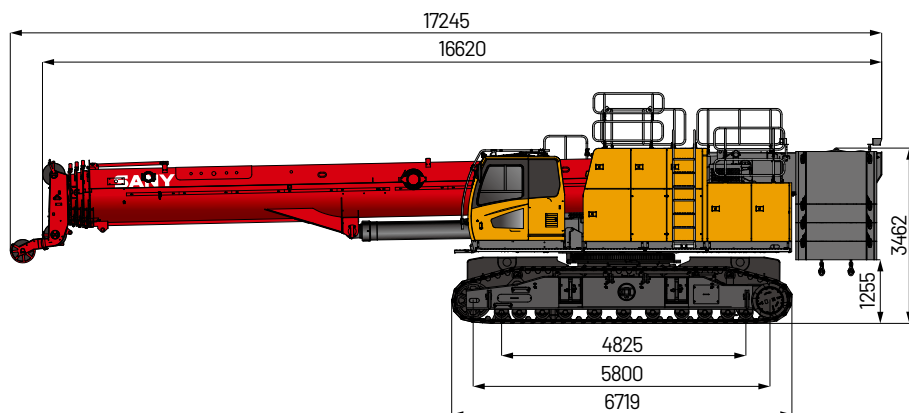


02 | Outline Dimension

整机基本尺寸

STB1000T5-EV

Unit: mm



03

Main Performance Parameters
主要性能参数

Performance Indicators 项目	Unit 单位	Parameters 参数
Overall Dimensions 整机外形尺寸		
Overall machine length 整机全长	mm	17245
Overall machine width (retracted) 整机全宽(收拢)	mm	3590
Overall machine height 整机高度	mm	3462
Center distance of drive and idle wheels 主驱动轮与导向轮中心距	mm	5860
Track shoe width 履带板宽度	mm	800
Boom Configuration 主臂配置		
Max. rated load capacity 最大额定起重量	t	100
Boom length 主臂长度	m	13.7~53.1
Boom angle 主臂变幅角	°	-2~80
Max. rated lifting moment 最大额定起重力矩	t·m	408
Fixed Jib Configuration 固定副臂配置		
Longest boom + longest jib 最长主臂 + 最长固定副臂组合	m	53.1+17.5
Boom to jib angle 主副臂夹角	°	0, 15, 30
Operation Speed 工作速度		
Rope speed of main/aux. load hoist 主/副卷扬绳速	m/min	0~120
Boom full up/down duration 主臂全起/全落时间	s	65/110
Boom full extension/retraction duration 主臂全伸/全缩时间	s	85/80
Slewing speed 回转速度	rpm	0~1.7
No-load traveling speed 空载行走速度	km/h	0~1.4
Drive Motor 驱动电机		
Model 型号	-	TZ400XS207AC
Rated power 额定功率	kW	250
Max. power 最大功率	kW	360
Charging system 充电系统模块		
DC charging power 直流充电功率	kW	120 / 240 (single gun / dual gun) (单枪/双枪)
DC charging standard 直流充电标准	-	CCS2 欧标
DC charging voltage 直流充电电压	V DC	750
AC charging power 交流充电功率	kW	10 / 20 / 40
AC charging standard 交流充电标准	-	Type 2
AC charging current 交流充电电流	VAC	16 / 32 / 63 A
AC charging voltage 交流充电电压	VAC	267~456 (three-phase 三相) 154~265 (single-phase 单相)
AC charging frequency 交流充电频率	Hz	45~65
Range Extender (Optional) 增程器(可选)		
Model 型号	/	DHEN3.61PH001001
Rated power 额定功率	kW	129
Electromotor rated power 发电机额定功率	kW	106

03

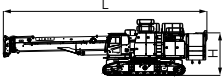
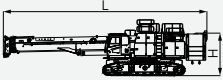
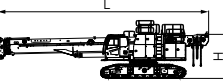
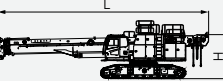
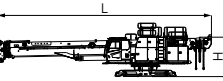
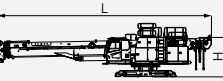
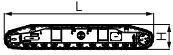
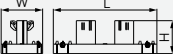
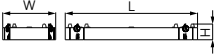
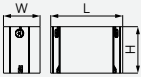
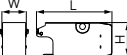
Main Performance Parameters

主要性能参数

Performance Indicators 项目	Unit 单位	Parameters 参数
Air-conditioning system 空调系统模块		
Cooling capacity 制冷量	kW	5
Heating capacity 供热量	kW	5.8
Air flow rate 送风量	m³/h	550/400 (cooling / heating) (制冷/制热)
Temperature control range 温度控制范围	℃	18~32
Operating conditions 使用环境	-	-30 to +47℃; 20%~90% (relative humidity 相对湿度)
Wire Rope 钢丝绳		
Main hoist wire rope: diameter × length 主卷扬钢丝绳直径 × 长度	φ mm × m	22 × 245
Aux. hoist wire rope: diameter × length 副卷扬钢丝绳直径 × 长度	φ mm × m	22 × 160
Rated single line pull of main/aux. hoist wire rope 主/副提升钢丝绳额定单绳拉力	t	10.5
Transport Parameters 运输参数		
Weight of machine 整机重量	t	99.7
Rear counterweight 后配重	t	30
Carbody counterweight 中央配重	t	8
Transport weight of basic machine (with crawler frames) 主机运输重量(含履带架)	t	61.7
Transport weight of basic machine (without crawler frame) 主机运输重量(不含履带架)	t	43.5
Machine transport dimension (with crawlers) L × W × H 整机运输尺寸(含履带)	mm	16620 × 3590 × 3462
Machine transport dimension (without crawlers) L × W × H 整机运输尺寸(不含履带)	mm	16620 × 3000 × 3110
Other Parameters 其他参数		
Average ground pressure (basic boom) 平均接地比压(主臂工况)	MPa	0.129
Gradeability 爬坡能力	%	30

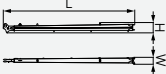
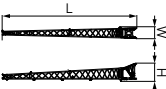
04 | Transport Dimension

部件运输尺寸

NO. 序号	Name 名称	Shape 形状	Length 长(m)	Width 宽(m)	Height 高(m)	Weight 单件重量(t)	Qty 数量
1	Whole machine (without jib) 整机(不含副臂)		16.62	3.59	3.46	99.70	1
2	Whole machine (without jib and range extender) 整机(不含副臂、增程器)		16.62	3.59	3.46	98.40	1
3	Basic machine 1 (with crawlers, without jib) 主机1(含履带, 不含副臂)		16.62	3.59	3.46	61.70	1
4	Basic machine 1(with crawlers, without jib and range extender) 主机1(含履带, 不含副臂、增程器)		16.62	3.59	3.46	60.40	1
5	Basic machine 2 (without jib and crawlers) 主机2(不含履带, 副臂)		16.62	3.00	3.11	43.50	1
6	Basic machine 2 (without jib, crawlers, and range extender) 主机2(不含履带、副臂、增程器)		16.62	3.00	3.11	42.20	1
7	Crawlers 履带总成		6.72	0.80	1.12	9.10	2
8	Rear counterweight tray 后配重托盘		4.00	1.60	1.27	8.00	1
9	Rear counterweight block 后配重块		4.00	1.60	0.47	7.00	2
10	Light counterweight 轻型配重		1.62	0.82	1.04	4.00	2
11	Carbody counterweight 中央配重		2.02	0.90	0.71	4.00	2
12	100t hook (optional) 100t 吊钩 (选配)		2.05	0.85	0.64	1.25	1
13	80t hook (optional) 80t 吊钩 (选配)		1.91	0.82	0.67	1.05	1
14	45t hook (optional) 45t 吊钩 (选配)		1.62	0.69	0.38	0.49	1
15	15t hook (optional) 15t 吊钩 (选配)		1.44	0.60	0.35	0.30	1

04

Transport Dimension
部件运输尺寸

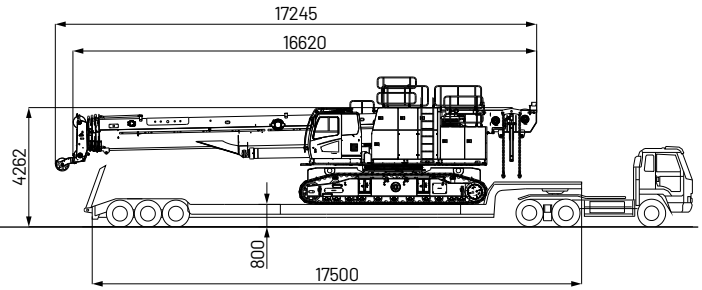
NO. 序号	Name 名称	Shape 形状	Length 长(m)	Width 宽(m)	Height 高(m)	Weight 单件重量(t)	Qty 数量
16	12.5t hook (optional) 12.5t 吊钩 (选配)		0.81	0.35	0.35	0.25	1
17	Folding jib (optional) 折叠副臂 (选配)		7.23	0.38	0.50	0.26	1
18	Lattice jib (optional) 桁架副臂 (选配)		10.68	0.95	1.44	0.87	1

05 | Transport Plan

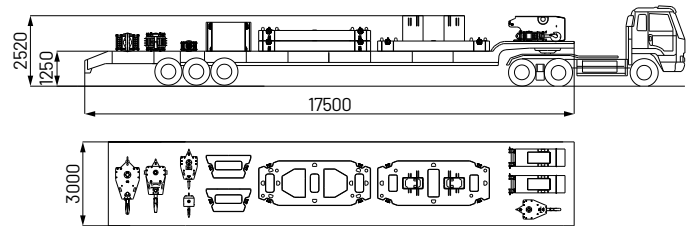
运输方案

1 Transport Plan A 运输方案一

Trailer 运输车 1	
Parts 包含部件	- Basic machine × 1 (Including an 1.13t fixed jib and an 1.3t range extender) - 主机 × 1 (包含固定副臂1.13t, 增程器1.3t)
Transport weight 运输重量	62.83t

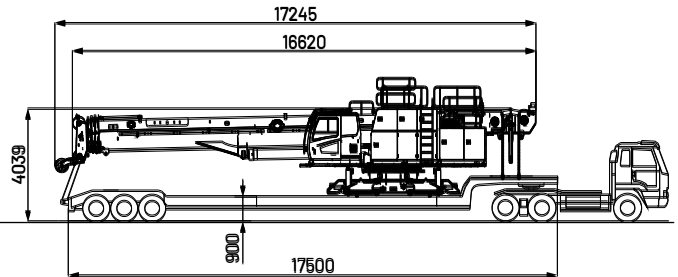


Trailer 运输车 2	
Parts 包含部件	- Counterweight tray 配重托盘 × 1 - Counterweight blocks I 配重块 I × 2 - Counterweight blocks II 配重块 II × 2 - Carbody counterweight 下车配重 × 2 100t hook block 100t起重钩 × 1 80t hook block 80t起重钩 × 1 45t hook block 45t起重钩 × 1 15t hook block 15t起重钩 × 1 12.5t hook block 12.5t起重钩 × 1
Transport weight 运输重量	41.43t

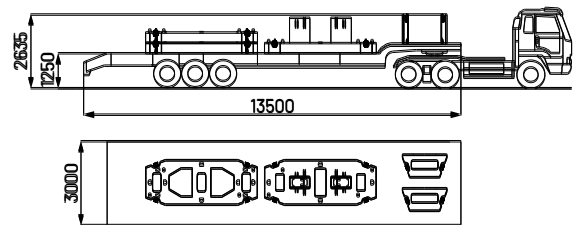


2 Transport Plan B 运输方案二

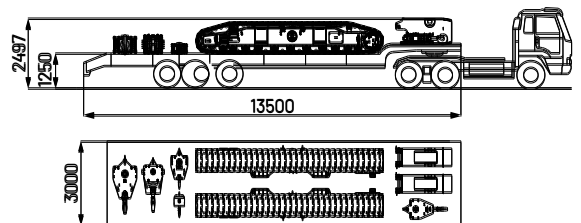
Trailer 运输车 1	
Parts 包含部件	- Basic machine × 1 (without track frame, Including an 1.13t fixed jib and an 1.3t range extender) - 主机 × 1 (不含履带架, 含固定副臂1.13t、增程器1.3t)
Transport weight 运输重量	44.63t



Trailer 运输车 2	
Parts 包含部件	- Counterweight tray 配重托盘 × 1 - Counterweight blocks I 配重块 I × 2 - Counterweight blocks II 配重块 II × 2
Transport weight 运输重量	30t



Trailer 运输车 2	
Parts 包含部件	- Left track frame 左履带架 × 1 - Right track frame 右履带架 × 1 - Carbody counterweight 下车配重 × 2 100t hook block 100t起重钩 × 1 80t hook block 80t起重钩 × 1 45t hook block 45t起重钩 × 1 15t hook block 15t起重钩 × 1 12.5t hook block 12.5t起重钩 × 1
Transport weight 运输重量	29.54t



06 | Main Characteristics

主要特性

1 Product Specification 产品规格

Drive Motor 电机

- Model: TZ400XS207AC.
- Rated power: 250kW.
- Max. power: 360kW.
- Rated torque: 1200N.m.
- Max. torque: 2400N.m.
- Max. working speed: 3000rpm.
- Working environment temperature: -40°C ~ +65°C.
- Insulation class: H.
- Cooling system: Liquid cooling (50% deionized water + 50% ethylene glycol).
- Coolant flow rate: 25L/min.
- IP rating IP67.
- Weight: 305kg.
- Work shift: S9.
- 型号: TZ400XS207AC;
- 额定功率: 250 kW;
- 最大功率: 360 kW;
- 额定扭矩: 1200 N·m;
- 最大扭矩: 2400 N·m;
- 最高工作转速: 3000 rpm;
- 工作环境温度: -40°C ~ +65°C;
- 绝缘等级: H级;
- 冷却系统: 液冷(50% 去离子水 + 50% 乙二醇);
- 冷却液流量: 25 L/min;
- 防护等级: IP67;
- 重量: 305 kg;
- 工作制: S9。

Power Battery 动力电池

- Battery type: LFP (Lithium Iron Phosphate).
- Rated capacity: 456 Ah.
- Nominal voltage: 618.24 V.
- Rated energy storage: 281.91 kWh.
- Specific energy: 155 Wh/kg.
- Battery configuration: 2P192S.
- Storage temperature: -30°C ~ +60°C, long-term storage controlled below 35°C.
- Operating temperature: -30°C ~ +65°C.
- Operating humidity: ≤85%.
- Thermal management: Liquid Heating + Liquid Cooling.
- State of charge (SOC) operating range: 8%~100%.
- Max.continuous charging current (A): 400.
- Max.continuous discharging current (A): 450.
- Discharging current at peak speed (A): 700A, 30 seconds.
- IP protection rating: Battery box IP68, junction box IP67, control box IP67.
- Total system weight (kg): 1804 kg (Battery box only).
- 电池类型: LFP(磷酸铁锂电池);
- 额定容量: 456 Ah;
- 标称电压: 618.24 V;
- 额定储能: 281.91 kWh;
- 比能量: 155 Wh/kg;
- 电池配置: 2P192S;
- 储存温度: -30°C ~ +60°C, 长期储存建议控制在 35°C 以下;
- 工作温度: -30°C ~ +65°C;
- 工作湿度: ≤85%;
- 热管理: 液冷热管理(液体加热 + 液体冷却);
- SOC工作范围: 8%~100%;
- 最大持续充电电流: 400 A;
- 最大持续放电电流: 450 A;
- 峰值放电电流: 700 A(30 秒);
- IP 防护等级: 电池箱 IP68, 接线盒 IP67, 控制箱 IP67;
- 系统总重量: 1804 kg(仅电池箱)。

Range Extender Assembly (Optional) 增程器总成(选配)

- Model: DHEN3.61PH001001.
- Type: Water-cooled; compliant with Non-road Stage III A emission standards.
- Displacement: 3.58 L.
- Rated power: 129 kW / 2400 rpm.
- Maximum torque: 610 N·m / 1800 rpm.
- Operating voltage range: 450-750 V.
- Generator rated power/speed: 106 kW / 1500 rpm.
- Generator peak power: 160 kW.
- Generator rated torque/speed: 675 N·m / 1500 rpm.
- Generator peak torque: 1100 N·m.
- Generator rated voltage: 600 V.
- Generation efficiency: 3 kWh/h.
- Operating ambient temperature: -25°C to 45°C.
- Fuel tank capacity: 150 L.
- 型号: 增程器总成DHEN3.61PH001001;
- 类型: 水冷, 符合非道路Stage IIIA标准;
- 排量: 3.58L;
- 额定功率: 129kW/2400rpm;
- 最大扭矩: 610N·m/1800rpm;
- 工作电压范围: 450-750V;
- 发电机额定功率/转速: 106kW/1500rpm;
- 发电机峰值功率: 160kW;
- 发电机额定扭矩/转速: 675N·m/1500rpm;
- 发电机峰值扭矩: 1100N·m;
- 发电机额定电压: 600V;
- 发电效率: 3kWh/h;
- 使用环境温度-25-45°C;
- 油箱容量: 150L。

Hydraulic System 液压系统

- Main pump: Adopt high-power open variable displacement piston pump, providing power for the entire machine.
- Gear pump: Dual gear pump for slewing, radiator
- Control: The main pump adopts the control type of electrically proportionate positive flow. The operating components are two electric-controlled cross handles, one electric control pedal valve for boom telescoping, and one dual electric pedal control valve for travel, to control each actuator proportionally.
- Way of cooling: Heat exchanger, fan core and multi-stage cooling.
- Filter: Large flow, high accuracy filter, with bypass valve and indicator, which can remind the user to replace the filter element in time.
- Max. pressure of system: Main load, aux. load, and travel system: 32MPa. Boom hoist cylinder lifting: 32MPa. Swing system: 24MPa. Control system: 4.5MPa.
- Hydraulic tank capacity: 1050L.
- 主泵: 采用大排量开式变量柱塞泵, 为整机主要执行机构提供液压动力;
- 齿轮泵: 双联齿轮泵, 用于回转与散热系统;
- 控制方式: 主泵采用电比例正流量控制; 操作元件包括两只电控十字操纵杆、一只电控伸缩脚踏阀及一只双联行走脚踏阀, 实现对各执行机构的比例控制;
- 冷却方式: 风冷散热器, 多级冷却结构;
- 过滤系统: 大流量、高精度过滤器, 带旁通阀与堵塞指示器, 便于及时更换滤芯;
- 系统最大压力: 主/副提升与行走系统: 32 MPa; 主变幅油缸: 32 MPa; 回转系统: 24 MPa; 控制系统: 4.5 MPa。
- 液压油箱容量: 1050 L。

06 | Main Characteristics

主要特性

1 Product Specification 产品规格

Main & Auxiliary Hoisting Systems 主、副提升机构

- Pump and motor: Dual-placement speed controlled energy efficient, combination of winch balance valve and anti-hook sliding technology, lifting or lowering the load steadily.
- Winch brake adopts concealed, normally closed, wet type and spring loaded fin type normally engaged brake, spring force braking, oil pressure released.
- Main and aux. load hoist winches adopt piston motor of variable displacement to drive planetary reducer.
- 双排量马达控制，实现节能的变速控制；平衡阀 + 防滑钩技术确保起升/下降平稳；
- 制动器采用内藏式、常闭、湿式多片弹簧制动，弹簧制动、液压释放；
- 主副卷扬采用变量柱塞马达 + 行星减速器。

	Rope speed on the outermost work layer 最外工作层绳速	0~120m/min
Main Hoist	Wire rope diameter 钢丝绳直径	Φ22mm
主提升卷扬	Wire rope length of main hoist 主提升钢丝绳长度	245m
	Rated single line pull 额定单绳拉力	10.5t
	Rope speed on the outermost work layer 最外工作层绳速	0~120m/min
Auxiliary Hoist	Wire rope diameter 钢丝绳直径	Φ22mm
副提升卷扬	Wire rope length of auxiliary hoist 主提升钢丝绳长度	160m
	Rated single line pull 额定单绳拉力	10.5t

Luffing Mechanism 变幅机构

- Dual-acting single piston hydraulic cylinder, with safety balance valve, and a luffing angle of -2° ~ 80° . Luffing down through self-weight to reduce energy consumption and increase stability of luffing down operation.
- 双作用单活塞液压缸，带安全平衡阀；
- 变幅角范围： -2° ~ 80° ；
- 下放利用自重完成，降低能耗，提高动作稳定性。

Slewing Mechanism 回转机构

- Slewing brake adopts wet, spring loaded, normally-closed brake, braking through spring force and released by oil pressure.
- Slewing system, equipped with integrated slewing buffer valve, has free slipping function. It is featured in steady start, control and excellent inching function.
- Unique slewing buffer design and more steady brake.
- Slewing drive: External gear slewing drive with 360° slewing range, and the max. slewing speed is 1.7r/min.
- Famous brand motor gearbox for higher reliability.
- Slewing lock: Manual lock device can make sure the upperworks can be locked on four directions after the work is done or during transport, which is more convenient and reliable.
- Slewing ring: Single row ball bearing.
- 回转制动为湿式、弹簧加载、常闭结构：弹簧制动、液压释放；
- 整合回转缓冲阀，具备自由滑转功能；启动平稳、微动性能优秀；
- 独特回转缓冲设计，使制动更平顺；
- 回转驱动：外啮合式回转驱动， 360° 全回转，最大回转速度 1.7 r/min；
- 电机与减速机采用知名品牌，可靠性高；
- 回转锁定：手动锁止装置，可在运输或作业结束后锁定上车结构；
- 回转支承：单排球式回转支承。

Counterweight 配重

- Counterweight are designed into blocks for self-assembly and easier transport.
- Counterweight tray and blocks are piled up for easier assembly and transport.
- Rear counterweight: Total 30t and capable of self-assembly.
- Carbody counterweight: $4t \times 2$ at the front and rear of carbody.
- 配重采用块状模块化设计，方便拆装与运输；
- 后配重：总质量 30t，支持自装卸；
- 中央配重： $4t \times 2$ (布置在车架前后)。

Superstructure 上车结构

- The high-strength steel welded frame structure provides better resistance to deformation and torsion. It features a closed protective cover for enhanced protection. The component layout is rational, making maintenance and service more convenient.
- 高强度焊接框架结构，抗变形与抗扭能力强；
- 采用全封闭防护罩，提高安全性；
- 组件布局合理，便于维护保养。

Cab and Controls 驾驶室与操控系统

- Novelty in cab design, artistic modeling and trim and large area glass window with a tilt angle of 20° to broaden horizon, fitted with low beam headlamp and rear-view mirror to broaden horizon, installed with air conditioner and radio, the arrangement of seats, control handle and various control buttons is ergonomically designed to enable more conformable operation.
- Cab layout: 10.1-inch touch screen, programmable smart switches, and improved touch screen interference.
- Armrest box: On the left and right armrest box are control handles, electrical switches, emergent stop and ignition switch. The armrest box can be adjusted along with the seat.
- Seat: Multi-way and multi-level floating adjustable seat with unload switch.
- A/C: Cool and heat air, optimized air channels and vents.
- Multiple cameras can be displayed on the monitor at the same time to realize backing video, real-time monitoring of wire rope on each winch, conditions behind the counterweight and surrounding the machine.
- 驾驶室采用全新设计，造型与内饰更具美感；大面积前窗可上仰 20° ，大幅提升仰视视野；配备近光前照灯与后视摄像头；标配冷暖空调与收音机。座椅、操纵手柄及各类控制按钮均按照人机工程学优化布置，操作更舒适；
- 驾驶室布局：配备 10.1 英寸触摸屏、可编程智能按键，界面交互进一步优化；
- 扶手箱：左右扶手箱集成操纵手柄、电气开关、急停开关及点火开关，并可随座椅同步调节；
- 座椅：多向、多级可调的悬浮式座椅，带卸荷开关；
- 空调：冷暖风系统，风道与出风口经过优化设计；
- 显示器可同时显示多路摄像画面，实现倒车影像、主副卷扬钢丝绳缠绕状态、配重后方及整机周边环境的实时监控。

Travel Drive 行走驱动

- Independent travel driving units are adopted for each side of the crawler, to realize straight traveling and turning driven by travel motor through gearbox and sprocket wheel.
- The crawler can be controlled independently when traveling.
- The travel speed can be controlled steplessly from 0 to 0~1.4km/h.
- Gradeability is 30%.
- 履带两侧采用独立行走驱动单元，通过行走马达经减速机和驱动轮实现直行与转向；
- 行走时可独立控制左右履带；
- 行走速度无级可调，范围 0~1.4 km/h；
- 最大爬坡能力 30%。

06

Main Characteristics

主要特性

1 Product Specification 产品规格

Traveling Braking 行走制动

- Embedded, wet, spring-loaded and normally-closed brake, which is braking with spring force and released by oil pressure.
- 内置式湿式弹簧加载常闭制动器，依靠弹簧力制动、液压释放。

Side Frame Extension and Retraction 伸缩式履带架

- The extension and retraction of crawler frames are realized through electric control hydraulic cylinder. The crawlers are extended at work and retracted for transport with the whole basic machine.
- 履带架伸缩采用电控液压缸实现，作业时扩展、运输时收拢，可与整机一体运输。

Crawler Tensioning 履带张紧

- The jack is used to push the guide wheel and insert the shim to adjust crawler tension.
- 通过千斤顶推动导向轮，并通过加减垫片调整履带张紧度。

Steering System 转向系统

- It can realize single track turning and pivot turning.
- 可实现单侧履带转向及原地转向(枢轴转向)。

Track Frame 履带架

- High-strength alloy cast steel track pad can prolong the service life. They are 800mm wide, and the total amount is 71pcs × 2.
- 高强度合金铸钢履带板，耐磨寿命长；宽度 800 mm，共 71 片 × 2 组。

Track Roller 托链轮

- Maintenance-free track roller.
- 免维护托链轮。

Outrigger 支腿

- Hydraulic outrigger cylinders are offered to facilitate the track frame assembly and disassembly.
- 配备液压支腿油缸，便于履带架安装与拆卸。

Boom 主臂

- The boom is made of high-strength steel structure with U-shape section area, with five sections, of which the basic boom is 13.7m and the max. boom length is 53.1m.
- Dual cylinders and rope row for boom telescoping.
- 主臂采用高强度钢 U 形截面结构，共 5 节；基本臂 13.7 m，最大臂长 53.1 m；
- 伸缩机构采用双油缸+绳排结构，伸缩顺畅可靠。

Fixed Jib 固定副臂

- Bi-fold fixed jib length of 10.2m and 17.5m.
- Offset angle includes 0° , 15° and 30° .
- 双折式固定副臂，长度为 10.2 m 与 17.5 m；
- 偏角可调：0° 、15° 、30° 。

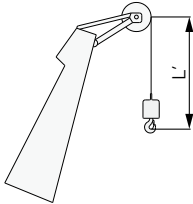
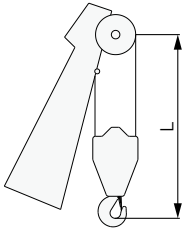
Tip Pulley 臂头滑轮

- Welding structure, connected with the boom through pin, and used for auxiliary hook operation.
- 焊接结构，通过销轴与主臂连接，用于副钩作业。

Name 吊钩名称	Max. capacity 最大吊重量 (t)	Quantity 数量	Pulley block 滑轮组	Weight 重量 (t)
100t hook 吊钩 *	100	1	5	1.25
80t hook 吊钩 *	80	1	5	1.05
45t hook 吊钩 *	45	1	3	0.49
15t hook 吊钩 *	15	1	1	0.30
12.5t hook 吊钩 *	12.5	1	1	0.25

Note: the above-mentioned operating equipment is full-up configuration. The actual configurations are subject to contract.
* marked as optional material.
注 :以上作业装备为完整配置,具体配置以合同为准。
带“*” 标记的为选装件。

Hook Height Limiter 起重钩高度限位



Hook 吊钩	L	Hook 吊钩	L'
100t	3.5m	12.5t	2.3m

06 | Main Characteristics

主要特性

2 Safety Devices 安全装置

Load Limit Indicator (LMI) 负载限制指示系统 (LMI)

- The integrated LMI system is provided as standard and high safety and efficiency for equipment control.
- The LMI system can automatically detect the suspended load weight, working radius of the crane and the angle of boom, and compare rated load weight and actual load, working radius and boom angle. Under normal operation condition, it can intelligently judge and automatically cut off the crane action in dangerous direction, and have black box function to record the overload information.
- Its main components include: monitor, controller, length and angle sensor, pressure sensor, etc.
- 标配集成式 LMI 负载限制指示系统，用于提升设备控制的安全性及作业效率；
- LMI 系统可自动检测吊载重量、作业幅度及主臂角度，并与额定载荷、额定幅度及额定角度进行比对。在正常作业情况下，系统可智能判断风险并自动切断危险方向的动作，同时具备黑匣子功能，可记录超载信息；
- 系统主要组件包括：显示器、控制器、长度与角度传感器、压力传感器等。

Assembly/Working Mode Switching Switch 装配 / 作业模式切换开关

- The assembly mode is primarily used for scenarios such as the disassembly of the boom or the removal of counterweights. In Assembly Mode, height limit and boom angle limit are disabled to facilitate crane assembly.
- In Work Mode, all safety limiting devices activate to protect the operation.
- 装配模式主要用于拆装主臂、安装/拆卸配重等场景。在该模式下，系统关闭高度限制及变幅角限制，便于整机装配作业；
- 在作业模式下，所有安全限位装置均会激活，为作业提供保护。

Emergency Stop 紧急停止

- The left armrest box in cab is equipped with one emergency stop button. In emergency situation, this button is pressed down to cut off the power supply of the whole machine and all actions stop.
- 驾驶室左扶手箱位置配备一个紧急停止按钮。在紧急情况下，按下此按钮可以切断整机的电源，并停止所有操作。

Over-hoist Protection of the Main/Auxiliary Load Hoist 主 / 副卷扬防过卷保护

- A2B limit switch is equipped on the boom/jib tip, which prevents the hook lifting up too much. When the hook is lifted up to the limit height, the limit switch activates, alarm pops up on the monitor, buzzer on the right front control panel sends alarm, failure indicator light starts to flash and the hook hoisting action is cut off automatically.
- 主臂/副臂臂头安装 A2B 防超高限位开关，防止吊钩上升超限。当吊钩接近限位高度时，限位开关动作，显示器弹出报警信息、右前控制面板蜂鸣器报警、故障指示灯闪烁，并自动切断卷扬上升动作。

Over-release Protection of the Main/Auxiliary Load Hoist 主 / 副卷扬防过放保护

- The 3rd-wrap indicator is installed on main and aux. load hoist to prevent over-release of wire rope. When the rope is paid out close to the last three wraps, the limit switch acts, and the system sends alarm through buzzer and show the alarm on the monitor, automatically cutting off the winch action.
- 主、副卷扬设有“三圈保护”装置。当钢丝绳放出至仅剩 3 圈时，限位开关动作，系统通过蜂鸣器报警并在显示器提示，同时自动切断继续放绳动作。

Function Lock 功能锁定

- There is a function lock lever located on the left side of the driver's seat in the cab. If the function lock lever is not in work position, all the other handles won't work, which prevents any mis-operation caused by accidental hitting.
- 驾驶室座椅左侧设有功能锁定杆。如果功能锁未处于工作位置，其余所有操纵手柄均无法动作，从而防止误操作导致的风险。

Hook Latch 起重钩防脱卡

- The lifting hook is installed with a baffle plate to prevent wire rope from falling off.
- 吊钩配有防脱挡板，可防止钢丝绳脱槽。

GPS Monitoring System GPS 监控系统

- Remote monitoring system is a standardized offering to provide functions like GPS locating, GPRS data transfer, machine status inquiry and statistics, operating data monitoring and analysis, remote diagnosis of failures.
- 标配远程监控系统，支持 GPS 定位、GPRS 数据传输、设备状态查询与统计、作业数据监控与分析及远程故障诊断等功能。

06 | Main Characteristics

主要特性

2 Safety Devices 安全装置

Tri-color Load Indicator 三色负载指示灯

- The load indication light has three colors, green, yellow and red, indicating the real-time load. When the actual load is smaller than 90% of rated load, the green light is on.
- When the actual load is $>90\%$ and $\leq 100\%$, the yellow light is on, the alarm light flashes and sends out intermittent sirens.
- When the actual load reaches 100% of rated load, the red light on, the alarm light flashes and sends out continuous sirens.
- When the actual load is 102% of rated load, the system will automatically cut off the crane's dangerous operation.
- 负载指示灯包含绿、黄、红三色，用于实时显示负载状态：
- 实际载荷 $<$ 额定载荷 90% 时，绿灯亮；
- 实际载荷 $>90\%$ 且 $\leq 100\%$ 时，黄灯亮，报警灯闪烁并间歇蜂鸣；
- 实际载荷 = 100% 时，红灯亮，报警灯闪烁并持续蜂鸣；
- 实际载荷达到 102% 时，系统自动切断危险方向动作。

Flash Alarm 闪光报警灯

- When the LMI is powered on, the flash alarm will turn on.
- 当 LMI 上电后，闪光报警灯自动点亮。

Slewing Indicator Light 回转指示灯

- The slewing indicator light flashes during traveling or slewing.
- 整机行驶或回转过程中，回转指示灯会闪烁提示。

Seat Interlock Protection 座椅互锁保护

- If the operator leaves the seat, all control handles and switches will be disabled immediately to prevent any mis-operation due to accidental collision.
- 当操作员离座时，全部操作手柄与开关立即失效，防止误碰造成误动作。

Illuminating Light 照明系统

- The machine is equipped with short-beam light in front of machine, lamps in operator's cab and lighting devices for night operation, as well as boom lights, so as to increase the visibility during work.
- 整机配备前照灯、驾驶室工作灯、夜间作业灯及臂架照明灯，保证夜间或低光环境下的作业视野。

Rear View Mirror 后视镜

- It is installed on the left of the operator's cab.
- 安装于驾驶室左侧，用于提升左侧视野范围。

Level Indicator 水平仪

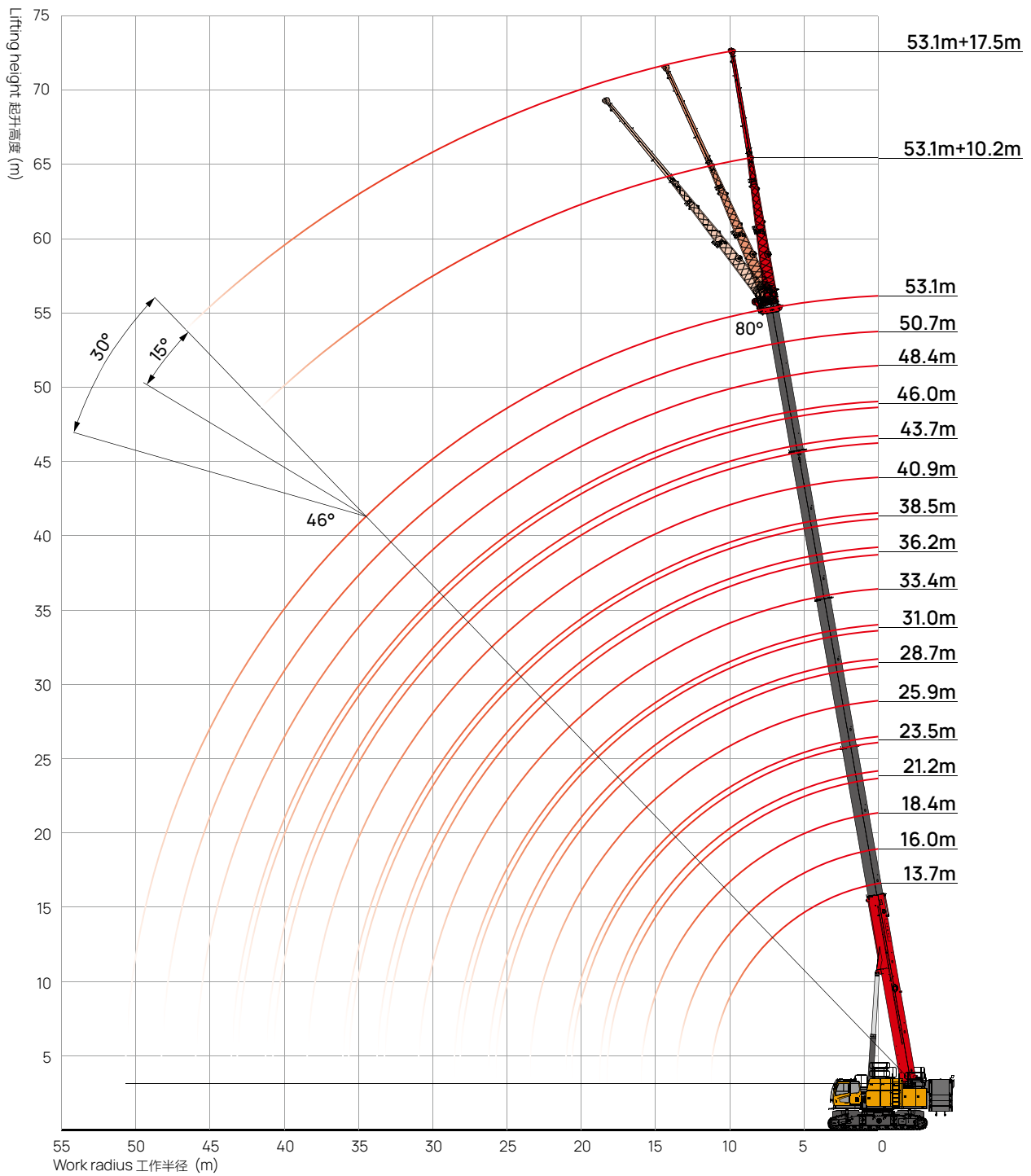
- Electrical level indicator can show the inclination angle of superstructure on the monitor.
- 电控水平仪可在显示器上实时显示上车倾斜角度。

Monitoring System 监控系统

- Two cameras and illumination lights are installed on the tail of rotating bed, which will show the conditions on the rear and winches on the monitor.
- A rear-view camera installed on the front side of Right Covering Part Assembly reduces blind spots on the right side.
- 回转平台尾部安装两套摄像头与照明灯，可在显示器上显示后方环境及卷扬状态。
- 右侧覆盖件前方安装后视摄像头，可减少整机右侧盲区。

07 | Working Radius

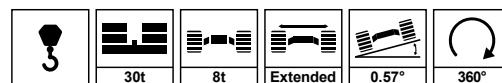
工况作业范围图



07 | Load Chart-H

工况载荷表-H工况

Unit: t



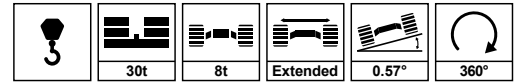
	Main Boom Length (m)												
	13.7	16.0	18.4	20.7	21.2	23.1	23.5	25.9	28.2	28.7	30.6	31.0	
3.0	100.0	82.0	78.0										3.0
3.5	92.0	82.0	78.0	70.0	33.6								3.5
4.0	88.0	82.0	78.0	68.0	33.6		33.6						4.0
4.5	85.0	78.0	75.0	65.0	33.6	60.0	33.6	33.6					4.5
5.0	80.0	75.0	68.0	63.0	33.6	58.0	33.6	33.6					5.0
5.5	71.0	68.0	65.0	62.0	33.6	58.0	33.6	33.6	33.6	33.6			5.5
6.0	68.0	63.0	62.0	61.0	33.6	58.0	33.6	33.6	33.6	33.6		33.6	6.0
6.5	62.0	58.0	55.0	53.0	33.6	52.5	33.6	33.6	33.6	33.6	33.6	33.6	6.5
7.0	55.0	53.0	50.0	49.0	33.6	48.0	33.6	33.6	33.6	33.6	33.6	33.6	7.0
7.5	50.0	48.0	46.0	45.0	33.6	44.0	33.6	33.6	33.6	33.6	33.6	33.6	7.5
8.0	44.0	42.0	41.0	41.0	33.6	40.8	33.6	33.6	33.6	33.6	33.6	33.6	8.0
9.0	38.1	37.3	35.5	36.0	33.6	36.0	33.6	33.6	33.6	33.6	33.6	33.6	9.0
10.0	32.3	31.6	31.0	30.7	33.6	30.4	32.9	32.5	31.9	33.6	30.8	32.5	10.0
11.0	27.8	27.1	26.7	26.3	29.3	26.0	28.5	28.0	27.6	29.6	27.3	29.1	11.0
12.0		23.6	23.2	22.8	25.7	22.5	24.9	24.5	24.1	26.0	23.8	25.6	12.0
14.0			18.0	17.7	20.4	17.4	19.7	19.3	18.9	20.7	18.6	20.3	14.0
16.0			14.3	14.0	16.7	13.8	16.0	15.6	15.2	17.0	14.9	16.6	16.0
18.0				11.3	13.9	11.1	13.2	12.8	12.5	14.2	12.2	13.8	18.0
20.0						8.9	11.1	10.7	10.4	12.1	10.1	11.7	20.0
22.0								9.0	8.7	10.4	8.4	10.0	22.0
24.0									7.3	9.0	7.0	8.6	24.0
26.0										7.8	5.9	7.4	26.0
28.0											4.9	6.4	28.0
	10	9	8	7	4	6	4	4	4	4	4	4	
2#	0	25	50	75	0	100	25	50	75	0	100	25	2#
3#	0	0	0	0	25	0	25	25	25	50	25	50	3#
4#	0	0	0	0	25	0	25	25	25	50	25	50	4#
5#	0	0	0	0	25	0	25	25	25	50	25	50	5#
	0	0	0	0	0	0	0	0	0	0	0	0	
	11.3	13.6	16	18.3	18.8	20.7	21.1	23.5	25.8	26.3	28.2	28.6	
	14.3	11	8.4	6.5	8.2	4.9	6.4	5	3.9	5.1	2.9	4	

07

Load Chart-H

工况载荷表-H工况

Unit: t



	Main Boom Length (m)													
	33.4	35.7	36.2	38.1	38.5	40.9	43.2	43.7	45.6	46.0	48.4	50.7	53.1	
7.5	33.6		26.0											7.5
8.0	33.6	33.6	25.0											8.0
9.0	33.6	33.6	23.0	33.4	24.5	26.0								9.0
10.0	31.7	30.6	22.0	29.6	23.0	24.0	24.8	18.5		18.5				10.0
11.0	28.3	27.4	21.5	26.5	22.3	23.0	23.8	17.5		18.0	17.8			11.0
12.0	25.2	24.6	21.0	23.8	21.5	22.0	22.5	16.5	23.0	17.5	17.0	16.5		12.0
14.0	19.9	19.6	19.0	19.3	20.0	20.3	19.8	15.5	19.2	16.5	15.8	15.8	15.5	14.0
16.0	16.2	15.9	17.0	15.6	16.9	16.6	16.3	14.5	16.1	15.0	14.8	14.4	14.5	16.0
18.0	13.4	13.1	14.5	12.9	14.1	13.8	13.5	13.0	13.3	13.5	13.4	13.0	13.5	18.0
20.0	11.3	11.0	12.3	10.7	12.0	11.7	11.4	12.0	11.2	12.2	11.9	11.7	11.5	20.0
22.0	9.6	9.3	10.6	9.0	10.3	10.0	9.7	10.8	9.5	10.5	10.2	10.0	9.8	22.0
24.0	8.2	7.9	9.2	7.7	8.9	8.6	8.3	9.4	8.1	9.1	8.8	8.6	8.4	24.0
26.0	7.1	6.8	8.1	6.5	7.7	7.4	7.2	8.2	6.9	7.9	7.7	7.4	7.2	26.0
28.0	6.1	5.8	7.1	5.6	6.8	6.5	6.2	7.3	6.0	7.0	6.7	6.5	6.3	28.0
30.0	5.3	5.0	6.3	4.7	5.9	5.6	5.4	6.4	5.1	6.1	5.9	5.6	5.4	30.0
32.0		4.3	5.5	4.0	5.2	4.9	4.7	5.7	4.4	5.4	5.2	4.9	4.7	32.0
34.0				3.4	4.6	4.3	4.0	5.1	3.8	4.8	4.5	4.3	4.1	34.0
36.0					4.0	3.7	3.5	4.5	3.2	4.2	4.0	3.7	3.5	36.0
38.0						3.2	3.0	4.0	2.8	3.7	3.5	3.2	3.0	38.0
40.0							2.5	3.6	2.3	3.3	3.0	2.8	2.6	40.0
42.0									1.9	2.9	2.6	2.4	2.2	42.0
44.0											2.3	2.0	1.8	44.0
46.0											2.0	1.7	1.5	46.0
48.0												1.4	1.2	48.0
	4	4	3	4	3	3	3	2	3	2	2	2	2	
2#	50	75	0	100	25	50	75	0	100	25	50	75	100	2#
3#	50	50	75	50	75	75	75	100	75	100	100	100	100	3#
4#	50	50	75	50	75	75	75	100	75	100	100	100	100	4#
5#	50	50	75	50	75	75	75	100	75	100	100	100	100	5#
	0	0	0	0	0	0	0	0	1	0	1	2	19	
	31	33.3	33.8	35.7	36.1	38.5	40.8	41.3	43.2	43.6	46	48.3	48.2	
	3.1	2.3	3.3	1.7	2.6	1.9	1.4	2.2	1.2	1.6	1.5	1.3	1.2	

07

Load Chart-FJ

工况载荷表- FJ工况

Unit: t



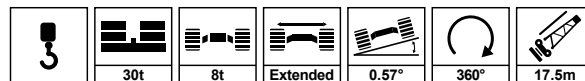
 m	53.1m			 m
	0°	15°	30°	
16.0	6.1			16.0
18.0	5.8	4.5	4.1	18.0
20.0	5.3	4.3	3.9	20.0
22.0	5.1	4.2	3.8	22.0
24.0	4.8	4.1	3.7	24.0
26.0	4.2	3.9	3.6	26.0
28.0	3.4	3.7	3.5	28.0
30.0	2.7	3.3	3.4	30.0
32.0	2.1	2.6	3.1	32.0
34.0	1.5	2.0	2.5	34.0
36.0	1.0	1.5	1.8	36.0
38.0	0.5	1.0	1.2	38.0
40.0		0.5	0.7	40.0
 C _n	1	1	1	 C _n
2#	100	100	100	2#
 3#	100	100	100	3# 
4#	100	100	100	4# 
5#	100	100	100	5#
 Min  m	50	48	48	 Min  m
 Min  m	38.8	41.7	42.2	 Min  m
 Min 	0.39	0.27	0.35	 Min 

07

Load Chart-FJ

工况载荷表- FJ工况

Unit: t



	53.1m			
	0°	15°	30°	
18.0	3.1			18.0
20.0	3.0			20.0
22.0	2.9	2.2	1.7	22.0
24.0	2.8	2.1	1.6	24.0
26.0	2.7	2.0	1.6	26.0
28.0	2.6	1.9	1.6	28.0
30.0	2.5	1.9	1.6	30.0
32.0	2.4	1.9	1.6	32.0
34.0	2.2	1.8	1.5	34.0
36.0	1.8	1.8	1.5	36.0
38.0	1.4	1.8	1.4	38.0
40.0	1.0	1.6	1.4	40.0
42.0	0.5	1.2	1.4	42.0
44.0		0.8	1.1	44.0
46.0		0.4	0.8	46.0
48.0			0.4	48.0
	1	1	1	
2#	100	100	100	2#
3#	100	100	100	3#
4#	100	100	100	4#
5#	100	100	100	5#
	50	49	48	
	43.7	47.1	48.8	
	0.3	0.27	0.31	

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