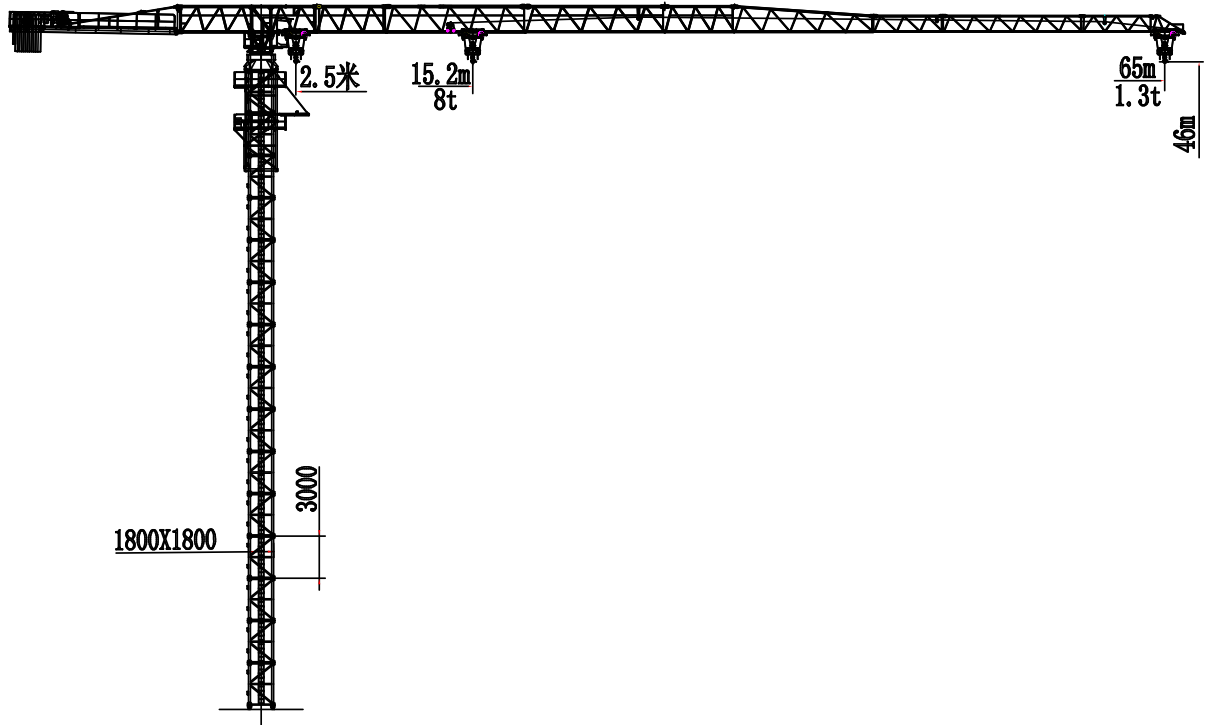


Technical introduction of FYPA125 (PT6513-8t)

一. Performance parameter

1. Main features

FYPA125(PT6513-8t) tower crane is a kind of level-jib、trolley derricking、high level slewing、flat-top self-hoisting tower crane. The max. working radius is 65m, and can change to 60m, 55m, 50m, 45m, 40m etc. The max. lifting capacity is 8t, and rated lifting moment is 1250KN*M, The jib and counter jib are designed with cantilever structure, which makes the installation and disassembly of the tower crane safer and faster. The mast section is integral, safe and beautiful; the main limb material adopts square tube structure, and the connecting sleeve is dovetail type; the straight web rod and inclined web rod of the mast section are super-strong design, the tower crane can be widely used in the construction of high-rise buildings and high-tower buildings can also be used for port terminals, cargo handling and loading and unloading work.



FYPA125(PT6513) tower crane diagram

2. Technical parameters

Name		Unit	Parameter		
Rated lifting moment		kN.m	1250		
Max lifting load		kN.m	1515		
Working radius		t	8		
The load at the max working radius		m	2.5~65		
Lifting height		t	1.3		
Lifting performance	Rope	m	Ropes	Fixed	Attached
	Lifting speed		2	46	200
	Lifting load		4	46	100
Slewing speed			0~0.62		
Derricking speed		m/min	0~40		
Climbing speed		t			
Tower body section demension		r/minm	1.8×1.8×3		
Working temperature		m/min	-20~+40		
Whole power		m/min			
Rated lifting moment					
Max lifting load		°C			
Working radius		kW	45(no including climbing motor)		

3. Lifting performance chart

Jib 65m

R(m)		2.5~15.4	17	18	20	22	24	26	27.7	
G(t)	2 ropes	4.00-----	4.00	4.00	4.00	4.00	4.00	4.00	4.00	
	4 ropes	8.00----	7.05	6.61	5.86	5.24	4.74	4.31		
R(m)		30	32	34	36	38	40	42	44	46
G(t)	2 ropes	3.63	3.36	3.12	2.90	2.71	2.54	2.38	2.24	2.12

	4 ropes									
	R(m)	48	50	52	54	58	60	61	63	65
G(t)	2 ropes	2.03	1.89	1.79	1.70	1.53	1.46	1.42	1.36	1.30
	4 ropes									

Jib 60m

	R(m)	2.5~15.4		16	18	20	22	24	26	28.1
G(t)	2 ropes	4.00----		4.00	4.00	4.00	4.00	4.00	4.00	4.00
	4 ropes	8.00----		7.69	6.73	5.96	5.34	4.83	4.39	
	R(m)	30	32	34	36	38	40	42	44	46
G(t)	2 ropes	3.70	3.42	3.18	2.96	2.77	2.59	2.43	2.29	2.16
	4 ropes									
	R(m)	48	50	52	54	58	60			
G(t)	2 ropes	2.04	1.93	1.83	1.74	1.57	1.50			
	4 ropes									

Jib 55m

	R(m)	2.5~17.3			19	20	22	24	26	28	31.6
G(t)	2 ropes	4.00----			4.00	4.00	4.00	4.00	4.00	4.00	4.00
	4 ropes	8.00----			7.22	6.81	6.11	5.53	5.04	4.62	
	R(m)	32	34	36	38	40	42	44	46	48	50
G(t)	2 ropes	3.95	3.67	3.43	3.21	3.01	2.83	2.67	2.52	2.39	2.26
	4 ropes										
	R(m)	52	54	55							

G(t)	2 ropes	2.15	2.05	2.00
	4 ropes			

Jib 50m

R(m)		2.5~18.6				20	22	24	26	28	30
G(t)	2 ropes	4.00-----				4.00	4.00	4.00	4.00	4.00	4.00
	4 ropes	8.00-----				7.40	6.64	6.02	5.49	5.04	4.65
R(m)		32	34.1	36	38	40	42	44	46	48	50
G(t)	2 ropes	4.00	4.00	3.75	3.51	3.30	3.11	2.93	2.77	2.63	2.50
	4 ropes	4.31									

Jib45m

R(m)		2.5~18.3				21	22	24	26	28	30
G(t)	2 ropes	4.00-----				4.00	4.00	4.00	4.00	4.00	4.00
	4 ropes	8.00-----				6.88	6.53	5.91	5.39	4.95	4.56
R(m)		32	33.5	36	38	40	42	45			
G(t)	2 ropes	4.00	4.00	3.68	3.44	3.23	3.05	2.80			
	4 ropes	4.23									

Jib40m

R(m)		2.5~18.6				21	22	24	26	28	30
G(t)	2 ropes	4.00-----				4.00	4.00	4.00	4.00	4.00	4.00
	4 ropes	8.00-----				7.00	6.64	6.01	5.48	5.03	4.65
R(m)		32	34	36	38	40					

G(t)	2 ropes	4.00	4.00	3.74	3.51	3.30
	4 ropes	4.31				

Jib35m

R(m)		2.5~18.7	24	26	28	30	32	34.2	35
G(t)	2 ropes	4.00----	4.00	4.00	4.00	4.00	4.00	4.00	3.90
	4 ropes	8.00----	6.05	5.52	5.06	4.67	4.33		

4. Metal structure

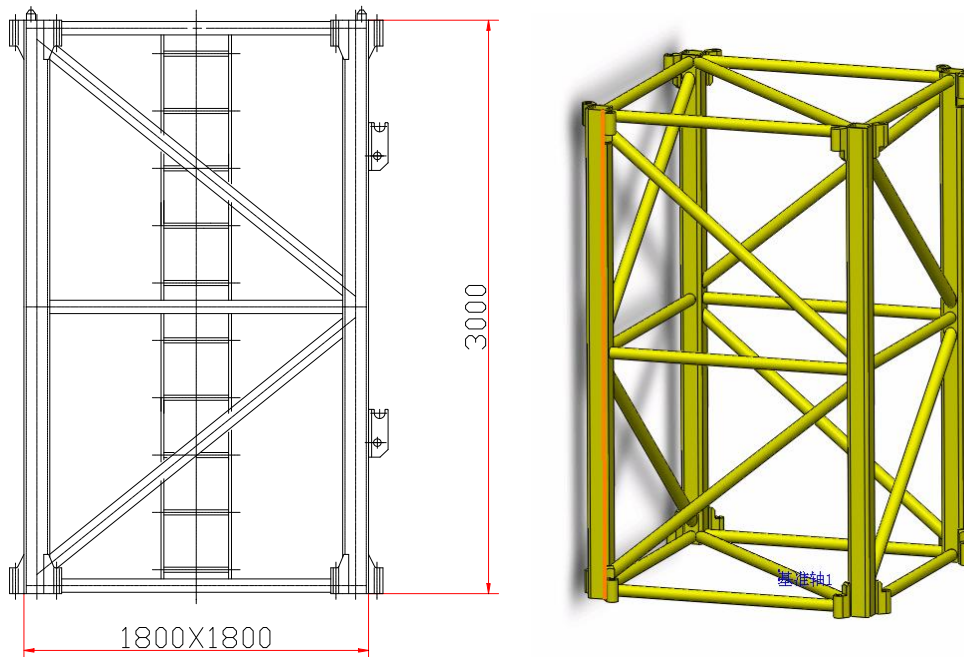
① By optimum design, the crane could be satisfied with the use, manufacture, transport and erection.

② The design of the jacking beam and the standard step has a safety latch to prevent the beam from falling out during the jacking process, and it is safe and reliable to use. This technology has been protected by a national patent.

③ The mast section is 1.8x1.8x3m, and the mast section is lamella assembly structure that connected by the fish plate pin shaft, which is convenient for container transportation.

④ Heightening design of lower turntable structure, integrated design of the swivel joint and the counter jib reduces the number of hoisting units and facilitates installation

⑤ The key force-bearing components such as the foundation feet and the main chord of the reinforcement section are designed to be reinforced to ensure the safety of the tower crane.



⑥ The counterweight net adopts the plate structure, and the external dimensions are accurate, which is convenient for pouring concrete.

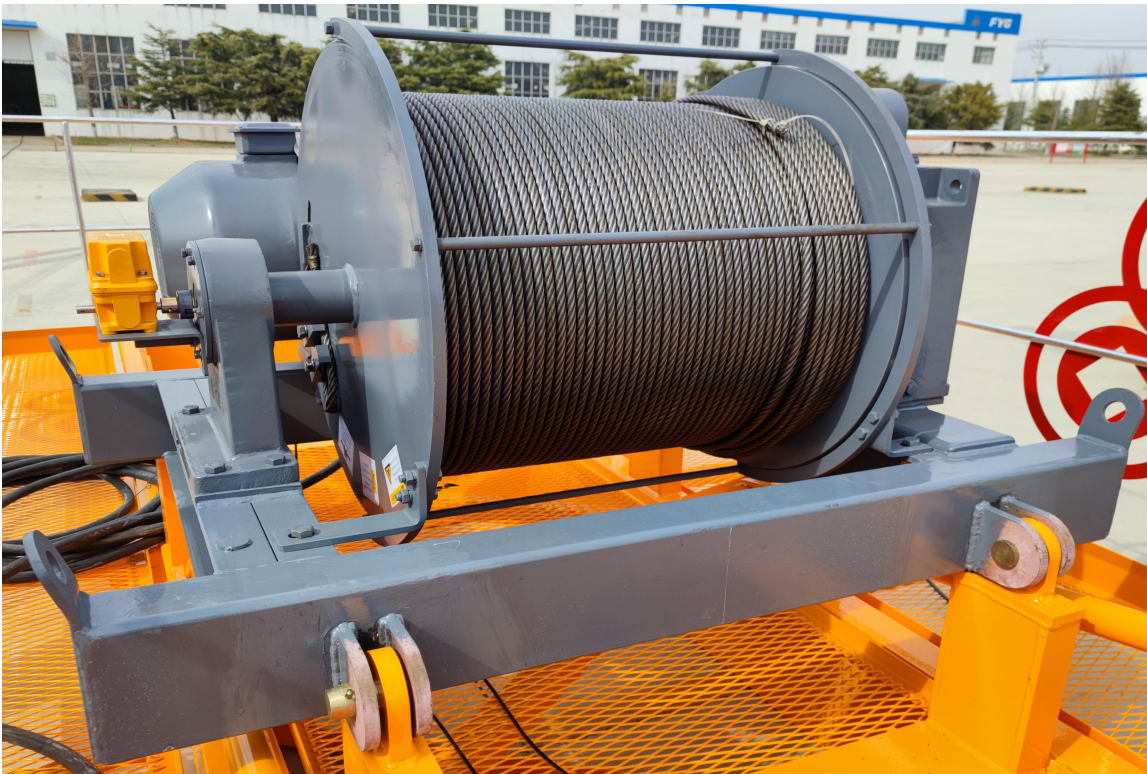


⑦The new type of hook and trolley structure can prevent the rope from falling off and overturn, which can facilitate the conversion of magnification.



5. Transmission mechanism features

①The hoisting reducer is a four-axle, which realizes the thick and short design of the hoisting mechanism drum, which reduces the deflection angle of the wire rope, so that the wire rope is arranged on the drum neatly, and the service life of the wire rope is improved; The mechanism adopts frequency conversion speed regulation control, the starting and braking are stable, and the slow positioning speed can run for a long time, which can basically achieve zero-speed braking, prolong the service life of the structure and transmission parts, and is also very beneficial to the wire rope arrangement and service life. Improve the safety of tower cranes;



②The trolley derricking is composed of a frequency conversion motor, a semi-built-in planetary reducer, a reel, a frame and other components. It has the characteristics of zero-speed braking, gentle running and braking, high transmission efficiency, low noise, compact structure, safe and reliable braking, accurate positioning, beautiful appearance, etc.



③The slewing mechanism adopts symmetrical double slewing control and frequency conversion control, with stable rotation, small impact and low failure rate; the upper turntable structure and the slewing bearing installation design positioning structure, so that the slewing pinion and the slewing bearing are well meshed;



二、 Production process introduction

After decades of experience, Fangyuan Group's TC and PT series tower cranes are widely used various construction projects for their safe, advanced and humanized design concepts, exquisite processing technology, strict quality management and thoughtful service.

1.Large, complete and specialized process equipment to ensure product quality



Material Pretreatment



CNC plasma cutting



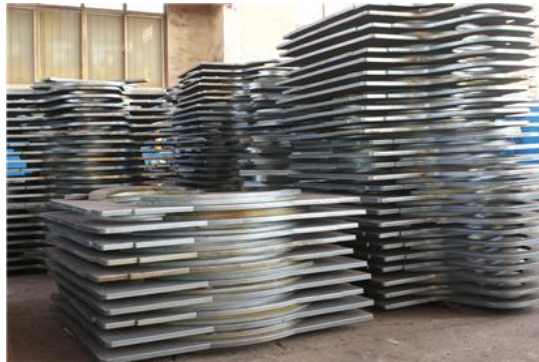
CNC laser cutting



CNC flame cutting



Parts with precise dimensions 1



Parts with precise dimensions 2

2 .Advanced process methods to ensure product quality



Double-sided milling process



Joint wire cutting process



Overall processing of the chassis



aged machining



Parts with precise dimensions



Parts with precise dimensions



3. Professional and advanced electronic control system to ensure product quality

①The electric control cabinet is made of stainless steel, which has good corrosion resistance and long service life; ②The electrical components adopt well-known brands at home and abroad, with stable performance and reliable quality; ③The connection and installation of electrical components are professionally produced, the connection is firm, strong anti-vibration ability; multi-stranded copper wires are used between the components, the current conduction effect is good, and the component performance is effectively displayed



4. Equipped with safety monitoring system to guarantee the work is safe and reliable.

The safety monitoring system of the tower crane provides the driver with the real-time operating status of the tower crane through the display device, and alarms and prompts the misoperation beyond the specified range to avoid the occurrence of safety accidents, and records the operating conditions of the tower crane in real time.



5. Construction Cases

