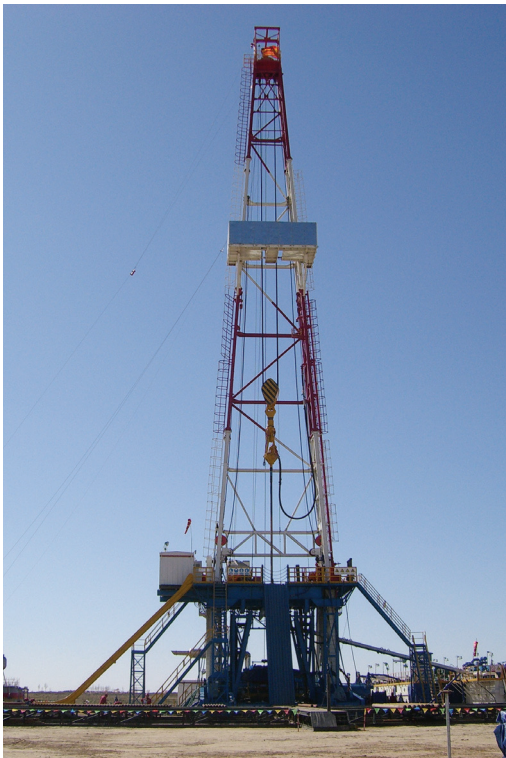


## MECHANICAL DRILLING RIGS

Drawworks, mud pump, and rotary table driven by diesel engines, can be used for less 7000 meters drilling depth.

### TECHNICAL FEATURES

- Various drive modes including "diesel engine+ torque converter or coupling transmission+chain compound", "diesel engine+transmission+v-belt compound", "diesel engine + transmission + cardan shaft", or "diesel engine + transmission+ gear compound "are available for option. The power is reasonably distributed for higher efficiency.
- Either inner or outer speed change is optional for drawworks. Speed change of drawworks is easy and fast by remote pneumatic operation. Main brake is either band brake or hydraulic disc. Electric magnetic eddy brake or pneumatic disc brake is optional for auxiliary brake;
- Sand reel, mechanical friction cathead and rotary drive device are provided.
- For drilling rigs over 4000 meters in drilling depth, rig floor is in two levels. Power and transmission system are installed on the rear low level and the rig power is transmitted to drive rotary table and catworks located on drill floor through bevel gear reducer and universal shaft.
- Separate auto driller unit can be equipped.
- A separate driller cabin is fitted operations for air, electric and hydraulic, drilling data and parameters are all in the cabin. Logic control, supervision and maintenance during complete drilling operations are available by PLC processes. The drilling data can be stored, printed and remote transmitted. All operations by driller can be completed in the cabin for better working conditions and less working strength.
- Top drive drilling system can be equipped.
- Integrated skid rail may be provided to meet requirements for cluster well drilling.





## TECHNICAL PARAMETER

<b>Drilling rig model</b>		ZJ10B	ZJ15DJ	ZJ30B	ZJ30DJ	ZJ40L/40J/ 40DJ	ZJ50L	ZJ70L
<b>Nominal drilling depth m</b>	<b>127mm(5") drill pipe</b>	500-800	700-1400	1500-2500	1500-2500	2000-3200	2800-4500	4000-6000
	<b>114mm(4 1/2") drill pipe</b>	500-1000	800-1500	1600-3000	1600-3000	2500-4000	3500-5000	4500-7000
<b>Max. hook load, kN</b>		585	900	1700	1350/1700	2250	3150	4500
<b>Hook speed, m/s</b>		0.134-1.3	0.26-1.08	0.192-1.458	0.23-1.21	1.54-1.75	0.20-1.33 0.19-1.77	0.22-1.88
<b>Line strung of hoisting system</b>		8	8	10	10	10	12	12
<b>Drill line diameter, mm</b>		22	26	29	29	32	35	38
<b>Max. pull of fast line, kN</b>		103	130	210	210	280	350	485
<b>Draw-works</b>	<b>Model</b>	JC-10B	JC-15DJ	JC-30B	JC-30DJ	JC-40B	JC-50B	JC-70B
	<b>Power rating kW(hp)</b>	210	250	440	380	735	1100	1470
	<b>Speed</b>	2F+1R	3F+1R	4F+1R	4F+1R	4F+2R/6F+2R	6F(4F)+2R	6F(4F)+2R
<b>Main brake</b>		Hydraulic disc brake or band brake						
<b>Auxiliary brake</b>		Eddy brake+ pneumatic disc brake						
<b>Crown block</b>		TC-60	TC-90	TC-170	TC-170	TC-225	TC-315	TC-450
<b>Traveling block</b>		YG-60	YG-135	YC-170/YG170		YC-225	YC-315	YC-450
<b>Sheave OD of hoisting system, mm</b>		600	660	1005	1005	1120	1270	1524
<b>Hook</b>		YG-60	YG-135	DG-250/YG170		DG-250	DG315	DG450
<b>Swivel</b>	<b>Model</b>	SL-80	XSL-135	XLS-170		SL-250	SL-450	SL-450
	<b>Stem dia., mm</b>	64				75		
<b>Rotary table</b>	<b>Table opening mm(in)</b>	444.5(17 1/2)		520.7(20 1/2)		698.5(27 1/2)	952.5(37 1/2)	
	<b>Speed</b>	2F+1R	3F+1R	4F+1R	4F+1R	4F+2R,3F+1R	6F(4F)+2R	
<b>Mast</b>	<b>Type</b>	A	K	K or A		K		
	<b>Height, m</b>	29	31	41	41	43	45	45
	<b>Max. load, kN (lbs)</b>	585	900	1700	1700	2250	3150	4500
<b>Substructure</b>	<b>Type</b>	Box or box-on-box				Box or swing lift		
	<b>Floor height, m</b>	3	3, 4.5	3.6, 4	3.8	6, 7.5	7.5, 9	7.5, 9
	<b>Clear height, m</b>	2.21	2.21, 3.2	2.91, 2.4	2.88	4.8, 6.3	6.3, 7.4	6.3, 7.4
<b>Mud pump</b>	<b>Model ×number</b>	F-800×1	F-800×1	F-1000×1	F-1000×1	F-1300×2	F1600×2	F1600×2
	<b>Drive mode</b>	Diesel engine drive			Compound drive			