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## JK580 HYDRAULIC DTH DRILLING RIG



### SPECIFICATION

#### DRILLING SPECIFICATION

1	Rock Hardness	F=6-20	
2	Hole Diameter	mm	90-165
3	Hole Depth	m	40
4	Drilling Rod Diameter	mm	60,76,89

#### ROTARY HEAD

5	Rotation Torque	Nm	2500
6	Rotation Speed	rpm	0-100

#### FEEDING SYSTEM

7	Max. Feed force	KN	30
8	Max. Lifting force	KN	30
9	Max. Feed Speed	M/min	15
10	Max. Lifting Speed	M/min	15

#### BOOM&GUIDE

11	Max Swing of Boom	°	45° left / 45° right
12	Max Dump of Boom	°	up60 down20
13	Max Swing of Guide	°	30(L) / 91(R) or91(L) / 30(R)(Change pin roll)
14	Max Dump of Guide	°	180
15	Feed Stroke	m	3

#### ENGINE

16	Manufacturer		CUMMINS
17	Model		4BTA3.9-C100

18	Rated Horse power	Kw	59
19	Electrical System	24	Volt
20	Cylinder		4

#### AIR CONSUMPTION

21	Air Consumption	M <sup>3</sup> /min	$\Phi \leq 115$ 11.3m <sup>3</sup> /min(1.4 Mpa) $\Phi \leq 140$ 13m <sup>3</sup> /min(1.4 Mpa) $\Phi \leq 165$ 17m <sup>3</sup> /min(1.4 Mpa) $\Phi \leq 165$ 25m <sup>3</sup> /min(2.4 Mpa)
22	Compressor Type	Rotary Screw/Movable	
23	Compressor Pressure Required	Mpa	$\geq 1.4$

#### GENERAL SPECIFICATION

24	Max. Travel Speed	Km/h	2
25	Gradeability	°	24
26	Grouser Width	mm	324
27	Net Weight	kg	6500
28	Shipping Length	mm	6900
29	Shipping Width	mm	2200
30	Shipping Height	mm	2200
31	Ground Clearance	mm	252
32	Guide Extension	mm	1200

#### FLUID CAPACITIES

33	Hydraulic Oil Tank	L	206
34	Fuel Tank (diesel)	L	72
35	Engine Crankcase	L	9
36	Water Pump Crankcase	L	0.6
37	Rotary Gear Box	L	5.5
38	Travel Gear Box	L	2X 5.2
39	Rock Drill Lubricator	L	7.5

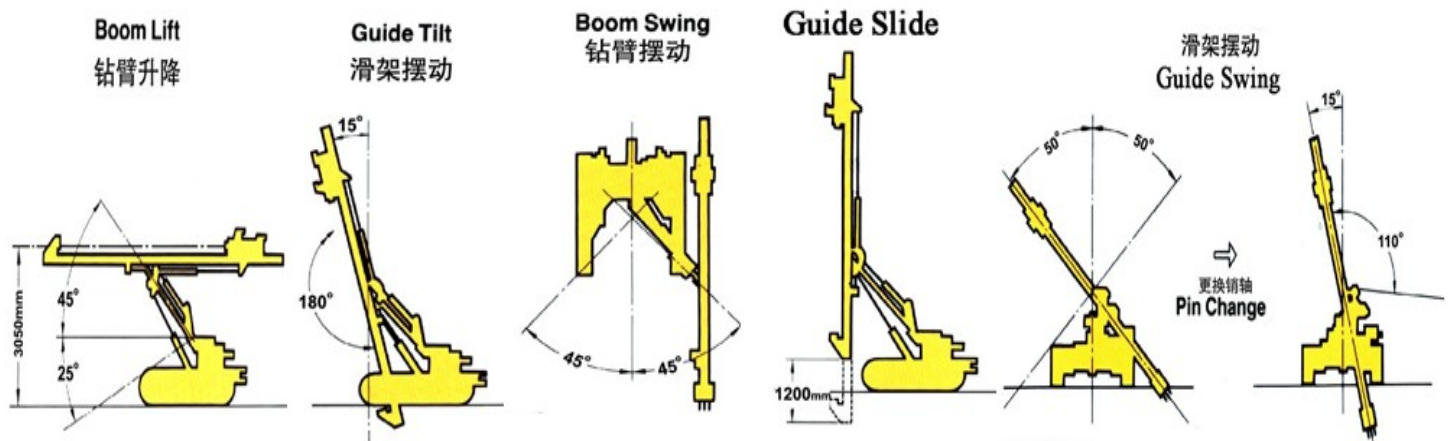
#### COOLING SYSTEM

40	Volume of Flow	L/Min	200
41	Rated Pressure	Mpa	1.6

#### DUST COLLECTOR

42	WET		OPTIONAL
43	DRY		OPTIONAL

## DRILLING COVERAGE



## INTRODUCTION



JK580<sup>®</sup> hydraulic down-hole drill is a multi-functional drill rig driven by internal combustion engine, the drilling power was provided by hydraulic system except for impacting and the hole cleaning wind. It is convenient and efficient to operate. This drill is the best replacement for traditional pneumatic drills in most operation. The drill is compact in structure, simple in operation, light in total weight. JK580 hydraulic crawler drilling rig is widely used for blast-hole drilling in the mines and quarries. It is also used for anchor in road, railway, power station, civil engineering and building etc.

## CHARACTERISTICS

- 1: The Rugged track was driven by hydraulic motor with high traveling ability.
- 2: The feed and rotary head were driven by hydraulic motor, therefore, the air and oil consumption and total drilling cost are lower.
- 3: The hydraulic feed and rotary head put out the biggest feeding force and largest rotary torque, which makes it more suitable for operation in complex worksites.
- 4: The compressor equipped for the rig is smaller and cheaper than that one the air rig equipped, along with the best price-performance ratio than air rig.
- 5: The Hydraulic track oscillation makes it more suitable to drill in any rough terrain.
- 6: The carriage with rollers provides for minimal wear to the drill guide.
- 7: The Hydraulic auxiliary functions are easy and efficient for guide extension, boom swing, boom lift, guide tilt and guide dump.
- 8: The diesel engine and main hydraulic parts adopt imported products or famous domestic brand.
- 9: The special compensation device makes a full protection of drill rod threads.

## MAIN COMPONENT



**Diesel Engine:** The drill was equipped with **CUMMINS<sup>®</sup>** 59kw diesel engine, which has reliable performance and strong power, meanwhile, the suction system of diesel engine has safe and reliable air filter device to make sure that the diesel will absorb fresh air.

**Oil Pump:** Imported hydraulic oil pump has steady performance and long service life.



**Rotary Head Assembly:** Equipped an **EATON<sup>®</sup>** hydraulic rotary motor, the Rotary Head Assembly speed reduced by two planetary gear, the output torque is 4000N/m, rotary speed 0-80rp/m, Rotary with impact cushioning capacity, with the ability to reduce the impact of drilling reaction forces transmitted to the rotary motor, to reduce parts wastage, simple internal structure, easy maintenance. rotary motor equipped YX ring, and thrust needle roller bearings equipped **U.S. IR OEM** product, increase the capability and life.



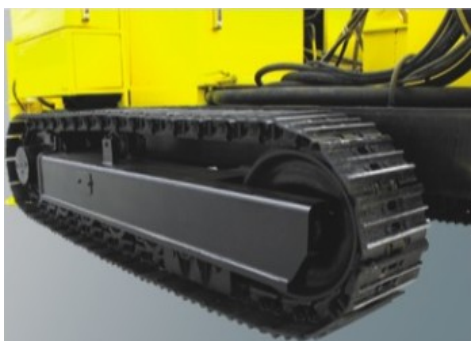
**Drill Guide Assembly:** Drill Guide Assembly: Heavy structure drill guide with Manganese steel rail trim & Multiple roller designing, make the guide can withstand high torque, resistance to deformation, also can greatly extend the life of skateboarding and guide, and effectually guarantee the various drilling angle.



**Operating System:** Operating System equipped in the back of rig, easy drill operator o observe and centralized control the machinery and hydraulic system, the pneumatic operating system is convenient and safety, could be one-handed control while traveling.



**Lubricator:** Lubricator provides drilling system( hammer & drill pipe), regular maintenance of the lubricator with dedicated lubricating Oil will improve the drilling efficiency and service life.



**Traveling System:** Each crawler were all powered by imported high power hydraulic motor, driven by a closed-end reducing gear, brake through the spring brake system, air clutch,same power of positive and negative direction,the gradeability arrives 35° while drag a compressor.

**Crawler:** Each side of frame equipped an oscillating cylinder, hick powered the crawler can up-down floating in the range of 15 degrees, which ensure the keep balance while the drill is walking and working, advanced plate designing make the crawler have high grip capability.

## ATTACHMENT PARTS

NO.	CODE	NAME	Q'ty
1	According hole diameter	Bit	1
2	According hole diameter	Hammer	1
3	CL351-000003	Fork	1
4	CL351-000004	J-Wrench	1
5	CL351-000009	J-Wrench	1
6	CL351-000012	Reducer union	1
7	JK580-000020	Reducer union	2
8	CL351-031201	Axis traction	1
9	JK580-080003	Union (ZG2" , M52*2)	2
10	JK580-010301	Liner	4
11	JK580-000100	Drill pipe (L=3000)	5
12	38*20m	High pressure air hose	1
13		High-pressure grease gun(50*280)	1
14		Pressure gauge components	1
15	31.75	Chain Easter	2
16		Engine Instruction & Parts	1
17	14 JB982 - 77	Combination washer	5
18	18 JB982 - 77	Combination washer	5
19	22 JB982 - 77	Combination washer	5
20	27 JB982 - 77	Combination washer	5



21	33 JB982 - 77	Combination washer	5
22	9*1.9 GB1235 - 76	O-ring	5
23	16*2.4 GB1235 - 76	O-ring	5
24	24*2.4 GB1235 - 76	O-ring	3
25	25*2.4 GB1235 - 76	O-ring	3
26	38*3.1 GB1235 - 76	O-ring	3
27	40*3.1 GB1235 - 76	O-ring	5
28	JK580	Other Tool	1
29	JK580	Iinstruction& parts manual	1
30	JK580	Product certificate	1

PICTURE

