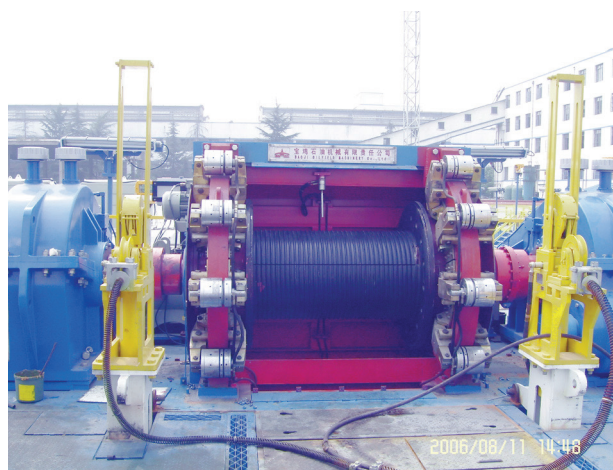


## Hydraulic Disc Brake Device

Hydraulic disc brake device consists of hydraulic station, control console, braking actuator and pipeline part. Our company can support mechanical brake handle type or electronic brake handle type hydraulic disc brake device. Brake can be applicable to series drawworks.

### Technical features

- With double brake and enough storage brake torque, reliable and safe.
- With emergency manual pump and energy accumulator to make sure continue operating and safety braking when power off in the drilling site.
- Idiot-proof space rectify tongs, it's convenient and accurate to adjust space to make brake reliable, steadily and sensitively.
- The structure of brake tong is special, the brake pad can be separated from brake disc quickly and accurately, also the friction calorie is few, and the effective of operation is high.
- Hydraulic circle is simple, stoppage is few, operating durable and reliable.
- The combined HPU is used mechanic-electronic-hydraulic integrated design; alarm and control are all automatic. The size is small and the weight is light.
- Humanization design, driller can master and operate easily and conveniently.



### Technical Parameters

- 1). Rated working pressure of hydraulic system: 6.5MPa ( mechanical brake handle type ) , 7.5MPa( electronic brake handle type).
- 2). Working medium: hydraulic oil (L-HV32 used in winter, L-HM46 used in summer).
- 3). Volume of oil tank: 250L or 1000L (combined HPU).
- 4). Power of motor:  $2 \times 3\text{kW}$ .
- 5). Volume of energy accumulator:  $2 \times 10\text{ L}$ .
- 6). Power of electric heater: 2 kW.
- 7). Max. One-sided positive pressure of each brake block: Under 7000m rig: 85 kN,  
9000m and 12000m rig: 120 kN.
- 8). Displacement of constant-pressure variable pump:  $2X\ 14\text{mL/r}$ .
- 9). Tongs No. and Brake torque:

Drilling rig model		ZJ10	ZJ20	ZJ30	ZJ40	ZJ50	ZJ70	ZJ90	ZJ120
Amount	working tong	1	2	2	3	3	4	4	4
	safety tong	1	2	2	3	3	4	4	4
Brake torque, kN·m	Working brake	30	60	70	110	145	186	256	456
	Safety brake	30	60	70	110	145	186	256	456
	e-brake	30	60	140	220	290	372	512	912