

## 主要参数/Main Specifications

型号 Model	单位 Unit	参数 Parameters
操作重量 Operation Weight	kg	46900
铲斗容量 Bucket Capacity	m³	2.2-2.5

发动机 Engine		
发动机型号 Model	/	QSM11
电喷 Electronic fuel injection	/	√
4冲程 Four strokes	/	√
水冷 Water cooling	/	√
涡轮增压 Turbo-charging	/	√
空空中冷 Air to air intercooler	/	√
缸数 No. of cylinders	/	6
额定输出功率/转速 Output power	kW/rpm	250/2000
最大扭矩/转速 Torque/speed	N.m/rpm	1790/1300
排量 Displacement	L	11

主要性能 Main performance		
行驶速度(高/低) Travel speed ( H/L)	km/h	5.4/3.2
回转速度 Rotating speed	r/min	9
爬坡能力 Gradeability	°	35
接地比压Ground pressure	kPa	83
铲斗挖掘力 Bucket digging force	kN	287
斗杆挖掘力 Arm digging force	kN	221
最大牵引力 Maximum traction	kN	338

液压系统 Hydraulic system		
主泵 Main pump	/	2个柱塞泵
主泵额定流量 Rated flow of main pump	L/min	2×360
主安全阀压力 Pressure of prime valve	MPa	31.4/34.3
行走系统压力 Pressure of travel system	MPa	34.3
回转系统压力 Pressure of swing system	MPa	28.4
先导系统压力 Pressure of pilot system	MPa	3.9

油类容量 Oil capacity		
燃油箱容量 Fuel tank capacity	L	725
液压油箱容量 Hydraulic tank capacity	L	430
发动机油容量 Engine oil capacity	L	38

型号 Model	单位 Unit	参数 Parameters
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外形尺寸 Appearance size			
A 总长 Overall length	mm	12090	
B 总宽 Overall width	mm	3582	
C 总高 Overall height	mm	3860	
D 转台宽度 Width of platform	mm	2995	
E 履带长度 Length of crawler	mm	5353	
F 底盘总宽 Overall width of chassis	mm	3582	
G 标准履带板宽度 Width of crawler	mm	600	
H 履带轴距 Track length on ground	mm	4292	
I 轨距 Crawler gauge	mm	2750	
J 配重离地间隙 Clearance under counterweight	mm	1324	
K 最低离地间隙 Min. ground clearance	mm	519	
L 尾部回转半径 Min. tail swing radius	mm	3665	
M 履带高度 Height of crawler	mm	1070	

工作范围 Working scope			
A 最大挖掘高度 Max. digging height	mm	10848	
B 最大卸载高度 Max. dumping height	mm	7569	
C 最大挖掘深度 Max. digging depth	mm	7845	
D 8英尺水平面挖掘深度 Excavation depth of 8 feet level	mm	7702	
E 最大垂直挖掘深度 Max. vertical wall digging depth	mm	6870	
F 最大挖掘半径 Max. digging reach	mm	12066	
G 最小回转半径 Min. swing radius	mm	4802	

材料和规格可随时改变，恕不另行通知  
Materials and specifications may be changed at any time without prior notice



# XE470D 液压挖掘机

## XE470D HYDRAULIC EXCAVATOR



- 铲斗容量 Bucket Capacity ( m³ ) : 2.2-2.5
- 操作重量 Operation Weight ( kg ) : 46900
- 额定功率 Output power ( kW/rpm ) : 250/2000

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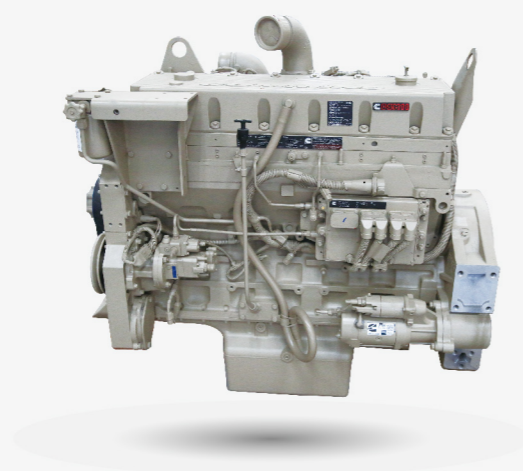
XCMG1608

## 更节能环保

### More energy-conservation and environmental protection

动力系统采用直喷、4冲程、水冷、涡轮增压、空空中冷、六缸发动机。该发动机采用高效率的HPI燃油喷射技术，实现分缸控制和全电子控制，大幅提高燃油经济性，是专门针对工程机械作业工况精心设计制造的发动机。

Power system refers to engine which features direct injection, IV stroke, water cooling, turbocharge, air-air intercool, VI cylinder. The engine adopts efficient HPI fuel injection technology realizing respective cylinder and full electronic control, sharply improving fuel economy, elaborately designed and manufactured especially for construction machinery working conditions.



- 液压系统采用大臂优先、小臂优先、回转优先和大小臂液压油流量再生系统，保证了机器的最佳作业性能，同时通过优化设计液压管路，改善回油压力损失及系统背压，有效降低了能量损耗。

Hydraulic system adopts boom priority, arm priority, swing priority, boom and arm hydraulic oil flow regeneration system, ensures optimum operating performance of this machine, simultaneously through optimal designed hydraulic pipes, improves return oil pressure loss and system back pressure, efficiently lowers energy loss.

- 可根据不同的使用环境，配置无级变速散热装置。机器可根据水温、进气温度和液压油温，利用分段算法精确控制风扇转速，在满足散热需求的条件下，尽可能降低风扇的能耗。

Continuously variable cooling device can be deployed depending on different conditions. Using segmentation algorithm, the equipment could accurately controls fan speed on the basis of water temperature, intake temperature and hydraulic oil temperature. Thus, minimizing the fan's energy consumption on condition of meeting cooling demand.

## 更高效回报

### More efficient return

- 发动机采用定制扭矩曲线，具有低速大扭矩，燃油消耗低，经济性好等特点，同时在特定转速段内为恒功率模式，使机器在重载低转速时仍保持强大的功率输出。

Engine adopts customized torque curve with features of large torque at low speed, low fuel consumption, economical efficiency. What's more, constant power will be supplied at special speed range, which provide the machine with strong power output when heavy load and low speed.

- 自主控制技术：自主知识产权专用电子监控器和控制器，自主编制控制器程序对发动机工作转速、泵功率进行精细匹配控制，充分利用发动机功率，提高作业效率的同时有效降低了油耗。

Independent control technology: Equipped with pecialized monitor and controller of proprietary intellectual property rights. Independent written control procedure can control engine working speed, pump power with accurate match, taking full use of engine power, reduces fuel consumption while increasing work efficiency.



- 液压系统采用流量再生节能技术、斗杆合流降压技术和阀芯开度自适应技术等新技术，进一步降低回油背压，提高挖掘力，提高重载作业效率。

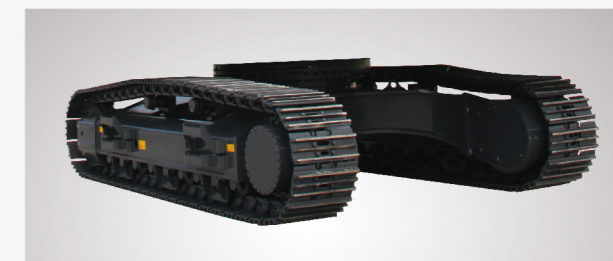
Hydraulic system adopts flow regeneration technology, arm interflow decompression technology, valve plug opening self-ataption technology and other new technologies, which further decreases oil returning pressure, increases digging force and heavy load work efficiency.

- 所有滤芯集成度高，触手可及，维修保养便捷高效。

All filters are at one's fingertips with high level integration, which makes maintenance easier and higher efficiency.

## 更可靠耐用

### More reliable and durable



- 坚固的下部行走体可以满足重载作业需要，其耐用性、可靠性和机动性更高，配置的强化型四轮一带，性能优良，质量更加可靠，强化行走架和X型梁结构，提高横截面的强度，分散机体的应力，可胜任更坚硬的工作。

Steady lower travelling body satisfies hezvy load requests with high durability, reliability and maneuverability. Reinforced type travelling mechanism has excellent performance, more reliable quality. Strengthened travelling frame and adoption of X type structure can improve section intensity, separate structure stress, which makes it taking more difficult work.

- H型大臂和小臂关键部位均采用一体式铸造结构，受力均匀，使用寿命更长；接触面采用高硬度T型轴套，大幅降低表面的磨损，延长使用时间；大容量岩石铲斗采用双圆弧设计结构，减小了挖掘时的阻力，更易装卸物料，同时采用美国著名公司爱斯科专利生产的Ultralok系列斗齿，穿透力更强，耐磨性更好，使用寿命提高一倍以上。

H type boom and arm key parts all adopt integrated casting structure, making stressed uniformly, longer service life. Contact surface adopts high rigidity T type sleeve, greatly reducing surface wearing, extending service time. Large capacity rock bucket adopts double-arc design, minishing resistance when digging, making loading and unloading materials easier. What' s more, the bucket are equipped with Ultralok series bucket teeth made from famous company called AISC in USA with stronger penetrating power, better wear resistance, more than one time' s service life.

- 液压系统采用行业最先进的变量柱塞泵，具有性能优越，输出持久稳定等特点；高压主油路和回油管路全部采用钢管+扣压软管结构，耐冲击，可靠性高；油缸采用增强型支撑环结构，寿命大幅提升，有效避免漏油、拉缸等故障。

Hydraulic system employs the most advanced variable displacement piston pump in excavator machinery industry with features of remarkable performance and constant stable output. Steel pipes plus attaching hoses structure is brought to high pressure main oil circuit and returning pipelines, realizing high impact resistance and reliability. Cylinders adopt enhanced supporting ring structure, increasing service life substantially, avoiding leakage and cylinder scuffing efficiently.



- 电器元件采用航空式插接件，导通性好、防护等级高、可靠性高。  
Electrical elements adopt aviationconnector clips with good conduction, high level of protection and reliability.
- 回转支承滚珠直径较上一代产品增加20%，并增大滚道直径，其承载能力提升15%。  
Slewing bearing balls' diameters are increased by 20% compared with last generation. The rollaway nest is also enlarged, making its bearing ability improving by 15%.

- 发动机配置防尘型启动马达，工况适应性强，可靠性高；燃油箱配置空气滤清器，可有效过滤空气中的粉尘，避免对油品造成污染。

Engine is equipped with dust-proof type start motor which has strong adaption of working conditions and high reliability. Air cleaner is fitted on fuel tank, filtering dusts in air substantially, avoiding pollution to fuel.



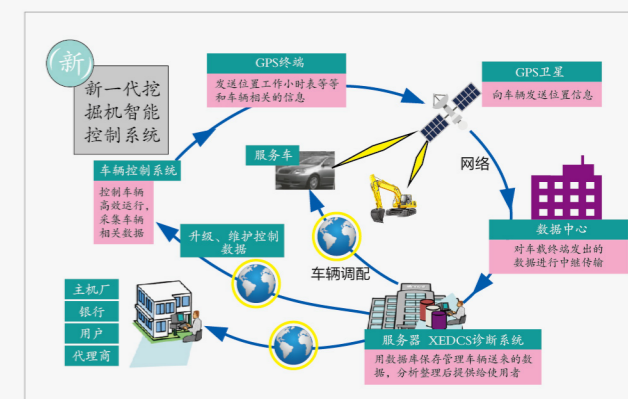
## 更智能管控 More intelligent management and control

- 自主知识产权XEICS系统，采用CAN总线通讯实现相应控制功能，对作业环境、作业工况和作业载荷能有效适应，做到会识别、会思考、会判断、会决策、会执行。

Intelligent control system (XEICS) developed independently adapts CAN bus to contact, realizing controlling relative functions. It can adjust itself to working environments, working conditions and working loading, be able to identify, judge, decide and execute.

- GPS智能云控制系统，与公司CRM、400、DMS系统链接，集GPS定位功能、远程管理和远程诊断功能于一体，不仅能够承载挖掘机地理位置信息，挖机现场工作参数和报警信息数据上传，还能实现车辆出入库管理、远程管理、远程诊断、远程控制。

GPS cloud control system is linked with corporation CRM system, 400 system, DMS system, and combined with GPS locating function, remote management and remote diagnosis. It can not only upload excavator location information, excavator realtime working parameters and alarm information, but also realize vehicles access management, remote management, remote diagnosis and remote control.



- 标配高原模式功能,利用GPS定位技术，可根据海拔高度调节主泵功率，防止发动机过载，实现电子节能控制。  
The highland self adaptation system is equipped, which is able to intelligently adjust power of hydraulic pump according to altitude to prevent engine from overloading, realizing electronic energy-saving control.
- 多功能彩色液晶显示器为操作者提供综合易读的机器信息，全面监控发动机和液压系统的工作状态，可查询机器的各种运行及故障诊断信息。  
Multi-function colorful LCD supplies operator with comprehensive readable vehicle information, fully monitors engine and hydraulic system working states. Inquiry of running and errors diagnosis information is available also.

## 更舒适安全 More comfortable and safe

- 具有增压功能的驾驶室，可有效防止灰尘进入操作室，为司机提供干净的作业环境；驾驶室内部框架加强，整体结构强度增加，前后增加销孔，安全性能提升；驾驶室配置双层夹胶玻璃，有效过滤紫外线，防护等级高。

Pressurized cabin, which can prevent dusts from going inside, supplies operator a clean environment. Internal structure of cabin is strengthened, and the overall structure strength is increased also. Pin holes are added in new cabin, which promotes safety. Protection grade is greatly increased by double-leak sealant glass which can filter ultraviolet ray efficiently equipped in new cabin.

- 采用进口硅油密封减震器，并提高驾驶室底板刚性，减小驾驶室晃动量，减轻驾驶人员的操作疲劳。

The imported high-performance silicone oil shock absorber enhances cabin base-plate rigidity, decreases shake of cabin, what's more, relieves the fatigue of operator.

- 警示功能：驾驶室顶部的旋转警示灯可对附近人员进行视觉提醒，高音量蜂鸣器可对附近人员进行听觉提醒。

Alarm function: The rotatory alarm lamp on the top of cab can warn people surrounding visually. High-pitch buzzer can warn people surrounding auditiely.

- 开阔视野：全车共配置4台凸面后视镜，实现视野360°可视化；夜间工作灯采用高亮度、低能耗，可持续工作20000h的LED灯。

Open horizon: The overall vehicle is equipped with 4 convex rearview mirrors, realizing 360° visible horizon. Night working lights adapt high brightness, low energy consumption LED, are able to work continuously for 20000h.



## XE470D HYDRAULIC EXCAVATOR

## XE470D液压挖掘机

- 座椅底盘上装有弹簧气缸减震装置，能有效降低不良震动，同时配置改良的头枕和加宽的靠背，彰显“以人为本”的设计理念，使操作更舒适。

There is spring air cylinder damping device, which can efficiently decrease endurable vibration. Modified headrest and dilated backrest manifest the design philosophy — people foremost, which make operation more comfortable.



## 便捷的维护保养 Convenient repair and maintenance

- 机油滤清器、先导滤清器、燃油滤清器、油水分离器，空气滤清器设置于可在地面接进行检查更换的地方，触手可及，保养方便，节省维修时间，提高工作效率。

Engine oil filter, pilot filter, fuel filter and water separator and air filter are all can be maintained directly by standing on the ground, maintenance is quite convenient with simple operation and low cost, improving work efficiency.

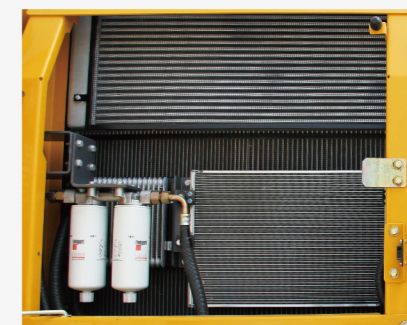


- 发动机罩采用具有气弹簧助力的侧面上翻式结构设计，开启角度大，方便对发动机和散热器进行检修。

Engine cover is designed by side upturning way with air spring assist, making open angle larger and convenient service for engine and radiator.

- 散热器外部设置防护网，有效防止飞絮等杂物吸入，拆卸方便，清洗更容易。

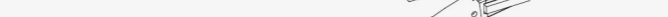
Protective screen is available for radiator, preventing sundries from going inside, which is convenient for service, easier for clean.



- 散热器和油冷却器平行排列，便于对散热器和油冷却器的清洁和拆卸，发动机油底壳装有排放接头，使得维护保养作业更加容易。

Radiator and oil cooler are arranged parallelly, and there is discharging connector at engine oil sump, making maintenance and service easier and more convenient.

1.0m<sup>3</sup> 松土斗



2.5m<sup>3</sup> 加强斗

■: 适用于密度小于2100 kg/m³或以下物料      Suitable for the material which density is less than 2100kg/m³  
□: 适用于密度小于1800 kg/m³或以下物料      Suitable for the material which density is less than 1800kg/m³  
○: 适用于密度小于1200 kg/m³或以下物料      Suitable for the material which density is less than 1200kg/m³

<p>发动机 Engine</p> <p>发动机型号 Model of engine: QSM11</p> <p>排放等级 Emission level: 国Ⅲ National III</p> <p>自动预热 Automatic preheat</p> <p>带水位指示传感器的油水分离器 Oil-water separator with water level indication sensor</p> <p>径向密封空气滤清器 Radial seal air filter</p> <p>空气预滤器 Air prefilter</p> <p>50° C 高温环境冷却组件 Cooling components of 50° C high temperature environment</p> <p>散热器防尘网 Dust screen of radiator</p> <p>燃油油标 Fuel leveler</p> <p>燃油呼吸阀 Fuel breather valve</p> <p>空气压差指示器 Air differential pressure indicator</p> <p>自动怠速 Automatic idle speed</p>	<p>驾驶室与内饰 Cab interior and interior trimming</p> <p>增压驾驶室 Pressurized cab</p> <p>完全可调的空气悬浮座椅 Completely adjustable air suspension seat</p> <p>可调节座位扶手 Adjustable armrest</p> <p>安全带 (51 mm [2"] 宽) Safety belt (51 mm [2"] width)</p> <p>配备辅助装置的可开启前挡风玻璃 Openable front windshield glass equipped with auxiliary equipment</p> <p>按 70/30 比例分割的前挡风玻璃 Front windshield window cut with ratio of 70/30</p> <p>双层夹胶挡风玻璃和其他钢化窗户 Double-layer laminated windshield and other tempered Windows</p> <p>可滑动的车门上窗 Slidable upper window of door</p> <p>带除霜器的双向出风空调 (自动型) (加压功能) Double-way air-out air conditioner with defroster(automatic)(pressurized)</p> <p>可显示警告信息、滤清器/液体更换信息和工作小时数的彩色液晶显示屏 Color LCD display with data of alarm, filter/fluid change and working hours</p> <p>操纵手柄 Control handle</p> <p>装有可拆卸手动操纵杆的行驶控制踏板 Travel control pedal with removable manual control lever</p> <p>两个立体声扬声器 Two stereo speakers</p> <p>饮料杯架 Beverage holder</p> <p>衣帽钩 Coat and hat hook</p> <p>可清洗地板垫 Washable floor mat</p> <p>空调系统 Air conditioner system</p> <p>高低速换挡 High/low speed shift gears</p> <p>一键增压模式 Onekey boost mode</p> <p>工作机具预留开关 Reserved switch for auxiliary equipment</p> <p>遮阳帘 Shade curtain</p> <p>顶部天窗 Top skylight</p> <p>间歇式多档雨刮器 Batch multiple-range wiper</p> <p>杯架/文件袋 Cup holder/file packet</p> <p>无线电收音机 Wireless radio</p>	<p>安全与保安配置 Safety and security configuration</p> <p>驾驶室门锁和各舱室锁 Door lock of cab and chambers</p> <p>警报喇叭 Alarm horn</p> <p>发动机和油泵室之间的隔离板 Spacer plate between engine and oil pump chamber</p> <p>后窗紧急出口 Emergency exit of rear window</p> <p>蓄电池断路开关 Shutdown switch of battery</p> <p>动臂、斗杆保持阀 Holding valve of boom and arm</p> <p>过热报警 Overheat alarm</p> <p>安全扶手和踏板 Safety rail and pedal</p> <p>旋转报警灯 Rotating alarm light</p> <p>防滑板/防滑贴 Anti-skid plate/anti-slip tip</p> <p>液压安全锁定杆 Hydraulic safety lock lever</p> <p>紧急逃生锤 Emergency escape hammer</p> <p>左右后视镜 Left and right rearview mirror</p> <p>配重后视镜 Rearview mirror of counterweight</p> <p>后视监控摄像头 Rearview monitor camera</p>
<p>液压系统 Hydraulic system</p> <p>动臂/斗杆流量再生 Boom/arm flow regeneration</p> <p>反向回转阻尼阀 Reverse rotary damping valve</p> <p>自动回转停车制动器 Automatic rotary parking brake</p> <p>直行液压回路 Travel straight hydraulic circuits</p> <p>动臂优先阀 Boom priority valve</p> <p>回转逻辑阀 Rotary logic valve</p> <p>液压油 ISO VG 46 Hydraulic oil ISO VG 46</p> <p>回转防摇摆阀 Rotary anti-sway valve</p> <p>备用阀片 Spare valve disc</p> <p>仪表压力监控 Instrument pressure monitor</p>	<p>照明灯 Lamp</p> <p>左右两侧动臂工作灯 Boom working lamp at left and right side</p> <p>安装在储物箱上的右侧工作灯 Working lamp installed on the right side of storage box</p> <p>驾驶室内部照明 Lamp inside the cab</p> <p>驾驶室顶安装的前工作灯 Front working lamp installed on the top of cab</p>	<p>电气系统 Electrical system</p> <p>蓄电池 (2×650 CCA) Battery (2×650 CCA)</p> <p>70 A 交流发电机 70 A Alternator</p> <p>9 kW 起动机 9 kW start motor</p> <p>行走报警器 Travel alarm</p> <p>24V点烟器 24V Cigar lighter</p> <p>24V电源接口 24V Power interface</p> <p>5V USB接口 5V USB interface</p>
<p>底盘系统与护罩 Chassis sytem and protective guard</p> <p>履带单护轨器 Single guardrail device of track</p> <p>底架牵引环 Underframe bail</p> <p>600 mm (24") 三筋履带板 600 mm (24") Three rib track plate</p> <p>保护装置套件: 底盘底部封板、行走马达封板 Protection suite: close plate at the bottom of chassis, close plate of travel motor</p> <p>加长底盘 Extended chassis</p>	<p>配重 Counterweight</p> <p>9.5 t 配重 9.5t Conuterweight</p>	<p>技术 Technology</p> <p>XEICS智能控制系统 XEICS intelligent control system</p> <p>数据链路插座 Data link socket</p>
<p>工作装置 Working device</p> <p>动臂 7.06m Boom 7.06m</p> <p>斗杆 3.38m Arm 3.38m</p>	<p>润滑系统 Lubrication system</p> <p>斗杆集中 Arm concentration</p>	

选装配置	Optional configuration	XE470D
带加热器油水分离器 (24V) Oil-water separator with heater (24V)	液压管路: 液压振动夯/高频破碎器	1 m <sup>3</sup> 松土斗 1 m <sup>3</sup> Ripper
油浴型空气预滤器 Oil-bath type air prefilter	Hydraulic line:hydraulic vibration rammer/high-frequency breaker	快速连接器 Quick connector
油水快速装置 Oil and water quick discharge device	液压管路: 液压抓具 Hydraulic line:hydraulic grapple	破碎锤 Quartering hammer
冷却液加热器 (燃油式) Coolant heater(fuel type)	操作方式切换 Operating modes switch	液压拇指钳 Hydraulic thumb pliers
带可控硅油离合器的散热器模块	液压油 ISO VG 32, 68 Hydraulic oil ISO VG 32, 68	松土器 Quick connector
Heat dissipating module with Controllable silicon oil clutch	带坐垫加热的空气悬浮座椅 Heated air suspension seat with cushion	振动夯 Vibrating tamper
燃油加油泵 50L/min Fuel refueling pump 50L/min	车载供氧装置 Onboard oxygen device	液压剪 Hydraulic shear
燃油快速加注系统 Fast fill fuel system	灭火器 Fire extinguisher	抓具 Grip
辅助液压阀 Auxiliary hydraulic valve	发动机紧急停机开关 Emergency stop switch of engine	高频破碎器 High frequency breaker
液压缓冲阀 Hydraulic buffering valve	动臂、斗杆管路防爆阀 Explosion-proof valve of boom and arm pipeline	贝壳斗 Clam shell bucket
液压管路: 破碎锤 Hydraulic line: quartering hammer	落物防护结构 (FOPS) Fall Off Protection Structure(FOPS)	梅花抓斗 Plum-blossom shape grab bucket
液压管路: 拇指钳及油缸 thumb pliers and cylinder	700 mm (28") 三筋履带板 700 mm (28") Three rib track plate	筛型斗 Screen-type bucket
液压管路: 防爆阀管路及油缸	800 mm (31") 三筋履带板 800 mm (31") Three rib track plate	12V点烟器 12V Cigar lighter
Hydraulic line:pipeline of explosion-proof valve and cylinder	900 mm三筋履带板 900 mm Three rib track plate	摄像头 Camera
液压管路: 快速连接器 Hydraulic pipeline:quick connector	履带橡胶块 Crawler rubber block	驾驶室顶安装的后工作灯 Rear working lamp installed on the top of cab
液压管路: 液压剪 Hydraulic line:hydraulic shear	2.5 m <sup>3</sup> +方斗 2.5 m <sup>3</sup> Earth working bucket	