

FR130X

1. Spec Technical Parameters

No	Description	Unit	Kelly bar	CFA
1	Max Drilling Diameter	mm	Ø1500	750
2	Max Drilling Depth	m	Standard: 40 Optional: 50	12.5+6 without soilcleaner 11.5+6 with soil cleaner
3	Max pull force	kN	/	340
4	Safe operation range	mm	3100~3450	
5	Drill rig Dimension in working condition (Length*Width*Height)	mm	7520×3600×17700	7520×3600×22178
6	Drill rig Dimension in transportation condition (Length*Width*Height)	mm	14075×2500×3500	
7	Total machine weight (drilling tools excluded)	t	41	40
8	Engine	Engine model	Cummins QSB7	
		Engine Power/ Rotating speed	kW	169 /2200r/min
9	Hydraulic System	Max working pressure of the main pump	MPa	32
10	Rotary Head	Max Torque of rotary head	kN •m	130
		Rotating speed of rotary head	r/min	8~35
		Rotation speed for cast	r/min	140
11	Crowd Piston (Optional)	Max push force	kN	120
		Max pull force	kN	140
		Stroke	mm	3500
12	Crowd Winch	Max push force	kN	200
		Max pull force	kN	200
		Stroke	mm	11000
13	Main Winch	Pull force	kN	140
		Wire Diameter	mm	26
14	Auxiliary	Pull force	kN	50



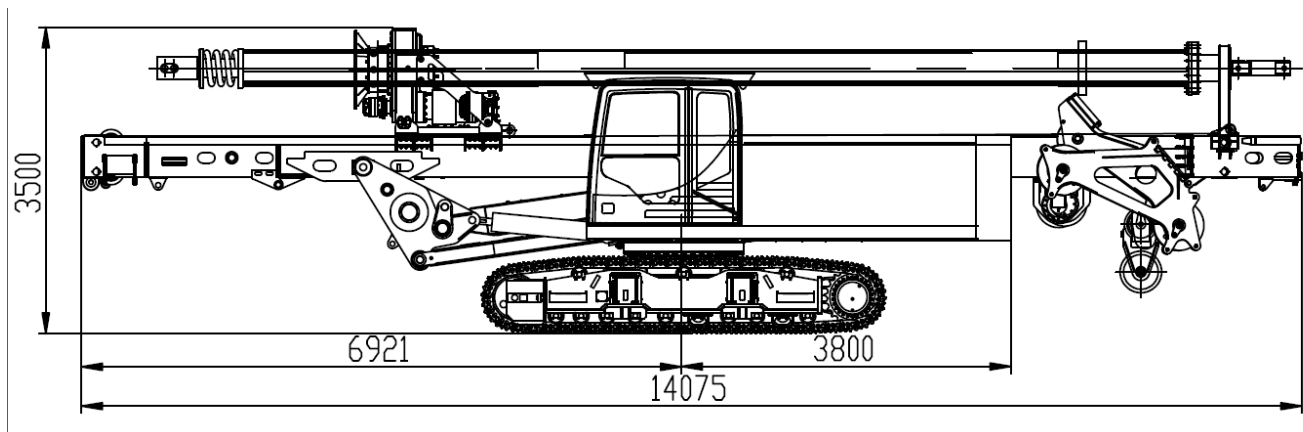
	winch	Wire Diameter	mm	16	
15	Mast	Mast inclination of Leftward/ Rightward	°	3 / 3	
		Forward	°	5	/
16	Swivel	Swing range	°	360	
17	Undercarriage	Max traveling speed	km/h	3	
		Max Slope for climbing	%	40	
18	Track shoe	Width	mm	600	
		Distance between tracks (Min-Max)	mm	2500~3600	
		Center distance between the two wheels of track	mm	3895	
		Average ground pressure	kPa	89	

Electrical System

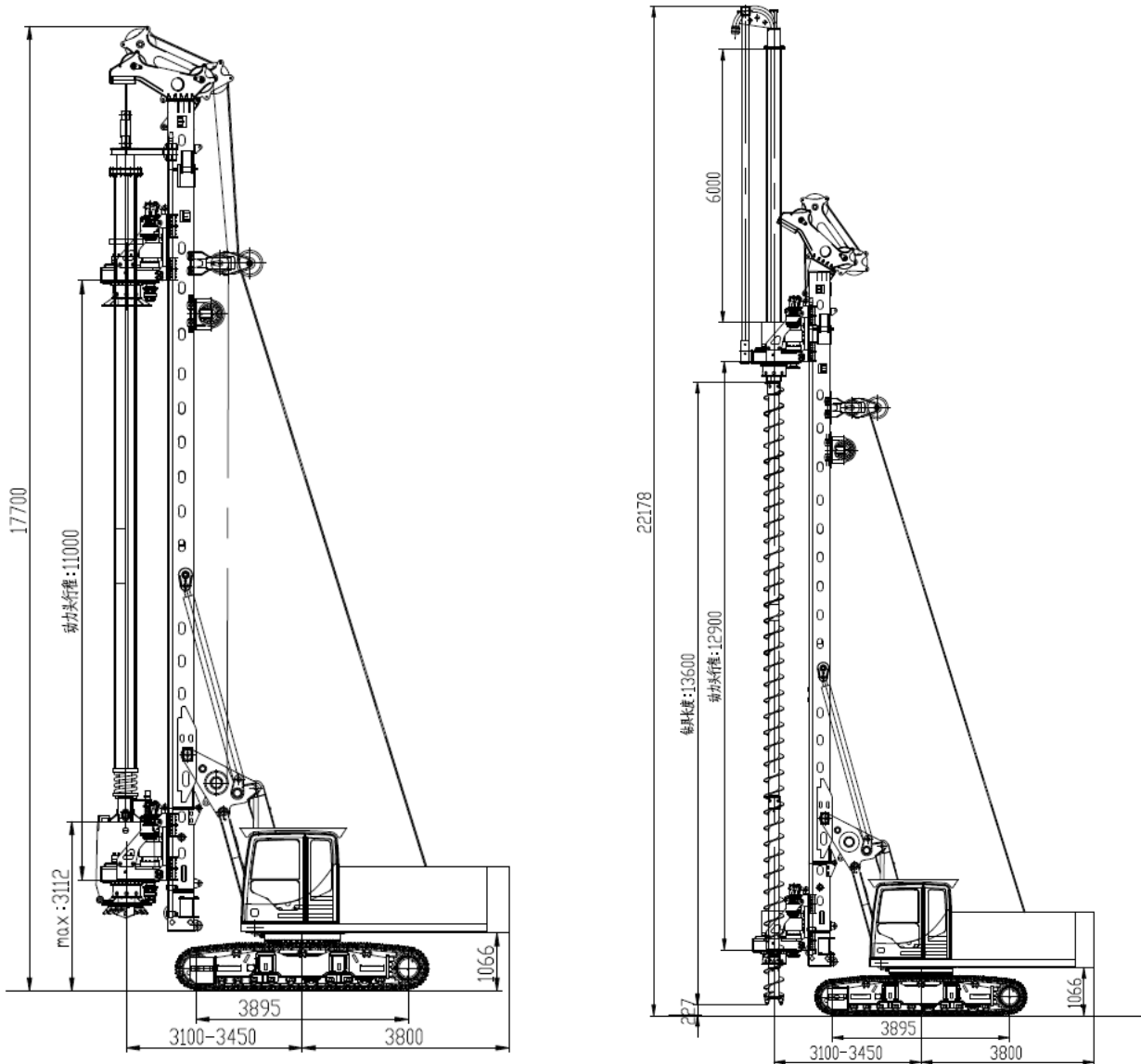
The electrical and control system of FR130X is developed based on latest technologies such as intelligent control technology, CANBUS technology and virtual instrument. The human-computer interface makes it easy to operate and monitor. The monitoring system displays a comprehensive range of drilling parameters such as mast verticality and depth, and keeps record in real time. The following features are also include: self-diagnosis of input/output signals, limit control of mast, parallelogram and main winch, alarm of filter clogging, reminder for maintenance, etc.

PLC control system may function to adjust mast verticality both manually and automatically. The mast verticality is displayed in both forms of analogue illustration of “+” and digits.

2. Transportation



Transportation condition (Kelly bar and drilling tools excluded)



Working condition

3. Main components list

Description	Manufacturer	
Engine	Cummins	America
Hydraulic main pump	Kawasaki	Japan
Hydraulic main valve	Kawasaki	Japan
Hydraulic motor for Rotary head	Rexroth	Germany
Pilot control handle	Kawasaki	Japan



Gear Box and motor for main Winch and track	Rexroth	Germany
Swing gear box and motor	Rexroth	Germany
Controller	Hirschmann	Germany
Solenoid valve	Argo	Germany
Rotary Bearing	FAG	Sweden
Gear box for rotary head	Bonfiglioli / Brevini	Italy