

DAHAN QTZ100(6013)

HAMMERHEAD CRANE INTRODUCTION



Content

Where QTZ100(6013) Use
What QTZ100(6013) Design ······
What QTZ100(6013) Specification
What QTZ100(6013) Advantage ······
QTZ100(6013) Outline Dimensions
Load Diagrams 6T·····
Masts·····
Anchorage
Mechanisms
Counter Weight
DAHAN Introduction
DAHAN Customers Case



100 6013

Advantage

1.With 56,000 sets of market volume and excellent reputation, Dahan tower crane ranks the first place in China tower crane industry in the past decades. Dahan always adheres to the value that supply the most valuable tower crane and service for the customer, with the highest cost performance in the industry.





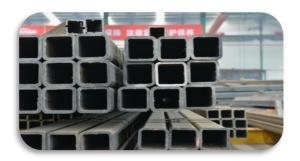
2. Dahan tower crane owns the leading technology R&D team, the product quality passed several experiments with strict testing. Otherwise, Dahan has 16 years of production technology and rich experiences in quality management. Till now, over 100 national technology patents of tower crane have been put into use already.





3.In order to guarantee the reliability of tower crane quality and reduce the cost, all raw materials are directly supplied by famous brands like Baosteel and Wisco. Raw materials for main parts such as standard section main limbs, tower caps adopt Q345B steel, thus the tensile strength increased by 30% and the tower crane becomes more safe and reliable.







4.Dahan tower crane is the enterprise which firstly started to use the robot welding lines. At present, we have a fully automatic robot welding production line for mast sections fabrication made up by more than 100 welding robots. The production line is composed with automatic material preparation, welding and maching. All main parts of Dahan tower crane use robot welding, with the most advance carbon dioxide mixed with argon gas shielded welding, it has deep depth of fusion, high quality of welding and stable performance.





5. All parts and components of Dahan tower crane use premium brands. Electric equipment with Schneider converter, aviation plug, stainless steel distribution box and three linkage console has features of low failure rate and easy installation.

Hoisting mechanism is provided by leading manufacturer Jiangte Motor or Dezhou Shengjian, all with engine oil, free maintenance, high reliability and low maintenance rate.

Slewing support uses Ma'anshan Fangyuan brand or Rothe Erde brand, twice tempering processing makes more smoothly operation and longer tower crane service life.









6. Attention to detail quality. High-strength bolt adopt shipborne scale DACROMET technology. It can keep not rusted for ten years .Swiss screw-thread bolts of preload promote 30 percent than traditional bolts. Weight limiter uses the tension ring structure and cast aluminum shell used Hoisting, derricking limiting stopper to extend service life.





7.Large structures as mast section, turn able, top kit and hoisting jib adopt advanced equipment as NC machine tool, drilling machine, milling machine processing after welding. That effectively guarantees products assembly accuracy, reducing the failure rate and improving the security.





8.12 automatic spraying assembly line, the whole machine adopt impeller blasting to ensure the cleanliness of steel surface and eliminate the internal stress producing in welding process, increase the strength and steel surface hardness, increase painting adhesion. Two primer, a paint spraying technology, beautiful appearance, corrosion resistance has increased more than twice than the life of ordinary spraying process. Platform, the small car, fence and other small pieces adopt hot dip galvanized after acid phosphate treatment, rust resistance stronger.

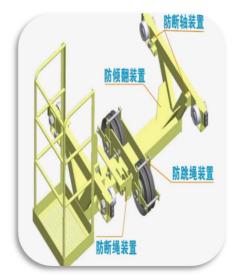






9. Hoisting, derricking and slewing mechanism, with complete safety such as torque, weight limit. The steel wire rope broken rope device. Range of the car design against loss and broken shaft, such as tilting device. The electrical adopts overload protection, the design of PLC self-diagnosis system, it's convenient to maintenance.



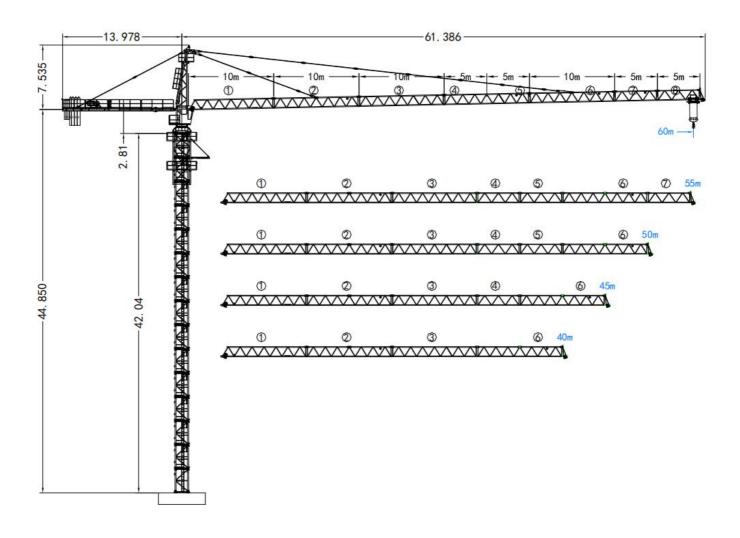


10.Dahan three production bases is Shandong, Hunan, Guangdong. Dahan tower crane are exported to more than 50 countries and regions. We have more than 1000 sets after-sales service network. We carried out the earliest stagnation point service mode in this tower crane industry that ensure the quality of service and efficiency. Otherwise, better to remove customer's worries.





QTZ100(6013) Outline Dimensions





m

	(m)	3-17	18	20	22	24	26	28	30	31.3	32
	-2 F		3000							2920	
kg	4 F	6000	5650	5010	4480	4050	3680	3370	3100	2940	2870
	(m)	35	40	42	45	48	50	52	55	58	60
1	2 F	2620	2220	2090	1910	1760	1670	1580	1470	1360	1300
kg	4 F	2570	2170	2030	1860	1700	1610	1530	1410	1310	1240

m

	(m)	3-18.1	20	22	24	26	28	30	32	33.3
14	2 F		3000							
kg	4 F	6000	5380	4820	4360	3970	3630	3350	3100	2950
	(m)	34	36	40	42	45	48	50	52	55
	2 F	2930	2740	2410	2260	2080	1910	1810	1720	1600
kg	4 F	2880	2680	2350	2210	2020	1860	1760	1670	1540



50m

	(m)	3-18.8	20	22	24	26	28	30	32	34.5
	2 F		8 .0	×0.	30	3000			30.	
kg	4 F	6000	5600	5020	4540	4140	3790	3490	3230	2950
	(m)	35	36	38	40	42	45	46	48	50
	2 F	2950	2860	2680	2510	2370	2170	2110	2000	1900
kg	4 F	2900	2800	2620	2460	2310	2120	2060	1950	1840

45m

136	(m)	3-18.8	20	22	24	26	28	30	32	34.5
	2 F		,	V.	74	3000			22	
kg	4 F	6000	5600	5020	4540	4140	3790	3490	3230	2950
	(m)	35	36	38	40	42	45			
	2 F	2950	2860	2680	2510	2370	2170		/	
kg	4 F	2900	2800	2620	2460	2310	2120			

40m

=:	(m)	3-18.8	20	22	24	26	28	30	32	34.5
4	2 F			Mg'	90	3000		Me'	*	
kg	4 F.	6000	5600	5020	4540	4140	3790	3490	3230	2950
	(m)	35	36	38	40					
	2 F	2950	2860	2680	2510			/		
kg	4 F	2900	2800	2620	2460					



Tower crane performance parameters

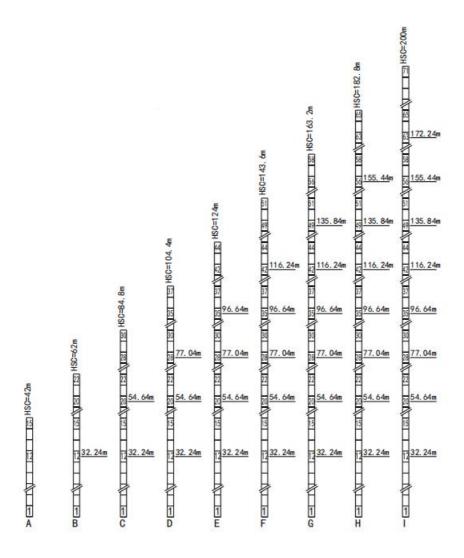
Use Level		U5	Maximum Inst	allation H	eight of Wind	Level	≤4			
Load State	e	Q2	Working state	wind level			≤6			
Working I	Level	A5	Non-working s	tate wind l	level		≤11			
Para	meter Nam	e		Unit		Valu	ue			
Rated Loa	d Moment			t.m		80				
Max Load	Capacity			t		6.0)			
Max Rateo	d Load Wei	ght Allows M	Iax Ratings	m		17	1			
Working I	Range (min	/ max)		m	3-60					
Lifting He	Lifting Height (fixed / attached)			t		1.3	3			
Rated Loa	d Moment			m		42/2	00			
	S _I]	Fall	1	2			4		
	Hoisting speed	S	peed	m/min	0~30	0~60	0~15	0~30		
Hoisting	ng	Loa	d Capacity	t	3	1.5	6	3		
tin	Mo	otor Model		1	YZ	TD225L-4/8	/32			
0,d		Power		Kw		24/24	/5.4			
		Motor Spo	eed	r/min		1440/70	00/140			
SIe		Slewing Sp	eed	r/min		0~0.	62			
Slewing		Power		Kw		5.5	5			
ng		Speed		r/min		150	00			
		Trolley Sp	eed	m/min		0~4	10			
7		Motor Mo	del	1		YZR132	2M2-6			
Trolley										
ey		Power		kW		3.7*2	2			
		Speed		r/min		40/20				
		Jacking Sp	eed	m/min	0.5					
	Hydra	ulic System l	Rated Work	MPa	25					
Ja		Motor Mo	del	1		YEZS132S	S-4/8			
ıck		Power		kW		3.3/2	2.2			
Jacking		Speed		r/min		1380/	720			
	Hydraul	ic Cylinder b	y / piston Rod	mm		160/1	110			
Counterweights	Load Radius		m	60	55		45			
eights	Counter Weight			t	15.06 13.76 10.6					
Power				Kw		34.	7			



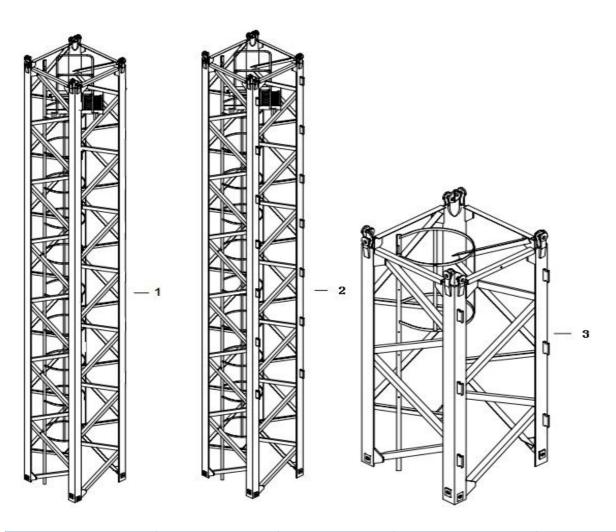
Tower Crane Mechanism Configuration Parameters

	Name	r configuration r	Unit	
		Model	/	YZTD225L-4/8/32
Ho	Motor	Power	Kw	24/24/5.4
Hoist mechanism		Speed	r/min	1440/700/140
ıech		Brake Torque	m	630
ani:	Reducer	Speed Ratio	1	15.64
3	Wire Rope		6×36WS+F0	С- ф 13-1770-І-
	2 times the lowe	est rate of steady decline≤9	m/min	
	N7. 4	Model	1	YZR132M2-6
	Motor	Power	Kw	3.7*2
Slewing mechanism		Speed	r/min	908
ving		Model	1	XX4-100
mee	Reducer	Speed Ratio	/	195
chan		Output Torque	N.m	10000
lism		Modulus	M	12
	Output gear	Gear Number	Z	16
	parameters	Displacement Coefficient	X	+0.5
70		Model	1	011.45.1250
Slewing ring	Single Row	Modulus	M	12
20 E.	Four Point	Gear Number	Z	118
ring	Contact Ball	Displacement Coefficient	X	+0.5
T		Model	1	YEZS112M-4/8
rolle	Motor	Power	Kw	3.3/2.2
еу ш		Speed	r/min	1380/720
echi	Reducer	Speed Ratio	1	38`
Trolley mechanism	Wire Rope	6×19W+FC-7.7-1670-II		
		Model	/	Y132M-4
Jacking system	Motor	Power	Kw	7.5
ding		Speed	r/min	1470
syst	Harders - P.	Flow	L/min	14.4
em	Hydraulic Power Station	Working Pressure	Mpa	25





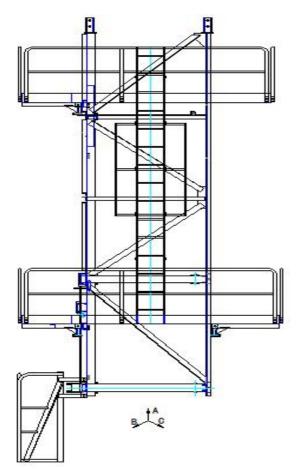




	A	В	C	Weight
	mm	mm	mm	Kg
Base Section 1	1815	1815	2840	1075
Section 3	1740	1740	2800	924



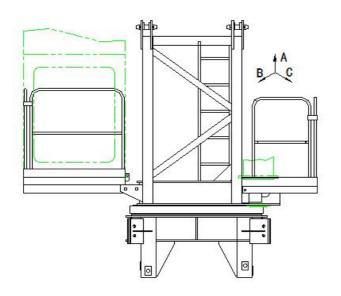
Climbing Cage



	A	В	C	Weight
	mm	mm	mm	Kg
Climbing Cage Assembly	3540	5050	6540	3226
Skeleton	2110	2310	6540	1826
Jacking Beam	1490	120	560	155
Hydraulic System				600



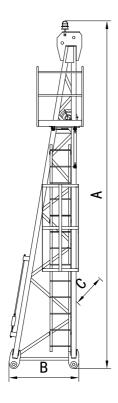
Slewing Assembly



	A	В	C	Weight
				Kg
Slewing assembly	2710	3710	3035	4909
Under turntable	2515	3710	2210	1935
Upper Turntable	2400	2400	714	1397
Operator cabin				410
Slewing Mechanism				700
Slewing ring				467



Top kit



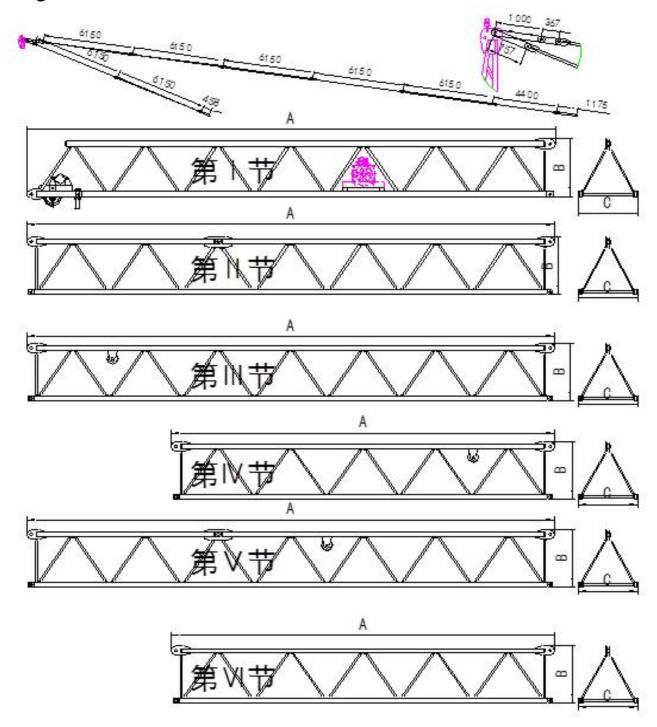
	A	В	C	Weight
				Kg
Tower assembly	1330	1450	7470	1400
Tower top	1300	1450	7470	1180
pull rod				215

Counter jib

	Counter skeletonI	Lever	Electric control box	Hoisting Mechanism	Assembly
A	2450	11000			13330
В	560	635	/	/	1455
C	1376	1472			2470
Kg	435	1482	245	1180	4180



Lifting





DAHAN Introduction

Dahan Construction Machinery (Group) is a large-scale enterprise group in Chinese construction machinery industry, specializing in the production of "tower cranes" and "construction elevators", with registered capital of 20 million US Dollars, integrating research, development, production, sales, service and finance.

Founded in November, 2000, after 18 years of rapid development, at present, the annual production capacity was over 13,000 sets and become the leading brand in tower crane and elevator industry in China.

The head office of the group is located in Hi-tech Development Zone, Jinan, China, with 3,000 m² workplaces. The production bases are separately located in Mingshui Economic Development Zone of Jinan City, Foshan of Guangzhong Province, Yiyang of Hunan Province, with total area of over 300,000 m². At present the group has 8 production bases, 7 operation center, 8 sales companies, one finance lease company and one import & export company.

Talent strategy is the core competitiveness of Dahan Construction Machinery. Dahan has 2300 employees, and 37 persons of them are cutting-edge technical talents, including drafters of national standard of domestic tower crane industry, engineers of implementing earliest FEM calculation of China, and professionals of design calculation and manufacturing technique. Besides, the group also have more than 600 professional personnels of other aspects like sales, management, financing, etc..

Science and technology are primary productive forces. Dahan owns 82 national technology patents (including 5 invention patent. In 2013 the group won the "high-tech enterprise" title, joined the Chinese Hoisting Machinery Standardization Technical Committee, and participated in revision of national standard (GB13752) of tower crane.

At present, the company has imported more than 100 robots of Panasonic and ABB company from Japan and Sweden separately, and owns 12 sets of automatic spraying lines, more than 1000 sets of large plasma cutting machines, CNC drilling machines, milling machines, lathes, boring machines, welding machine and other special tools and equipment. Through advanced equipment, automated assembly line, Dahan can ensure quality of products in the aspect of production technology. Besides, Dahan also build strategic partnership and matching supply cooperation with world-class enterprises such as Baosteel, Ansteel, Dezhou Sheng Jian, Rothe Erde, SIEMENS, Zhejiang Sanmen, France Schneider, etc., to ensure fist class quality of products in the aspect of purchasing of raw material and spare parts.

Now the group has achieved complete coverage of four major series, i.e., top kit tower crane, flat-top tower crane, luffing boom tower crane, and construction hoist, with over 30 types and more than 60 models. Till 2019, Dahan had built sales teams of 2000 persons, and nearly 1000 sales outlets in domestic market, and sold nearly 50,000 Dahan tower cranes to 32 provinces, direct-controlled municipalities, and autonomous region, and exported products to over 50 countries and districts.



In 2012, Dahan established the joint venture, Zhongkang International Financial Leasing Co., Ltd in Binhai New Area, Tianjin City, with 50 million dollars registered capital, to effectively provide clients financing solutions, aiming to achieve the transition of sales modes from "Products supply" to "Supply of products and comprehensive financing service".

Along with internationalization and implementation of international branding strategy, Dahan Construction Machinery (Group) has developed to be a professional, mature, healthy and highly reliable manufacturer and service provider of tower cranes and construction hoists, and will stand on the top of world's construction machinery industry with a fire-new image.