I General

XY-2B Core Drill is up-dated designed according to the development of geological works to meet the needs of users. It is a new type spindle core drill rig. It is applicated for engineering geological exploration drilling, hydrogeology well drilling and big-hole basic engineering drilling including core drilling with ngalloy-carbid-tipped and diamond bit mainly. The rig's characteristics as follows:
1. Light in weight, easy relocation.

2. Adopting traversal winch, this will overcome the fault of wire arbitrary intertwine and quick wearing out of the winch laid in lengthways.

3. Belt transmission is adopted for the high speed level to make the drill soft in the uneven formation, and reduce the damage to the components and other mechanical failure.

4. In large spindle hole.

5. With wide speed range and large torque moment in lower speed, it is suitable for engineering geological subterranean and water explorations.

6. The rig is stable in relocation and firmly for position.

7. Debuts F3L 912 diesel engine or 22Kw electric motor for your selection.

## Specifications

### 1. Drilling capacity

<table>
<thead>
<tr>
<th>Drilling type</th>
<th>Drilling depth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foundation pile drilling</td>
<td>100m (328 feet)</td>
</tr>
<tr>
<td>Hydro geological well drilling</td>
<td>150m (492 feet)</td>
</tr>
<tr>
<td>Core Drilling</td>
<td>600m (1968 feet)</td>
</tr>
</tbody>
</table>

### 2. Rotator

<table>
<thead>
<tr>
<th>Type of power engine</th>
<th>Diesel</th>
<th>Electromotor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive speed (r/min)</td>
<td>92, 152, 230, 330, 293, 485, 734, 1056</td>
<td>92, 152, 230, 330, 293, 485, 734, 1056</td>
</tr>
<tr>
<td>Negative speed (r/min)</td>
<td>81, 258</td>
<td>81, 258</td>
</tr>
<tr>
<td>Max. torque of Spindle</td>
<td>2.1 KN·m (1548 lbf·ft)</td>
<td>2.1 KN·m (1548 lbf·ft)</td>
</tr>
</tbody>
</table>
3. Hoist

Hoisting capacity (Single-third of the rope): 31300, 12600, 8800 N (7034, 2831, 1978 lbf)
Lifting speed of wire rope (The third rope): 0.64, 1.05, 1.6, 2.3 m/s (2.1, 3.44, 5.25, 7.54 inch/s)
Wire rope dia.: 12.5 mm (0.49 inch)
Drum dia: 194 mm (7.64 inch)
Brake rim dia.: 360 mm (14.17 inch)
Drum length: 150 mm (5.91 inch)
Brake band width: -90 mm (3.54 inch)
Drum capacity: 80 m (262.4 feet)

4. Traveling device

Retraction cylinder stroke -: 600 mm (23.62 inch)
Distance between drill rig and hole: 420 mm (16.54 inch)

5. Pressurizing system

Cylinder I.D.: 70 mm (2.76 inch)
Cylinder rod dia: 35 mm (1.38 inch)
Max. Pressure: 45 KN (10116 lbf)
Max. Lifting force: 60 KN (13488 lbf)
Cylinder stroke: 550 mm (21.65 inch)

6. Oil pump

Type: CBF-E416-AL
Displacement: 16 L/min (4.22 US Gallons/min)
Speed (r/min): 1500
Working pressure: 8 Mpa (1160 psi)
Max. Pressure: 20 Mpa (2901 psi)
7. Drill rod

1) The hexagonal Kelly: Φ89×79 mm, Φ76×66 mm, Φ60×53 mm
   (Φ3.50×3.11 inch, Φ3.0×2.60 inch, Φ2.36×2.09 inch)
2) Φ89 mm, Φ71 mm, Φ50 mm (Φ3.50 inch, Φ2.80 inch, Φ1.97 inch)

8. Power engine

Diesel engine Deutz F3L 912 28KW (37.5HP) 1500 rpm
Electromotor Y180L-4 22KW (29.5HP) 1470 rpm

9. Dimensions (L×W×H): 2177×950×1863 mm (85.71×37.40×73.35 inch)

10. Weight of drill (without power unit): about 1300 kg (2867 lb)