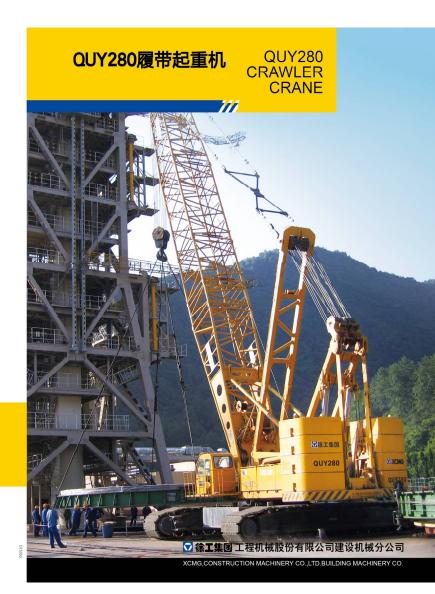
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QUY280履带起重机 QUY280 CRAWLER CRANE

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

☆ 徐工集团 工程机械股份有限公司建设机械分公司





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

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Soon Communitors shoon wor 上背信件 业况图 Boom Working Area 上背江北岛城市表 Boom Lifting Load Chart 加克巴斯宁亚克 Working Area Boom Lifting Load Chart 加克尼斯宁亚克 Working Area Bin Elegistra Marka Might Jan Chart Lifting Load Chart 不改成的 Working Condition 标式测算作业范围 Tower allo Working Condition 标式测算作业范围 Tower allo Working Area 稀式测算工业系列 Tower allo Working Area 稀式测算工业系列 Tower Jo Lifting Load Chart Tower also Working Area 稀式测算工业系数 Working Area 稀式测算工业系数 不可能可以加速的 Working Area 新式测算工业级模壳表 Tower Jo Lifting Load Chart - Tower -

单位 Unit 数值 Data 项目 Items 基本型主臂 Main boom t 280 最大额定起重量 Max. lifting capacity 起升机构最大单绳速度(空载、第六层)Winch max. single line speed (no load, at 6th layer) m/min 137 - State Mat. (ロードリー・1923 vs.) stross verticile mass (main frook blook. 18m boom) t 252 运輸状态単作拡大販賣 Max. weight of single unit in travel configuration t 58.0 国輸状态単作は対象人力(伏×窓×高)

主要零部件 Main Parts

The state of the s	主机 Basic machine	×1
	КL	12530mm
	宽W	3470mm
	商用	3460mm
	重量 Weight	58000kg
(But Browney You) The Browney And	280t吊钩 Capacity Hook Block	×1
et la	₩L	2500mm
	宽W	1400mm
(OO)	高日	910mm
	重量 Weight	4500kg
Muun maru	150t吊钩 Capacity Hook Block	×1
	КL	2220mm
# P	完w	900mm
NO 00	高日	850mm
	重量 Weight	2400kg
	80t吊钩 Capacity Hook Block	×1
(· · · · ·)	₩L.	2030mm
\ • · · · /	宽w	920mm
Ä.	高日	820mm
9	重量 Weight	1400kg
A	35t吊钩 Capacity Hook Block	×1
(° •))	K L	1750mm
**	宽w	900mm
The second secon	商用	390mm
	重量 Weight	1000kg
	12t吊钩 Capacity Hook Block	×1
	₩L	920mm
171	宽W	520mm
A Law	高H	520mm
0	重星 weight	600kg
	上车1(3)号配重 Upper Counterweight	×5
	K∟	1942.7mm
	宽W	1400mm
	高H	528mm
	重量 Weight	7000kg
ioi	上车4(5)号配重 Upper Counterweight	×1
	KL.	1942.7mm
	宽W	1400mm
	高H	428mm
	重量 Weight	5000kg

主要零部件 Main Parts

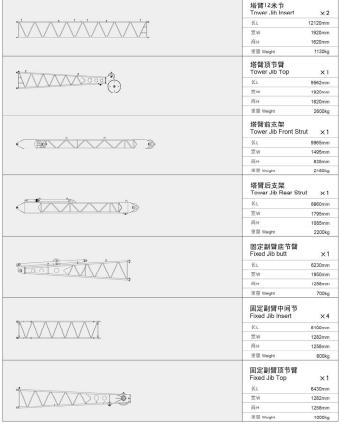
上车2号配重 Upper Counterweight ×1 长L 商日 640mm 部景 Weight 20000kg 车身1号配重 Car-body counterweight ×2 ΚL 1700mm 変w 高H 1030mm 1010mm 重量 Weight 5000kg 车身2号配重 Car-body counterweight ×2 ΚL 2800mm 高日 1010mm 重量 Weight 10000kg 履带架 Crawler ×2 tξL 9510mm 変w 1380mm 商日 1400mm 重量 Weight 27000kg 主臂底节臂 Boom Butt X1 ΚL 9280mm 商日 2357mm 重量 Weight 5700kg 主臂3米节 Boom Insert 烁L $\times 1$ 変w 2460mm 商H 2492mm 重量 Weight 1150kg 主臂6米节 Boom Insert ⊮∟ ×1 宽W 高H 2460mm 2492mm 重量 Weight 2000kg

主要零部件 Main Parts

	主臂12米节	
	Boom Insert	×5
	长L 変w	12160mm 2460mm
	商用	2492mm
9	野景 Weight	
	III III Weight	3600kg
	主臂7.8米节 Boom Insert	×1
	K L	7960mm
	宽W	2460mm
	商н	2836mm
0	重量 Weight	2800kg
	主臂臂头 Boom Head	×1
	₩L	2251mm
	Σw	1970mm
Cope of	Äн	3061mm
Ш»	重量 Weight	3200kg
	主臂臂端单滑轮 Boom Head Single Sheave ×1	
	KL	1400mm
σ	変w	576mm
	Äн	980mm
	重量 Weight	330kg
	塔臂底节臂 Tower Jib Butt	×1
@ 100 (\\\\\\\\	₩L	9211mm
The state of the s	変w	192011111
	高日	1620mm
	重量 Weight	1250kg
- 1 · · · · · · · · · · · · · · · · · ·	塔臂3米节 Tower Jib Insert	×2
	KL	3120mm
	変w	1920mm
v	商用	1620mm
	重量 Weight	420kg
a 1 1 10	塔臂6米节 Tower Jib Insert	×2
1//////	₩1	6120mm
a	変w	1920mm
	高日	1620mm
	1911	1020111111

. __

主要零部件 Main Parts



说 明 Notes

- 以上零時件控稿形状为示意图。解标尺寸为设计值,不包括包条
 The above parts dimension is only for illustration, the dimension shown is design value, and does not include the package.
 重量为设计值。由于制造误差,可能稍不同.
 The weight if design value, may have slight difference due to error in manufacture.

详细介绍 **Brief Introduction**

■ 上 车

发动机

采用康明斯QSL9-C325电喷发动机,额定功率242kW,额定转速为 2100rpm,最大输出扭矩1424N·m。符合欧洲工程机械第三阶段排放标准。

控制

管能化计算机集成式可编程控制系统,是该产品的关键核心技术,采用 PLC可编程控制器。与宏观电气组结合、完成系统的逻辑控制与电比例控制功能,实现基理机的信息控制,大大股高起重机的作业安全性、可靠性和作业安全。本机的操作可以通过电脑的大屏幕显示出来,很万便的实现了人机对话。

液压系统

采用电比例控制, 开闭式回路相结合, 恒功率变量泵系统。 液压系统组成: 起升系统, 变幅系统, 回转系统, 塔臂防后倾系统, 行走

主、副起升型号相同,单独驱动,双聚合流供油;片式常闭制动器。力士 水丹疏式减速地见。主、副起引机特与转台京用带轴连接,使了组装。驱动 步达、平衡衡。起升锁丝线分污幅回进口。最大速度可达1200m/min,具有 优良的锁速性能。起升机构还具有换油方便。低噪音、高效率、长寿命等

变幅机构

主門支編为 个双联卷筒独立驱动,使用居肾工况时,利用副起耳机构作 为烙臂变编制构使用。主臂变编机构采用内藏式流速机(力士乐),片式 常别动动器。卷筒设有缝轮锁止装置,以实现机械制动,安全可靠。主臂 变编机构与转台深用螺栓连接,使于组装、驱动马达、平衡旭、变编销丝 绳均为德国进口。

回转机构

同转机构布置在转台内侧前面,由两个行星减速机(力士乐)组成,与回 转支承外啮合。液压缓冲,具有自由滑转机能。行星齿轮减速机,可控常 闭、片式制动器,工作可靠,维修方便。

回转支承

采用罗特艾德的三排液柱式回转支承,质量稳定可靠。

上车配重

- 上车1号配重: 35t: 6~7t, 共5块; 上车2号配重: 20t: 1×20t, 共1块; 上车3号配重: 35t: 5×7t, 共5块; 上车4号配重: 5t: 1×5t, 共1块; 上车5号配重: 5t: 1×5t, 共1块;

☑ Crane Superstructure

Cummins QSL9-C325 diesel engine with electronic injection, rated output power 242kW, rated speed 2100rpm, max. output torque 1424N.m, emission in compliance with European Construction Machinery Stage III.

intelligent computer integrated program control system is the key technology of the crane. PLC program controller is used, with combination of conventional electrics, to realize the function of logic control and electronic proportional control of the system, greatly improving safety, reliability and efficiency for crane operation. Care operation can be shown by a larger screen computer display, and easy for man-machine interaction.

Hydraulic System

Electronic proportional control, with combination of close/open type circuit, constant power and variable displacement pump system. Hydraulie system winch, luffing gear, televing gear, tower jib backstop, travet gear, auxiliary assembly system. Features: winch, luffing gear, travel gear are of open type system, main pump is constant power and variable displacement pump, variable displacement. Siewing gear is closer type system, quick response, accurate control, stable starting, braking and direction change, no impact, may satisfy operation of frequent direction change and fine motion control.

Main/auxiliary winch has same model, with independent drive and combination of two pumps for oil superly, disk type constant closed struck Rezorth builtin speed reducer; main/auxiliary winch and turntable connected by pin shaft, easy for assembly. Drive motor, counterbalance valve, winch wife rope imported from Germany, max, line speed 172mmin, with proof line spead performance Winch also features acres of replacement, for noise, high efficiency and rong service life.

Luffing Gear

Boom luffing gear is a twin drum independent drive unit, and use auxiliary which as tower jib luffing gear when tower jib is in use. Main/auxiliary which has built-in-speed reducer (Resorth), and disc type constant closed brake. Which drum has a ratchet locking device to realize mechanical brake, which will reliable. Down thing year and turntable ownered by jin shaft, easy for assembly. Drive motor, counterbalance valve, winch wite rope are all imported from Germany.

Slewing Gear

Slewing Ring

Slewing gear is arranged inside the front of turntable, made up by two planetary reducers (Rexroth), and external meshed with slewing ring, dyrdraulic buffering, and with the function of free swing. Planetary reducer has a controllable constant-closed disc brake, reliable working and easy for maintenance.

Slewing ring is a 3-row roller type slewing bearing made by Xuzhou Rothe Erde, with reliable quality.

Upper Counterweight Upper counterweight 1: 40t 5-8t total 5 slats, Upper counterweight 2: 20t 1×20t total 1 slab; Upper counterweight 3: 40t 5-8t total 5 slabs; Upper counterweight 4: 5t 1×5t total 1 slabs; Upper counterweight 5: 5t 1×5t total 1 slabs;

详细介绍 **Brief Introduction**

操纵室

提級室東用賴制框架结构,正面配置有整体式夹层玻璃,其余玻璃均为锅 化玻璃。装有可调过整体。接入机工程学布置的全全接级仅表和识别装置。 起置风温式次型空调。音响,火头装置。闭塞的说系统等。索修活。工 作时,接级室可调整俯仰角度,扩大视野,万使操作;运输时,操纵室可 从侧方转到前方,减小运输宽度。

转合采用箱型与单腹板混合的结构,该结构整体稳定性好。转台是联系上 下车的关键承载结构件、转台通过回转支承与下车进行联接。驾驶室、起 升机构、变幅机构、发动机、人字架、桅杆、臂架及配重等分别与转合在 不同部位进行联接。



车架采用高强锅板、箱形结构,中间设置横隔板,加强其抗扭刚度,结构 简单,承载能力强,刚性好。

包括腰带梁和四轮一带。腰带梁采用箱形结构,和车架连接部位局部加强, 中间设置横隔板。两个腰带架对称布置,装有宽度为1.2m的腰带板。

履带行走驱动采用德国进口的内藏式行星齿轮减速机,液压释放行走制动 器,每个减速机由德国进口的轴向柱來变量马达驱动,可同步操作,也可 单独採纵,以实现直行和柱弯。

行走速度

套量马法可以实现王级套速,最高速度1公里/小时,行走时,设备运行平稳,可实现快速行走。

车身配重

车身1号配重: 10t: 2×5t, 共2块; 牛身2号配重: 201: 2×101, 共2块



起重臂包括主臂、固定副臂和塔式副臂。结构型式为中间等截面,两端变 截面的四弦杆空间桁架结构,主弦杆采用进口高强度管材,腹杆采用固产 优质管材,提高了臂架抗弯曲的能力。

主臂

主臂为中间等截面、两端变截面的空间桁架式结构、钢管焊接、臂架顶部 与根部用钢板加强,以利于传递载荷。主臂配置臂端单滑轮机构,主臂长

超成: 底节臂9m、中间节臂3m×1、中间节臂6m×1、中间节臂12m×5、顶节臂7.0m×1、臂头1.2m×1。

Operator's Cabin

Operator's cabin is steel frame structure, front windshield has overall type safety glass, other glass is hardened glass, euupped with adjustable seat, all kinds of ergonomic designed instruments and adjustable seat, all kinds of ergonomic designed instruments and confortable with the seat of the seat of

Turntable is structure of box type and single web plate, with good overall stability. Turntable is key structural part linked with crane superstructure and crane carrier for load bearing, with many mechanisms arranged on it, such as operator's cabin, winch, luffing gear, engine, gantry, mast, boom and countanvaight.

☑ Crane Carrier

Car-body

Car-body is made of high strength steel, box-type structure, with cross panel installed in the middle to strengthen its stiffness of torsion resistance, simple structure, high loading capacity and well rigidity.

Crawler track consists of track beam, drive sprocket, idler wheel, upper roller, lower roller and track. 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.

Travel Gear

Travel gear drive has German imported built-in planetary gear reducer and hydraulic release service brake, each reducer is driven by German imported axial piston variable displacement motor, can be operated synchronously or independently to realize straight travel and turning around.

Travel Speed

Variable displacement motor can realize infinitely variable drive, max. speed 1 km/h, stable and fast travel.

Car-body counterweight

Car-body counterweight: 10t 2×5t total 2 slabs; Car-body counterweight: 20t 2×10t total 2 slabs.

Lifting Operation Parts

Lifting boom comprises main boom, tower jib and special jib, the structural type is lattice structure of four tubular chords with intermediate equal section and two end variable section; the main boom chord is made of imported high quality tube, and web rod is made of domestic high quality tube, with the ability for improving to resistance.

Main boom is lattice structure of intermediate equal section and two end variable section, welded by steel tube, boom top and boom foot rendrood by steel pales for load transfer, and equipped with boom head single sheave, boom length: 18m-87m.

Construction: 3m boom butt, 3m-1 boom insert, 6m-1 boom insert, 12m-5 boom insert, 75m-1 taper extension, 12m-1 boom head.

详细介绍 **Brief Introduction**

固定副臂

固定副臂为中间等截面、两端变截面的空间桁架式结构,钢管焊接,臂架

顶部与根部用钢板加强,以利于传递载荷。 固定副臂可在主臂长45~75米范围内进行作业,其作业长度为12~36m,

含10°及30°两种安装角。 组成:底节臂6m、中间节臂6m×4、顶节臂6m。

塔式副臂

。 塔式副附为中间等截高、两端多截面的空间桁架式结构、钢管焊接、臂架 顶部与相部用钢板加强。以利于任建载荷。 塔式副附可在主臂长30-60米宽阳内进行作业,其作业长度为27-60m。 组成。 据节则9m、中间节臂3m×2、中间节臂6m×2、中间节臂12m×2、顶 节调9m。

桅杆

桅杆结构为箱形双肢结构,该结构整体稳定性好。在自拆装时,可组成桅杆 吊,用于拆装整机的大型结构件。

人字架

人字架是重要结构件之一。前足采用箱形观肢结构,后足采用可折叠式拉板,前足装有油缸,用于起落人字架和自拆装转台配重。

吊钩

标准配置: 280t吊钩, 150t吊钩, 80t吊钩, 35t吊钩, 12t吊钩

☑ 安全装置

安全装置包括力矩限制器、转台回转锁销装置、起重臂防后翻装置、起升 高度跟位装置、风速仪、水平仪、液压系统的溢流阀、平衡阀、双向液压 锁、回转警告、行走警告等。

应急功能

系统程序崩溃时,可采用控制柜中的翘板开关把整机操作到安全状态。此 时所有安全保护功能不起作用。

力矩限制器

检测功能: 力矩限初器能自动检测出起重臂的角度、起重软荷。 显示功能: 实时的显示当前深泻或荷。工作半径、起重鲜角度和当前风速。 参示功能: 如果检测到实污或药超过酸度或荷,起重转超过极弱角度,力 矩限别器发出报源并限制当高动作。

主、副提升过卷装置

当主、副养杨起升到一定高度时, 仪表板上的过券保护指示灯亭, 同时力 矩限制器停止起升动作。

Fixed Jib

Fixed jib is lattice structure of intermediate equal section and two end variable section, welded by steel tube, jib top and jib foot reinforced by steel plate for foot transfer. See jib can be operated within the range of boom length 45-75m, and litting operation length is 12-36m, with two offset angle of 10° and 30°. Construction: 6m jib butt, 6m-4 jib insert, 6m jib bop.

Tower Jib

Tower jib is lattice structure of intermediate equal section and two end variable section, welded by steel tube, jib top and jib foot reinforced by steel plate for faced transfer.

I ower jic can be operated within the range of boom length 30-60m, and lifting operation length is 27-60m. Construction: 9m jib butt. 3m+2 jib insert, 6m+2 jib insert, 12m+2 jib insert, 9m jib butt.

The mast is box-type structure of twin tubular chord, with good overall stability. When carrying out crane assembly/disassembly, the mast can be combined with other lifting parts for mounting and dismounting large crane structural parts.

Gantry is one of the important structural parts, the front foot is hox-type structure of twin tubular chord, with hydraulic cylinder for raising and lowering gantry, and for turntable and counterweight self assembly/disassembly, and the rear foot is folded pendant.

Hook Block

Standard equipment: 280t capacity hook block, 150t capacity hook block, 80t capacity hook block, 35t capacity hook block, 12t capacity hook block, 12t capacity hook

Safety Devices

Safety devices comprise: load moment limiter, turntable lock pin, boo backstop, hoist limit switch, anemometer, level gauge, hydraulic overflevalve, counterbalance valve, two-way hydraulic lock, slewing warni lamp and travel warning lamp, etc.

When a breakdown occurs in the system, a toggle switch on control panel may be used to control the whole machine into safe state, at this time all sate protections have no use.

Load Moment Limiter

Detection function: automatically detect boom angle and lifting load.
Display function: real time display current actual load, working radius and

Soom angle.

Warning function: automatically send out warning and stop crane operation when detecting actual load exceed total rated load and boom out of limit angle.

Main/Auxiliary Winch Over-Wound Protection Device

When main/auxiliary winch hoists up to a certain lifting height, over-wound warning lamp on instrument panel lights on, at the sa time, load moment limiter stops crane hoisting up operation.

详细介绍 **Brief Introduction**

主、副提升过放装置

此保护功能由安装在卷筒内部接近升关检测到卷筒上的钢丝绳剩下三卷时, 仪表板上的指示灯亮,同时力矩限制器自动停止起升落动作。

安全保护开关

该安全保护开关的在手柄前侧、此开关没有按下的时候、所有动作信号被 屏蔽, 手柄不起作用。防止身体碰撞手柄产生误操作。

棘爪锁止装置

用于锁定变幅卷扬,起重臂降落的时候必须打开该装置,否则不能降落,用于保护臂架在非工作时安全停放。

起重臂角度限制

主起里臂帶角在82.8°时,起里臂被停止起升,由力矩限制器和行程开关双 级控制,主起里臂在侧角小于30°时停止起那臂落,由力矩限制器控制并 发出声名器等。 境間由行程开关和力矩限制器双级控制上限位和下限位。

监控系统

由2个摄像头和一个监视器组成,分别监视主、副卷扬和变幅卷扬

在履带起重机移动或做回转动作的时候灯闪烁并且发出声音报警。

力限器三色报警灯

由三种颜色相成,负载在90%以下B*绿灯下完,表示起重机在安全区域运行,负载在90%-100%的时候"夷灯"完。表示起重机在已接加糖度载荷绝相,负载在100%-105%以上时"虹灯"和"贵灯"同时完,表示起重机已经超载,在危险区域,控制系统自动切断起重机向险舱的方向运行。

照明灯 装置在转台前方、臂架上和操纵室内,用于夜间工作时提供照明。

安装在臂架顶部,作为高空警示。

风速仪

实时检测当前风速,传送到操纵室的监视器上,提醒司机操作的安全性。

Main/Auxiliary Winch Over-Release Protection Device

When access switch in winch drum detects only three turns of wire rope left on the drum, an over-release warning lamp on instrument panel lights on, at the same time, load moment limiter stops crane hoisting up operation.

Safe Protection Switch

At the front of joystick installed a safe protection switch, when the switch is pressed down, all crane movement signals have been shielded, and the joystick is useless. This switch can be used to prevent malfunction when operator accessing the cabin and toughing the joystick.

Winch Ratchet Locking Device

Winch drum has a ratchet locking device, and it must be turned on when lowering boom, otherwise boom cannot be lowered. The device is used to stow the boom for safety.

Boom Angle Limit

When boom angle is more than 80°, both load moment limiter and hoist limit switch stop boom maising. When boom angle is less than 30°, load moment limiter stops boom lovering and give a sound warning. The hoist limit switch and load moment limiter may control the tower jib upper/lower limit postilon.

Monitor System

The monitor system contains 2 cameras and 1 monitor display, respectively keeping watch on main/ auxiliary winch and luffing winch.

Audio/Video Warning

When crawler crane is moving and slewing, there is light and sound for warning.

Tricolor Warning Lamp

The lamp comprises 3 colors, when crane loading is below 90% of total rated filling load. "Green Lamp" lights on to indicate crane is running in safety area, when crane loading is in 90%—100% total rated filling load, "Yellow Lamp" lights on to indicate crane is close to total rated filling load, "Yellow Lamp" lights on to indicate crane is close to total rated filling load, short crane loading is above 100%—100% for total rated filling load, short Peed Lamp" and "Yellow Lamp light on at the same time to indicate crane is overfeed, in find angerous area, control system can automatically cut off crane movement to dangerous direction.

Illumination Lamp

Height Mark Lamp

Boom tip has a height mark lamp for high level operation warning.

Anemometer at boom head can detect current wind speed and send wind signal to a monitor in operator's cabin to alert operator for safety.

自拆装 Self Assembly/Disassembly

