

# QUY50 | 履带起重机 CRAWLER CRANE

QUY50履带起重机是在消化吸收国外的先进技术，结合目前我国的具体情况，独立研制的液压驱动、全回转、桁架臂式履带起重机。该机操作简便、灵活，整机行驶平稳，最大起重量50吨，主臂长13~52米。副臂长9.15~15.25米。结构布局合理。该车适用于建筑工地、矿山、工厂及码头等场所的起重安装作业。

QUY50 crawler crane is an independent-developed hydraulic drive, full swing and lattice boom crawler crane, absorbing foreign advanced technology and combining present domestic situations. It features easy and manoeuvrable control, smooth vehicle traveling. The QUY50 has a maximum lifting capacity of 50t, with boom length 13~52m and jib length 9.15~15.25m. Logical structure design and layout. It is suitable for lifting operation in construction sites, mining, factories and docks.

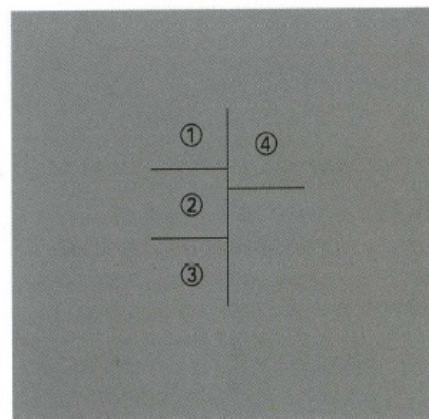
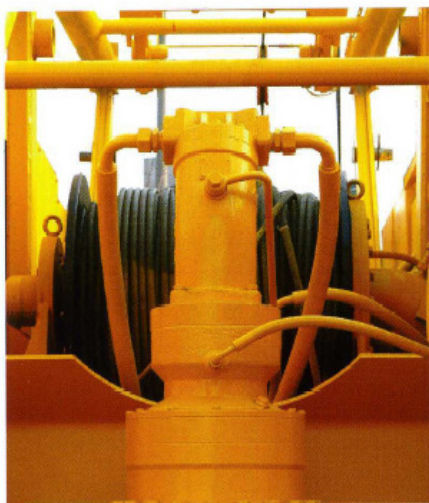




# QUY50

## 国际领先的配置和特有的专利技术

International leading configuration and special patent technology



### 先进的配置 Advanced configuration

#### ① 力士乐回转减速机

行星式减速机，可控常闭、片式制动器，可靠性高，维修方便。

#### Rexroth swing reducer

Planetary reducer, controllable constant-close disc brake, high reliability, easy for maintenance.

#### ② 力士乐的行走减速机

采用内藏式，转弯半径小，具有高度的灵活性和可靠性。

#### Rexroth gear reducer

Built-in gear reducer with small turning radius, high manoeuvrability and reliability.

#### ③ 进口的逻辑阀

能够实现精确化的逻辑控制，使系统简化，便于维修。

#### Imported logic valve

Logic valve can realize precise logical control and simplify the system, easy for maintenance.

#### ④ 进口的PAT力矩限制器

具有对履带式起重机的工况进行检测，起到安全、保护的功能。

#### Imported PAT load moment indicator

LMI can detect working conditions of crawler crane, having the function of protection.



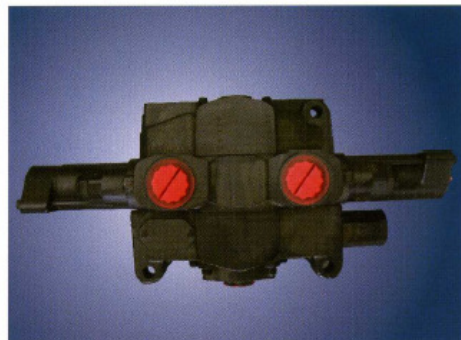
## 专利技术 Patent technology

### ① 履带式起重机液压回路转向阀

将下车液压系统行走回路与履带梁需要扩张和收缩回路进行功能转换，可以解决机械拖动的技术问题，并安全锁止，使操作过程安全、稳定的完成。

#### Hydraulic circuit steering valve

The function exchange of carrier hydraulic propelling circuit and crawler beam extension and retraction circuit resolves mechanical motoring and safe locking, which enable the operation safe and smooth.

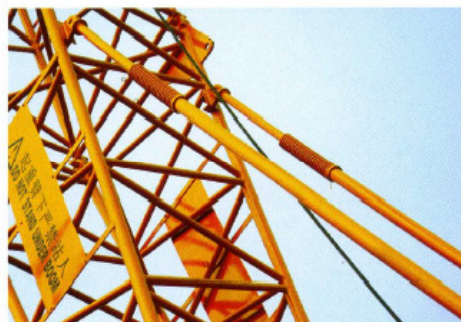


### ② 可调整式履带起重机吊臂防过仰装置

在起重臂的吊臂向上变幅时，检测板向检测开关接近，当到达最大仰角时，检测板床及撞击检测开关，开关关闭，发出报警信号并切断向上变幅的动作，避免危险事故的发生。

#### Adjustable boom backstop device

When the boom is elevation upwards, the detector board approaches to detecting switch; when reaching maximum elevating angle, the detector board impacts detecting switch and the switch is off, then warning signal is sent out and the elevating motion stops so as to avoid dangerous accidents.



### ③ 自由滑转液压控制装置

可以控制的自由滑转功能，起吊时自动找到重物的重心，有效避免吊臂受侧向力。

#### Free swing hydraulic control device

Controllable free sliding function enables the boom find weight center of gravity automatically and avoid boom lateral force.

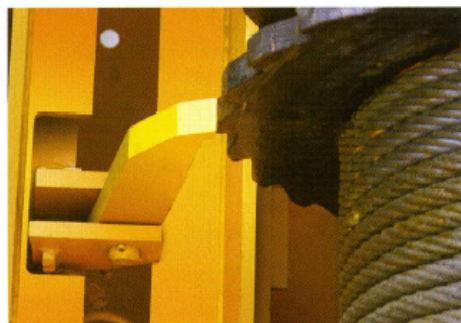


### ④ 液压控制卷扬棘轮锁止装置

液压自动控制的变幅卷扬棘轮锁止装置，保证了吊臂的安全可靠定位，操作简便舒适。

#### Hydraulic-controlled winch ratchet lock device

The automatic-controlled winch ratchet lock device ensures safe and reliable boom orientation, easy and comfortable operation.





# QUY50

安全、舒适的人性化设置  
Safe and comfortable ergonomic design



## QUY50 CRAWLER CRANE

① 体现以人为本的设计思想。运用三维造型技术、人机工程学原理，对整机布局、外观造型、操纵室、操纵件的布置进行全新的设计，大大提高了操纵的舒适性。

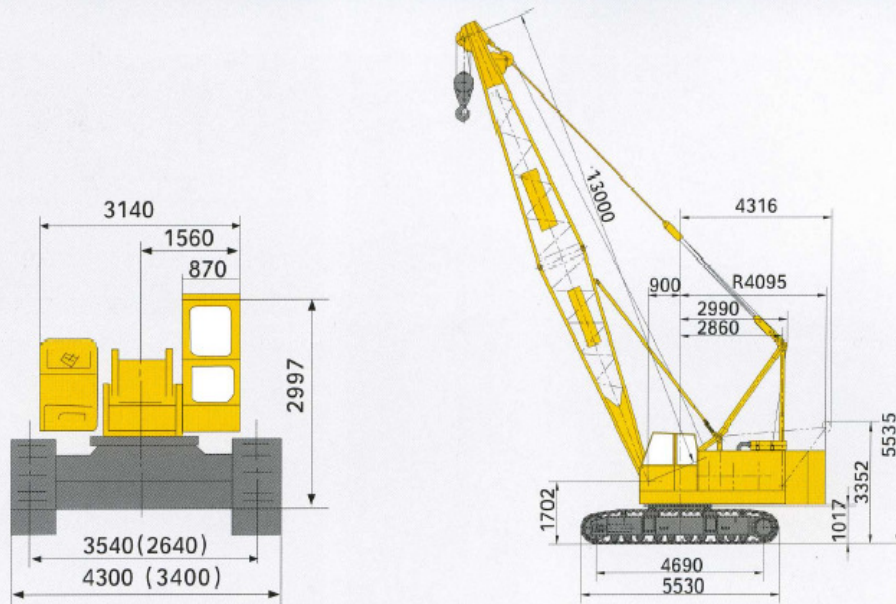
It embodies the design idea of putting people first. The brand-new design for whole vehicle layout, outline, driver's cab, operator's cab and control components by using 3-dimensional styling technology and ergonomic principle makes the operator more comfortable.





# QUY50 | 履带起重机

## 整机外形尺寸 Outline Dimensions



## 主要技术参数表 Main technical specifications

项目 Item		单位 Unit	数值 Data
最大额定起重量	Max. lifting capacity	t	50
最大起重力矩	Max. load moment	kN.m	1815
主臂架长度	Boom length	m	13~52
主臂架工作仰角	Elevation angle	°	30~80
单绳速度	主起升机构 Main winch system	m/min	0~65
	副起升机构 Aux. winch system	m/min	0~65
	变幅机构 Elevating system	m/min	0~52
爬坡度	Grade-ability	°	20
回转速度	Swing speed	r/min	0~1.5
行走速度	Max. travel speed	km/h	0~1.5
接地比压	Mean ground pressure	MPa	0.069
发动机最大功率	Engine output	kw	115
副臂长度	Jib length	m	9.15~15.25
副臂安装角度	Jib erection angle	°	10/30
最小转弯半径	Min. turning radius	m	2.985
运输状态单件(主机)最大质量	Max. weight of single part in transport state	t	31.0
运输状态单件(主机)最大尺寸 (长×宽×高)	Dimension of single part (main machine) in transport state (L×W×H)	m	11.5×3.40×3.40

## 臂架长度、倍率、吊钩及对应臂架的最大起重量 Boom length, parts of line, hook block and Max. Lifting capacity

50吨吊钩对应工况 50t hook block					
臂架长 (m)	Boom length	13	16	19	22
倍率	Parts of line	12	10	8	7
起重量 (t)	Lifting Capacity	50	45	37.5	29.5



# CRAWLER CRANE

## 26吨吊钩对应工况 26t hook block

臂架长 (m)	Boom length	25	28	31	34	37	40	43	46	49	52
倍率	Parts of line	6	5	4	4	4	3	3	3	3	2
起重量 (t)	Lifting Capacity	26	22.5	18.5	15	14.9	10.8	10.7	10.4	10.3	8.00

副臂工况采用4吨吊钩

4t hook block is used in jib working condition

## 起重性能参数表

### Total rated lifting load

#### 主臂起重性能表 Boom lifting performance

R(m)	13(m)	16(m)	19(m)	22(m)	25(m)	28(m)	31(m)
3.7	50.00						
4.0	43.00	45.00					
4.5	36.00	37.00	37.50				
5.0	31.00	31.00	30.50	29.50			
5.5	26.50	27.30	27.00	27.00	26.00		
6.0	22.00	23.40	24.00	24.00	24.00	22.50	
7.0	19.00	19.00	19.00	19.00	19.50	18.80	18.50
8.0	15.50	15.50	16.00	16.00	15.80	15.20	15.00
10.0	11.00	12.00	11.50	11.50	11.40	11.50	11.30
12.0	9.00	9.50	9.50	9.00	8.90	8.80	8.60
14.0		7.50	7.50	7.50	7.30	7.40	7.10
16.0			6.50	6.50	6.40	6.40	6.00
18.0				5.40	5.40	5.30	5.00
20.0				4.60	4.50	4.30	4.20
22.0					3.80	3.70	3.50
24.0						3.50	3.00
26.0							2.80

## 起重性能参数表

### Total rated lifting load

#### 主臂起重性能表 Boom lifting performance

R(m)	34(m)	37(m)	40(m)	43(m)	46(m)	49(m)	52(m)
8.0	15.00	14.90					
10.0	11.20	11.00	10.80	10.70	10.40	10.30	
12.0	8.60	8.60	8.50	8.40	8.20	8.10	8.00
14.0	7.00	6.80	6.50	6.60	6.50	6.30	6.20
16.0	5.80	5.80	5.70	5.50	5.30	5.00	5.00
18.0	4.70	4.60	4.50	4.40	4.30	4.20	4.10
20.0	4.10	4.00	3.80	3.80	3.70	3.50	3.30
22.0	3.50	3.40	3.30	3.20	3.00	2.80	2.70
24.0	2.90	3.00	2.80	2.60	2.50	2.30	2.10
26.0	2.60	2.50	2.30	2.10	2.00	1.80	1.60
28.0		2.10	1.90	1.80	1.60	1.40	1.20
30.0		1.80	1.60	1.50	1.30	1.20	1.10
32.0		1.50	1.50	1.30	1.10	1.00	0.90
34.0			1.40	1.20	1.00	0.90	0.80

◆ 所示起重量的单位为吨;

◆ 作业前必须扩张履带、履带起重机应在平坦坚实的地面上作业;

◆ 表中所示起重量包括吊具和附件的重量;

◆ 表中所示起重量均不超过倾翻载荷的75%;

◆ 头部装有副臂时,起重量应减去2.5吨;

◆ The unit of lifting capacity is ton;

◆ Extend the crawler before operation,crawler crane should be set up on firm ground;

◆ Lifting capacity in the table includes weight of slings and accessories;

◆ Lifting capacity in the table should not exceed 75% of tilting loads;

◆ When jib is assembled on boom head,lifting capacity should minus 2.5t.



# QUY50 | 履带起重机

## 起重性能参数表 Total rated lifting load

### 副臂起重作业性能表 Jib lifting performance

主臂长 Boom (m)	25						28							
	9.15		12.20		15.25		9.15		12.20		15.25			
副臂长 Jib (m)														
副臂安装角度 Jib erection angle	10	30	10	30	10	30	10	30	10	30	10	30		
工作幅度 Working radius														
9	4.00								4.00					
10	4.00		3.80						4.00		3.80			
11	4.00		3.80		3.00						4.00		3.80	
12	4.00		3.30		3.80		3.00		4.00		3.30		3.80	
13	4.00		3.30		3.80		3.00		4.00		3.30		3.80	
14	4.00		3.30		3.80		2.70		3.00		4.00		3.30	
15	4.00		3.30		3.80		2.70		3.00		4.00		3.30	
16	4.00		3.30		3.80		2.70		3.00		2.00		4.00	
18	4.00		3.30		3.80		2.70		3.00		2.00		4.00	
20	4.00		3.30		3.80		2.70		3.00		2.00		4.00	
22	3.70		3.30		3.70		2.70		3.00		2.00		3.60	
24									3.15		3.15		3.15	

## 起重性能参数表 Total rated lifting load

### 副臂起重作业性能表 Jib lifting performance

主臂长 Boom (m)	31						34							
	9.15		12.20		15.25		9.15		12.20		15.25			
副臂长 Jib (m)														
副臂安装角度 Jib erection angle	10	30	10	30	10	30	10	30	10	30	10	30		
工作幅度 Working radius														
9	4.00													
10	4.00		3.80						4.00					
11	4.00		3.80		3.00						4.00		3.80	
12	4.00		3.30		3.80		3.00		4.00		3.80		3.00	
13	4.00		3.30		3.80		3.00		4.00		3.30		3.80	
14	4.00		3.30		3.80		2.70		3.00		4.00		3.30	
15	4.00		3.30		3.80		2.70		3.00		4.00		3.30	
16	4.00		3.30		3.80		2.70		3.00		4.00		3.30	
18	4.00		3.30		3.80		2.70		3.00		2.00		4.00	
20	4.00		3.30		3.80		2.70		3.00		2.00		4.00	
22	3.50		3.30		3.50		2.70		3.00		2.00		3.45	
24	3.05		3.05		3.05		2.70		3.00		2.00		3.00	
26	2.70		2.70		2.70		2.70		2.70		2.00		2.60	
28									2.30		2.30		2.30	
30									2.00		2.00		2.00	

# CRAWLER CRANE

## 起重性能参数表 Total rated lifting load

### 副臂起重作业性能表 Jib lifting performance

主臂长Boom (m)	37						40					
	9.15		12.20		15.25		9.15		12.20		15.25	
副臂长Jib (m)	10	30	10	30	10	30	10	30	10	30	10	30
副臂安装角度Jib erection angle	10	30	10	30	10	30	10	30	10	30	10	30
工作幅度Working radius												
11	4.00											
12	4.00		3.80				4.00		3.80			
13	4.00	3.30	3.80		3.00		4.00		3.80			
14	4.00	3.30	3.80		3.00		4.00	3.30	3.80		3.00	
15	4.00	3.30	3.80		3.00		4.00	3.30	3.80		3.00	
16	4.00	3.30	3.80	2.70	3.00		4.00	3.30	3.80	2.70	3.00	
18	4.00	3.30	3.80	2.70	3.00	2.00	4.00	3.30	3.80	2.70	3.00	2.00
20	3.90	3.30	3.80	2.70	3.00	2.00	4.00	3.30	3.80	2.70	3.00	2.00
22	3.40	3.30	3.40	2.70	3.00	2.00	3.80	3.30	3.30	2.70	3.00	2.00
24	2.90	2.90	2.90	2.70	2.90	2.00	2.85	2.85	2.85	2.70	2.85	2.00
26	2.55	2.55	2.55	2.55	2.55	2.00	2.45	2.45	2.45	2.45	2.45	2.00
28	2.20	2.20	2.20	2.20	2.20	2.00	2.15	2.15	2.15	2.15	2.15	2.00
30	1.95	1.95	1.95	1.95	1.95	1.95	1.85	1.85	1.85	1.85	1.85	1.85
32	1.70	1.70	1.70	1.70	1.70	1.70	1.65	1.65	1.65	1.65	1.65	1.65
34							1.40	1.40	1.40	1.40	1.40	1.40

## 起重性能参数表 Total rated lifting load

### 副臂起重作业性能表 Jib lifting performance

主臂长Boom (m)	43					
	9.15		12.20		15.25	
副臂长Jib (m)	10	30	10	30	10	30
副臂安装角度Jib erection angle	10	30	10	30	10	30
工作幅度Working radius						
12	4.00					
13	4.00		3.80			
14	4.00		3.80		3.00	
15	4.00	3.30	3.80		3.00	
16	4.00	3.30	3.80		3.00	
18	4.00	3.30	3.80	2.70	3.00	
20	3.80	3.30	3.80	2.70	3.00	2.00
22	3.20	3.20	3.20	2.70	3.00	2.00
24	2.75	2.75	2.75	2.70	2.75	2.00
26	2.40	2.40	2.40	2.40	2.40	2.00
28	2.05	2.05	2.05	2.05	2.05	2.00
30	1.85	1.80	1.80	1.80	1.80	1.80
32	1.50	1.50	1.50	1.50	1.50	1.50
34	1.30	1.30	1.30	1.30	1.30	1.30

◆ 表中所示的额定起重量，是在坚硬，平坦的地面上吊载工作的值、该值在倾翻载荷78%以内。

◆ 实际可以吊升载荷，是由上表起重量扣除（主钩+副钩）等一切吊具重量后的值。

◆ 平衡重为16.5吨，4吨钩重0.087吨。

◆ 工作时必须扩张履带。

◆ 工作幅度是吊重以后的实际工作幅度。

◆ The rated lifting capacity in the table is the value that is within 78% of tilting loads, when crane works on firm and flat ground;

◆ The practical lifting loads is the value that lifting capacity minus weight of all slings (main hook block + auxiliary hook block);

◆ Counterbalance is 16.5t, 4t hook block weighs 0.087t;

◆ Extend the crawler during operation;

◆ Working radius is the practical value after lifting.