

Main characteristic and technical data for rough-terrain crane

FRC25

ROUGH-TERRAIN TYPE CRANE

- Strong adaptability and
- high-passing through, full hydraulic configuration
- flexibility, traveling with load
- Telescopic cylinder with five sections having the function of ordinal and synchro extending and retracting frame form basic jib + boxlike telescopic jib which can realize 0,15,30° angle changed
- Two drives can be switched for four drives, crablike traveling, small turning radius, also limitations of workplace is small
- Chassis is adopted by compound bracket, stable and comfortable traveling
- Pilot ratio control
- Moment limiter display
- air-condition.
- directional joystick
- Proper layout, showing elegance and compacting
- CAN meter : showing engine oil pressure, cooling water temperature, rev, odograph as well as fuel level, which all can offer intuitive, real-time data display for operator. Streamlined cabin was special designed by front door pane and owns many advantages such as wide horizon and safety environment, air-conditioner , and adjustable desk.

Catalogue	Item	Unit	Numerical value	
Working performance parameter	Max. lifting capacity	kg	25000	
	Max. lifting moment	Basic boom	kN.m	1078
		Longest boom	kN.m	539
		Longest boom + Fly jib	kN.m	227
	Max. lifting height	Basic boom	m	7.5
		Longest boom	m	27.5
Longest boom + Fly jib		m	35.6	
Working speed	Max. speed with single line	m/min	120	
	Extending and retracting time for lifting boom	S	85	
	Lifting and falling time for lifting boom	S	50	
	Slewing speed	r/min	2.0	
	Extending and retracting for jack horizontal cylinder	S	Extending ≤36 Retracting ≤31	
	Shrinking and expanding time for vertical jack cylinder	S	Shrinking ≤31 Expanding ≤39	
Traveling parameter	Highest traveling speed	km/h	45	
	Max. Gradeability	%	50%	
	Turning radius	m	4.8/9.4	
	Smallest clearance above ground	mm	260	
	Approach angle	°	19.5°	
	Departure angle	°	19.5°	
Weight parameter	Deadweight under traveling	kg	26000	
	Whole crane weight	kg	25896	
	Front shaft weight	kg	13000	
	Middle-back shaft weight	kg	13000	
Dimension parameter	Figure size (length X width X height)	mm	9900x2496x3563	
	Outrigger longitudinal span	m	6.6	
	Outrigger transversal span	m	6.1/4.72/3.4/2.26	
	Boom length	m	7.5-25.5	
	Boom elevation	°	-8°~80°	
	Jib length	m	5.15-8.4	
Chassis	Drive form	4 X 2 front roller 4X4 Front/rear wheel		
	Engine	Power	kW/rpm 177/2300	
		Max. torsion	N.m/rpm 1356/1200-1600	
	Turning system	hydraulic power-assisted steering, offering three kinds of turning model. Full turning with two wheels, Full turning with four wheels, Cab-like turning with four wheels.		
Suspension system	Compound bracket			
Hydraulic system	<ul style="list-style-type: none"> ■ Hydraulic pump: Variable pump and ration gear pump can be used together for whole crane operation ■ Control valve : Loading sensing with multiple unit valve ■ Hydraulic oil tank capacity about 420 litre 			

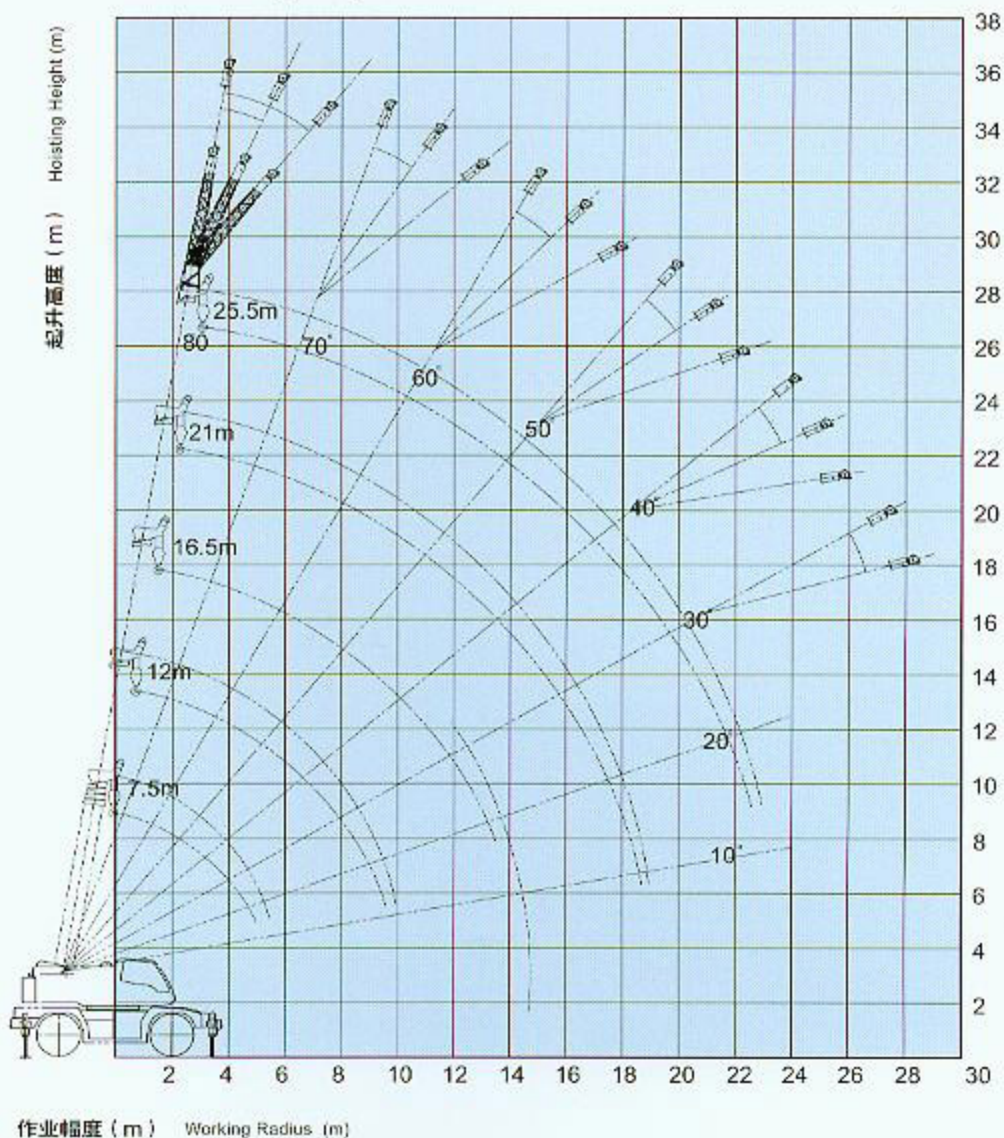
FRC25越野起重机性能表

作业幅度 Working angle (米/m)	支腿跨距 (6.12m) Outrigger span (6.12m)					支腿跨距 (4.72m) Outrigger span (4.72m)					支腿跨距 (3.4m) Outrigger span (3.4m)					支腿跨距 (2.26m) Outrigger span (2.26m)				
	支腿跨距6.12m (全圆) Jack-up span (full circle)					支腿跨距4.72m (侧方) Jack-up span (Side)					支腿跨距3.4m (侧方) Jack-up span (Side)					支腿跨距2.26m (侧方) Jack-up span (Side)				
	7.5m	12m	16.5m	21m	25.5m	7.5m	12m	16.5m	21m	25.5m	7.5m	12m	16.5m	21m	25.5m	7.5m	12m	16.5m	21m	25.5m
3.0	25.00					25.00					25.00					12.00				
3.5	25.00	19.20				25.00	19.20				21.00	19.20				10.30	10.50			
4.0	24.00	17.70				24.00	17.70				16.00	16.50				8.20	8.40			
4.5	22.50	16.40	13.50	11.50		22.50	16.40	13.50	11.50		12.70	13.00	13.50	11.50		6.60	6.80	7.50	7.90	
5.0	21.00	15.10	12.50	10.50		18.20	15.10	12.50	10.50		10.10	10.60	11.50	10.50		5.50	5.70	6.30	6.60	
5.5		14.00	11.60	9.70	5.90		14.00	11.60	9.70	5.90		8.80	9.60	9.70	5.90		4.80	5.40	5.70	5.50
6.0		13.20	10.80	9.10	5.50		12.60	10.80	9.10	5.50		7.50	8.20	8.60	5.50		4.10	4.60	4.90	5.00
6.5		12.00	10.10	8.50	5.10		10.70	10.10	8.50	5.10		6.50	7.10	7.50	5.10		3.50	4.00	4.30	4.30
7.0		11.60	9.50	7.90	4.70		9.30	9.50	7.90	4.70		5.60	6.30	6.60	4.70		3.00	3.50	3.80	3.70
7.5		11.00	9.00	7.50	4.40		8.10	8.80	7.50	4.40		5.00	5.50	5.90	4.40		2.60	3.10	3.40	3.30
8.0		10.50	8.40	7.00	4.10		7.20	7.80	7.00	4.10		4.30	4.90	5.20	4.10		2.20	2.70	3.00	2.80
8.5		9.90	8.00	6.60	3.90		6.40	7.00	6.60	3.90		3.80	4.50	4.70	3.90		1.90	2.40	2.70	2.50
9.0		8.80	7.60	6.30	3.60		5.70	6.30	6.30	3.60		3.50	3.90	4.20	3.60		1.60	2.10	2.40	2.20
9.5		8.00	7.20	6.00	3.40		5.10	5.70	6.00	3.40		3.00	3.50	3.80	3.40		1.40	1.90	2.20	1.90
10		7.10	6.80	5.60	3.20		4.60	5.20	5.60	3.20		2.50	3.20	3.50	3.20		1.10	1.70	1.80	1.70
11			6.50	5.10	2.90			4.30	4.80	2.90				2.70	2.90	2.90		1.30	1.40	1.30
12			5.60	4.70	2.60			3.60	4.15	2.30				2.10	2.50	2.60		1.00	1.20	0.90
13			4.90	4.20	2.40			3.00	3.60	2.10				1.60	2.10	2.10				0.90
14				3.80	2.10				3.20	1.70					1.70	1.80				
16				3.50	1.70				2.40	1.40					1.20	1.20				
18					1.40					1.20						0.90				
20					1.25					0.80										
危险角度 Warning angle																				
倍率	8	8	6	6	4	8	8	6	6	4	8	8	6	6	4	8	8	6	6	4
25.5米主臂 + 5.15米副臂 25.5 m Boom + 5.15 m Jib																				
主臂 仰角 Boom elevation (°)	支腿全伸6.1米 (360全圆周吊重) Jack-up full extending 6.1m (lifting 360° all round)					支腿半伸4.72米 (侧向区吊重) Jack-up half extending 4.72m (lifting at side zone)					支腿半伸3.4米 (侧向区吊重) Jack-up half extending 3.4m (lifting at side zone)									
	倾角0° Inclination 0°		倾角15° Inclination 15°		倾角30° Inclination 30°		倾角0° Inclination 0°		倾角15° Inclination 15°		倾角30° Inclination 30°		倾角0° Inclination 0°		倾角15° Inclination 15°		倾角30° Inclination 30°			
	作业半径 Working Radius	起重量 Lifting capacity	作业半径 Working Radius	起重量 Lifting capacity	作业半径 Working Radius	起重量 Lifting capacity	作业半径 Working Radius	起重量 Lifting capacity	作业半径 Working Radius	起重量 Lifting capacity	作业半径 Working Radius	起重量 Lifting capacity	作业半径 Working Radius	起重量 Lifting capacity	作业半径 Working Radius	起重量 Lifting capacity	作业半径 Working Radius	起重量 Lifting capacity	作业半径 Working Radius	起重量 Lifting capacity
(米)	(吨)	(米)	(吨)	(米)	(吨)	(米)	(吨)	(米)	(吨)	(米)	(吨)	(米)	(吨)	(米)	(吨)	(米)	(吨)	(米)	(吨)	
80	3.8	3.00	4.9	3.00	5.8	2.20	3.81	3.00	4.9	3.00	5.84	2.20	3.81	3.00	4.9	2.50	5.8	2.00		
77	5.4	3.00	6.4	2.50	7.4	2.00	5.37	3.00	6.4	2.50	7.35	2.00	5.37	3.00	6.4	2.00	7.4	1.80		
75	6.4	3.00	7.5	2.00	8.4	1.80	6.41	2.50	7.5	2.00	8.35	1.80	6.41	2.50	7.5	1.60	8.4	1.40		
72	7.9	2.50	9.0	1.60	9.8	1.40	7.94	2.10	9.0	1.60	9.82	1.40	7.94	2.10	9.0	1.50	9.8	1.30		
68	9.9	2.10	10.9	1.50	11.7	1.30	9.94	1.85	10.9	1.50	11.7	1.30	9.94	1.85	10.9	1.30	11.7	1.10		
65	11.4	1.85	12.4	1.30	13.1	1.10	11.4	1.55	12.4	1.30	13.1	1.10	11.4	1.48	12.4	1.13	13.1	0.95		
61	13.8	1.55	14.7	1.13	15.4	0.95	13.3	1.48	14.7	1.13	14.9	0.95	13.3	1.27	14.7	1.07	15.4	0.91		
55	14.7	1.48	15.6	1.07	16.2	0.91	14.7	1.27	15.6	1.07	16.2	0.91	14.7	1.19	15.6	0.98	16.2	0.87		
52	17.3	1.27	18.1	0.98	18.6	0.87	17.3	1.19	18.1	0.98	18.6	0.87	17.3	1.11	18.1	0.94	18.6	0.85		
49	18.5	1.19	19.3	0.94	19.8	0.85	18.5	1.11	19.3	0.94	19.8	0.85	18.5	1.00	19.3	0.90	19.8	0.80		
45	20.1	1.11	20.7	0.90	21.2	0.83	20.1	1.00	20.7	0.90	21.2	0.83	20.1	0.95						
41	21.5	1.00	22.1	0.87	22.5	0.82	21.5	0.95	22.1	0.87										
35	24.5	0.95	24.0	0.83	24.2	0.81														
主臂翻倒倾角 Boom tilt angle (°)	30		30		30		35		37		40		38		41		43			

FRC25越野起重机性能表

作业 幅度 Working angle (米)	不使用支腿定位吊重 Don't use jack-up orientation for lifting										行驶吊重 Traveling with load									
	7.5m		12m		16.5m		21m		25.5m		7.5m		12m		16.5m		21m		25.5m	
	前方 front	全周 full circle	前方 front	全周 full circle	前方 front	全周 full circle	前方 front	全周 full circle	前方 front	全周 full circle	前方 front	全周 full circle	前方 front	全周 full circle	前方 front	全周 full circle	前方 front	全周 full circle	前方 front	全周 full circle
3.0	14.00	6.00									8.30	2.80								
3.5	12.50	5.20	12.60	5.00							7.30	2.20	7.40	2.30						
4.0	11.30	4.40	11.30	4.50							6.50	1.80	6.60	1.90						
4.5	10.20	3.80	10.30	3.80	10.40	4.00	10.80	4.20			5.80	1.40	5.90	1.50	6.30	1.90				
5.0	9.30	3.20	9.40	3.40	9.50	3.50	9.90	3.70			5.20	1.10	5.40	1.20	5.70	1.60	5.90	1.80		
5.5	8.50	2.80	8.60	2.90	8.70	3.10	9.10	3.30	9.20	3.20	4.70	0.80	4.80	0.90	5.20	1.30	5.30	1.50	5.50	1.60
6.0			7.90	2.60	8.10	2.80	8.40	3.00	8.50	2.90			4.40		4.70	1.10	4.90	1.30	5.00	1.40
6.5			7.30	2.30	7.50	2.50	7.80	2.70	7.90	2.60			4.00		4.30	0.90	4.50	1.10	4.60	1.20
7.0			6.80	1.90	7.00	2.20	7.30	2.40	7.40	2.40			3.70		4.00		4.20	0.90	4.30	1.10
7.5			6.30	1.60	6.50	2.00	6.80	2.20	6.90	2.20			3.40		3.70		3.90	0.80	4.00	0.90
8.0			5.70	1.30	6.00	1.80	6.40	2.00	6.50	2.00			3.10		3.40		3.60		3.70	0.80
8.5			5.10	1.10	5.40	1.60	6.00	1.80	6.10	1.80			2.80		3.20		3.30		3.50	
9.0			4.60	0.80	3.80	1.40	5.40	1.70	5.60	1.70			2.60		2.90		3.10		3.20	
9.5			4.10		4.40	1.25	5.00	1.50	5.20	1.40			2.40		2.70		2.90		3.00	
10			3.70		3.90	1.00	4.50	1.20	4.70	1.20			2.20		2.50		2.70		2.80	
11					3.20	0.80	3.80	0.80	4.00	1.00					2.20		2.40		2.50	
12					2.70		3.20		3.40						1.90		2.10		2.20	
13					2.20		2.80		2.60						1.60		1.80		2.00	
14					1.80		2.40		2.30						1.40		1.60		1.70	
16							1.80		2.00								1.30		1.40	
18									1.50										1.10	
20									1.20											
全回转角度 Degree of rotation																				
倍率	8		8		6		6		4		8		8		6		6		4	
25.5米主臂+8.4米副臂 25.5 m Boom + 8.4 m Jib																				
主臂 仰角 Boom elevation (°)	支腿全伸6.1米(360°全周吊重) Jack-up full extending 6.1m(360° full circle)						支腿半伸4.72米(侧向区吊重) Jack-up half extending 4.72m (lifting at side zone)						支腿半伸3.4米(侧向区吊重) Jack-up half extending 3.4m (lifting at side zone)							
	倾角0° Inclination 0°		倾角15° Inclination 15°		倾角30° Inclination 30°		倾角0° Inclination 0°		倾角15° Inclination 15°		倾角30° Inclination 30°		倾角0° Inclination 0°		倾角15° Inclination 15°		倾角30° Inclination 30°			
	作业半径 Working Radius	起重能力 Lifting capacity	作业半径 Working Radius	起重能力 Lifting capacity	作业半径 Working Radius	起重能力 Lifting capacity	作业半径 Working Radius	起重能力 Lifting capacity	作业半径 Working Radius	起重能力 Lifting capacity	作业半径 Working Radius	起重能力 Lifting capacity	作业半径 Working Radius	起重能力 Lifting capacity	作业半径 Working Radius	起重能力 Lifting capacity	作业半径 Working Radius	起重能力 Lifting capacity	作业半径 Working Radius	起重能力 Lifting capacity
(米)	(吨)	(米)	(吨)	(米)	(吨)	(米)	(吨)	(米)	(吨)	(米)	(吨)	(米)	(吨)	(米)	(吨)	(米)	(吨)	(米)	(吨)	
80	4.4	2.50	6.3	1.40	7.9	1.00	4.4	2.50	6.3	1.30	7.9	1.00	4.4	2.10	6.3	1.10	7.9	0.90		
77	6.1	2.10	8.0	1.10	9.6	0.90	6.1	2.10	8.0	1.10	9.6	0.90	6.1	1.72	8.0	1.00	9.6	0.85		
75	7.3	1.72	9.1	1.00	10.7	0.85	7.3	1.72	9.1	1.00	10.7	0.85	7.3	1.38	9.1	0.90	10.7	0.80		
72	8.9	1.38	10.7	0.90	12.3	0.80	8.9	1.38	10.7	0.90	12.3	0.80	8.9	1.20	10.7	0.81	12.3	0.75		
68	11.2	1.20	12.9	0.81	14.3	0.75	11.2	1.20	12.9	0.81	14.3	0.75	11.2	1.03	12.9	0.75	14.3	0.70		
65	12.8	1.03	14.5	0.75	15.8	0.70	12.8	1.03	14.5	0.75	15.8	0.70	12.8	0.93	14.5	0.69	15.8	0.60		
60	14.9	0.93	16.5	0.69	17.7	0.60	14.9	0.93	16.5	0.69	17.7	0.60	14.9	0.85	16.5	0.65	17.7	0.55		
58	16.4	0.85	17.9	0.65	19.1	0.55	16.4	0.85	17.9	0.65	19.1	0.55	16.4	0.79	17.9	0.62	19.1	0.52		
55	17.9	0.79	19.3	0.62	20.4	0.52	17.9	0.79	19.3	0.62	20.4	0.52	17.9	0.74	19.3	0.59	20.4	0.49		
52	12.3	0.74	20.7	0.59	21.7	0.49	12.3	0.74	20.7	0.59	21.7	0.49	12.3	0.68	20.7	0.57	21.7	0.47		
49	20.6	0.68	22.0	0.57	22.8	0.47	20.6	0.68	22.0	0.57	22.8	0.47	20.6	0.60	22.0	0.54				
45	22.4	0.62	23.6	0.54	24.3	0.44	22.4	0.62	23.6	0.54			22.4	0.55	23.6	0.50				
41	24.0	0.58	25.1	0.52	25.7	0.42	24.0	0.58												
主臂侧倾角度 Boom tilt angle (°)	35		35		35		38		41		44		41		43		45			

起升高度曲线
Crane Lifting Height Curves



注:

1. 表中所列额定起重量是以起重机水平固定在地面上为前提条件,包括吊钩、吊具自重在内的最大起重量。主钩自重300Kg, 副钩自重50Kg。表中粗线上方所列数值是吊臂强度决定的起重量, 粗线下方所列数值是由起重机稳定性决定的起重量。

2. 起重机作业幅度是指吊钩中心线至转台回转中心垂线的距离。

3. 主臂作业时主起升机构单绳负载不得大于3500Kg。

4. 对特殊气候的注意事项请参阅使用说明书。

5. 不允许带载伸缩

1. The basis of the lifting capacity listed in the table is that the crane works on the level and firm ground including the max. lifting capacity of hooks and slings. Main hook self-weight 300kg, aux. hook self-weight 50kg. The value listed above thick line of the table is the lifting capacity decided by boom strength, The value listed below thick line of the table is the lifting capacity decided by stability of crane.

2. Working radius of crane is the distance between hook centerline and slewing center vertical line of platform.

3. Single rope load of main hoisting mechanism cannot exceed 3500kg when boom works.

4. Precautions about special climate refer to Operation Manual.

5. Prohibit extending and retracting with load.