



DRILLING RIGS



Power Meets Precision Underground

ChangSha Fast Drill Engineering Machinery Co.,Ltd



www.finedrill.com



Established in 2008 and headquartered in the vibrant city of Changsha, Hunan Province, ChangSha Fast Drill Engineering Machinery Co., Ltd. is a dynamic subsidiary of Hunan DiFan Geological Equipment Co., Ltd. For over a decade, we have been a trusted partner in the global engineering and resource sectors, providing robust and reliable solutions for a wide range of applications, including geological exploration, hydropower construction, mineral exploration, oil and coal mining, and building surveying.

Our deep-rooted expertise began with our specialization in high-performance drilling tools. As a leading producer of thermally pressed and electroplated diamond drill bits, PDC drill bits, reamers, and geological drill rods, we gained an intimate understanding of the challenges faced at the rock face. This knowledge is the foundation upon which we design and operate our complete drilling systems, including our high-performance water well and geological exploration drilling rigs, water pumps, and accessories.



At FineDrill, we believe that true drilling efficiency comes from the perfect synergy between the rig and its tools. Our focus on innovating PDC technology—enhancing its adaptability to diverse geological strata and its overall cost-effectiveness—is directly applied to our rig manufacturing. We understand that maximizing your return on investment requires a delicate balance between drilling speed and equipment longevity. Therefore, every FineDrill rig is engineered not just for power and performance, but for durability and reliability, ensuring you achieve more meters per day and a lower cost per meter.

The superior quality that defines our drill bits is engineered into every drilling rig we produce. Our products have earned the trust of major drilling companies and mining operations across China and have been successfully exported to markets in Indonesia, Pakistan, Africa, and beyond, receiving consistent acclaim for their performance and resilience in the field.

We are committed to providing not only stable product quality but also comprehensive technical support, creating a seamless and valuable service experience from pre-sale consultation to on-ground operation.

We sincerely look forward to establishing long-term, stable partnerships with clients worldwide. Based on honesty, mutual trust, and shared benefit, let us face future challenges together and strive for mutual development.



Model	Maximum depth (m)	Page
1. Shallow drilling rig (<300m)		
XY-1	100	1
XY-1A	180	2
XY-1B	150	3
FYX-180	180	4
FYX-200	200	4
GK-200	180	5
GXY-260	260	6
FY-260	260	7
TY-200	200	8
2. Mid-level drilling rig (300-600m)		
XY-2	300	9
FY-300A	300	10
FY-300B	300	10
SM-300	300	11
FY-350	350	12
GXY-360	360	13
TY-300	300	14
FD-400	400	15
FY-400	400	16
FY-450	400	17
GXY-2	500	18
FY-500	500	19
FY-580	580	20
XY-2B	500	21
3. Deep drilling rig (>600m)		
FY-600	600	22
TY-600	600	23
XY-3	600	24
FY-700	700	25
FY-800	800	26
TY-800 (Split Type)	800	27
FD-600-800	1000	28
FY-1000	1000	29
FD-1000-1200	1400	30

XY-1



Drilling Depth (m)	100	70	50	Rotary Table Parameters	Main Shaft Speed Three Gear (r/min)	570	285	142	
Hole Diameter, Final Hole Diameter (mm)	75		110		Main Shaft Stroke (mm)	450			
Drill Rod Diameter (mm)	42	50			Main Shaft Maximum Feeding Pressure (kn)	15			
Hole Inclination Range (°)	90°-75°				Main Shaft Maximum Lifting Force (kn)	25			
Drilling Machine Outer Dimensions (mm)	1640*690*1440			Power	Model (Engine)	ZS1105			
Drilling Machine Weight (excluding power) (kg)	500				Rated Power (kw)	13.2			
Maximum Lifting Capacity - Single Rope (kn)	10				Model (Electric motor)	Y132M-4			
Drum Diameter (mm)	145	110	55		Rated Speed (r/min)	1440			
Drum Speed (r/min)	220	0.84	0.42	Water Pump Parameters	Model	Horizontal Single-Double-acting			
Drum Circumference Speed (m/s)	1.68				Maximum Displacement (l/min)	95	77		
Steel Wire Rope Diameter (mm)	9.3				Stroke Times (min)	120	96		
Maximum Steel Wire Rope Capacity (m)	27				Maximum Allowable Pressure (mpa)	1.2			
Clutch Diameter (mm)	230				Working Pressure (mpa)	0.7			
Brake Belt Width (mm)	50				Cylinder Diameter (mm)	80			
Model (Gear oil pump)	YBC-20/125				Piston Stroke (mm)	100			
Displacement (ml/r)	16								
Rated Pressure (mpa)	20								
Rated Speed (r/min)	2000								

XY-1A



Basic Parameters				Engine & Motor	Engine Model		ZS1105	
Drilling Depth (m)	170	150	100		Rated Power (kW)		13.2	
Hole Diameter (Initial/Final) (mm)	46	75	120		Rated Speed (r/min)		2200	
Drill Pipe Diameter (mm)	42	50			Motor Model		Y160M-4	
Drilling Angle Range (°)	90°–75°				Motor Rated Power (kW)		11	
Rig Dimensions (mm)	1700×780×1274				Motor Rated Speed (r/min)		1460	
Rig Weight (Excluding Power)	500 kg			Model: Horizontal Single-Cylinder Double-Action	Max. Discharge (L/min)		95	77
Winch Parameters					Stroke Frequency (min ⁻¹)		120	96
Maximum Lifting Capacity (Single Rope)	15 kN				Max. Allowable Pressure (MPa)		1.2	
Drum Diameter (mm)	140				Working Pressure (MPa)		0.7	
Drum Speed (r/min)	121	76	36		Cylinder Diameter (mm)		80	
Drum Peripheral Speed (m/s)	1.05	0.66	0.31		Piston Stroke (mm)		100	
Wire Rope Diameter (mm)	9.3			Spindle Parameters	Spindle Speed (5 Gears) (r/min)		1010/790/470	
Maximum Wire Rope Capacity (m)	35				Spindle Stroke (mm)		450	
Brake Diameter (mm)	252				Max. No-load Upward Speed (m/min)		3	
Brake Band Width (mm)	50				Max. Feed Pressure (kN)		15	
					Max. Lifting Force (kN)		25	

Gear Oil Pump

Model	YBC-20/125
Displacement (ml/r)	16
Rated Pressure (MPa)	20
Rated Speed (r/min)	2000

XY-1B



Basic Parameters	Drilling Depth (m)	150	100	70	50	Engine & Motor	Spindle Speed (3 Gears) (r/min)	620	310	142	71		
		30					Spindle Stroke (mm)	450					
	Hole Diameter (Initial/Final) (mm)	75	91	110	130		Max. No-load Upward Speed (m/min)	3					
		150					Max. Pulling Force (kN)	15					
	Drill Pipe Diameter (mm)	42	50				Max. Lifting Force (kN)	25					
	Drilling Angle Range (°)	90°–75°					Engine Model	ZS1115					
	Rig Dimensions (mm)	1433×697×1274					Rated Power (kW)	16.2					
	Rig Weight (Excluding Power)	500 kg					Rated Speed (r/min)	2200					
Winch Parameters	Maximum Lifting Capacity (Single Rope)	15 kN					Water Pump Parameters	Motor Model	Y160M-4				
	Drum Diameter (mm)	140						Motor Rated Power (kW)	11				
	Drum Speed (r/min)	168	84	36	18	Motor Rated Speed (r/min)		1460					
	Drum Peripheral Speed (m/s)	1.465	0.733	0.314	0.157	Model		Horizontal Single-Cylinder Double-Action					
	Wire Rope Diameter (mm)	9.3				Max. Discharge (L/min)		95	77				
	Maximum Wire Rope Capacity (m)	35				Stroke Frequency (min ⁻¹)		120	96				
	Brake Diameter (mm)	252				Max. Allowable Pressure (MPa)		1.2					
	Brake Band Width (mm)	50				Working Pressure (MPa)		0.7					
Oil Pump	Model	YBC-20/125						Cylinder Diameter (mm)	80				
	Displacement (ml/r)	16						Piston Stroke (mm)	100				
	Rated Pressure (MPa)	20											
	Rated Speed (r/min)	2000											

FYX-180

Weight (T)	4.5	Drill Pipe Length (m)	1.5, 2.0, 3.0
Hole Diameter (mm)	140-254	Rig Lifting Force (T)	12
Drill Depth (m)	180	Rapid Rise Speed (m/min)	20
One-time Advance Length (m)	3.3	Fast Feeding Speed (m/min)	40
Walking Speed (km/h)	2.5	Width of Loading (m)	2.4
Gradability (Max.)	30°	Hoisting Force of Winch (T)	--
Engine Power (kW)	55	Swing Torque (N.m)	3200-4600
Working Air Pressure (MPa)	1.7-2.5	Dimensions (mm)	3950 x 1630 x 2250
Air Consumption (m³/min)	17-31	Penetration Efficiency (m/h)	10-35
Swing Speed (rpm)	45-70	Engine Brand	Quanchai
High Leg Stroke (m)	1.4		
Drill Pipe Diameter (mm)	76-89		



FYX-200



Weight (T)	4.7	Drill Pipe Length (m)	1.5, 2.0, 3.0
Hole Diameter (mm)	140-254	Rig Lifting Force (T)	13
Drill Depth (m)	200	Rapid Rise Speed (m/min)	30
One-time Advance Length (m)	3.3	Fast Feeding Speed (m/min)	60
Walking Speed (km/h)	2.5	Width of Loading (m)	2.6
Gradeability (Max.)	30	Hoisting Force of Winch (T)	1.5
Engine Power (kW)	58	Swing Torque (N.m)	3400-4700
Working Air Pressure (MPa)	1.7-2.5	Dimensions (mm)	3950 x 1750 x 2250
Air Consumption (m³/min)	17-31	Penetration Efficiency (m/h)	10-35
Swing Speed (rpm)	45-70	Engine Brand	Yuchai
High Leg Stroke (m)	1.4		
Drill Pipe Diameter (mm)	76, 89		

GK-200



Basic Parameters	Drilling Depth (m)	180	150	100	70	Spindle Parameters	Spindle Speed (4 Gears) (r/min)	1010	505	236	118
		50	30				Spindle Stroke (mm)	450			
	Hole Diameter (Initial/Final) (mm)	75	91	110	130		Max. No-load Upward Speed (m/min)	3			
		150					Max. Pulling Force (kN)	15			
	Drill Pipe Diameter (mm)	42	50				Max. Lifting Force (kN)	25			
	Drilling Angle Range (°)	90°–75°	Rig Weight (Excluding Power)		600 kg	Power Machinery	Rated Power (kW)	16.2	Motor Rated Power (kW)		11
	Rig Dimensions (mm)	1433×697×1274	Maximum Lifting Capacity (Single Rope)		20 kN		Rated Speed (r/min)	2200			
							Motor Model	Y160M-4			
Winch Parameters	Drum Diameter (mm)						Motor Rated Speed (r/min)	1460			
	Drum Speed (r/min)	170	85	39	20	Water Pump Parameters	Model	Horizontal Single-Cylinder Double-Action			
	Drum Peripheral Speed (m/s)	1.476	0.738	0.345	0.172						
	Wire Rope Diameter (mm)	12					Max. Discharge (L/min)	95	77		
	Maximum Wire Rope Capacity (m)	40					Stroke Frequency (min ⁻¹)	120	96		
	Brake Drum Diameter (mm)	278					Max. Allowable Pressure (MPa)	1.2			
	Brake Band Width (mm)	50					Working Pressure (MPa)	0.7			
Gear Oil Pump	Model	YBC-20/125						Cylinder Diameter (mm)	80		
	Displacement (ml/r)	16	Rated Pressure (MPa)		20	Piston Stroke (mm)		100			
	Rated Speed (r/min)	2000									

GXY-260



Basic Parameters	Drilling Depth	0-260 m				Winch	Max. Lifting Capacity (Low Speed)	25 kN			
	Drill Pipe Diameter (mm)	φ42	φ50	φ60			Drum Speed (r/min)	34	59	94	129
	Drilling Angle Range (°)	0°-360°					Wire Rope Speed (Single Layer) (m/s)	0.38	0.66	1.05	1.44
	Rig Weight (Excluding Power)	800 kg					Wire Rope Specification (mm)	12.5			
Rotary Device	Active Drill Pipe	Hex Fluted 53×59×4300 mm					Drum Rope Capacity (m)	30			
	Engine Speed (r/min)	1460/1800				Moving Device	Moving Cylinder Stroke (mm)	465			
	Forward Low Speed (r/min)	43	74	117	162		Distance from Hole Opening (mm)	330			
	(Cont.)	53	92	145	200	Oil Pump	Pump Model	CB-32T			
	Forward High Speed (r/min)	203	352	556	768		Speed (r/min)	500-2000			
	(Cont.)	250	435	668	947		Discharge (ml/r)	32			
	Reverse Speed (r/min)	33	159	41	196	Power Configuration	Diesel Engine Model	Changchai 24L			
	Spindle Stroke (mm)	500	Max. Spindle Pulling Force (kN)		49		Diesel Engine Power (kW)	17			
	Max. Spindle Torque (N·m)	2500	Max. Spindle Feed Force (kN)		36		Diesel Engine Speed (r/min)	2200			

FY-260

Width of Loading (m)	2.73
Hoisting Force of Winch (T)	1.5
Swing Torque (N.m)	4000-5300
Dimensions (mm)	3900 x 1750 x 2250
Penetration Efficiency (m/h)	10-35
Engine Brand	Quanchai

Parameter	Value
Weight (T)	5.7
Hole Diameter (mm)	140-305
Drill Depth (m)	260
One-time Advance Length (m)	3.3
Walking Speed (km/h)	2.5
Gradeability (Max.)	30°
Engine Power (kW)	76
Working Air Pressure (MPa)	1.7-2.5
Air Consumption (m ³ /min)	17-31
Swing Speed (rpm)	45-70
High Leg Stroke (m)	1.4
Drill Pipe Diameter (mm)	76, 89
Drill Pipe Length (m)	1.5, 2.0, 3.0
Rig Lifting Force (T)	15
Rapid Rise Speed (m/min)	24
Fast Feeding Speed (m/min)	40



TY-200



General Parameters	Total Weight (kg)	2650
	Dimensions (LxWxH) (mm)	4000x1800x2500
	Mast Height (m)	4
	Travel Speed (km/h)	0-3
	Max. Climbing Angle (°)	30
Engine	Model	Changchai 1115
	Power/Speed	16.2 kW
Drilling Specifications	Drilling Method	Top-drive Mechanical Rotation + Hydraulic Feed
	Mud Pump Drilling	Standard
	Suitable Strata	Loose Stratum
	Max. Drilling Depth (m)	200
Drill Pipe	Diameter (mm)	42
	Length (mm)	2000
Winch	Lifting Capacity (kN)	17

XY-2



Basic Parameters	Drilling Depth	0–300 m				Moving Device	Moving Cylinder Stroke (mm)	400	
	Drill Pipe Diameter (mm)	φ42	φ50	φ60			Distance from Hole Opening (mm)	243	
	Drilling Angle Range (°)	90°–65°				Oil Pump	Pump Model	SCB32/12	
	Rig Dimensions (L×W×H) (mm)	2150×900×1690					Speed (r/min)	1800	
	Rig Weight (Excluding Power)	980 kg					Discharge (L/min)	32	
Rotary Device	Active Drill Pipe	53×59				Power Configuration	Diesel Engine Model	Z4100K	
	Engine Speed (r/min)	1800					Diesel Engine Power (kW)	30	
	Forward Low Speed (r/min)	65	114	180	248		Diesel Engine Speed (r/min)	1500	
		310	538	894	1172		Electric Motor Model	Y180L-4	
	Reverse Speed (r/min)	51	242				Electric Motor Power (kW)	22	
	Spindle Stroke (mm)	560					Electric Motor Speed (r/min)	1470	
		Max. Spindle Pulling Force (kN)	60				Winch	Drum Diameter (mm)	200
		Max. Spindle Feed Force (kN)	45					Drum Length (mm)	160
								Wire Rope Speed (Single Layer) (m/s)	0.618
								Wire Rope Specification (mm)	12.5
						Drum Capacity (m)	50		

FY-300A



Weight(t)	6.8
Drill pipe diameter(mm)	Φ76 Φ89
Hole diameter(mm)	140 - 325
Drill pipe length(m)	1.5 / 2.0 / 3.0
Drill depth(m)	300
Rig lifting force	18
One - time advance length(m)	3.3
Rapid rise speed(m/min)	22
Walking speed(km/h)	2.5
Fast feeding speed(m/min)	40
Gradeability (Max.)	30
Width of loading(m)	2.6
Equipped capacitor(kW)	85
Hoisting force of winch(T)	2
Working air pressure(MPA)	1.7 - 3.0
Swing torque(N·m)	5700 - 7500
Air consumption(m³/min)	17 - 36
Dimensions(mm)	4100 × 2000 × 2260
Swing speed(rpm)	40 - 70
The penetration efficiency(m/h)	15 - 35
High leg stroke(m)	1.4

Weight (t)	8
Drill pipe diameter(mm)	Φ76 Φ89 Φ102
Hole diameter(mm)	140 - 325
Drill pipe length(m)	1.5 / 2.0 / 3.0 / 6.0
Drill depth(m)	300
Rig lifting force	18
One - time advance length(m)	6.6
Rapid rise speed(m/min)	22
Walking speed(km/h)	2.5
Fast feeding speed(m/min)	40
Gradeability (Max.)	30
Width of loading(m)	2.6
Equipped capacitor(kW)	85
Hoisting force of winch(T)	2
Working air pressure(MPA)	1.7 - 3.0
Swing torque(N·m)	5700 - 7500
Air consumption(m³/min)	17 - 36
Dimensions(mm)	5900 × 1850 × 2200
Swing speed(rpm)	40 - 70
The penetration efficiency(m/h)	15 - 35
High leg stroke(m)	1.4

FY-300B



SM-300



Rated power of engine: 106HP

Torque 5000 to 6500

Speed 80 to 200 rpm

Maximum hole depth 300 metres

Maximum hole diameter 325mm

Lifting force 14 tonnes

Drill pipe for 60

Drill pipe for 3 metres

Maximum stroke 2.4 metres

With BW160 mud pump

Size: Length * Width * Height/3000 * 1600 * 2000mm
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Drilling rig weight: 2.7 tons

FY-350



Weight (t)	8.6
Drill pipe diameter(mm)	Φ89 Φ102
Hole diameter(mm)	140 - 325
Drill pipe length(m)	1.5 / 2.0 / 3.0 / 6.0
Drill depth(m)	350
Rig lifting force	22
One - time advance length(m)	6.6
Rapid rise speed(m/min)	18
Walking speed(km/h)	2.5
Fast feeding speed(m/min)	33
Gradeability (Max.)	30
Width of loading(m)	2.7
Equipped capacitor(kW)	91
Hoisting force of winch(T)	2
Working air pressure(MPA)	1.7 - 3.4
Swing torque(N·m)	6200 - 8500
Air consumption(m³/min)	17 - 36
Dimensions(mm)	6000 x 2000 x 2550
Swing speed(rpm)	66 - 135
The penetration efficiency(m/h)	15 - 35
High leg stroke(m)	1.4

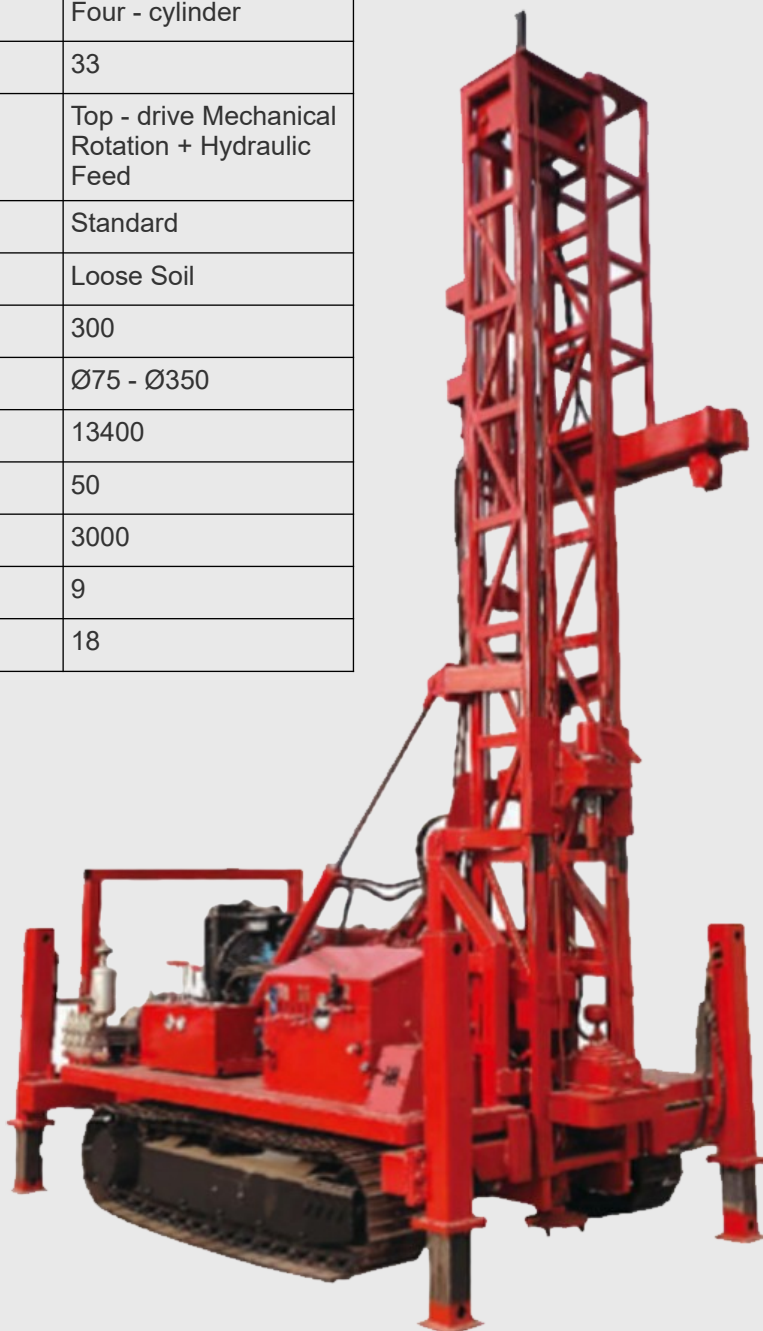
GXY-360



Basic Parameters	Drilling Depth	0—360 m				Winch	Max. Lifting Capacity (Low Speed)	25 kN			
	Drill Pipe Diameter (mm)	φ42	φ50	φ60			Drum Speed (r/min)	37	65	103	141
	Drilling Angle Range (°)	0°—360°					Wire Rope Speed (Single Layer) (m/s)	0.41	0.73	1.15	1.58
	Rig Weight (Excluding Power)	1020 kg					Wire Rope Specification (mm)	16			
Rotary Device	Active Drill Pipe	Hex Fluted 53×59×4300 mm					Drum Rope Capacity (m)	50			
	Engine Speed (r/min)	1460/1800				Moving Device	Moving Cylinder Stroke (mm)	465			
	Forward Low Speed (r/min)	56	97	153	211		Distance from Hole Opening (mm)	330			
	(Cont.)	69	119	188	259	Oil Pump	Pump Model	CB-32T			
	Forward High Speed (r/min)	264	458	722	966		Speed (r/min)	500—2000			
	(Cont.)	323	560	884	1220		Discharge (ml/r)	32			
	Reverse Speed (r/min)	44	206	54	253	Power Configuration	Diesel Engine Model	L32M-R08			
	Spindle Stroke (mm)	500	Max. Spindle Pulling Force (kN)		60		Diesel Engine Power (kW)	23			
	Max. Spindle Torque (N·m)	2500	Max. Spindle Feed Force (kN)		36		Diesel Engine Speed (r/min)	2200			

TY-300

General Parameters	Total Weight(kg)	5000
	Dimensions (L×W×H)(mm)	3500×1900×1950
	Mast Height(m)	6.5
	Travel Speed(km/h)	0 - 2
	Max. Climbing Angle(°)	20
Engine	Type	Four - cylinder
	Power/Speed(kW)	33
Drilling Specifications	Drilling Method	Top - drive Mechanical Rotation + Hydraulic Feed
	Mud Pump Drilling	Standard
	Suitable Strata	Loose Soil
	Max. Drilling Depth(m)	300
	Bit Diameter Range(mm)	Ø75 - Ø350
	Rotation Torque(N·m)	13400
Drill Pipe	Diameter(mm)	50
	Length(mm)	3000
Drilling Forces	Feed Force(t)	9
	Hoisting Force(t)	18



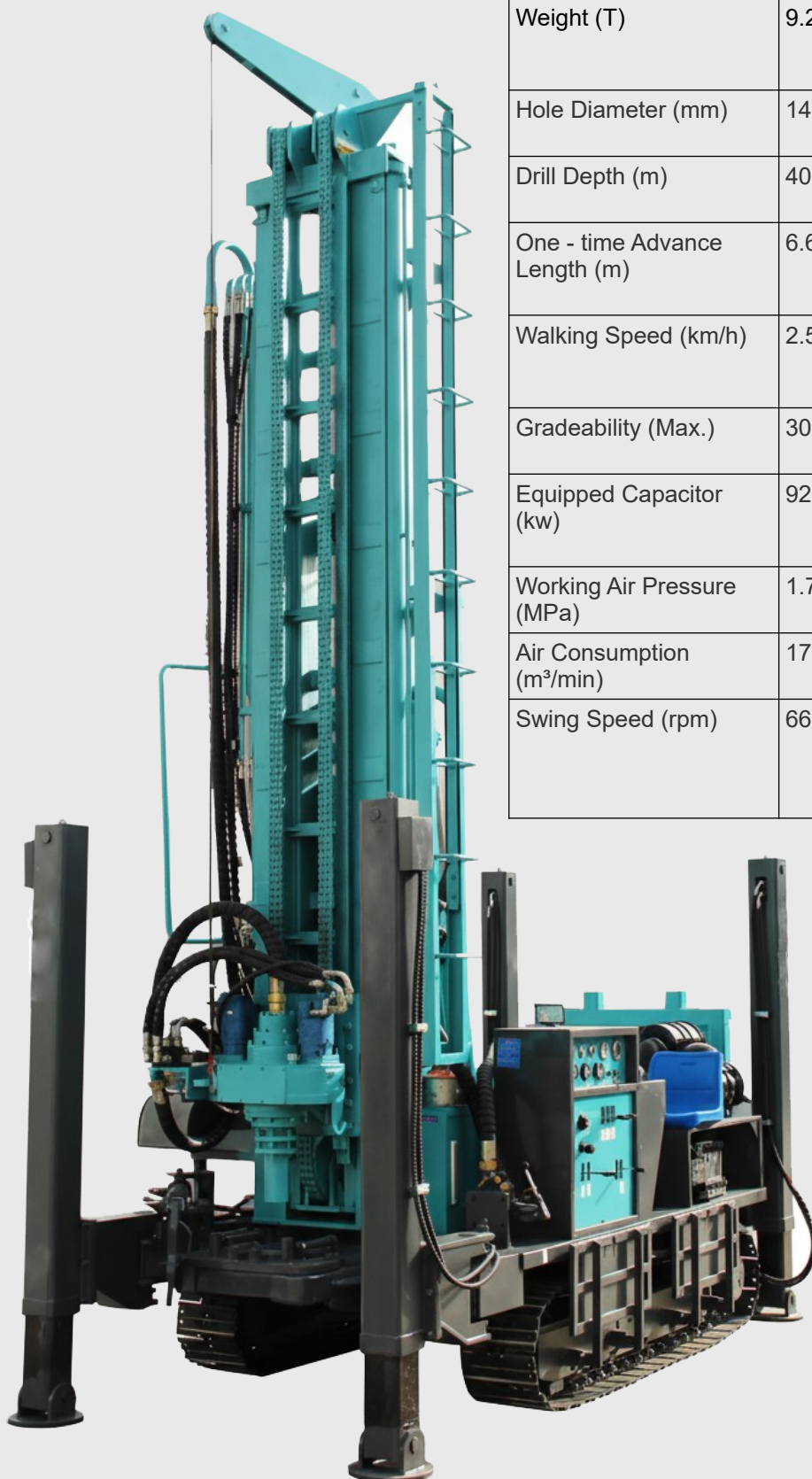
FD-400



Drilling Machine Model	FDX - 400	FDG - 400	Winch Parameters	Capacity	500	500
Drilling Capability	BTW(m)	480	480	Lifting Force	15kN	15kN
	NTW(m)	400	400	Lifting Speed	110m/min	110m/min
	HTW(m)	200	200	Steel Wire Rope Diameter	6mm	6mm
Hydraulic System	Cooling Method	Water Cooling	Water Cooling	Sliding Rail Parameters	Full Height	7m
Engine Parameters	Model	Yuchai 75kW	Yuchai 75kW	Drilling Angle	45 - 90°	45 - 90°
	Rated Power	75kW	75kW	Compensation Stroke	900mm	900mm
	Rated Speed	2200rpm	2200rpm	Clamping Parameters	BQ/NQ/HQ/PQ	30°
Power Head Parameters	Maximum Torque	1200N·m	1200N·m	Track Type	Rubber Track	Steel Track
	Maximum Speed	1400rpm	1400rpm	Maximum Travel Speed	2.5km/h	2.5km/h
	Feed Stroke	2m (Optional)	2m (Optional)	Track Model	BW90	BW90
	Lifting Force	16T	16T	Overall Dimensions	Working Dimensions	3850×1800×700mm
	Pushing Force	8T	8T	Transport Dimensions	5700×1800×2170mm	5700×1800×2170mm
			Machine Weight	5.3T	5.8T	

FY-400

Weight (T)	9.2	Drill Pipe Diameter (mm)	Φ89/Φ102
Hole Diameter (mm)	140 - 325	Drill Pipe Length (m)	1.5/2.0/3.0/6.0
Drill Depth (m)	400	Rig Lifting Force (T)	24
One - time Advance Length (m)	6.6	Rapid Rise Speed (m/min)	18
Walking Speed (km/h)	2.5	Fast Feeding Speed (m/min)	33
Gradeability (Max.)	30	Width of Loading (m)	2.7
Equipped Capacitor (kw)	92	Hoisting Force of Winch (T)	2
Working Air Pressure (MPa)	1.7 - 3.4	Swing Torque (N·m)	6500 - 9000
Air Consumption (m³/min)	17 - 36	Dimensions (mm)	6000×2000×2550
Swing Speed (rpm)	66 - 135	The Penetration Efficiency (m/h)	15 - 35

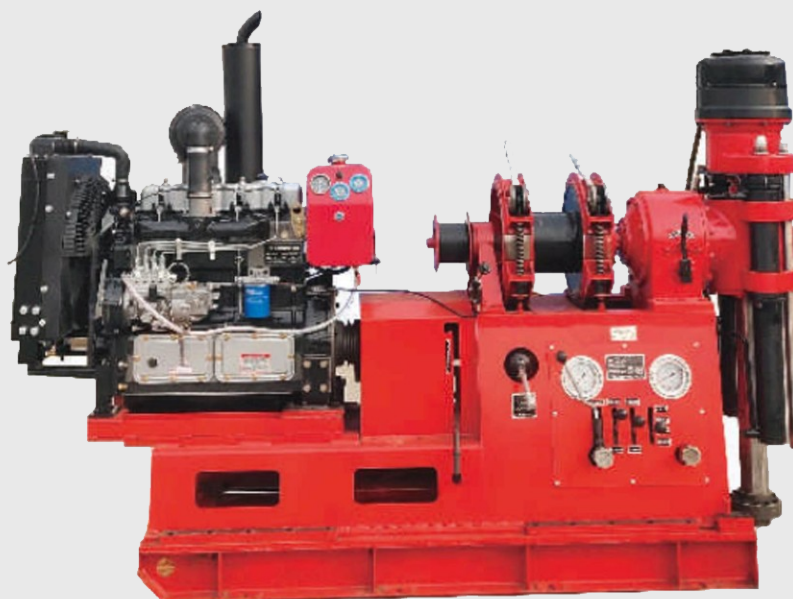


FY-450



Weight (T)	9.2	Drill Pipe Diameter (mm)	Φ89/Φ102
Hole Diameter (mm)	140 - 350	Drill Pipe Length (m)	1.5/2.0/3.0/6.0
Drill Depth (m)	450	Rig Lifting Force (T)	25
One - time Advance Length (m)	6.6	Rapid Rise Speed (m/min)	20
Walking Speed (km/h)	2.5	Fast Feeding Speed (m/min)	40
Gradeability (Max.)	30	Width of Loading (m)	2.8
Equipped Capacitor (kw)	110	Hoisting Force of Winch (T)	2
Working Air Pressure (MPa)	1.7 - 3.5	Swing Torque (N·m)	7000 - 9500
Air Consumption (m³/min)	17 - 36	Dimensions (mm)	6150×2200×2600
Swing Speed (rpm)	30 - 135	The Penetration Efficiency (m/h)	15 - 35
High Leg Stroke (m)	1.6	The Engine Brand	Yuchai

GXY-2



Basic Parameters	Drilling Depth	300-500 m				Moving Device	Moving Cylinder Stroke (mm)	465			
	Drill Pipe Diameter (mm)	φ42	φ50	φ60			Distance from Hole Opening (mm)	315			
	Drilling Angle Range (°)	0°-360°				Oil Pump	Pump Model	CB-32T			
	Rig Weight (Excluding Power)	1280 kg					Speed (r/min)	500-2000			
Rotary Device	Active Drill Pipe	53×59						Discharge (ml/r)	32		
	Engine Speed (r/min)	1460				Power Configuration	Diesel Engine Model	L32M-R08			
	Forward Low Speed (r/min)	70	121	190	263		Diesel Engine Power (kW)	23			
	Forward High Speed (r/min)	329	570	899	1241		Diesel Engine Speed (r/min)	2200			
	Reverse Speed (r/min)	55	257								
	Spindle Stroke (mm)	600				Winch	Max. Lifting Capacity (Low Speed)	30 kN			
	Max. Spindle Torque (N·m)	2760					Drum Speed (r/min)	37	65	103	141
	Max. Spindle Pulling Force (kN)	72					Wire Rope Speed (Single Layer) (m/s)	0.41	0.73	1.15	1.58
	Max. Spindle Feed Force (kN)	54					Wire Rope Specification (mm)	16			
							Drum Rope Capacity (m)	50			

FY-500



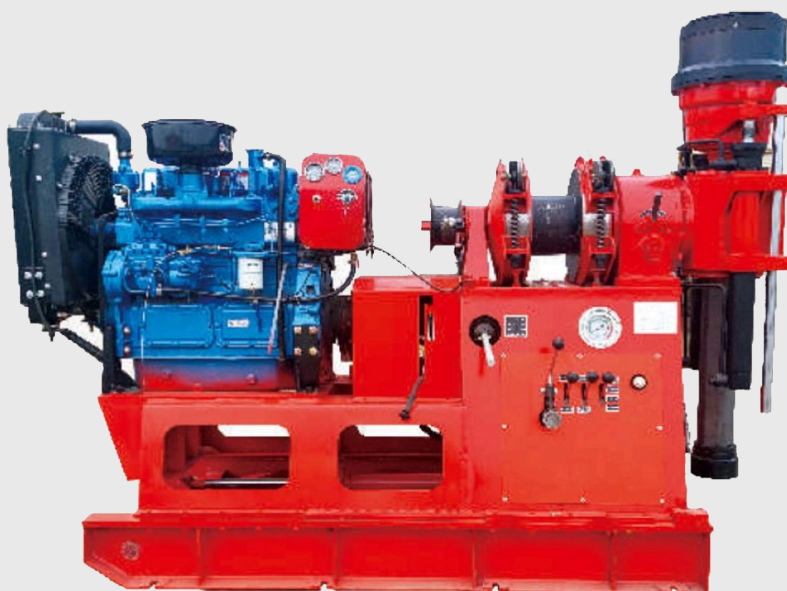
Weight (T)	9.5	Drill Pipe Diameter (mm)	Φ102/Φ108/Φ114
Hole Diameter (mm)	140 - 350	Drill Pipe Length (m)	1.5/2.0/3.0/6.0
Drill Depth (m)	500	Rig Lifting Force (T)	26
One - time Advance Length (m)	6.6	Rapid Rise Speed (m/min)	20
Walking Speed (km/h)	2.5	Fast Feeding Speed (m/min)	40
Gradeability (Max.)	30	Width of Loading (m)	2.85
Equipped Capacitor (kw)	118	Hoisting Force of Winch (T)	2
Working Air Pressure (MPa)	1.7 - 3.5	Swing Torque (N·m)	7500 - 10000
Air Consumption (m³/min)	17 - 42	Dimensions (mm)	6150×2200×2600
Swing Speed (rpm)	45 - 130	The Penetration Efficiency (m/h)	15 - 35
High Leg Stroke (m)	1.6	The Engine Brand	Yuchai

FY-580



Total Weight (T)	12				One-time Advance Length (m)	6.6	
Dimensions (mm)	6200*2200*2650				Rapid Rise Speed (m/min)	20	
Width of Loading (m)	2.85				Fast Feeding Speed (m/min)	40	
Drilling Capacity					Rotation Speed (rpm)	45	140
Hole Diameter (mm)	140-350				Pneumatic System		
Drilling Depth (m)	580				Working Air Pressure (MPa)	1.7	3.5
Penetration Rate (m/h)	15-35				Air Consumption (m³/min)	17	42
Drill Pipe					Mobility		
Diameter (mm)	102	108	114		Travel Speed (km/h)	2.5	
Length (m)	1.5	2	3	6	Max. Climbing Angle (°)	30	
Power & Forces					High Leg Stroke (m)	1.7	
Engine Power (kW)	132				Accessories		
Rig Lifting Force (T)	28				Engine Brand	Cummins	
Winch Hoisting Force (T)	2						
Rotation Torque (N/m)	8500-11000						

XY-2B



Basic Parameters	Drilling Depth	0–500 m				Moving Device	Moving Cylinder Stroke (mm)	400
	Drill Pipe Diameter (mm)	φ42	φ50	φ60			Distance from Hole Opening (mm)	277
	Drilling Angle Range (°)	90°–65°				Oil Pump	Pump Model	SCB32/12
	Rig Dimensions (L×W×H) (mm)	2220×900×1800					Speed (r/min)	1800
	Rig Weight (Excluding Power)	1200 kg					Discharge (L/min)	32
Rotary Device	Active Drill Pipe	53×59				Power Configuration	Diesel Engine Model	Z4100K
	Engine Speed (r/min)	1800					Diesel Engine Power (kW)	30
	Forward Low Speed (r/min)	57; 99; 157; 217; 270; 470; 742; 1024					Diesel Engine Speed (r/min)	1500
	Reverse Speed (r/min)	45	212				Electric Motor Power (kW)	22
	Spindle Stroke (mm)	560					Electric Motor Speed (r/min)	1470
	Max. Spindle Pulling Force (kN)	60					Electric Motor Model	Y180L-4
	Max. Spindle Feed Force (kN)	45						
Winch	Drum Diameter (mm)	200				Wire Rope Specification (mm)		12.5
	Drum Length (mm)	160						
	Wire Rope Speed (Single Layer) (m/s)	0.618	1.073	1.694	2.337	Drum Rope Capacity (m)	50	

FY-600

Weight (T)	11.5	Drill Pipe Diameter (mm)	Φ102/Φ108/Φ114
Hole Diameter (mm)	140 - 350	Drill Pipe Length (m)	1.5/2.0/3.0/6.0
Drill Depth (m)	600	Rig Lifting Force (T)	28
One - time Advance Length (m)	6.6	Rapid Rise Speed (m/min)	20
Walking Speed (km/h)	2.5	Fast Feeding Speed (m/min)	40
Gradeability (Max.)	30	Width of Loading (m)	2.85
Equipped Capacitor (kw)	113	Hoisting Force of Winch (T)	2
Working Air Pressure (MPa)	1.7 - 3.5	Swing Torque (N·m)	8500 - 11000
Air Consumption (m³/min)	17 - 42	Dimensions (mm)	6300×2200×2650
Swing Speed (rpm)	45 - 130	The Penetration Efficiency (m/h)	15 - 35
High Leg Stroke (m)	1.7	The Engine Brand	Cummins



TY-600



Drilling Capacity	Hole Diameter	HTW-NTW-BTW	Mast	Type	Ground-touch Integrated
	Max. Depth (m)	600		Drilling Angle Range	55-90
Hydraulic System	Max. Pressure (MPa)	20	Winch	Hoisting Force (T)	16
	Rated Flow (L/min)	250		Feed Force (T)	12
	Cooling Method	Air + Water Cooled		Lifting Capacity (kg)	1000
Engine	Brand	Yuchai	Travel System	Speed (r/min)	100-300
	Type	Turbocharged		Wire Rope Diameter (mm)	6
	Rated Speed (r/min)	2200		Rope Capacity (m)	600
	Rated Power (kW)	92 (4-cylinder)		Control Type	Manual + Remote
Power Head	Motor Speed	Stepless Variable (Piston Motor)	Hydraulic Mud Pump	Travel Speed (km/h)	3.5
	Transmission	High/Neutral/Low		Max. Climbing Angle	45
	Max. Torque (N/M)	1500	General	Flow Rate (L/min)	100
	Max. Drilling Speed (r/min)	1300		Pressure (MPa)	4-7(MPa)
	Drill Pipe Length (mm)	1500		Transport Dimensions (L*W*H) (mm)	4300*1800*2250
				Total Weight (kg)	5200

XY-3



Overall Machine Parameters	Drilling Depth	600m
	Borehole Diameter at Start	600mm
	Final Borehole Diameter	75mm
	Drill Rod Diameter	60mm
	Drilling Angle	75 - 90°
	Matched Power Unit	Yunnei YN27/39kW
	Weight	1800kg
	Dimensions (L × W × H)	2500mm × 900mm × 1800mm
Spindle	Forward Rotation Speed	32 - 1057r/min
	Reverse Rotation Speed	29 - 137r/min
	Spindle Stroke	600mm
Winch	Single - rope Lifting Force	3000kg
	Single - rope Lifting Speed	0.5 - 1.9m/s
	Steel Wire Rope Diameter	12.5mm
	Steel Wire Rope Capacity	65m
Drill Tower	Effective Height	6.5m
	Rated Load	18t

FY-700



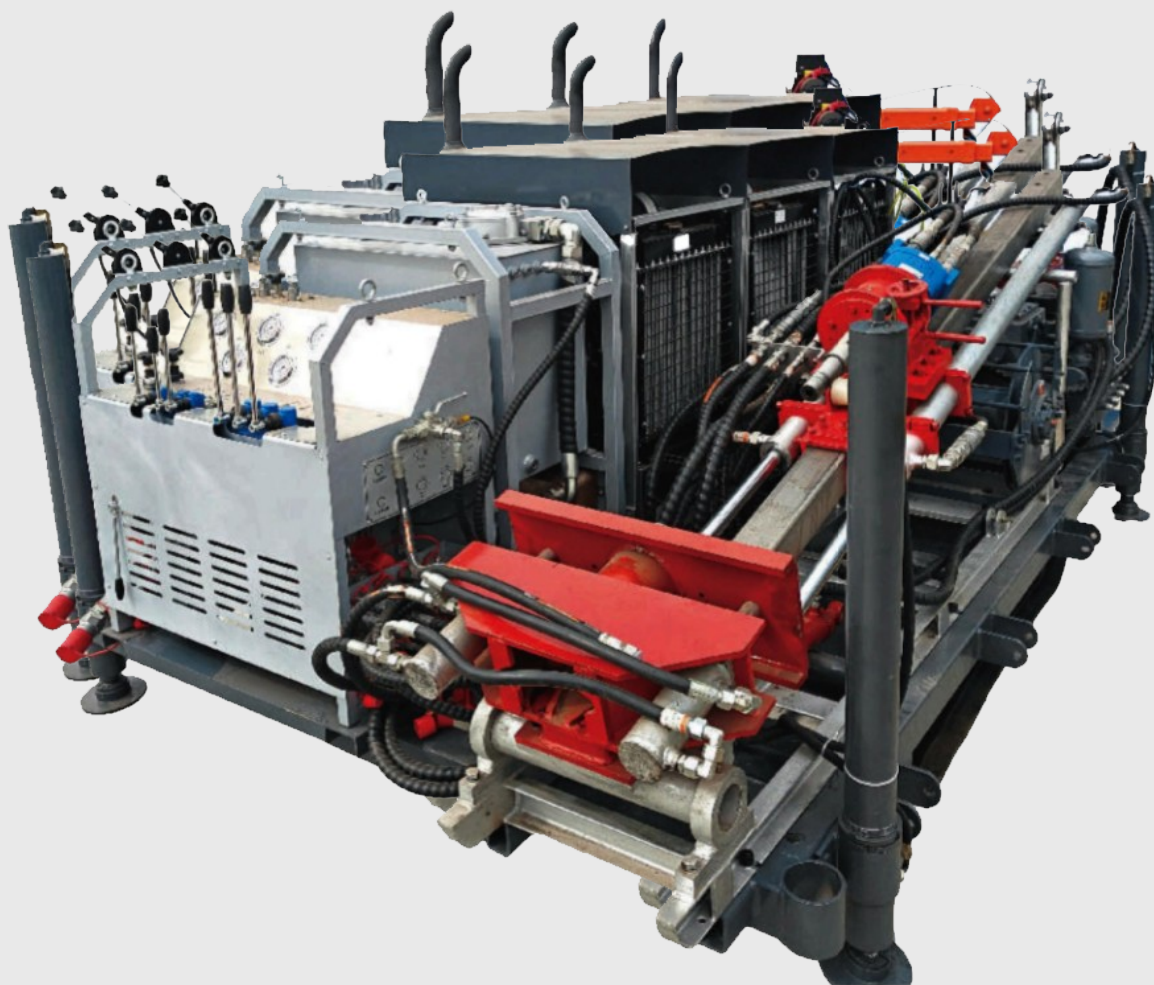
Weight (T)	12	Drill Pipe Diameter (mm)	Φ102/Φ108/Φ114
Hole Diameter (mm)	140 - 350	Drill Pipe Length (m)	1.5/2.0/3.0/6.0
Drill Depth (m)	700	Rig Lifting Force (T)	28
One - time Advance Length (m)	6.6	Rapid Rise Speed (m/min)	20
Walking Speed (km/h)	2.5	Fast Feeding Speed (m/min)	40
Gradeability (Max.)	30	Width of Loading (m)	2.95
Equipped Capacitor (kw)	132	Hoisting Force of Winch (T)	2
Working Air Pressure (MPa)	1.7 - 3.5	Swing Torque (N·m)	8500 - 11000
Air Consumption (m³/min)	17 - 42	Dimensions (mm)	6200×2200×2950
Swing Speed (rpm)	45 - 140	The Penetration Efficiency (m/h)	15 - 35
High Leg Stroke (m)	1.7	The Engine Brand	Cummins

FY-800

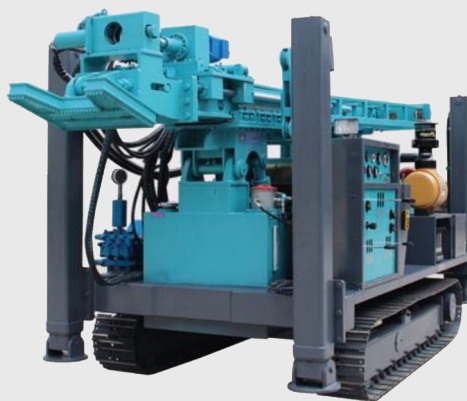
Weight (T)	13	Drill Pipe Diameter (mm)	Φ102/Φ108/Φ114
Hole Diameter (mm)	140 - 400	Drill Pipe Length (m)	1.5/2.0/3.0/6.0
Drill Depth (m)	800	Rig Lifting Force (T)	30
One - time Advance Length (m)	6.6	Rapid Rise Speed (m/min)	20
Walking Speed (km/h)	2.5	Fast Feeding Speed (m/min)	40
Gradeability (Max.)	30	Width of Loading (m)	2.95
Equipped Capacitor (kw)	153	Hoisting Force of Winch (T)	2
Working Air Pressure (MPa)	1.7 - 3.5	Swing Torque (N·m)	8850 - 13150
Air Consumption (m³/min)	17 - 42	Dimensions (mm)	6300×2300×2950
Swing Speed (rpm)	45 - 140	The Penetration Efficiency (m/h)	15 - 35
High Leg Stroke (m)	1.7	The Engine Brand	Cummins



TY-800 split type



Drilling Capacity	Hole Diameter	HTW/NTW/BTW		Mast	Type	Ground-touch Integrated
	Depth Range (m)	100-800			Drilling Angle Range (°)	0-90
Hydraulic System	Rated Pressure (MPa)	21			Hoisting Force (T)	16
	Rated Flow (L/min)	160			Feed Force (T)	10
	Cooling Method	Water Cooled		Winch	Lifting Capacity (kg)	1000
Engine	Brand	Yunnei/Electric Motor			Rated Speed (r/min)	100-300
	Type	Turbocharged			Wire Rope Diameter (mm)	6
	Rated Speed (r/min)	2400 (Diesel)	1440 (Motor)		Rope Capacity (m)	800
	Rated Power (kW)	55x3 (Diesel)	22x3 (Motor)	Hydraulic Mud Pump	Model	BW-90 Included
Power Head	Max. Torque (N/m)	1150-1300			Flow Rate (L/min)	30-90
	Max. Speed (r/min)	1300			Pressure (MPa)	4-7
	Feed Stroke (mm)	1800		General	Total Weight (kg)	2500/2200



FD-600-800

	Drilling Machine Model	FDX - 600	FDG - 600	FD800
Drilling Capability	BTW(m)	650	650	1000
	NTW(m)	600	600	800
	HTW(m)	300	300	600
Hydraulic System	Cooling Method	Water - cooled	Water - cooled	Water - cooled + Air - cooled
Engine Parameters	Model	Yuchai 91kw	Yuchai 91kw	Yuchai Six - cylinder 92kw
	Rated Power(kw)	91	91	92
	Rated RPM	2200	2200	2200
	Maximum Torque(N路m)	1600	1600	2000
	Maximum RPM	1400	1400	1400
	Feed Stroke(m)	2 (Optional)	2 (Optional)	2 (Optional)
	Hoisting Force(T)	16	16	20
	Thrust Force(T)	8	8	10
Rope Core Reel Parameters	Rope Capacity(m)	800	800	1000
	Hoisting Force(kN)	15	15	20
	Hoisting Speed(m/min)	110	110	110
	Steel Wire Rope Diameter(mm)	6	6	6
Mast Parameters	Overall Height(m)	7	7	7
	Drilling Angle掣	45 - 90	45 - 90	45 - 90
	Compensation Stroke(mm)	900	900	900
	Hold - down Parameters	BQ/NQ/HQ/PQ	BQ/NQ/HQ/PQ	Wood - jaw Holder, Hole Diameter 114mm (Optional Sizes Available)
Track Parameters	Track Angle掣	30	30	30
	Track Type	Rubber Track	Steel - reinforced Track	Steel - reinforced Track
	Maximum Travel Speed(km/h)	3	3	3
	Mud Pump	BW90	BW90	BW160
Exterior Dimensions	Working Dimensions(mm)	4100x1900x7000	4100x1900x7000	4400x2070x7000
	Transport Dimensions(mm)	4500x1900x2400	4500x1900x2400	4500x2070x2400
	Machine Weight(t)	5.7	6.2	7.5

FY-1000



Weight (T)	13	Drill Pipe Diameter (mm)	Φ102/Φ108/Φ114/Φ117
Hole Diameter (mm)	140 - 400	Drill Pipe Length (m)	1.5/2.0/3.0/6.0
Drill Depth (m)	1000	Rig Lifting Force (T)	36
One - time Advance Length (m)	6.6	Rapid Rise Speed (m/min)	20
Walking Speed (km/h)	2.5	Fast Feeding Speed (m/min)	40
Gradeability (Max.)	30	Width of Loading (m)	2.95
Equipped Capacitor (kw)	194	Hoisting Force of Winch (T)	2
Working Air Pressure (MPa)	1.7 - 3.5	Swing Torque (N·m)	9000 - 14000
Air Consumption (m³/min)	17 - 42	Dimensions (mm)	6300×2300×2950
Swing Speed (rpm)	45 - 140	The Penetration Efficiency (m/h)	15 - 35
High Leg Stroke (m)	1.7	The Engine Brand	Cummins

FD-1000-1200

	Drilling Machine Model	FD1000	FD1200
Drilling Capability	BTW(m)	1200	1400
	NTW(m)	1000	1200
	HTW(m)	800	1000
Hydraulic System	Cooling Method	Water - cooled + Air - cooled	Water - cooled + Air - cooled
Engine Parameters	Model	Weichai Six - cylinder 129kw / FAW Jiefang 130kw	Cummins 132kw
	Rated Power(kw)	129/130	132
	Rated RPM	2300	2300
	Maximum Torque(N路m)	2600	3000
	Maximum RPM	1400	1400
	Feed Stroke(m)	2 (Optional)	3.6 (Optional)
	Hoisting Force(T)	24	26
	Thrust Force(T)	12	12
Rope Core Reel Parameters	Rope Capacity(m)	1200	1400
	Hoisting Force(kN)	24	24
	Hoisting Speed(m/min)	110	110
	Steel Wire Rope Diameter(mm)	8	8
Mast Parameters	Overall Height(m)	7	8.6
	Drilling Angle(°)	45 - 90	45 - 90
	Compensation Stroke(mm)	1200	1200
	Hold - down Parameters	Wood - jaw Holder, Hole Diameter 114mm (Optional Sizes Available)	Wood - jaw Holder, Hole Diameter 114mm (Optional Sizes Available)
Track Parameters	Track Angle(°)	30	30
	Track Type	Steel - reinforced Track	Steel - reinforced Track
	Maximum Travel Speed(km/h)	3	3
	Mud Pump	BW160	BW160
Exterior Dimensions	Working Dimensions(mm)	4700x3100x7000	4700x3100x8600
	Transport Dimensions(mm)	4700x2100x2500	4700x2100x2500
	Machine Weight(t)	8.4	9



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