

XGC25T伸缩臂履带起重机
XGC25T Telescopic Crawler Crane

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XGC25T 伸缩臂履带起重机
XGC25T Telescopic Crawler Crane



技术性能参数/整机基本尺寸
 Technical Specification/Overall Dimension

详细介绍
 Brief Introduction

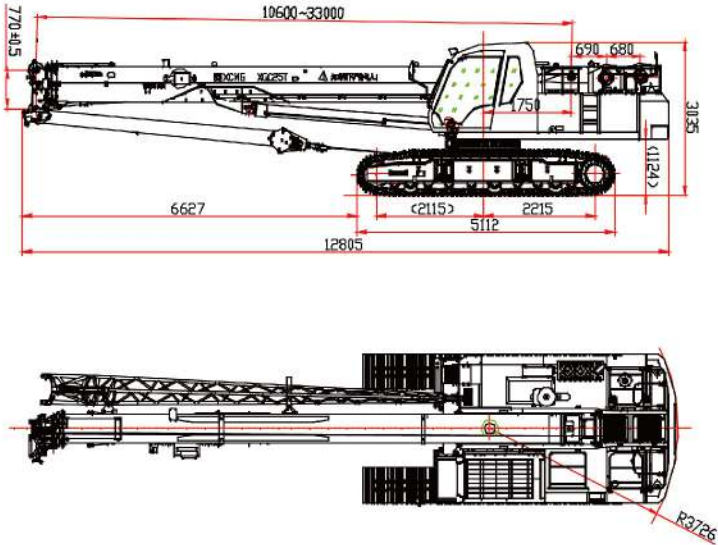
XGC25T

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类别Category	项目Items	单位Unit	参数Data
尺寸参数 Dimension	整机全长 Overall length	mm	12805
	整机全宽(伸/缩)Overall width (extension/retraction)	mm	4200/2950
	整机全高 Overall height	mm	3035
	主、从动轮中心距 Central distance from drive roller to driven roller	mm	4330
	履带板宽 Track shoe width	mm	700
重量参数 Weight	行驶状态总质量 Total mass in travel state	kg	34960
行驶参数 Travel	空载行驶速度 Max. travel speed with no load	km/h	2.6
	满载行驶速度 Max. travel speed with full load	km/h	1.5
	最小离地间隙 Min. ground clearance	mm	357
	最大爬坡能力 Max. grade-ability	%	45
	接地比压 Ground pressure	MPa	0.06
	耳旁噪声 Noise at ear in the cab	dB(A)	80
动力参数 Power	发动机型号 Engine model	-	QSB6.7
	发动机额定功率 Engine rated output power	kW	142
	发动机额定转速 Engine rated rotation speed	r/min	1800
	发动机排放标准 Engine emission standard	-	非道路 EU Stage IIIA
容积参数 Capacity	液压油箱容积 Hydraulic oil tank	L	400
	燃油箱容积 Fuel tank	L	450
主要性能参数 Main performance	最大额定总起重量 Max. rated lifting capacity	t	25
	最小额定幅度 Min. rated working radius	m	3
	转台尾部回转半径 Slewing radius at turntable tail	mm	3726
	最大起重力矩	kN·m	970
	最长主臂 Max. length boom	kN·m	576
	起升高度	m	9.9
	最长主臂 Max. length boom	m	32.3
	最长主臂 + 副臂 Max. length boom + Jib	m	39.8
	起重臂长度	m	10.6
	最长主臂 Max. length boom	m	33
工作速度 Working speed	最长主臂 + 副臂 Max. length boom + Jib	m	41.15
	副臂安装角 Jib offset angle	°	0°、15°、30°
	主臂起臂时间 Boom raising time	s	48
	主臂全伸时间 Boom full extension time	s	56
	最大回转速度 Max. slewing speed	r/min	2.5
	起升速度(空载四层) Hoisting speed(no load at the 4th layer)	m/min	140
	主起升机构 Main winch 副起升机构 Auxiliary winch	m/min	140

本印刷品所包含的数据，会随着产品的不断升级而改变，请以实际产品为准
 Pictures and data in this catalog will change with the update and modification of products,
 so please take the actual vehicle as reference.



上 车

发动机

配置东风康明斯QSB6.7-C190发动机（EU StageIIA）或潍柴WP6.210发动机（国III）
 额定功率/转速：142kW/1800rpm。空滤器采用曼胡默尔空滤器，可靠稳定的除尘效果保证主机平稳长时间运行。
 燃油箱：有效容积450L。

起升机构

起升机构描述：
 空载起升速度：0～140m/min。
 钢丝绳直径/长度：
 主卷钢丝绳：14mm/160m。
 副卷钢丝绳：14mm/95m。
 额定单绳拉力：2.8t。

变幅机构

变幅机构描述：单缸前支变幅
 主臂起升时间≤48S

回转机构

回转机构布置于转台右前端，由马达驱动。
 行星减速机与回转支承齿轮外啮合进行回转，具有自动滑转功能，可调整臂架起重作用线与重物为铅直线，保证作业安全。行星齿轮减速机具备常闭、片式制动器工作可靠维修方便。
 回转支承：采用单排四点接触球式回转支承，承载能力强，保证上车360°回转作业安全、平稳。
 回转速度：0～2.5r/min

电气控制系统

采用ECU控制器，油门门，手油门，通过CAN实现对发动机转速的高效控制。
 系统采用供电方式为DC24V，负极搭铁单线制。采用PLC可编程控制器作为控制系统的核心，系统由发动机控制、安全控制、先导控制、力矩限制器控制、辅助功能控制等几部分组成。通过显示器实时监测发动机水温、机油压力，当超过安全临界值时，蜂鸣器自动报警；同时，通过力 limiter 对当前工况的分析，当吊重量、仰角或幅度任意一值超出安全范围时，三色报警灯和蜂鸣器会发出“声光报警”并通过程序控制，限制危险动作的进行。

液压系统

液压先导控制，控制精准，微动性好，调速范围广。起重作业伸缩、变幅及起升液压系统与行驶作业液压系统共用一恒功率A8V107双泵，回转系统和先导系统分别由排量为40ml/r和10ml/r的齿轮泵供油。
 采用成熟的液压元件，成熟稳定的液压传动控制技术。操作简单，维修维护方便。与电气系统相配合，保证主机安全稳定。

Crane Superstructure

Engine

Dongfeng Cummins QSB6.7-C190 engine (EU Stage IIIA) or WP6.210 Weichai engine (GB III), rated power / speed: 142kW/1800rpm., Mann Hummel air filter, reliable and stable dust-proof ensure the machine smooth and long time running. Fuel tank: effective capacity 450L.

Hoist winch

Hoist winch description:
 Hoisting speed with no load: 0～140m/min.
 Wire rope diameter / length:
 Main winch rope: 14mm / 160m.
 Auxiliary winch rope: 14mm / 95m.
 Rated single line pull: 2.8t.

Luffing winch

Luffing winch description: single cylinder front support luffing
 Boom lifting time ≤48S.

Slewing unit

Slewing unit is arranged at turntable right front, driven by the motor, with planetary gear reducer, external engaged by slewing ring for rotation, with hydraulic buffer and free-swing function, adjust the boom lifting active line with the lead line in the straight line, to ensure safe operation. Planetary gear reducer has a constant closed disc brake for reliable work and easy maintenance.
 Slewing ring: it is single-row 4-point-contact ball type slewing ring, with strong load bearing capacity, to ensure the superstructure 360° slewing operation, safe and stable.
 Slewing speed: 0～2.5r/min.

Electric control system

Use of ECU controller, foot accelerator, hand accelerator, efficient control of the engine speed by CAN. The system uses DC 24V for power supply, negative ground and single cable system. PLC programmable controller is used as the core of the control system, the system consists of several parts such as engine control, safety control, pilot control, load moment limiter control, auxiliary function control. Real-time monitoring through the display of engine temperature, oil pressure, buzzer warning when the load exceeds the safety limit; at the same time, analysis of current conditions such as lifting load weight, boom elevation angle or radius through load moment limiter, if any values exceed safe limits, a three-color warning light and buzzer will give “sound and light warning”, and control and restriction of hazardous actions by program control.

Hydraulic system

Hydraulic pilot control, precision control, good fine motion, and wide speed range. the hydraulic system for lifting operations of telescoping, luffing and lifting, and the travel hydraulic system share one constant power A8V107 twin-pump, slewing system and pilot system is respectively supplied oil by displacement 40ml/r, and 10ml/r gear pump oil. Hydraulic components use mature and reliable hydraulic units, mature and stable hydraulic drive control technology. Simple operation, easy maintenance and repair, combined with electrical system to ensure the machine safety and stability.

详细介绍
Brief Introduction



下 车

下车包括车架、履带架、行走装置。车架和履带架采用插入式连接，拉板限位。

履带伸缩

将下车行走切换阀，切换到收梁状态，通过履带伸缩油缸实现履带梁的扩张与收缩。方便转场及狭窄环境通过。

行走装置

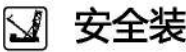
由行走马达、减速机、驱动轮来实现整机的直线行走及转弯。空载行驶速度为0~2.6 km/h，带载行驶速度为0~1.5 km/h。

吊钩

名称	25t吊钩	副起重吊钩（2.8t）
数量	1	1
备注	标配	标配

平衡重

零件名称	重量(吨)	长(米)	宽(米)	高(米)	数量	备 注
平衡重	9	2.930	0.570	0.900	1	铸铁



安全装置

安全装置包括急停开关、先导控制开关、力矩限制器、起升高度限制器、水平仪、回转锁止装置、三圈保护器等。

紧急停止

按下急停开关，发动机熄火，整车动作停止。

先导控制开关

按下开关后，起重作业电气系统才能正常操作。

力矩限制器

当吊重量大于额定起重量，吊臂仰角超出额定范围时，力限器会发出信号，限制危险动作的继续进行。



Crane Undercarriage

Crane carrier comprises car-body,crawler track and travel gear.Car-body and crawler are using the plug-in connection.

Track frame extension/retraction

Track frame extension/retraction is achieved by track frame telescopic cylinder, facilitate site transition and narrow environment through.

Travel unit

Crawler track consists of track beam, drive sprocket, idler wheel, upper roller, lower roller and track pads. Crawler beam is box-type structure, the connection place to frame is strengthened partially, and cross panel is installed in the middle of it. Two crawler tracks are symmetrically arranged, with track pads of 1.5m, can be operated synchronously or independently to realize straight travel and turning around.

Hook block

Name	25t hook block	Auxiliary hook block (2.8t)
Qty.	1	1
Remark	standard	standard

Counterweight

Parts name	Weight (t)	Length (m)	Width(m)	Height(m)	Qty.	Remark
Counterweight	9	2.930	0.570	0.900	1	Casting iron



Safety Devices

Safety devices comprise:emergency stop switch、pilot control switch、load moment limiter、hoist limit switch、level meter、slewing locking device、rope-end limiter, etc.

Emergency stop switch

Press the emergency stop switch to stop the engine, and to stop all the machine movements.

Pilot control switch

Press the switch, the electric system for lifting operation starts to a normal work.

Load moment limiter

When lifting load exceeds the total rated lifting capacity, and boom angle exceeds the rated limit, the load moment limiter will send a warning signal, and cut off crane movement to dangerous direction.

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起升高度限位器

由主、副臂端部限位开关和重锤构成，当吊钩中心起升至距吊臂滑轮中心约710mm时，起升动作自动停止。

水平仪

机棚前方装有水平仪，监控地面是否满足作业要求。

回转锁止装置

保证运输时转台有效锁止，防止其自由滑转。

三圈保护器

当吊钩下降至卷扬钢丝绳剩余三至五圈时，落钩自动停止。

Hoist limit switch

It consists of boom and jib end limit switch and the weight, which will automatically stop the hoisting movement when hook block center is raised 710mm to boom sheave center.

Level meter

A level meter is set on the front of engine hood,to monitor the ground surfacefor operation requirements.

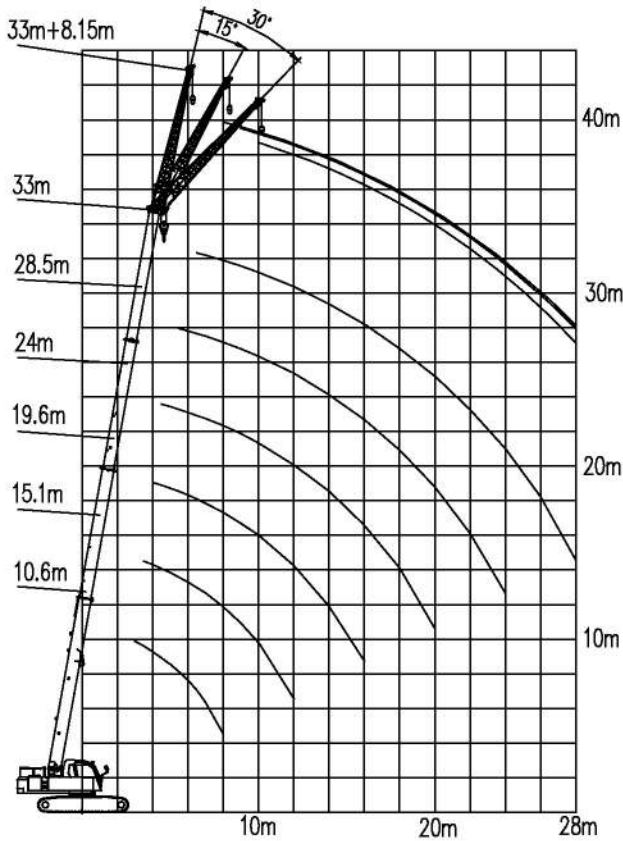
Slewing locking device

The device is used to lock the turntable during transport to avoid free swing.

Rope-end limiter

The device is used to stop hook block lowering when the hook block lowering down and only three to five turns of wire rope left on the winch drum.

起重工况作业范围图
Lifting Operation Range



起重工况性能表

Lifting Performance Table

主臂工况，履带全伸，静止吊载（不行走）

Boom condition, crawler track full extension, lifting standstill (no travel)

履带全伸，配重9t，360° 作业						
Crawler track full extension, Counterweight 9t, for 360° operation						
幅度Radius	10.6	15.1	19.6	24	28.5	33
3	25					
3.5	25	22.7				
4	24	21.6	16.9			
4.5	22	20.6	16	12.2		
5	18.9	19.4	15.2	11.6		
5.5	16.1	16.5	14.5	11.1	9.1	
6	14	14.4	13.8	10.7	8.7	
6.5	12.2	12.6	12.9	10.2	8.4	7.4
7	10.9	11.2	11.4	9.8	8.1	7.2
8	8.7	9.1	9.3	9.1	7.5	6.6
9		7.6	7.8	7.9	7	6.1
10		6.4	6.6	6.7	6.5	5.7
12		4.8	4.9	5	5.1	4.9
14			3.8	3.9	4	4
16			3	3.1	3.2	3.2
18				2.5	2.6	2.6
20				2	2.1	2.2
22					1.7	1.8
24					1.4	1.5
26						1.2
28						0.9
吊钩Hook block	25t钩Hook block (299kg)					
倍率Parts of line	10	9	7	5	4	3
仰角最小Min. angle (°)	28.4	28.7	28.9	29.2	29.4	29.7
仰角最大Max. angle (°)	68.5	73.9	76.9	78.8	79.2	79.5
二节臂2nd section	0	20%	40%	60%	80%	100%
三节臂3rd section	0	20%	40%	60%	80%	100%
四节臂4th section	0	20%	40%	60%	80%	100%

副臂工况，履带全伸，静止吊载（不行走）

Jib condition, crawler track full extension, lifting standstill (no travel)

履带全伸，配重9t，360° 作业，主臂长度33m，副臂长度8.15m						
Crawler track full extension, Counterweight 9t, for 360° operation, Boom length 33m, Jib length 8.15m						
幅度Radius	副臂安装角					
	0°		15°		30°	
	起重量(t) Lifting load (t)	起升高度 (m) Lifting height (m)	起重量(t) Lifting load (t)	起升高度 (m) Lifting height (m)	起重量(t) Lifting load (t)	起升高度 (m) Lifting height (m)
8	2.6	39.8				
9	2.45	39.6	2.1	39.5		
10	2.4	39.3	2	39.2	1.4	38.6
12	2.4	38.6	1.85	38.5	1.3	38
14	2.3	37.8	1.65	37.7	1.25	37.1
16	2.05	36.9	1.5	36.8	1.15	36.2
18	1.95	35.8	1.4	35.7	1.1	35.1
20	1.75	34.7	1.3	34.5	1.1	33.9
22	1.6	33.3	1.2	33.2	1.05	32.5
24	1.3	31.8	1.1	31.6	1	30.9
26	1	30	1.05	29.9	0.95	29.1
28	0.8	28.1	0.7	27.9	0.7	27.1

起重工况性能表

Lifting Performance Table

XGC25T

主臂工况，履带全伸，吊载行驶

Boom condition, crawler track full extension, travel with a load

履带全伸，配重9t，低速稳定行驶			
Crawler track full extension, Counterweight 9t, Travel with stable speed			
幅度Radius	10.6	15.1	19.6
3	25		
3.5	25	22.7	
4	23.7	21.6	16.9
4.5	19.1	19.5	16
5	15.8	16.2	15.2
5.5	13.5	13.8	14
6	11.7	12	12.2
6.5	10.2	10.6	10.7
7	9.1	9.4	9.6
8	7.3	7.6	7.8
9		6.3	6.5
10		5.4	5.5
12		4	4.1
14			3.2
16			2.5
吊钩	25t钩Hook block (299kg)		
倍率	10	9	7
仰角最小 (°)	28.4	28.7	28.9
仰角最大 (°)	68.5	73.9	76.9
二节臂	0	20%	40%
三节臂	0	20%	40%
四节臂	0	20%	40%

说明：

1. 表中给定数值是在地面坚实、平整的状态下，起重机的额定起重量。表中工作幅度为吊载后的实际幅度。

2. 主臂臂长≤19.6m时，整机可带载行走，其余主臂工况以及副臂工况不允许带载和空载行走。

3. 带载行驶时要求履带必须为全伸状态。

4. 吊钩共两种，25t（主臂工况）、2.8t（副臂工况），各吊钩重量如下表：

吊钩重量		
型号	25t吊钩	2.8t吊钩
重量	299kg	58kg

Note:

1. The values given in the table are the rated lifting capacity for the crane set up on the solid and level ground, rated lifting cranes. The radius in the table is the actual radius of the boom with a lifting load.

2. The crane can travel with a load with boom length ≤ 19.6m, the other boom and jib conditions do not allow travel with a load and travel with no-load.

3. Fully extended crawler track must be required for travel with a load.

4. Total two kinds of hook block, 25t hook block (for boom), 2.8t hook block (for jib), the weight of each hook block is in the following table:

Weight of hook block		
Type	25t hook block	2.8t hook block
Weight	299kg	58kg

整机运输方案

Transport Planning



备注：

1、履带架前后应该加垫木防止主机在运输过程过滑动。

2、图中尺寸均为设计尺寸，如有偏差以实际为准。仅供参考！

Note:

1. Add wood blocks on the front and rear of the track frame, to prevent sliding during transport.

2. The dimensions in the figure are the design size, if any deviation, take the actual as the subject, this is only for reference!