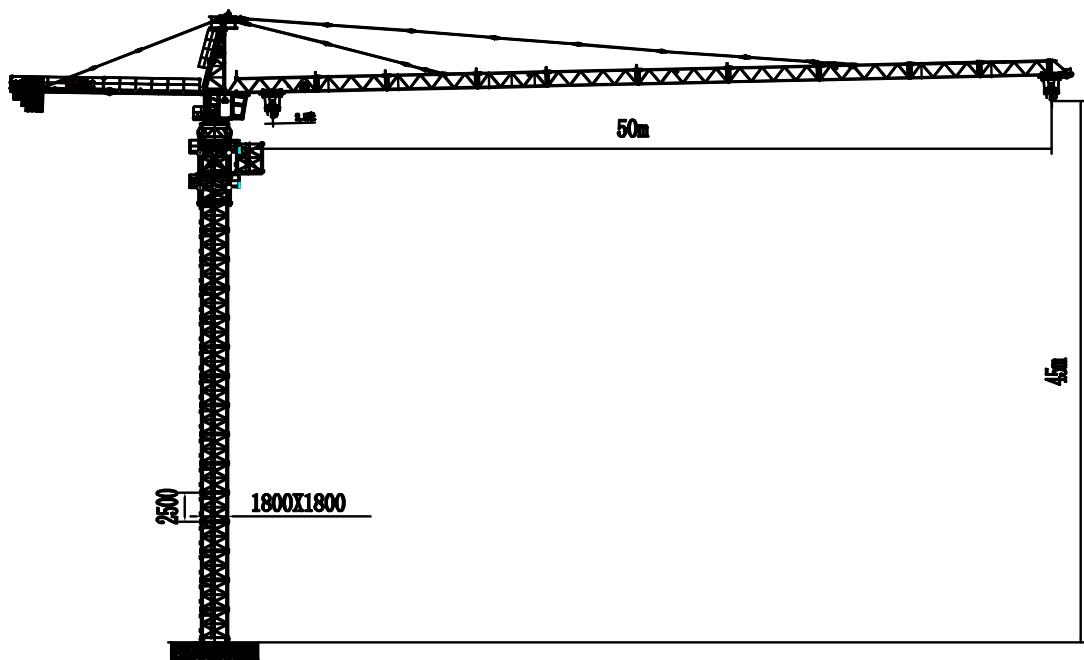


Technical introduction of FYT100 (TC5018-8t) Tower crane

1.Main feature

FYT100 (TC5018-8t) tower crane is a kind of level-jib、trolley derricking、high level slewing、self-hoisting tower crane. Hoisting and slewing adopt frequency control, so have wide speed range and gentle running and braking, and prolong the life of the crane structure and driving medium.the max radius can reach 50 meters, and 45m or 38.5m radius can also be realized according to user requirements. The basic standard configuration is a foot-supported, and other forms can also be provided according to user requirements.



TC5018-8t tower crane diagram

2. Main technical parameters

Name		Unit	Parameter			
Rated lifting moment		kN.m	1000			
Max. load		t	8			
Working radius		m	2.5~50/45/38.5/35.5			
The load at the max working radius		t	1.8			
Lifting height		m	Rope	Fixed	Attached	
			2	45	150	
			4	45	75	
Lifting performance	Rope		2		4	
	Lifting speed	m/min	0~80	0~40	0~40	0~20
	Lifting load	t	2	4	4	8
Slewing speed		r/min	0~0.62			
Derricking speed		m/min	0~40/20			
Jacking speed		m/min	0.58			
Operating temperature		°C	-20~+40			
Total power		kW	41.3(No including jacking motor)			

3.Characteristic table

jib 50 m

R(m)		2.5~14.9	16	18	20	22	24	26.9	28	30	
G(kg)	2ropes	4000	4000	4000	4000	4000	4000	4000	3820	3510	
	4ropes	8000	7410	6460	5710	5110	4600				
R(m)		32	34	36	38	40	42	44	46	50	
G(kg)	2ropes	3240	3000	2790	2600	2430	2280	2140	2020	1900	1800
	4ropes										

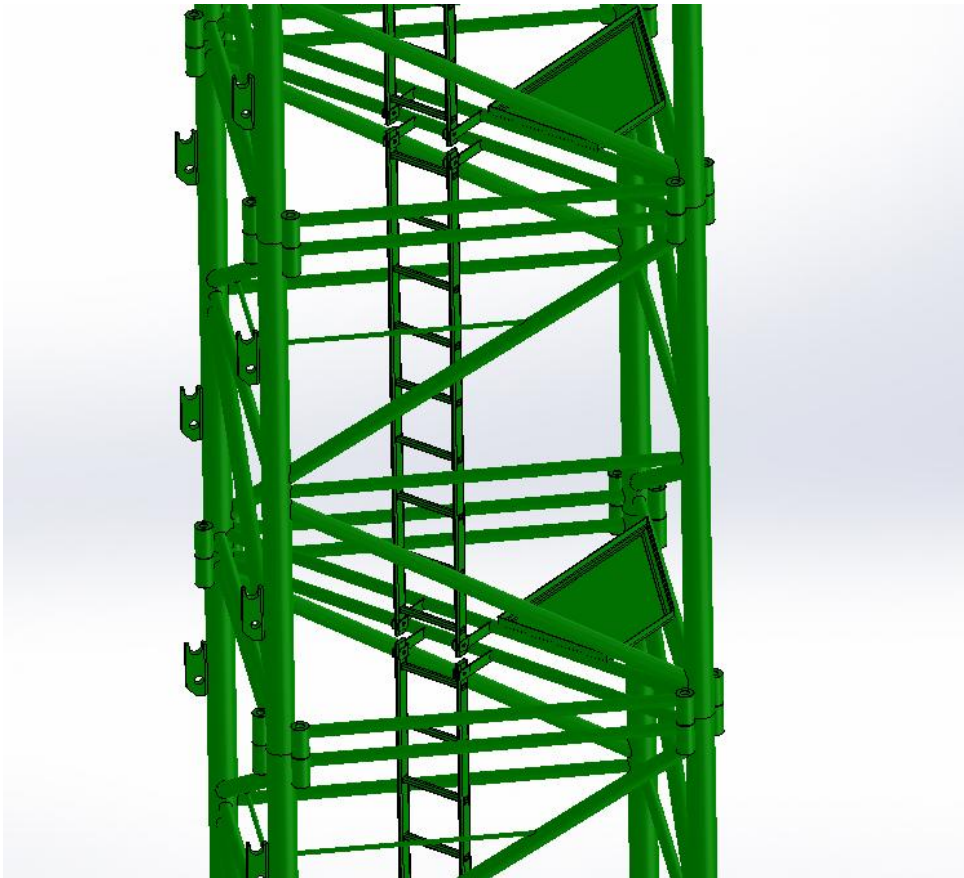
jib 45m

R(m)		2.5~15.3	16	18	20	22	24	26	27.6	28
G(kg)	2ropes	4000	4000	4000	4000	4000	4000	4000	4000	3930
	4ropes	8000	7600	6630	5870	5250	4730	4300		
R(m)		30	32	34	36	38	40	42	44	45
G(kg)	2ropes	3610	3330	3090	2880	2680	2510	2350	2210	2150
	4ropes									

4.Product structure features

4.1 The main parts all are made of Q345B low alloy steel and could be used under the lower temperature.

4.2 The size of mast section is 1.8m×1.8m×2.5m, which is easy to install; the main chord of the mast section is made of steel pipe $\Phi 127 \times 14$ /Q355B material; it is adopted Dacromet process high-strength bolts connecting.



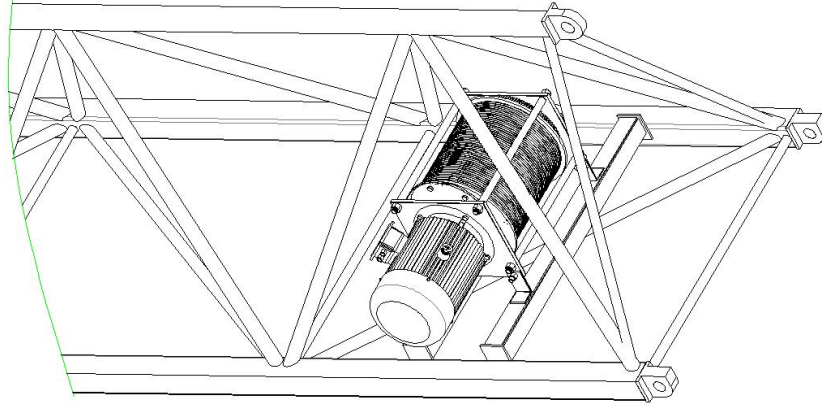
4.3 Steel double pull pole hangs the wide range jib,the tower cap is cone,according to user requirements,the radius can be set to 50 meters, 45 meters, 38.5 meters, etc.



4.4The hoisting adopts frequency control, adopts variable frequency motor, with rotary encoder, closed-loop speed control. Gentle running and braking, running long time at the lower insertion speed, no slip in heavy-load hoisting and descending, and can realize brake failure Protection and other functions, running smoothly without impact. The hoisting reducer is designed as a four-axis type, and the stubby type of the reel reduces the deflection angle of the wire rope, improve the service life of the wire rope.



4.5 The trolley derricking is composed of a 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.

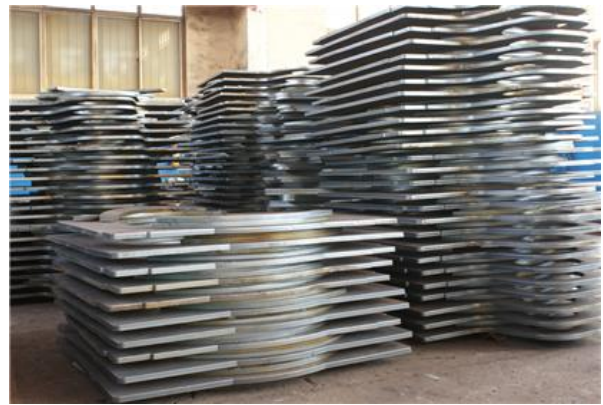


4.6 Two sets of slewing mechanisms are symmetrically arranged, with external teeth meshing; the slewing motor adopts frequency conversion motor, frequency conversion speed regulation, and cooperates with 011.45.1400 slewing bearing, which is reliable in operation and stable in starting and braking; The swing brake adopts double brake and is normally open, which is convenient for operation and management.



5. Main 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.





Professional and advanced electronic control system to ensure product quality

①The electric control cabinet and resistance box are 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.



Picture



TC5018-8tMain parts and components

SN	Item		Model	Manufacturer
1	Lifting mechanism QRS80P	Reducer speed ratio	20.23	Fangyuan group
		Motor	YZTPF225M-8 30kW	
		Wire rope	14NAT6X29Fi-1770ZS	Saifutian,Wuxi
2	Slewing mechanism		QTH130P	Fangyuan group
3	Derricking mechanism		TXB425.49	Fangyuan group
4	Slewing bear		011.45.1400	Haiying,Yantai