

The logo for DAHAN, featuring a stylized blue and yellow triangle above the word "DAHAN" in bold, black, uppercase letters.

DAHAN



Tower Crane & Construction Hoist Manufacturer Only

So Professional So Excellent

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 8T.....

Masts.....

Anchorage.....

Mechanisms.....

Counter Weight.....

DAHAN Introduction.....

DAHAN Customers Case.....

100 6013

Advantage

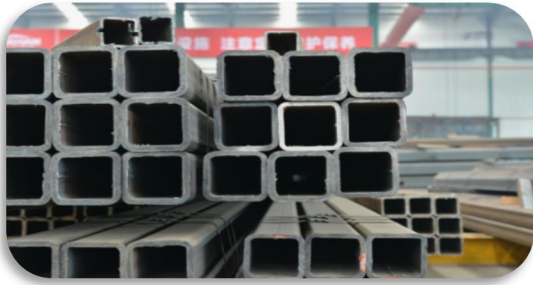
1. With 56,000 sets of market volume and excellent reputation, Dahan tower crane ranks the first place in China tower crane industry in the past decades. Dahan always adheres to the value that supply the most valuable tower crane and service for the customer, with the highest cost performance in the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



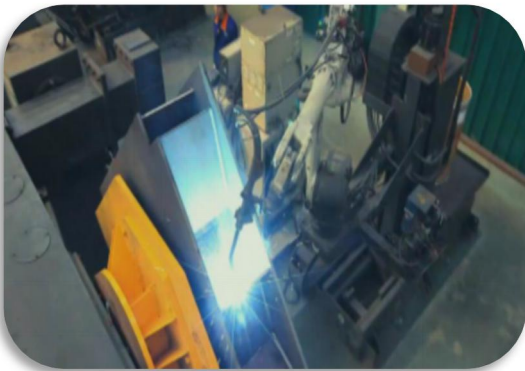
2. Dahan tower crane owns the leading technology R&D team, the product quality passed several experiments with strict testing. Otherwise, Dahan has 16 years of production technology and rich experiences in quality management. Till now, over 100 national technology patents of tower crane have been put 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 machining. All main parts of Dahan tower crane use robot welding, with the most advanced carbon dioxide mixed with argon gas shielded welding, it has deep depth of fusion, high quality of welding and stable performance.



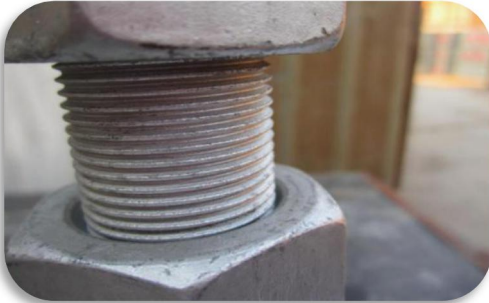
5. All parts and components of Dahan tower crane use premium brands. Electric equipment with Schneider converter, aviation plug, stainless steel distribution box and three linkage console has features of low failure rate and easy installation.

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.



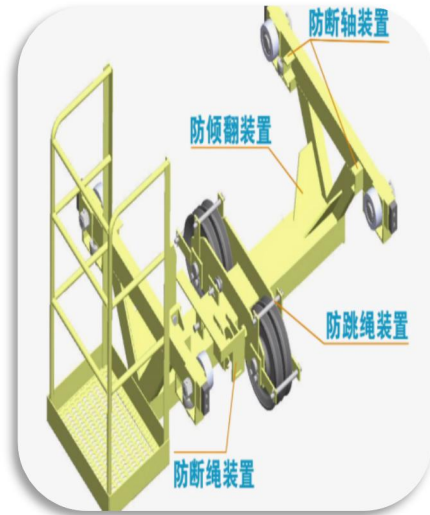
7.Large structures as mast section, turn able, top kit and hoisting jib adopt advanced equipment as NC machine tool, drilling machine, milling machine processing after welding. That effectively guarantees products assembly accuracy, reducing the failure rate and improving the security.



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.



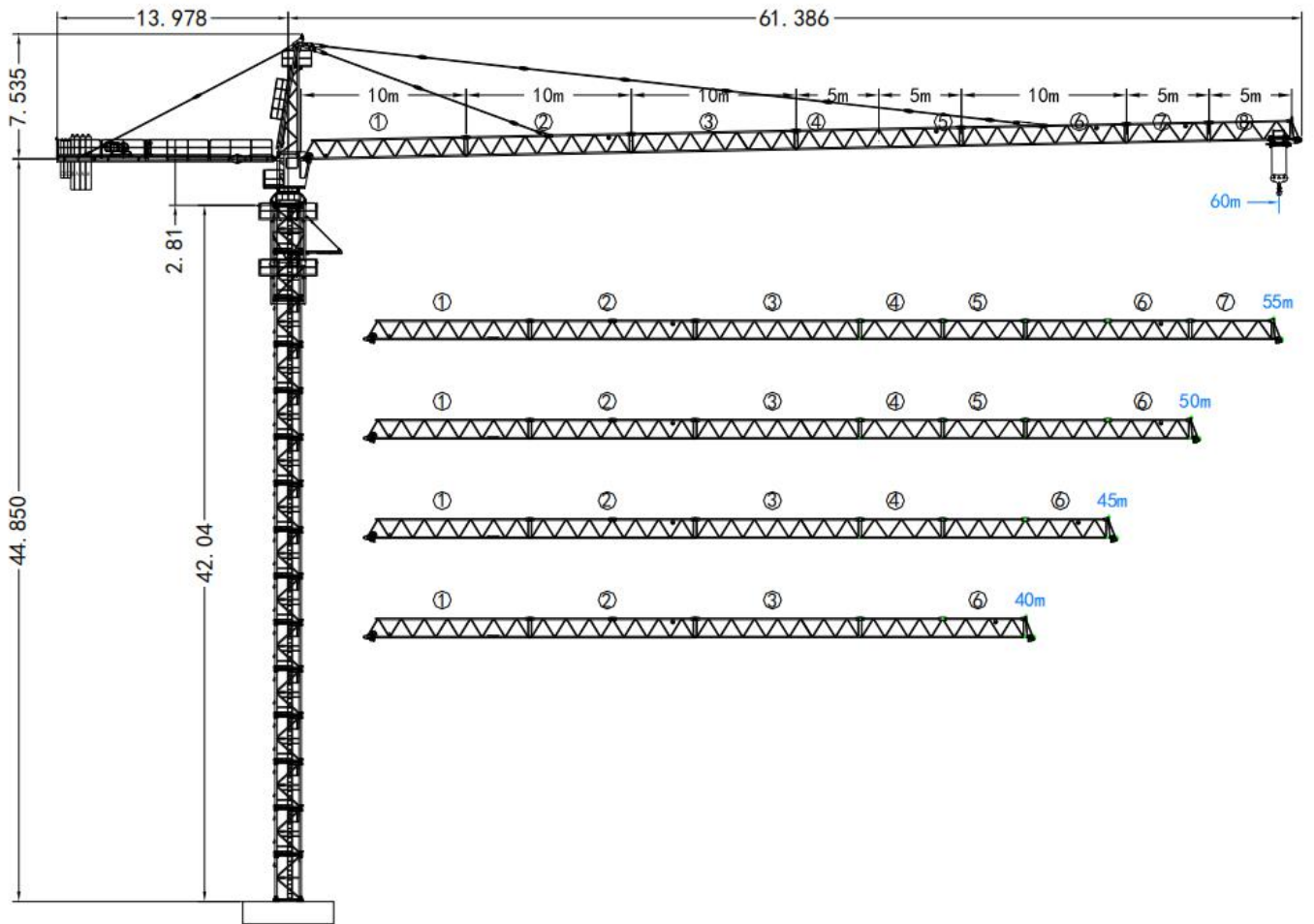
9. Hoisting, derricking and slewing mechanism, with complete safety such as torque, weight limit. The steel wire rope broken rope device. Range of the car design against loss and broken shaft, such as tilting device. The electrical adopts overload protection, the design of PLC self-diagnosis system,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



60m

(m)		3-13.8	16	18	20	22	25.4	28	30	32	34
kg	2 F	4000						3550	3270	3020	2800
	4 F	8000	6740	5870	5190	4630	3890	3450	3170	2920	2700
(m)		38	40	42	45	48	50	52	55	58	60
kg	2 F	2430	2280	2140	1950	1790	1690	1600	1480	1370	1300
	4 F	2330	2180	2040	1850	1690	1590	1500	1380	1270	1200

55m

(m)		3-14.5	16	18	20	22	24	26	26.8	28	30
kg	2 F	4000								3800	3490
	4 F	8000	7180	6260	5530	4950	4460	4050	3900	3700	3400
(m)		32	35	38	40	42	45	48	50	52	55
kg	2 F	3230	2890	2610	2450	2300	2100	1930	1780	1730	1600
	4 F	3130	2800	2510	2350	2200	2000	1830	1730	1630	1500

50m

(m)		3-15	18	20	22	24	26	27.6	30	32
kg	2 F	4000							3630	3350
	4 F	8000	6480	5730	5130	4620	4200	3910	3530	3260
(m)		35	36	38	40	42	45	46	48	50
kg	2 F	3010	2910	2710	2540	2390	2190	2130	2010	1900
	4 F	2910	2810	2620	2450	2290	2090	2030	1910	1800

45m

(m)		3-15	18	20	22	24	26	27.6	30
kg	2 F	4000							3630
	4 F	8000	6480	5730	5130	4620	4200	3910	3530
(m)		32	35	36	38	40	42	45	/
kg	2 F	3350	3010	2910	2710	2540	2390	2190	
	4 F	3260	2910	2810	2620	2450	2290	2090	

40m

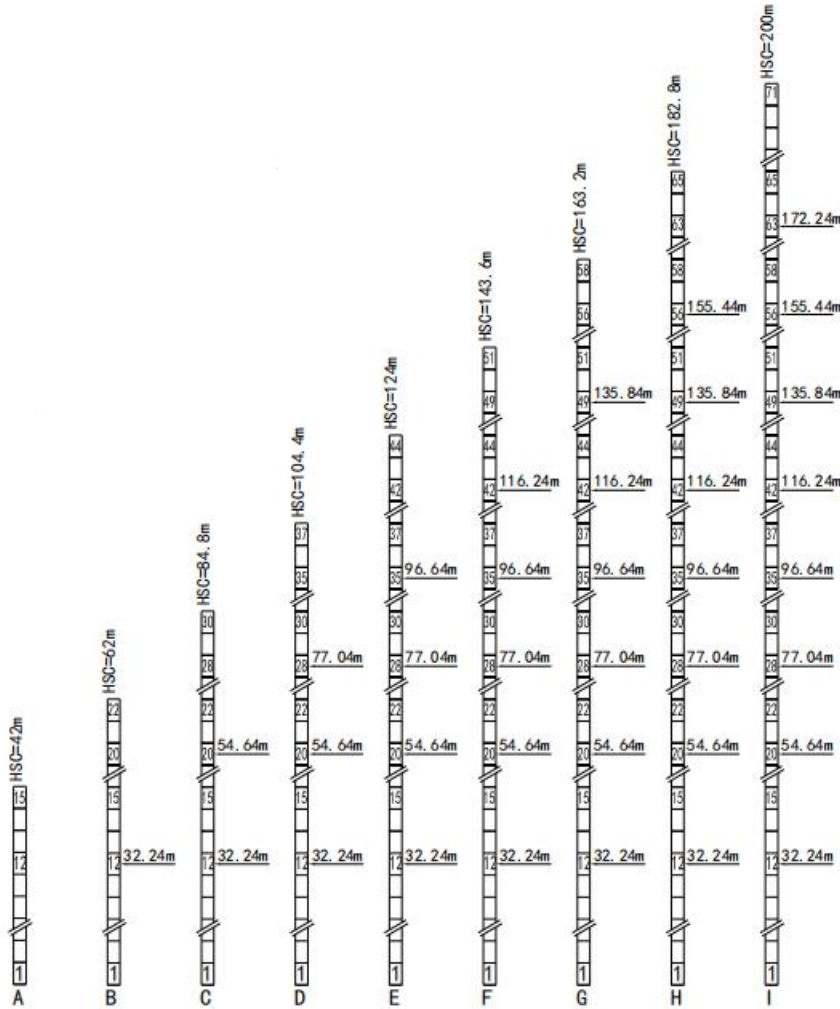
(m)		3-15	16	18	20	22	24	26
kg	2 F	4000						
	4 F	8000	7430	6480	5730	5130	4620	4200
(m)		27.6	30	32	35	36	38	40
kg	2 F	4000	3630	3350	3010	2910	2710	2540
	4 F	3910	3530	3260	2910	2810	2620	2450

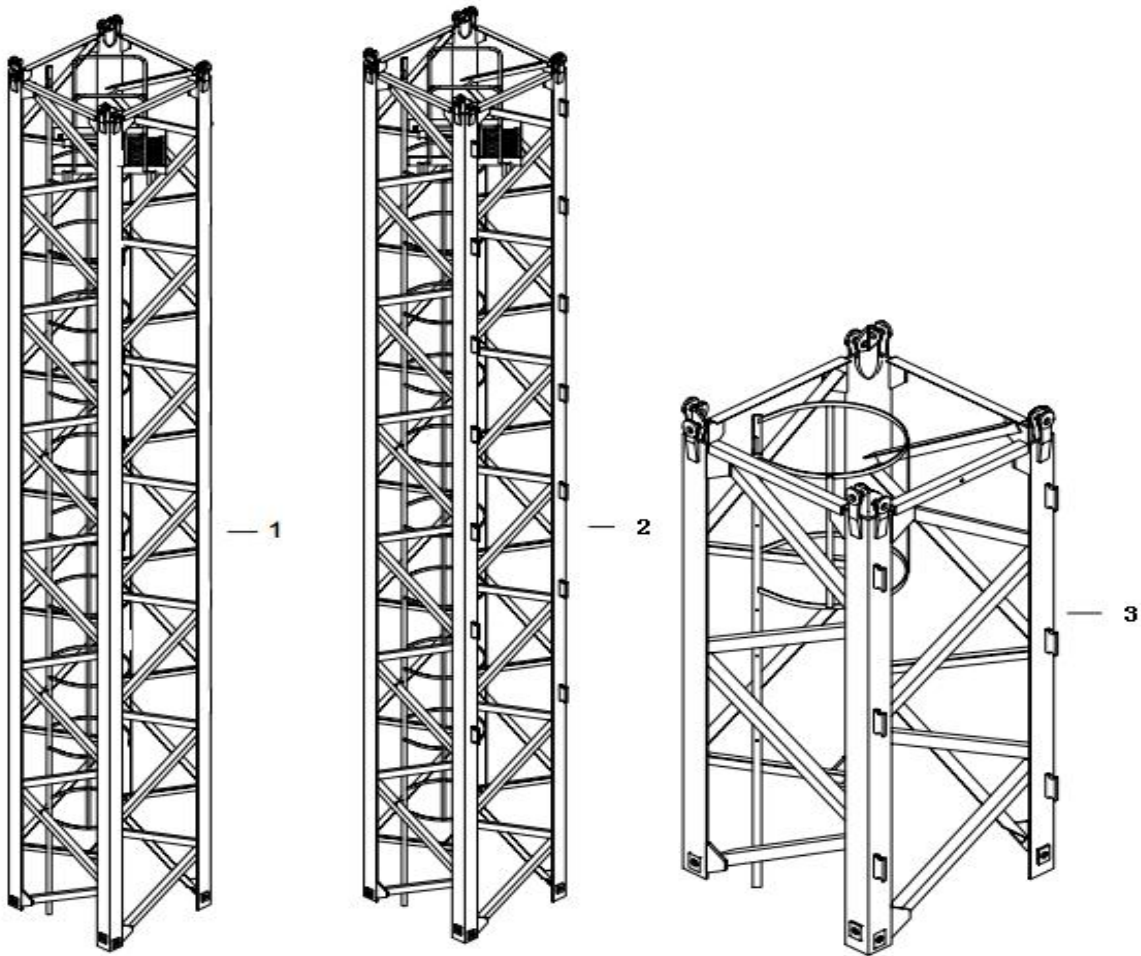
Tower crane performance parameters

Use Level	U5	Maximum Installation Height of Wind Level	≤4					
Load State	Q2	Working state wind level	≤6					
Working Level	A5	Non-working state wind level	≤11					
Parameter Name	Unit	Value						
Rated Load Moment	t.m	100						
Max Load Capacity	t	8						
Max Rated Load Weight Allows Max Ratings	m	13.8						
Working Range (min / max)	m	3-60						
Lifting Height (fixed / attached)	t	1.3						
Rated Load Moment	m	42/200						
Hoisting	Hoisting speed	Fall	/		2		4	
		Speed	m/min	0~30	0~60	0~15	0~30	
		Load Capacity	t	4	2	8	4	
	Motor Model	/	YZRDW225M1-4/8					
	Power	Kw	30/30					
	Motor Speed	r/min	1420/720					
Slewing	Slewing Speed	r/min	0~0.62					
	Power	Kw	3.7*2					
	Speed	r/min	1500					
Trolley	Trolley Speed	m/min	0~40					
	Motor Model	/	YZR132M2-6					
	Power	kW	3.7*2					
	Speed	r/min	40/20					
Jacking	Jacking Speed	m/min	0.5					
	Hydraulic System Rated Work	MPa	25					
	Motor Model	/	YEZS132S-4/8					
	Power	kW	3.3/2.2					
	Speed	r/min	1380/720					
	Hydraulic Cylinder by / piston Rod	mm	160/110					
Counterweights	Load Radius	m	60	55	45			
	Counter Weight	t	15.06	13.76	10.6			
Power	Kw	34.7						

Tower Crane Mechanism Configuration Parameters

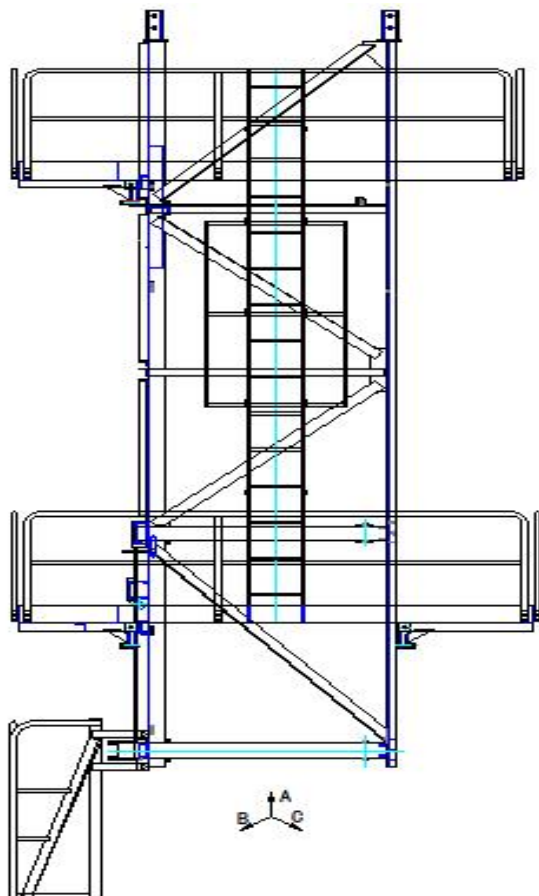
	Name		Unit		
	Hoist mechanism	Motor	Model	/	YZTD225L-4/8/32
Power			Kw	24/24/5.4	
Speed			r/min	1440/700/140	
		Brake Torque	m	630	
Reducer		Speed Ratio	/	15.64	
Wire Rope		6×36WS+FC- φ 13-1770-I-			
2 times the lowest rate of steady decline ≤ 9m/min					
Slewing mechanism	Motor	Model	/	YZR132M2-6	
		Power	Kw	3.7*2	
		Speed	r/min	908	
	Reducer	Model	/	XX4-100	
		Speed Ratio	/	195	
		Output Torque	N.m	10000	
	Output gear parameters	Modulus	M	12	
		Gear Number	Z	16	
		Displacement Coefficient	X	+0.5	
Slewing ring	Single Row Four Point Contact Ball	Model	/	011.45.1250	
		Modulus	M	12	
		Gear Number	Z	118	
		Displacement Coefficient	X	+0.5	
Trolley mechanism	Motor	Model	/	YEZS112M-4/8	
		Power	Kw	3.3/2.2	
		Speed	r/min	1380/720	
	Reducer	Speed Ratio	/	38'	
	Wire Rope	6×19W+FC-7.7-1670-II			
Jacking system	Motor	Model	/	Y132M-4	
		Power	Kw	7.5	
		Speed	r/min	1470	
	Hydraulic Power Station	Flow	L/min	14.4	
		Working Pressure	Mpa	25	





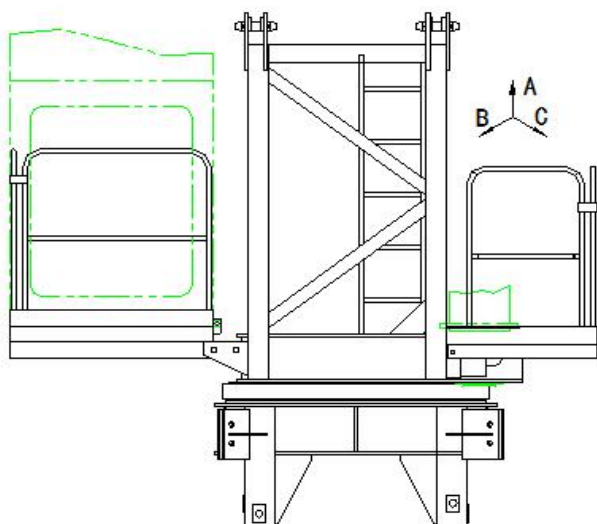
	A	B	C	Weight
	mm	mm	mm	Kg
Base Section 1	1815	1815	2840	1075
Section 3	1740	1740	2800	924

Climbing Cage



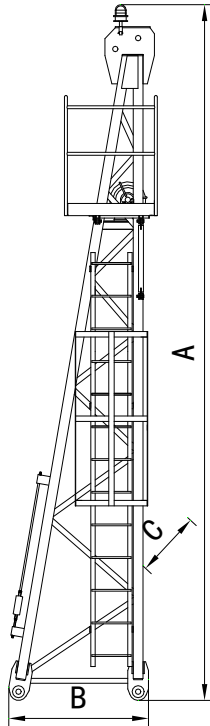
	A	B	C	Weight
	mm	mm	mm	Kg
Climbing Cage Assembly	3540	5050	6540	3226
Skeleton	2110	2310	6540	1826
Jacking Beam	1490	120	560	155
Hydraulic System				600

Slewing Assembly



	A	B	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

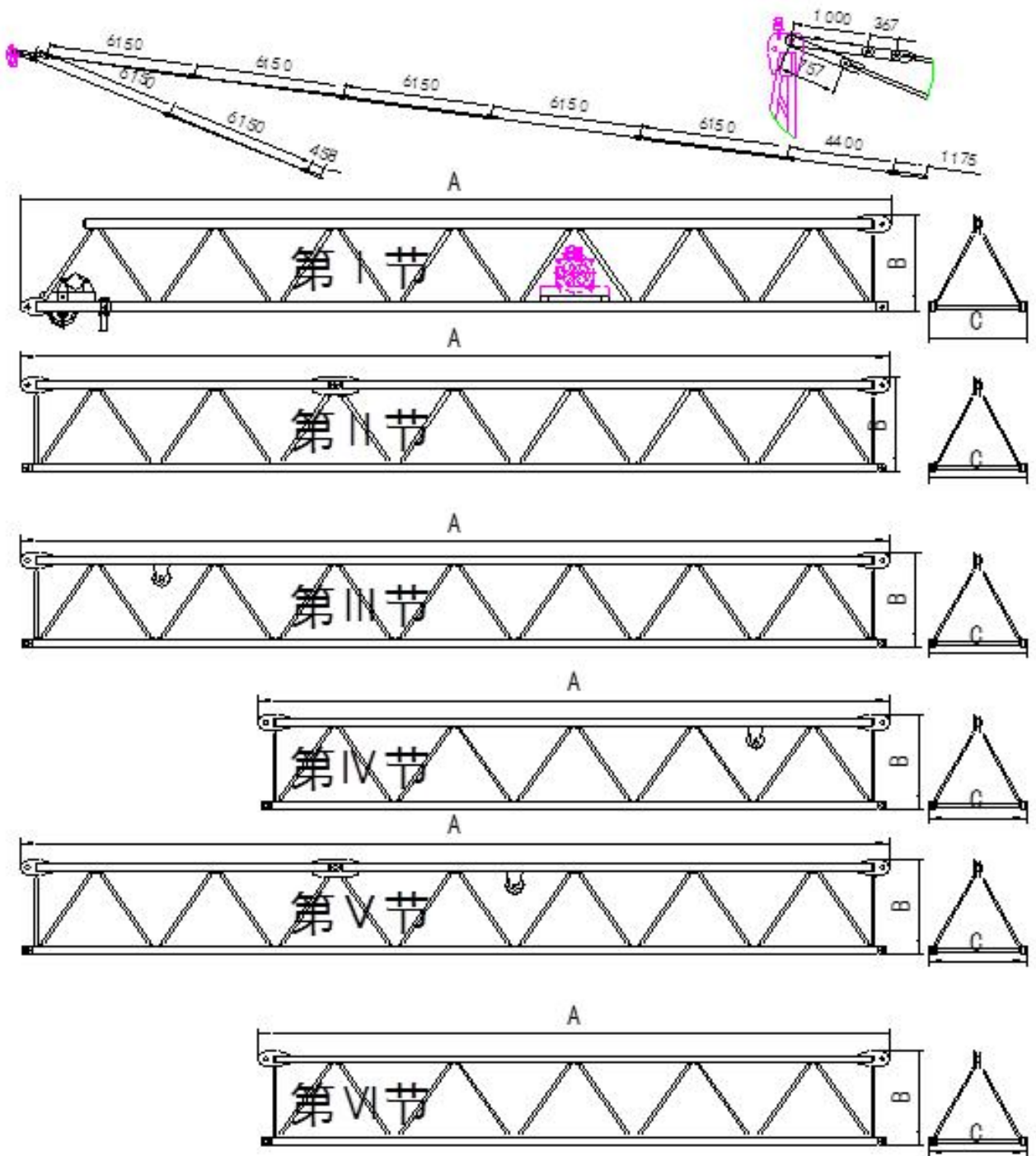


	A	B	C	Weight
				Kg
Tower assembly	1330	1450	7470	1400
Tower top	1300	1450	7470	1180
pull rod				215

Counter jib

	Counter skeletonI	Lever	Electric control box	Hoisting Mechanism	Assembly
A	2450	11000			13330
B	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.