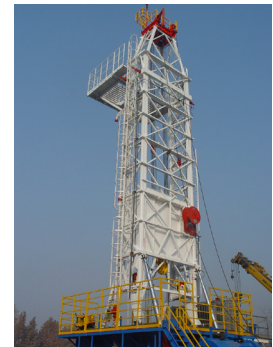


MASTS

CNPC owns strong manufacturing capacity of steel structure products, and provides about 70,000 tones of all kinds of mast annually, including traditional mast and updated mats.

TECHNICAL FEATURES:

- Common Mast Model: A masts, K masts (open-front masts), derricks, masts and bootstrap masts;
- A-mast: its leg section is rectangle or triangle, with preferably features of high loading capacity and perfect local stability. Each section of A-mast is connected by pins. The mast is assembled on the ground and raised or lowered integrally by use of power of the drawworks.
- K-mast its leg section is "K" open face type. The beam legs adopt laminated truss structure. Each section of the mast is connected by pins. K masts can be assembled on the ground and raised or lowered integrally by use of power of the drawworks;
- Telescoping mast: The main body is "K" type welded with girder structure, consisting of two or three sections, which can be rigged up and telescoped by main drawworks or hydraulic power;
- The derricks: adopts tower type truss structure with bolts connection featuring better integral stability and high loading capacity. The offshore derricks were divided into 2 types: the static derrick installed on the fixed platform and the dynamic derrick installed on drilling ship.
- The masts: its main body belongs to welded truss structure, incline to the wellhead during the drilling operation and keep their stability and load capacity by guy rope;
- The bootstrap mast: the main body belongs to "K" section, the base section as the guide section and the support section to raise and assemble the other sections consequently by the power of drawworks or the hydraulic power, which is able to save the field and reduce aloft working.



TECHNICAL PARAMETER:

Model		JJ170/41-A	JJ225/42-A	JJ315/43-A	JJ9031-KS	JJ170/24-KS	JJ170/33-KS	JJ225/43-KS
Max static hook load, kN		1700	2250	3150	900	1700	1700	2250
Clear height, m		41	42	43	31	24	33	43
Bottom span, m		7.5	8	9	2.9	2.135 × 1.375	2.9	4
Height of monkey board, m		24.5, 25.5, 26.5	24.11, 25.21, 26.31	22.1, 23.5, 25.5, 26.5	17.5	45° -90° range of obliquity adjusting	16.5, 17.5	25.5, 26.5
Setback capacity (4.5"), m		2750	4000	4500	1500	1.5° obliquity increment	3000	4000
Wind survival	standby condition (no setback, no load), m/s	36	36	36	36	36	36	36
	survivalcondition (no standno load), m/s	47.8	47.8	47.8	47.8	47.8	47.8	47.8
	Raising & lowering Mast, m/s	≤8.3	≤8.3	≤8.3	≤8.3	≤8.3	≤8.3	≤8.3
Weight, kg		34400	36300	37900	16600	19500	26000	38000
Note: A-A mast KS-Telescoping mast								

Model	JJ170/42-K	JJ225/43-K	JJ250/42-K	JJ315/45-K	JJ450/45-K	JJ450/45-K	JJ450/45-K	JJ585/46-K
Max static hook load, kN	1700	2250	2450	3150	4500	4500	4500	5850
Clear height, m	42	43	42	45	45.5	45.5	45.5	46.5
Bottom span, m	7.5	8.5	7.5	9	10	9/10	9	9
Height of monkey board, m	23.35 24.35 25.35 26.35	24.5 25.5 26.5	24.5 25.5 26.5	24.5 25.5 26.5	24.5 25.5 26.5	24.5 25.5 26.5	24.5 25.5 26.5	24.5 25.5 26.5
Setback capacity (4.5"), m	3000	3500	4000	5000	7000	7000	7000	8000 (5")
Wind survival	standby condition (no setback, no load), m/s	36	36	36	36	36	36	36
	survivalcondition (no standno load), m/s	47.8	47.8	47.8	47.8	47.8	47.8	47.8
	Raising & lowering Mast, m/s	≤8.3	≤8.3	≤8.3	≤8.3	≤8.3	≤8.3	≤8.3
Weight, kg	40000	46900	41000	95630 70300	63000	103000 103600	85100	87400
Note: K-K mast								

Model	JJ675/48-K	JJ900/52-K	JJ225/43-Z	TJ2-41	JJ90/39-W	JJ120/31-W	JJ150/31-W	JJ180/38-W
Max static hook load, kN	6750	9000	2250	2200	900	1200	1500	1800
Clear height, m	48	52	43	41	39	31	31	38
Bottom span, m	10	10	8	8.02 × 8.02	6	2.32	2.52	1.86
Height of monkey board, m	24.5 25.5 26.5	24.5 25.5 26.5	24.5 25.5 26.5	22.543	24.5 25.5 26.5	16.1 17.1 18.1	16.5 17.5	16.2 17.2 18.2
Setback capacity (4.5"), m	9000 (5")	12000 (5")	4000	4000	1960	2000	3000	3000
Wind survival	standby condition (no setback, no load), m/s	36	36	36	36	36	36	31
	survivalcondition (no standno load), m/s	47.8	47.8	47.8	47.8	47.8	47.8	47.8
	Raising & lowering Mast, m/s	≤8.3	≤8.3	≤8.3	≤8.3	≤8.3	≤8.3	≤8.3
Weight, kg	162100	205800	57000	31200	24000	11300	14400	19300
Note: K- K mast , Z- Bootstrap, W- Mast								