

## 3.7 Offshore mast/derrick

CNPC owns strong design and manufacturing capacity of steel structure products. The offshore bottleneck-style derrick and bootstrap mast feature manufacture fine, high corrosion-resistant and reliable quality, which have been widely applied to marine projects.

## **Technical features**

The offshore bottleneck-style derrick adopts square cross-section, removable, bolt connection. Derrick body consists of four stands and number of braces connected by the bolts, while the stand column forms from cross-section structure welded by large-size angle iron. All exposed components are hot dip galvanized to improve corrosion resistance. The derrick features high capacity, good stability, large inner space and wide view of driller, which is especially suitable for offshore operating.

Boot strap mast including six sections: top section, upper section, middle section, lower section, bottom section, and base section. Pin connection between two sections. Top section will be lifted by hydraulic system mounted on the bottom section, then the other section one by one vertically accordingly. It need smaller space for installation on the platform, convenient for maintenance, the mast can be installed and dismantled by the platform crane, no need for the float crane. It's especially suit for the less space and movable platform.







## **Technical Parameter**

Model		НЈЈ158/33-Т	НЈЈ225/43-Т	НЈЈ450/45-Т	НЈЈ450/47-Т	НЈЈ500/47-Т	НЈЈ675/52-Т		
Max static hook load, kN		1580	2250	4500	4500	4800	6750		
Clear height, m		33	43	45	47	47	52		
Bottom span, m		7.14	8.02	10	9.144X9.144 9.14		12.2		
Height of monkey board, m		17.5	25.6	22.5	26.5 26.5		26.5		
Setback capacity (4 1/2″drill pipe) , m		3400	3000	7000	7000 7000		9000		
Wind loading m/s	Under no working condition (no setback, noload)	51.5	51.5	36	36	36	51.5		
	Under no working condition (stand no load)	64.7	64.7	47.8	51.4	47.8	84.7		
	Weight, kg	34300	45000	57100	111400	122000	240000		
Note: T- Derrick									

## **Technical Parameter**

Model		HJJ225/43-Z	HJJ315/45-Z	HJJ450/46-Z	HJJ170/33-KS			
Max static hook load, kN		2250	3150	4500	1700			
Clear height, m		43	45	46.5	33			
Bottom span, m		9 × 6	9.144	9.144	4			
Height of monkey board, m		24.5, 25.5, 26.5	26.5	26.625	15.5, 16.5, 17.5			
Setback capacity (4 1/2″drill pipe) , m		4000	5000	7000	3000			
Wind loading m/s	Under no working condition (no setback, no load)	51.2	54.4	54.4	36			
	Under no workingcondition (stand no load)	64.7	64.7	64.7	47.8			
Weight, kg		94510	124000	138000	39400			
Note: Z-Boot Strap KS-Telescoping mast								