

KEE HING CHEUNG KEE CO., LTD.
DLFTZ CHANG HING KEE
INT'L INDUSTRY & TRADE CO., LTD.



DRILLING RIG



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KHCK-II truck-mounted Drilling Rig



KHCK-II Trailer Drilling Rig



Water well drilling rig KHCK-II truck-mounted use the **DONGFENG** brand EQ1093F6D 2nd chassis (4 drive), and with the hydraulic pressure support leg. The automobile loads drilling machine maneuverability, cross-country performance is good, hydraulic pressure rise and fall tower, can accomplish the slurry drilling and the latent air hole hammer two kinds of crafts together.

Well drilling parameter

| | |
|----------------------|---------|
| Drilling Depth(m) | 50-100 |
| Diameter of hole(mm) | 90-1200 |

Unit head rotation speed

| |
|---|
| A (positive 13,22,48)(reverse 10,17,36) |
| B (positive 48,84,184)(reverse 37,65,142) |
| C (positive 103,179,393)(reverse 78,136,298) |

| | |
|-----------------------------------|-------------------------------|
| Unit head max lifting ability(Kn) | 94.55 |
| Main hoist lifting ability(kn) | 18.54 |
| Power rating(kw) | 27 |
| hoisting speed | 0.622/1.602M/min(single rope) |
| Drill pipe dia | Φ73 φ89 φ60 φ133 |

Mud pump

The BWT-450 mud pump is horizontal-type triplex reciprocation double-acting piston pump, its characteristic is the current capacity big, the weight light, easy to decompose and advantageous for the mountainous region transporting, can delivery clear water and the mud.

| | | |
|--|---|------------------|
| type | Horizontal-type triplex reciprocation double-acting piston pump | |
| model | BW-450Q | |
| Jar number | 3 | |
| Piston journey(mm) | 85 | |
| Pump speed(times /min) | first gear: 170 | second gear: 115 |
| Max Peak rate of flow(lit/min) | first gear 450 | second gear 350 |
| Most pressure(MPa) | first gear :1.2 | second gear:2.0 |
| transmission shaft rotate speed(rpm/min) | 389 | |
| Strap wheel pitch diameter | 399(C typeX5 trough) | |
| Power(kw) | 18 | |
| Water pipe dia(inner size) (mm) | 89 | |
| Drainpipe dia(inner size) (mm) | 51 | |
| Dimension(mm) | 1350x820x1040 | |
| Weight(kg) | 540 | |

Chassis parameter

| | |
|-------------------------------|--|
| Truck style | DONGFENG EQ1093F6D-401 |
| Truck engine | EQB160-20 |
| Truck engine type | In line six cylinders, water cooling four strokes, turbo-charged diesel engine |
| Rating power(kw/ r/min) | 118/2600 |
| Torque(N.m/r/min) | 550/1500~1700 |
| Cylinder bore(mm)x stroke(mm) | 102x120 |
| Work order | 1-5-3-6-2-4 |



| | |
|--------------------------------------|--|
| fuel | Diesel |
| Displacement(L) | 5.88 |
| Lowest ratio oil consumption(g/kw.h) | 220 |
| Truck Basis parameter | |
| chassis | EQ1093F6D |
| Max loading weight(kg) | 5000 |
| Total weight(kg) | 10000 |
| Front axle(kg) | 2455 |
| Rear axle(kg) | 7545 |
| Whole weight (kg) | 4200 |
| Tow weight (kg) | 4500 |
| Outline dimension(mm) | 6910x2470x2475 |
| Wheelbase(mm) | 3950 |
| Front tread(mm) | 1774 |
| Rear tread (mm) | 1800 |
| Front hang (mm) | 1065 |
| Rear hang(mm) | 1895 |
| Approach angle(°) | 42.5 |
| Leave angle(°) | 26 |
| Smallest ground clearance(mm) | 260 |
| Min Curve diameter(mm) | 16.4 |
| Max speed(km/h) | 94 |
| Lowest speed(km/h) | 14 |
| Max gradient | ≤55 |
| brake potency(%) | 20 |
| 100Km fuel oil consumption(L) | 19 |
| Clutch | Monolithic, dry belt damping spring and friction damping fin |
| Transmission gearbox | The manual mechanical transmission gearbox, five front motions, a reverse gear, the model is A121J |

KHCK-III truck-mounted Drilling Rig



KHCK-III Trailer Drilling Rig



Water well drilling rig KHCK-III truck-mounted use the DONGFENG brand EQ1141G7D 2nd chassis (4 drive), F6L913 Diesel engine, with FSB-80 water pump or BW600/30 mud pump and a drilling machine main engine.

Well drilling parameter

| | |
|----------------------|----------|
| Drilling Depth(m) | 50 -300 |
| Diameter of hole(mm) | 110-1500 |

Unit head rotation speed

| | |
|---|--------------|
| A (positive 20,33,73)(reverse 13,23,47) | |
| B (positive 41,66,146)(reverse 26,43,94) | |
| C (positive 36,58,127)(reverse 23,37,80) | |
| Max power head (Kn/m) | 11..5(A,B) |
| Max power head(kn/m) | 6.4(C) |
| Max lifting capacity of power head (kn) | 130 |
| Main hoisting lifting capacity(kn) | 25 |
| Auxiliary hoist lifting capacity(kn) | 10 |
| Max pull down force | 15 |
| Bar diameter(mm) | Φ73 φ89 φ133 |

Mud pump

| | |
|--------------------------------|------------|
| model | BW-600/30 |
| Traveling schedule(mm) | 180 |
| Cylinder bore(mm) | 90;110;130 |
| Pressure(kgf/cm ²) | 30 |
| Displacement(l/min) | 600 |
| Absorbing water caliber(mm) | 102 |
| Draining water caliber(mm) | 63 |
| Power(kw) | 30 |
| Weight (kg) | 1450 |

Truck parameter

| | |
|---------------------------|--|
| Truck style | DONGFENG EQ1141G 7D2 |
| Truck engine | EQB180-20 |
| Truck engine type | Water-cooled, turbo-charged, inter-cooled, 6 cylinder in-line diesel engine |
| Rating power(kw/ r/min) | 132 |
| Max Torque(N.m/r/min) | 610 |
| Max speed(km/h) | 90 |
| Max grad ability | 28 |
| fuel | Diesel |
| Displacement(L) | 5.88 |
| Approach/departure angle | 34/14 |
| Min ground clearance (mm) | 248 |
| Tire type | 10.00-20 |
| Type number | 6 |
| Wheel base | 5000 |

| | |
|------------------------|--|
| Track front/rear | 1940/1860 |
| chassis | EQ1141G 7D2 |
| Max loading weight(kg) | 8000 |
| Whole weight (kg) | 14300 |
| Outline dimension(mm) | 8490x2470x2830 |
| Approach angle(°) | 34 |
| Diesel engine | |
| type | F6L913G |
| Pattern | Vertical four stroke ,forced-air cooling spruts |
| Air cylinder quantity: | 6 |
| Rated power (kw) | 84 |
| Speed (r/min) | 2200 |
| Weight(kg) | 430 |

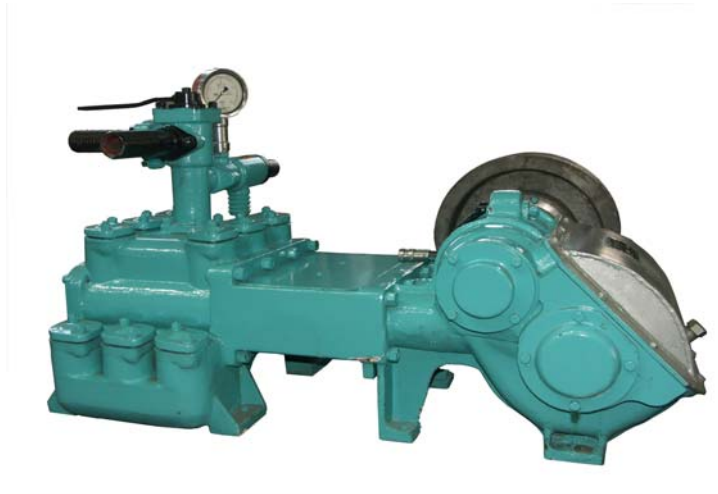
Drilling tools pictures

Impactor/impact hammer



| | | | |
|--------|------------|------------------------------|----------------------|
| model | Weight(kg) | Wind pressure(KG/CM2) | Consume wind(M3/MIN) |
| DHD360 | 126 | 7-21 | 8.5-25 |
| Model | Joint way | Rock drill head | |
| DHD360 | AP13-1/2" | High wind pressure standard, | non-standard |

Mud pump



Drilling rods



Drilling bit



KHCK-DPP100-3A Drilling Rig



Back pictures



Application range

- (1) Exploration in shallow holes of mine and seismic exploration drilling.
- (2) In liquids and natural gas holes drilling.
- (3) Construction shot drilling.
- (4) Geological exploration and shallow water well drilling.

Main features

- (1) Having hydraulic pressure and high ability of pulling down and pulling up. the operation is easy and the labor intensity is reduced.
- (2) Being provided planetary hoisting the operations are easy, safety and reliable.
- (3) The mud pump is high self-adsorb ability and can be regulated 10 kind flows
- (4) The water cock is small volume, light in weight and better seal.
- (5) The driver rod has high rigidity, weightier, being pressure by self-weight.
- (6) Having hydraulic mast, convenient in operation.

Technical specification of drill

| specifications | KHCK-DPP100-3 Series |
|--|----------------------|
| Max drilling depth(m) | 70 |
| 7 3/4"bit(200m) | |
| 5 3/4"bit(150m) | 100 |
| Hex Kelly bar(mm) | 75x5500 |
| Rod dia(mm) | 50 |
| Max feeding/pulling capacity(KN) | 30/50 |
| Feeding stroke(mm) | 450 |
| Traveling stroke(mm) | |
| Single wire lifting capacity of main/auxiliary hoist(KN) | 12.5/10 |
| Max working pressure of water pump(MPa) | 2 |
| Max displacement of water pump(L/min) | 450 |
| Max pressure of hydraulic system(MPa) | 8 |

Specification of truck(JIEFANG)brand

| | |
|-----------------------------------|----------------|
| Drill model | DP100-3 |
| Chassis model | CA1097K2 |
| Engine model | CA6DE2-16 |
| Dimension(mm) | 9100X2460X3350 |
| Weight(kg) | 8070 |
| Power(kw) | 117 |
| Rotary table spindle speed(r/min) | 81,135,226 |
| fuel | diesel |
| person | 3 |

KHCK-SPC300S Water Well Drilling Rig



The water well drilling rig model KHCK-SPC300 is a truck mounted rig for both rotary and percussive drilling, with all its components are mounted on the “**STEYR**” brand truck. The rig is mechanically driven with on part of its operating mechanism being hydraulic and the other part being mechanical. In addition to the main operating made of rotary drilling by rotary table. The drilling rig is provided with percussive drilling mechanism, which is of high adaptability, suitable for drilling through various strata such as clay, sand, conglomerate and matrix. For rotary drilling, mud is used as flushing fluid (positive cycle). Moreover, the two—arms drilling tool is equipped as air lifting reverse cycle; The shallow—bore hammer tool, air compressor and speed reducer of increasing rotary table are equipped as foam drilling, Auger tool is equipped as Auger drilling.

Main characteristics and applications

At the beginning of boring, pressuring mechanism may be used for drill tool to effect pressuring drilling, thus promoting the efficiency of shallow hole drilling. With the increased depth, when the weight of the drill tool is greater than the pressure required to apply to the drill tool, the main hoisting system should be used to carry out reduced—pressure drilling.

Percussion mechanism is used for drilling through conglomerate stratum.

The drilling rig is provided with one main hoist and tow secondary hoists.

The main hoist is used for lifting or lowering of the drill tool, lowering of the well pipe, reduced-pressure drilling and percussive drilling.

One of the secondary hoists is used for driving percussive earth excavator or other coring tool and sand reel to extract sand sample or core and silt in the well. The other secondary hoist is used for elevating the movable table.

The drilling rig is equipped four jacks to reduce physical labour and improve install efficiency.

The drilling rig isn't used the truck engine. It is separately equipped diesel engine (The buyer can choose model 6135AN or F6L912 or BF6L913 etc diesel engine).

This drilling rig features in best maneuver ability, compact construction, high integrity, economical transportation, and simple operation, Reliable transmission, high versatility and efficiency. After loosening the first turn of thread of the lock joint with the aid of breakout-gun cylinder, the drill pipe can be rotated in clockwise or counter-clockwise direction by the rotary table to reduce greatly the labour intensity and prolong service life of the component parts.

In order to improve efficiency of drilling, This drilling rig is equipped with related drilling tool that can be applied various advanced drilling technology.

The drilling rig may be used for drilling in quaternary period stratum and matrix water well. Rotary drilling can be made right with a depth of 300m. And bore diameter of 500mm ,while percussive drilling with a depth of 40-80 m. and bore diameter of 700 mm.

(1) Technical parameter

1.Base data

Drilling Depth(m) 200-300

Percussive drilling (m) 80

2.diameter of bore hole

Rotary drilling(mm) 500

Percussive drilling(mm) 700

3.max.through hole diameter

Max. through hole diameter of rotary table 505
(mm)

4.drill pipe

Driving Kelly (mm) 110x110x7500

In-hole drill pope(mm) 89x6000

5.Mast



| | |
|--|-----------------|
| Height (m) | 11 |
| Max. load (T) | 15 |
| Front inclination(rotary drilling)(°) | 3 |
| 6.weight of percussive drill tool(kg) | 800-1000 |
| Physical dimensions(L*W*H)(mm) | 10880x2500x4100 |
| Total weight(T) | 21 |

(2)Power(diesel engine)

| Model | BF6L913 | F6L912 | 6135AN |
|---------------------------|-------------------------------|-------------------------|---------------|
| description | Air-cooling | Air-cooling, direct | Water cooling |
| | Direct injection supercharged | Injection diesel engine | Diesel engine |
| Liner size and stroke(mm) | 102x125 | 100x120 | 135x150 |
| Power/run(kw/rpm) | 104/2300 | 74/2300 | 100/1500 |
| Max torque/run(N.m/rpm) | 490/1650 | 345/1600 | 647/1250 |

(3)main parameters

1.Out put speed of rotary table

| description | Clockwise(RPM) | | | Counter-clockwise(RPM) |
|----------------|----------------|----|-----|------------------------|
| Gear shift | 1 | 2 | 3 | |
| Rotation speed | 44 | 68 | 105 | 34 |

2.hoist:

Max. capacity:

| | |
|---------------------|-----|
| Main hoist(KN) | 30 |
| Sand reel hoist(KN) | 20 |
| Tool hoist (KN) | 20 |
| Diameter of drum | |
| Main hoist(mm) | 273 |
| Sand reel hoist(mm) | 268 |
| Tool hoist(mm) | 268 |

Rotation speed and hoisting speed for single rope

| description | Main hoist | | | Sand rell hoist | | | Tool hoist | | |
|---------------------|------------|----|-----|-----------------|------|----|------------|------|----|
| | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 |
| Rotation speed(rpm) | 43 | 85 | 122 | 21.5 | 42.5 | 61 | 21.5 | 42.5 | 61 |

diameter of rotary steel rope(mm) 15.5 15.5 9.3

Percussive can be used(mm) 21.5

Hoisting speed(m/s) 0.716 1.42 2.04 0.353 0.698 1.00 0.332 0.658
0.945

Percussive speed(m/s) 0.76 1.51 2.13

Length of steel ropes (m) (15.5)120

Percussive drilling main hoist(m) (21.5)125



3.percussion mechanism

Percussion travel(mm) 650,500
Frequency of percussion(r/m) 25,50,72

4.Guide pressuring mechanism

Max. pressure applied (kg) 2000
Pressuring travel(mm) 1000
Diameter of guide rod(mm) 50
Diameter of wire rope for 9.3
pressuring(mm)

5.chassis

Model ZZ2252M4651
Axle spacing(m) 4.6+1.35
Wheel track(m) 1.8
Angle of approach(°) 33
Angle of departure(°) 19
Number of tires Front 2 rear 8
Size of tire 12.00-20
Speed of truck (km.h) limited speed 50

6.hydraulic beakout gun mechanism

travel(mm) 185
Bore diameter of oil cylinder(mm) 110
Rated(KN.m) 26.2
max(KN.m) 40.2

7.hydraulic oil pump

model CB-32 gear pump
displacement 32.6ml/rev
Rotation speed(rpm) 1100-1625
Rated pressure(mpa) 9.8
Power required(Hp) 12.1
Net weight(kg) 6.7

8.Mud pump

| | | |
|-------------------------------------|-----------|----------|
| Model | BW900/25 | BW600/30 |
| Max pressure | 2.5Mpa | 2.94Mpa |
| Max displacement | 1030L/min | 600L/min |
| Power required | 52HP | 52HP |
| Internal diameter of intake pipe | 102mm | 102mm |
| Internal diameter of discharge pipe | 64mm | 64mm |

KHCK-SPC300D Water Well Drilling Rig



Water well Drilling Rig model KHCK-SPC300D is a truck mounted rig for rotary drilling, with all its components are mounted on the "**DONG FENG**" brand truck and powered by its engine. The drilling rig is of a main mechanical drive. The rig is mechanically driven with on part being mechanical.

For rotary drilling, mud is used as flushing fluid (positive cycle). As the beginning of boring, pressuring mechanism may be used for drill tool to effect pressuring drilling, thus promoting the efficiency of shallow --hole drilling. With the increased depth, when the weight of the drill tool is greater than the pressure required apply the drill tool, the main hoisting system should be used to carry out reduced-pressure drilling.

The drilling rig is provided with one main hoist and tow secondary hoists. The drilling rig are equipped four jacks to reduce physical labour and improve install efficiency.

Main characteristics and applications

This drilling rig features in best maneuver ability, compact construction, high integrity, economical transportation, and simple operation, Reliable transmission, high versatility and efficiency. After loosening the first turn of thread of the lock joint with the aid of breakout-gun cylinder, the drill pipe can be rotated in clockwise or counter-clockwise direction by the rotary table to reduce greatly the labour intensity and prolong service life of the component parts.

In order to improve efficiency of drilling, This drilling rig is equipped with related drilling tool that can be applied various advanced drilling technology.

The drilling rig may be used for drilling in quaternary period stratum and matrix. Rotary drilling can be made right with a depth of 300m. And bore diameter of 500mm

(1)Technical parameter

1.Base data

Drilling Depth(m) 200-300

2.Diameter of bore hole (mm) 500

3.max.through hole diameter

Max. through hole diameter of rotary table 505
(mm)

4.drill pipe

Driving Kelly (mm) 110x110x7500

In-hole drill pipe(mm) 89x6000

5.Mast

Height (m) 11

Max. load (T) 15

Front inclination(rotary drilling)(°) 3

Physical dimensions(L*W*H)(mm) 10850x2470x3850

Total weight(T) 13.9

(2)main parameters

1.Out put speed of rotary table

| description | Clockwise(RPM) | | | Counter-clockwise(RPM) |
|---------------------|----------------|------|------|------------------------|
| | 1 | 2 | 3 | |
| Gear shift | 1 | 2 | 3 | 40 |
| Rotation speed(RPM) | 52 | 78 | 123 | 40 |
| Torque(N.m) | 4047.4 | 2695 | 1715 | 5262.6 |

2.hoist:

Main hoist(KN) 29.4

Sand reel hoist(KN) 19.6

Tool hoist (KN) 19.6

Diameter of drum

Main hoist(mm) 273

Sand reel hoist(mm) 268



Tool hoist(mm) 268

Rotation speed and hoisting speed for single rope

| description | Main hoist | | | Sand rell hoist | | | Tool hoist | | |
|---------------------|------------|----|-----|-----------------|------|----|------------|------|----|
| | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 |
| Gear shift | | | | | | | | | |
| Rotation speed(rpm) | 43 | 85 | 122 | 21.5 | 42.5 | 61 | 21.5 | 42.5 | 61 |

diameter of rotary steel rope(mm)

15.5 15.5 9.3

Percussive can be used(mm)

21.5

Hoisting speed(m/s)

0.716 1.42 2.04 0.353 0.698 1.00 0.332
0.658 0.945

Percussive speed(m/s)

0.76 1.51 2.13

Length of steel ropes (m)

(15.5)120

For main hoist of rotary drilling

For sand reel hoist(m)

(15.5)120

For tool hoist(m)

(9.3)120

3.Guide pressuring mechanism

Max. pressure applied (kg)

2000

Pressuring travel(mm)

1000

Diameter of guide rod(mm)

50

Diameter of wire rope for
pressuring(mm)

9.3

4.chassis

Model

EQ1141GY

Axle spacing(mm)

4500

Front Wheel (mm)

1940

Rear wheel(mm)

1860

Angle of approach(°)

34

Angle of departure(°)

13.3

Number of tires

Front 2

Size of tire

11.00-20

Speed of truck (km.h)

50

5.hydraulic beakout gun mechanism

travel(mm)

185

Bore diameter of oil cylinder(mm)

110

Rated(KN.m)

26.2

max(KN.m)

40.2

6.hydraulic oil pump

model

CB-32 gear pump

displacement

32.6ml/rev

Rotation speed(rpm)

1100-1625

Rated pressure(mpa)

9.8



| | |
|-------------------------------------|-----------|
| Volumetric efficiency | 0.9 |
| Power required(Hp) | 12.1 |
| Net weight(kg) | 6.7 |
| 7.Mud pump | |
| Model | BW900/25 |
| Max pressure | 2.5Mpa |
| Max displacement | 1030L/min |
| Power required | 45kw |
| Internal diameter of intake pipe | 4 |
| Internal diameter of discharge pipe | 3 |

KHCK-BZC350 Truck-mounted Drilling Rig



KHCK-BZC350 driller is truck-mounted using truck crane chassis with power distribution device and hydraulic system for traveling and drilling operation. equipped with obverse-reverse circulation pump set, it is used in large discharge stone grain and fast drilling, so it is suitable for deep well work, high-rise building, bridge foundation, mining, port and dam foundation construction, this type drilling rig is well received by foreign users and domestic constructors.



Water Drilling specification

| | |
|---|--|
| Drilling Depth(m) | 100 / 3 50 |
| Diameter of hole(mm) | 800 /500 |
| Inner diameter of turntable(mm) | 500 |
| Drilling method | Mud drilling |
| Turntable rotation speed (forward and reverse)(r/min) | 8.1,13.7,24.2,38.5,59.2 Reverse:7.7 |
| Turntable output torque(KN.m) | 80.2,47.4,26.8,16.9,11 Reverse:84.3 |
| Hoist lifting capacity(single rope)(KN) | 30 |
| Main machine matching power(KW) | 132 |

Chassis specification

| | |
|-------------------------------|-----------------|
| Truck chassis model | TAZ5190TXJ |
| Drive type | 6x4 |
| Chassis total weight(kg) | 8750 |
| Max total weight(kg) | 19450 |
| Front axle weight(kg) | 3500 |
| Rear axle weight(kg) | 5250 |
| Chassis outside dimension(mm) | 10220x2490x2400 |
| Wheelbase(mm) | 4600+1300 |
| Tread front/rear (mm) | 1935/1860 |
| Front hang/rear hang(mm) | 2320/2000 |
| Min ground clearance(mm) | 255 |
| Angle of approach/off(°) | 15/12 |
| Max speed(km/h) | 75 |
| Min curve data(m) | 22 |
| Max gradient (%) | 22 |
| brake distance(m) | ≤9 |
| Engine type | TBD226B-6IIE |
| Rated power(kw/rpm) | 132/2300 |
| Peak torque(N.m/rpm) | 1400-1500 |

Transmission

| | |
|-----------------------------|--|
| clutch | The monolithic dry week sets at the spring |
| Transmission type and model | 5J75TB 5front motion,1 reverse gear |
| Velocity ratio | 7.34;3.99;2.47;1.55;1.00;R6.48 |
| Transmission shaft type | Open type |
| Drive axle type | Penetration type two grad transmission |
| Drive axle Velocity ratio | 5.571 |
| Tyre type | 9.00-20 |
| Tyre pressure(mpa) | 0.68± 0.020 |



Transport condition(mm) 10220x2490x3250

Accessory collocata

| NO | name | specification | unit | Qty |
|----|--|---------------|-------|-----|
| 1 | Chassis | | set | 1 |
| 2 | Re-equips four hydraulic pressure supports | | | |
| 3 | Transfer case | | | |
| 4 | Drilling machine main engine | | | |
| 5 | Well drilling tower | | | |
| 6 | Ram pump | | | |
| 7 | Drill pipe | | | |
| 8 | Drilling rod coupling | 89mm*6 | m | 300 |
| 9 | Whole assembly | 89mm | pairs | 50 |
| 10 | Rubber tube, steel wire and other expenses | | | |

KHCK-BZC350 Truck-mounted drilling machine packing list

| NO | Name | QTY |
|-----|---|-----------|
| 1. | Drilling truck | 1set |
| 2. | Raises directs | 1pcs |
| 3. | Vice-drill rod | 100pcs |
| 4. | Drill rod connecting bolt M22*85(high strength) | 650pcs |
| 5. | Drill rod connecting nut M22(high strength) | 1300pcs |
| 6. | O seal packing collar 180*5.7 | 120pcs |
| 7. | Dull spanner | 2pcs |
| 8. | Drill bit 600.800 | Each 1pcs |
| 9. | Mat fork | 1pcs |
| 10. | Foot pedal | 1pcs |
| 11. | Hoist handwheel | 1pcs |
| 12. | 6 inches cut-off valves | 1pcs |
| 13. | 4 inches bottom valves | 1pcs |
| 14. | 4 inches rubber tubes | 1pcs(8M) |
| 15. | 6 inches rubber tubes | 2pcs(10M) |
| 16. | 4 inches tube clamps | 2group |

| | | |
|-----|----------------------------------|--------|
| 17. | 6 inches tube clamps | 3group |
| 18. | M20X90 bolt | 8pcs |
| 19. | M20x90 bolt | 8pcs |
| 20. | M20 nut | 16pcs |
| 21. | 20 Spring washer | 16pcs |
| 22. | Engine with the vehicle document | 1set |
| 23. | Engine tools | 1set |
| 24. | Chassis with document | 1set |
| 25. | Chassis tools | 1set |
| 26. | Drilling rig with document | 1set |
| 27. | Drilling rig spare parts | 1set |

KHCK-SPC450 TRAILER Water Well Drilling Rig



KHCK-SPC450 Trailer Type Water-well Drilling Rig is a trailer towing type drill with turning table and is mainly mechanically driven and partially hydro-operated. The machine uses a positive cycle pump. Twin winding benches and the mud pump are equipped on the machine. The rig is integrally built frame, lifting by hydro-pressure, so that it is easy to move and high in mechanization. Both diesels and electrical generators can be used to supply the power. The drill can be applied to the exploration of hydrology and geology, water well drilling, underground tunnel, ventilation holes and construction holes, drilling impact layer of clay, grit stone, bedrock etc. It can also be widely used in metallurgy geology, oil exploration, coal mining, forest, army troop and construction material industries.

Technical parameter

| | |
|--|---|
| Drilling Depth(m) | 450 |
| Drilling Diameter of hole(mm) | 300 |
| Drive drill rod (mm) | 108x108x7000 |
| Drill rod inside(mm) | 89x6000 |
| Moving height of main tower(mm) | 10500 |
| Rated load of drill tower(KN) | 300 |
| Max. downward lifting power of mechanical axis(KN) | 90 |
| Hoist single cable tension(KN) | 40 |
| Through hole diameter of rotary table(mm) | 505 |
| Rotation speeds of rotary table(rpm) | Normal:26,47,77,126,200 Reverse:21,38,63,103,164 |
| Mud pump model | BW900/25 |
| Drilling diesel engine | 4135type/100horsepower/1500rpm |
| Dimensions(mm) | 11300x2440x3900 |
| Gross Weight(T) | 14.5 |

KHCK-YZC500 Vehicle-Carried Rock Core Rig



KHCK-YZC500 Vehicle-carried Rock Core Drilling Rig is the newly research of our company, which is designed for XY-5 Rock Core Drilling as the major equipment. All parts of the drilling rig are installed on the “STEYR” carrying car. The drilling rig mainly works with normal mud circulation for its drilling progressing. Reverse air drilling can be realized when equipped with proper auxiliary devices.

The drilling rig could be applied into diamond small caliber drilling in the prospecting of metal or non-metal solid ore deposit, it could also be used for the large caliber alloy drilling. In parallel, it could be used for the prospecting of hydrology, water well, oil Dom and the construction of technical bore.



Technical parameter

| | |
|--|---|
| Drilling Depth(m) | 1500-500 |
| Drilling Diameter of hole(mm) | 56-300 |
| Drill rod diameter (mm) | 50,60,73,89 |
| Speeds of big through hole(rpm) | Forward:87,170,267,301,362,591,928,1262 Reverse:67,230 |
| Forming of mechanical axis(mm) | 500 |
| Max. upward lifting power of mechanical axis(KN) | 135 |
| Max.downwardlifting power of mechanical axis(KN) | 90 |
| Hoist single cable tension(KN) | 40 |
| Move forming of backward oil cylinder(mm) | 450 |
| Effective height of drilling tower(m) | 12.2 |
| Effective load of drilling tower(KN) | 200 |
| Mud pump model | BW600/30 |
| Mud pump power | 37KW |
| Drilling rig power source | Diesel engine:59kw Motor:55kw |
| Dimensions(mm) | 12800x2500x5100 |
| Weight(T) | 24 |

KHCK-600ST Drilling Rig



Water well drilling rig KHCK-300ST/600ST is a truck-mounted rotary drilling rig. Equipped with proper drilling devices this rig can be used for other drilling technologies. The model is mainly for hydrological geology and water well drilling in clay, sand and bedrock layers. It can also be used for construction of underground tunnels, ventilation holes and etc.

The rig can be installed on the chassis of “STEYR” truck with 10 driving wheels for good off-highway performance and driving on bad roads.

The rig is compact in structure, centralized in control and equipped with high pressure and high volume mud pump. Pressure increase and decrease mechanism is installed to realize drilling in increased or decreased pressures, resulting in drilling efficiency.



Water Drilling specification

| | |
|---------------------------------------|--|
| Drilling Depth(m) | drill pipe ϕ 73 600 m drill pipe ϕ 89 400 m |
| Diameter of hole(mm) | 500 |
| Manufacturing year | 2006 / 2007 |
| Drill rod inside(mm) | 108×108×7500 |
| Effective height of drilling tower(m) | 11 |
| Nominal load of main hook(T) | 25 |

Main hoist

| | |
|-------------------|-------------------------|
| Cable tension(T) | 4.5 |
| Feed speed(m/min) | 1.32, 3.4 (single rope) |

Assistant winch

| | |
|-----------------------|---------------------------|
| Single pull (T) | 2T |
| hoisting speed(m/min) | 0.622/1.602 (single rope) |

Tool winch

| | |
|------------------------|-----------------------|
| Single rope pull(T) | 1 |
| Hoisting speed (m/min) | 0-0.329 (single rope) |

Nominal pressure increase and decrease of cables

| | |
|---|-----|
| Increase capability(T) | 20 |
| Decrease capability(T) | 14 |
| Stroke of pressure increase and decrease(m) | 7.6 |

Rotary table

| | |
|---|---|
| Maximum through hole diameter of rotary table(mm) | ϕ 505 |
| Rotation speeds of rotary table(rpm/min) | Clockwise 27.49.80.131.208(rpm/min) Reverse 35 (rpm/min) |

water faucet

| | |
|----------------------|----|
| carrying capacity(T) | 25 |
| Dia (mm) | 60 |

wheel box

| | |
|-----------------------|------|
| Output speed(rpm/min) | 1107 |
|-----------------------|------|

Chain box

| | |
|-----------------------|------|
| Input speed(rpm/min) | 1107 |
| Output speed(rpm/min) | 964 |

transmission case

| | |
|-----------------------|--|
| Input speed(rpm/min) | 1107 |
| Output speed(rpm/min) | 145/259/426/696/1107(rpm/min) ; reverse 86(rpm/min) |

Mud pump



| | |
|---|------------------------------------|
| type | BW1600/30 |
| Travel(mm) | 240 |
| Time(min) | 70 |
| Max Peak rate of flow(lit/min) | 600 |
| Most pressure(mPa) | 3 |
| Truck capability | |
| Max speed(km/h) | 73 |
| Turning radius(m) | 22.6 |
| Angle of approach(°) | 30 |
| Angle of chamfer(°) | 13.5 |
| The other chassis | |
| Truck style | STEYR ZZ2252M4651 |
| Truck engine | WD615.77(weichai) |
| Truck engine power(kw/rpm) | 206/2400 |
| Cooling of engine | Water cool |
| Drive style | Triaxiality 6×6 |
| Cab room | Plat hydraulic |
| Cold boot | |
| High-power internal circulation warm air blower | |
| Tyre style | 12-20 |
| drier | 10 |
| Brake system | Air pressure double return circuit |
| Fuel tank | 380lit |
| redirector | ZF-8098 import |
| Cab color | white |
| producer | china |
| Power of engine | |
| Diesel engine | BF6L913C-GF |
| Power and rotate speed(kw/rpm) | 141/2500 |
| Peak torque | 620N.M/1650rotate/min |
| Diesel engine cooling | wind |

Drilling pipe



Lock the attachment



Three wings shaving knife drill bit



Three roller bit



KHCK-YDC600 (2) hydraulic driving head mobile drill



This mobile drill is one kind of full hydraulic driving drilling equipment installed on the chassis of EQ2162NJ diesel truck.

Application:

It is mainly used for diamond bit drilling and carbide bit drilling of solid bed. it also can be uses in exploring drilling and base or pile hole drilling and the small water well drilling.

Characters:

1. Rotation unit(hydraulic drive head)adopted the France technique. it was drive by dual hydraulic motor and changed speed by the mechanical style.
2. The feeding and the lifting system use the single hydraulic cylinder driving the chain. it has the long distance characters. it is easy for the long rock core drilling process.
3. Rig has the high lifting speed, it can decrease the auxiliary time and improve the rig's efficiency.
4. The V style orbit in the mast can sure the enough rigidity between the top hydraulic head and the mast and give the stability at the high rotation speed.
5. The hydraulic driving head can move away the drilling hole.
6. Rig has the clamp machine system and the unscrew machine system, so it bring the

convenient for the rock core drilling.

7. The hydraulic system adopted the France technique; the hydraulic system has the high reliability.
8. The mud pump control by the hydraulic valve. all kind of the handle is concentrate.

Technical specifications

Basic parameters

Drilling capacity

Hole data ϕ 75 600m/ ϕ 220 400m/ Φ 300 300m

Drilling angle 20-90

Rob types(mm) 50/60/89

Overall dimensions

Movement dimensions(mm) 8800x2470x3800

Working dimensions(mm) 8200x2470x9000

Total weight(kg) 12000

Rotation unit

Rotation speeds Max torque

71. 107 rpm 4700 N.m

142. 215 rpm 2350 N.m

230. 346 rpm 1460 N.m

462. 693 rpm 735 N.m

Hydraulic driving head feeding distance(mm) 4200

Hydraulic driving head feeding system

type Single hydraulic cylinder driving the chain

Lifting force(KN) 60

Feeding force(KN) 43

Lifting speed(m/min) 0-8

Rapid lifting speed(m/min) 44

Feeding speed(m/min) 0-11

Rapid feeding speed(m/min) 63

Mast displacement system

Distance(mm) 1000

Lifting force(KN) 80

Feeding force(KN) 54

Clamp machine system

Rang(mm) 50-220

Force(KN) 100

Unscrews machine system

Torque(N.m) 6000



Winch

Single rope force(KN) 30

Speed(m/min) 48

Mud pump

Model: Three cylinder reciprocating piston style pump
type BW-250A

Distance(mm) 100

Diameter cylinder(mm) 80

Volume(L/Min) 250.145.90.52

Pressure(Mpa) 2.5,4.5,6.0,6.0

Engine diesel engine

model LR6108ZK61

Power(kw/rpm) 105/2200

KHCK-150Y



KHCK-150Y water well drilling rig can get the depth 150 meters.

This water well drilling contains a drill tower, a water pump, main engine, drill pipe and lock pitch. You will see the drilling accessories form the sheet. The model is mainly for hydrological geology and water well drilling in clay, sand and bedrock layers. It can also be used for construction of underground tunnels, ventilation holes and etc

Specification

| | |
|-------------------------------------|-----------------------------------|
| Drilling depth | 30-200M |
| End hole caliber | 500-75mm |
| Drill rod caliber | 50mm |
| Drilling angle | 90-75 |
| Drill weight (No include power) | 910kg |
| Unity machine dimensions | 2.5×1×1.3 2.5×0.9×1.3m |
| Spindle speed | 64 128 287 557r/min |
| Spindle stroke | 450mm |
| Hoist | |
| Max.single line hoisting capability | 1600kg |
| Single line lifting speed | 17 35 75 151r/min |
| Tightrope caliber | 12.5m |
| Tightrope cubic measure | 35m |
| Hug floodgate caliber | 254mm |
| Hug floodgate belt width | 70mm |
| Distance between drill and hole | 400mm |
| Mud pump type | Horizontal single urn twin-action |
| Displacement | 170L/min |
| Diesel engine | S1105 18HP |
| Electric motor | Y160M-4 15Kw 1440r/min |
| Maximum pressure | 1.5Mpa |
| Work pressure | 0.7Mpa |
| Water inlet caliber | 40mm |
| Water to exit caliber | 30mm |
| Triangle conveyer belt | B1728mm |



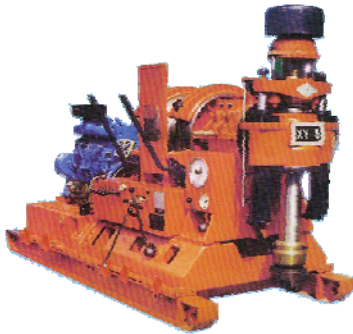
KHCK-150Y Fitting List

| No | Description | Specification | Unit | Quantity |
|----|----------------------------|---------------|------|----------|
| 1 | Water well drilling rig | HZ150YY | Set | 1 |
| 2 | Drill tower | 6M | Set | 1 |
| 3 | High pressure water faucet | Φ50mm | Set | 1 |
| 4 | High pressure rubber duct | Φ38mm | M | 6 |
| 5 | Water-absorption tube | Φ38mm | M | 3 |
| 6 | Water faucet | Φ38mm | Pc | 1 |
| 7 | Trepanning tube | Φ127mm | Pc | 1 |
| 8 | Connector | Φ127mm | Pc | 2 |
| 9 | Core barrel | Φ127mm | M | 1 |
| 10 | Core barrel | Φ127mm | M | 2 |
| 11 | Sediment tube | Φ127mm | M | 1 |
| 12 | Alloy bit | Φ127mm | Pc | 4 |
| 13 | Diamond bit | Φ130mm | Pc | 1 |
| 14 | Three -wings bit | Φ150mm | Pc | 1 |
| 15 | Drill pipe | Φ50mm | M | 150 |
| 16 | Driving lever | 59×53 | M | 4 |
| 17 | Joints | Φ65mm | Set | 40 |
| 18 | Change size | 50/50 | Pc | 1 |
| 19 | Thumb buster | Φ65mm | Pc | 1 |
| 20 | UL-fork | | Pc | 1 |
| 21 | U-fork | | Pc | 1 |
| 22 | Chuck handle | | Set | 1 |
| 23 | Wire rope | Φ10.5 | M | 14 |
| 24 | Pipe wrench | 108—127 | Set | 1 |
| 25 | L-wrench | | | 2 |
| 26 | Drill pipe wrench | Φ50mm | Set | 1 |
| 27 | Allen wrench | Φ8mm | Set | 1 |
| 28 | Wire clip | Φ10mm | Pc | 2 |
| 29 | Leather cup | 2-18 | Pc | 10 |
| 30 | Oil gauge/ Oil seal | | Set | 1 |
| 31 | Link rod sleeve | 1-22 | Set | 2 |
| 32 | Central shaft | 2-03 | Pc | 1 |
| 33 | Cypriot line sets | 2-06 | Pc | 2 |
| 34 | Pan-gen | | M | 3 |



| | | | | |
|----|----------------------------------|----------|-----|---|
| 35 | Safe bar | | Pc | 1 |
| 36 | Gear | 5-48 | Pc | 1 |
| 37 | Gear | 5-06 | Pc | 1 |
| 38 | Claw shape clutch | 1-10 | Pc | 1 |
| 39 | Worm wheel | 1-05 | Pc | 1 |
| 40 | Steel jacket | 2-02 | Pc | 1 |
| 41 | Passive hub | 3-18-8 | Pc | 1 |
| 42 | Hold slipper | | Set | 2 |
| 43 | Steel ball | Φ15 | Pc | 9 |
| 44 | I shaft oil seal | 40×60×12 | Pc | 1 |
| 45 | Drive nut | 6-17 | Pc | 1 |
| 46 | Diesel machine | S1110 | Set | 1 |
| 47 | English instruction book/ VCD | | | 2 |

KHCK-1500Y (6B)



KHCK-1500Y core drill is suitable for conventional and slim-hole diamond drilling in geological hydrogeological and coal field exploration. It can drill vertical and angle holes

Specification

| | |
|--------------------------------------|---------------------------------|
| Drilling depth | 1500M |
| Drill rod caliber | |
| For conventional swivel head | ⊙50 ⊙60 |
| For large swivel head | ⊙89 |
| Drilling capability(m) | 1000M-1500M |
| Torque(KN.m) | 0.39-5.64 |
| Drilling angle | 90-80 |
| Spindle speed(r/min) | |
| forward | 85 166 261 294 335 577 906 1232 |
| Reverse | 65 225 |
| Max. hoisting capability(KN) | 135 |
| Max. angle line hoist capability(KN) | 40 |
| Dimension (L×W×H)(mm) | 3190×1495×2140 |
| Weight(kg) | 3500 |
| Power unit | |
| Electric motor | 55kw 1470r.p.m |
| Diesel engine | 80HP 1500r.p.m |



KHCK-1500Y Fitting List

| Name | Specification | Unit | Quantity | Remark |
|-----------------|---------------|-------|----------|---|
| drill tower | AG18 | assy | 1 | |
| water faucet | Φ89 | pc | 1 | |
| thumb buster | Φ75 | pc | 1 | |
| mud pump | BW300/5H | set | 1 | diesel engine、 water box、 battery cell、 rubber duct |
| breakout tool | NY-3 | set | 1 | |
| jack | 75T | set | 1 | |
| drill pipe | Φ60 | meter | 1500 | R780 material |
| joint | Φ75 | pc | 150 | D40 material |
| coupling | Φ75 | pc | 200 | D40 material |
| traveling block | 20T | assy | 1 | |
| change size | 89/60 | pc | 2 | |