

Technical Specification for 750hp truck mounted Drilling Rig

750HP Truck-mounted Drilling Rig, drilling depth up to 3000m (4 1/2" DP), main technique parameter are as follows:

Drilling depth	3000m (4 1/2" DP) 2500m (5" DP)
Nominal hook load	1500KN
Max. static load	1800kN
Drawworks horsepower	750hp
Mast height	38m
Height of racking board (to drill floor)	17.2m
Height of substructure	6m
Traveling system	5x6
Drive type, carrier	14x8
Diameter of wire line	∅ 29
Traveling dimensions	16.03mx3.3mx3.2m (without mast)
Limiting speed	45km/h
Min. turning radius	21m
Traveling weight	54500kg (without mast)
Ambient temperature	-19 ~ +50 °C

The workover rig complete with the following equipments:

- ✧ POWER SYSTEM
- ✧ CHASIS
- ✧ DRAWWORKS
- ✧ MAST SYSTEM
- ✧ TRAVELING EQUIPMENT
- ✧ ROTARY EQUIPMENT
- ✧ HYDRAULIC SYSTEM
- ✧ AIR SYSTEM
- ✧ CARRIER ELECTRICAL SYSTEM
- ✧ SUBSTRUCTURE SYSTEM

- ✧ INSTRUMENT SYSTEM
- ✧ MISCELLANEOUS EQUIPMENT

1. POWER SYSTEM

1.1 Model: CAT C15 Engine

Qty. 2 sets

Power: 540HP/2100RPM

Features:

- the engine throttle can be controlled in cab and on driller's console with electricity controlled by air.
- The engine is complete with engine tachometer, water temperature gauge, oil pressure gauge, oil filter and fuel filter etc. The exhaust system is fitted with anti-flaming muffler. equipped with heat insulation material.
- The engine is complete with low oil pressure, high water temperature and over-speed protection devices, w/ PTO ports for steering oil pump and air compressor. Complete with engine hood.

1.2 Hydraulic transmission

Model: Allison M5620AR

Qty. 2 sets

The hydraulic transmission is equipped with main control valve, oil filter, oil temperature gauge and oil pressure gauge. Complete with PTO port for main oil pump.

The transmission gears can be shifted in cab and driller's console.

1.3 Drop box

Qty. 1 EA.

- Model: FD260
- Structure: Gear compounding
- Drive ratio to axle 1: 1
- Drive ratio to drawworks 1:1
- Gear ratio to rotary table: 1: 1.65
- Max. output speed: 2500r/min
- Max. output torque: 26000N·M

2. CHASIS SYSTEM

Qty. 1 set.

- Complete with 3 front axles and 4 rear axles, 14×8 drive.
- The first and third axles: 13t steering driving axle
- The second axle: 13t steering driven axle
- The fourth and fifth axles: 13t tandem driving axle, rigid centralizer beam suspension.
- The sixth axle: 12t floating axle
- The seventh axle: 10t steering floating axle
- The first, second, third and seventh axles use 445/65r22.5 tire (single tire)
- The fourth, fifth and sixth axles use 12-20 tire (double tire)
- The front three axles use steel plate spring suspension
- The sixth and seventh axles are air suspension
- Hydraulic assist steering.
- Cab is COE type with single seat. Interlock for wheels and axles.

SPECIFICATIONS:

- Drive type 14X8
- Min. turning radius 21m
- Max. climb gradient 26%
- Min. ground clearance 0.34m

3. DRAWWORKS SYSTEM

3.1 Qty. 1 EA. Right angle gear box

- Gear ratio: 1.57:1

3.2 Qty. 1 set Drawworks (single drum)

Qty. 1 set Main drum:

- Groove diameter × length: ϕ 528mm×1012mm
- Groove structure: 29mm LEBUS groove
- Model, clutch: ATD-330H thrust disk clutch
- Max. fastline pull: 280KN

Qty. 1 set Main brake:

- Brake type: disc brake

- Diameter, brake rim: φ1450
- Width, brake rim: 40
- Cooling method, brake rim: air cooled

Qty. 1 set Auxiliary brake system:

- Type: WPT 324 air controlled water cooled disc brake
- Rated brake torque: 33870N.M/0.55MPA
- Maximum air inlet pressure: 1.03MPa

Qty. 1 set Overwinding crown saver

Qty. 1 set Cooling system of auxiliary brake

- Volume, water tank: 8m³
- Laying type, water tank: on the ground
- Radiator: JH400KW

Qty. 1 set Deadline anchor JZ200 (with recorder)

4. MAST SYSTEM

4.1 Qty. 1 EA. Mast

Double stage telescoping, raised and telescoped by hydraulic cylinders. A kick-back post is set on the sheave seat to prevent ropes from jumping.

SPECIFICATIONS:

- Mast height: 38m
- Max. static load: 1800kN
- Inclination angle: 3°
- Traveling system: 5×6
- Height, racking board (to rig floor): 17.2m
- Capacity, racking board: 8000m (2⁷/₈" DP)
6500m (3¹/₂" DP)
4800m (4 1/2" DP)
- Max. wind rate: 110km/h (about 10 degrees)
- Finger arrangement on racking board: Horizontal

4.2 Crown block

- Type: TC180

- Max. static load: 1800kN(10 lines)
- Cluster Pulley diameter: 755mm
- Number of cluster pulley: 4
- Fast line Pulley diameter: 895mm
- Number of fast line pulley: 1

4.3 Qty. 1 EA. 4” Standpipe

- Max. working pressure: 35MPa
- ID ϕ 103mm(4”)
- Connection type: Gooseneck connection 4” FIG1003
Standpipe lower end 4” FIG1003

4.4 Qty. 1 EA. 4” Rotary hose

- One for swivel, one for top drive
- Max. working pressure: 35MPa
- Bore size: 4”
- Length: 17m

4.5 Qty. 1 EA. Lightning rod

5. TRAVELING EQUIPMENT

5.1 Qty. 1 EA. Traveling hook

- Model: YG180
- Max.static load: 1800kN
- Diameter of sheaves: 915mm

5.2 Qty. 1 EA. Swivel

- Model: SL225
- Max.static load: 2250kN
- Max. working pressure: 35MPa
- Diameter of washpipe: ϕ 76mm
- Gooseneck connection: 4LP
- Coupling Thread to Kelly: 6 5/8” API REG LH

5.3 Qty. 1 EA. Elevator link

- Model: DH250

- Rated load: 2250KN
- Length: 2700mm

6. ROTARY EQUIPMENT

6.1 Qty. 1 EA. Rotary drive unit

Complete with ATD-318H air thrust disk clutch. gear box can realize 5 forward and 5 reverse.

ATD118H air thrust disk clutch for rotary table brake

6.2 Qty. 1 EA. chain box

Complete with ATD-318H air thrust disk clutch

6.3 ZP275 Rotary table

- Type: ZP275
- Max. static load: 4450kN
- Torque: 27459Nm
- Opening size: $\phi 698.5\text{mm}$ (27.5")
- Max. RPM: 300rpm

- Qty. 1 EA. Master Bushing

Split body square drive master bushing for ZP275 rotary table, complete with lifting sling.

- Qty. 1 EA. Split bushing
Split distance: 3 1/2"

- Qty. 1 EA. Roller Kelly bushing (hex)
Split distance: 3 1/2"

- Qty. 1 EA. Flat bushing
Flat bushing for rotary table

7. Hydraulic system

Hydraulic Pumps:

(1) Gear pump (Circulation pump)

Flow: 165L @ 1200 RPM

Pressure: 2000 PSI

(2) Vane pump (steering pump)

Flow: 26.5L @ 1200 RPM

Pressure: 2000 PSI

Hydraulic Control Manifold and Components:

- Hydraulic reservoir with all accessories.
- In tank return line filter housing and element 40 micron
- valves including relief valve, check valves
- Tank mounted suction filters for pump supply

Qty. 2pcs Mast raising cylinder

- for mast raising up and down

Qty. 2pcs Mast telescoping cylinder

Qty. 4 EA. Hydraulic jacks

- install under carrier front and rear position.

Qty. 2 EA. Cylinder Hydraulic catheads

- Hydraulic catheads mounted in mast.
- Individual hydraulic makeup & breakout cylinders.
- Includes all wire line and all hydraulic piping for the two cylinder catworks.

SPECIFICATIONS

- Breakout Cylinders stroke- 1800mm
- Makeup Cylinders stroke - 1800mm
- Maximum Pull – 80KN at 2,000 PSI

Qty. 2 EA. Hydraulic winch

Hook load : 30 kN×1+50KN×1

Qty. 1 EA. HYD-PIPING

- Hydraulic Piping for Mast and work operating
- For mast and raising/lowering and other hydraulic functions.

8. Air system

- Air system is used for workover rig driving and workover jobs controlling.
- It is equipped with air compressor driven by engine
- All necessary components including fittings, air lines and control valves.

SPECIFICATIONS:

- System working pressure: 0.75 - 0.85MPa
- Capacity, main air reservoir: 0.22m³
- Air compressor Flow rate m³/(r/min): 0.79 (1250RPM)
- Max. displacement, air compressor: 0.67m³/1250r/min

Qty. 1 EA. 0.5t air hoist

- Will be installed on racking board

9. Carrier electrical system

The carrier electrical system consists of driving system and operation lighting system.

Qty. 1 EA. Driving electric system

- Engine start-up, lamp signals of monitoring instrumentations on carrier, and various lights during driving.
- Power for carrier: 24V DC

Qty. 1 EA. lighting system

Location	Qty	Model (220V, 50Hz, AC power)
Mast upper section	4	Fluorescent tube light ex-proof
Mast lower section	4	Fluorescent tube light ex-proof
Rig floor	4	Fluorescent tube light ex-proof
Under rig floor	2	Fluorescent tube light ex-proof
Engine	2	Fluorescent tube light ex-proof
Main Drum	1	Fluorescent tube light ex-proof

Elevation lamp on the crown block	1	Red flash light ex-proof
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Qty. 1 EA. explosion-proof control box

10. DRILLING FLOOR SYSTEM

Qty. 1 EA. 6m substructure

The substructure is folding type. Complete with two sets of ladders (one set to the ground and the other to the carrier), one set of V-door, walkway, handrails, stairs, mouse hole and rat hole and two backup tong posts.

Specification:

- Floor height: 6m
- Clear height: 4.9m
- Transportation height: 2.65m
- Max. load, rotary table: 1800kN
- Setback capacity: 8000m (2 7/8" DP)
6500m (3 1/2" DP)
4800m (4 1/2" DP)
- Area of drill floor: 5.4×8m

11. INSTRUMENT SYSTEM

Qty. 1 set.

- Weight indicator (Hook load and WOB in metric system)

12. MISCELLANEOUS EQUIPMENT

Qty. 1 EA. Drilling line

- Diameter, wireline \varnothing 29mm
- Length 500m

Qty. 1 EA. Winch line

- Diameter \varnothing 14mm

Qty. 1 EA. Winch line

- Diameter \varnothing 15.5mm

Qty. 1 EA. Safety climb assisting device

Qty. 1 EA. Mittelman escape device on racking board

Qty. 1 EA. Local 30m fall arrester TS30

Qty. 1 EA for each. Spare tire (445/65R22.5, 12-20)

Qty. 2 EA. Protective sleeve for raising cylinder

Qty. 1 EA. Loading beam

Qty. 1 EA. Nameplate Chinese and English

13. Consumable parts for main rig

1	Repair kit for electrical apparatus	1
2	Repair kit for right angle gear box	1
3	Repair kit for main drum	1
4	Repair kit for main drum braking system	1
5	Repair kit for brake circulating system	1
6	Repair kit for rotary drive	1
7	Repair kit for rotary table chain box	1
8	Repair kit for crown saver cylinder	1
9	Repair kit for crown-O-matic valve	1
10	Repair kit for jack cylinder	4
11	Repair kit for raising cylinder	2
12	Repair kit for telescoping cylinder	2
13	Repair kit for tong cylinder	2
14	Repair kit for rotary table	1

14. Tools come-along with the rig

S/N	Description and size	Qty.
1	8 nos. double end unadjustable spanner	1 set
2.	8 nos. double offset ring spanner	1 set

3	10 nos. allen wrench	1 set
4	Adjustable spanner 200mm	1 pc
5	Adjustable spanner 300mm	1 pc
6	Adjustable spanner 450mm	1 pc
7	Tire box spanner 32X34	1 pc
8	28 nos. sleeve	1 set
9	Slip joint pliers 200mm	1 pc
10	Nose pilers 150mm	1 pc
11	Circlip pilers 200mm	1 set
12	Pipe wrench 200mm	1 pc
13	Pipe wrench 450mm	1 pc
14	Screw driver 5x150mm	1 pc
15	Screw driver 6x250mm	1 pc
16	Screw driver 1x150mm	1 pc
17	Screw driver 2x250mm	1 pc
18	2 pound ball face hammer	1 pc
19	Hacksaw 300mm	1 pc
20	Steel chisel 150mm	1 pc
21	16t oil jack	1 pc
22	Grease gun 400CC	1 pc
23	Pressure oil can 0.5kg	1 pc
24	Clearance gauge 100mm	1 set
25	Level bar 600mm	1 pc
26	Working lamp	1 pc
27	Tire pressure gauge	1 pc
28	Gas filling hose	1 set
29	Straight clamp plate	2 sets
30	Bent clamp plate	2 sets
31	Long crow bar	1 pc
32	Short crow bar	1 pc
33	Spring location rod	6 pcs
34	Puller	1 set
35	Rubber appliance, stabilizer beam	1 set
36	Chain spanner	1 set

37	Hook spanner (5 in 1)	1 set
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15. Document come-along with the rig

S/N	Description	Language	Qty.
1	Operation and maintenance manual for the rig	English	4
2	Operation and maintenance for the engine	English	1
3	Operation and maintenance for the transmission	English	1
4	Certificate	English	1
5	Packing list	English	2
6	Copy of API certificates	English	2
7	Copy of ISO9001 certificate	English	2
8	Quality assurance report for main components	English	2
9	Operation and maintenance manuals, as well as certificates of outsourcing parts	English	1

16. PUMPS & mud manifold

16.1 1000HP Mud Pump group

Qty: 2 sets

- Triplex single active piston type mud pump
- Each is driven by a diesel engine through V-belt transmission.
- The mud pump and diesel engine are located as an “L” on an oil field skid, V-belt transmission, and the air clutch can realize remote and locate control.

16.1.1. 1000HP Mud Pump

Qty: 2 sets

- Advanced structure, small volume, high reliability and easy for maintenance
- API 6# valves adopted, suction valves and discharge valves can be interchanged.
- The hydraulic cylinder is alloy steel forged.
- The 3 hydraulic cylinders of every pump can be interchanged.
- Cylinders are straight way type, namely a kind of valve-over-valve structural design,

it has reduced the bulk volume of cylinders and has improved the internal volume efficiency.

- Pressure and splash lubrication.
- KB75-5000Psi. pulsation dampener
- JA-3 shear-pin relief valve with 3” relief line.

Specification

- Maximum liner dia. x stroke: 170x254mm
- Rated strokes: 140spm
- Nominal power ratings 1000HP
- Gear type : herringbone gear
- Gear velocity ratio: 4.207:1
- Lubrication: pressure & splash
- Valve pots: valve over valve, API #6
- Valve cover: screw type
- Liner lock: Screw type, Metal to metal
- Maximum working pressure: 35Mpa
- Maximum discharge capacity: 43.24 L/S
- ID of discharge pipe: 5”
- ID of suction pipe: 12”
- Liner size and displacement:

Φ170mm	43.24 L/s
Φ150mm	33.66 L/s
Φ130mm	25.29 L/s

16.1.2. Diesel engine

Qty: 2 sets

- Model: G12V190PZL3
- Output power: 960kw
- Rating rotary speed: 1500rpm

16.1.3. Transmission accessories

Qty: 2 sets

- Skid of Diesel
- Extended Skid
- Local Air Control System
- 20CB500 air clutch
- Input Shaft Shaft Coupling Assy.

- Belt Pulley
- Combined V-Belt
- Other accessories, such as adjustable and tension bolt, guard and support, etc.

16.2 Short hose

- Diameter: $\Phi 103 \text{ mm}(4\text{'})$
- Working pressure: 35MPa (5000 psi.)

16.3 Mud manifold

- Diameter: $\Phi 103 \text{ mm}(4\text{'})$
- Working pressure: 35MPa (5000 psi.)

17. Solid control system

- The system consists of three main mud tanks.
- Each tank base is equipped on oil field type skid and with oil field type skid ends.
- Tank Side, end walls and partition plate V type crimp design.
- Tank walls rimed with mud gun pipeline, water pipeline, grout pipeline.
- Tanks connection is hammer seal pit union type.
- Overall dimension for all tanks are as annex drawings to ensure the safety transmission by railway or road.
- All AC motors are explosion proof type.
- Total effective capacity: 150m^3 ,

17.1 Shale shaker tank

- Effective capacity: 35m^3
- Equip with two shakers and one desander.
- The bottom of the tank lefts the output pipeline for wellhead pipeline and mud. The surface of tank should lefts sidewalk for people.
- The body of tank consists of three compartments: setting sand compartment, trip compartment, desander compartment. Each compartment is with sand removal door, water clean outlet.
- Capacity of desander compartment is 30m^3 .
- One 15KW agitator is fixed on its top. The top of the tank is closed. One mud gun and one desander.
- Capacity of trip compartment is 5m^3 .
- A liquid measure meter is fixed on one side of the tank (the dial have two units m^3 and bbl). The tank is equipped an alarm for mud level. One set of SB3"x4"-9" metering pump is installed on tank end.

- Trip compartment has a mud gun.
- One 55KW supply pump is fixed at the right (look from drill hole) of the tank. They are used to supply drilling mud for desander.

17.2 Intermediate tank

- Effective capacity: 60m³
- The tank is separated into two parts, consisting of suction compartment and reserve compartment. One 15KW agitator, one mud gun, sand removal door, clean water outlet in each compartment.

17.3 Suction tank

- Effective capacity: 55m³
- Two mud pump absorbing inlets (12") are fixed on the tank side.
- The tank consists of two compartments.
- Two sand discharge gates, two 15KW agitators, two mud guns and two clean water outlet are fixed on this tank.
- A super-charging cell is fixed before the tank. Two super charging pumps are installed in it (include filters of two pumps), installed with mud pump skid.
- The left side of the tank installs one mixing pump.
- The head of the end installs one mixing hopper in order to reusing the mud.

17.4 Solids control equipment

17.4.1 Shale shaker

- Qty: 2set; Model: ZS/Z-1;
- Handling capacity: 40~50 L/S

17.4.2 Desander

- Qty: 1 set
- Model: CSQ250X2
- Capacity: 200m³/h

17.4.3 Sand pump

- Model: SB6"×8"-12-1/2"
- Capacity: 200m³/h
- Lift: 35m
- Ac motor power: 55KW
- Quantity: 2

- 1 for desander and 1 for mixing hopper.

17.4.4 Sand pump

- Qty: 1 set
- Model: SB3"x4"-9"
- Capacity: 80m³/h
- Ac motor power: 11KW

17.4.5 Agitators

- JB/W-15 5 sets
- Power 15 kW
- Impeller size 900 mm

17.4.6 Mud guns

- Bottom mud guns 6 sets
- Jet size 2" nozzle

17.4.7 Mixing hopper

- Qty: 1 set
- Model: SL200
- Capacity: 210m³/h

18. Manual tongs

- **Q86-324/75 manual tongs for casing**
- Handling range: 3-3/8"~12-3/4"
- Max. torque: 75 kN.m

19. Kelly

5.1/4" Kelly, hex, length 40ft, 6.5/8" reg LH by NC 50 connection

20. Bit breaker

20.1 Bit breaker adapter, suitable for being installed in the 27-1/2" rotary table

20.2 Bit breaker for 12-1/4" drill bit

20.3 Bit breaker for 8-1/2" drill bit

20.4 Bit breaker for 6" drill bit

21. Electrical system

21.1 Generator 2sets

- Engine model: CAT C18
- Rated speed: 1500 rpm
- Rated power: 480kW
- Voltage: 400V
- Current: 853A
- Frequency: 50Hz
- Use 24V maintain-less storage battery, started by electric motor

21.2 Main switchboard (Generator cabinet) 2 sets

CAT		
S/N	Description	Technical specification
1	Air circuit breaker	ABB
2	Breaker capacity	1000A
3	Automatic control system	Volvo EDCIII
4	Automatic synchronizer	America GAC
5	Automatic load distributor	America GAC
6	Emergency stop switch	YES
7	Ammeter	YES
8	Voltmeter	YES
9	Power meter	YES
10	Power factor meter	YES
11	Frequency meter	YES

21.3 Motor Control Center

Container type MCC house, suitable for oilfield, can be hoisted and transported as an integral. With the features of fireproof, sand prevention, antiknock, watertight and heat preservation etc. The indoor temperature is 17°C~27°C. The MCC house is equipped with 220V socket, lighting control box, fluorescent and emergency lamps with enough luminance. The floor is covered with insulating rubber slab. The house body is white.

The technical standard of MCC house is as per NEMA, IEC standard. Working voltage: 380/220V, working frequency: 50HZ, equipped with multi-way independent control switch, the MCC cabinet uses GCS type with 3-phase 4-wire system. The breaker, contactor and

thermal relay use SCHNEIDER products. The 380V, 50HZ power supply for all the motors in well site are provided by MCC house. The motors in solid control system with power below 37KW do not need to be centralized controlled via MCC house, only 3-phase power supply is provided, such as agitator, shale shaker etc. These motors will be controlled via local explosive-proof magnetic starter. The motors with power above 37KW will be started by soft starter, such as charging pump and sand pump etc. These motors adopt two-place control (MCC house control or local control). All the motor control circuit is with overloading and short circuit protection. The MCC provides one way power supply (380V/150A 3-phase 4-wire system) to each mud tank. The spray pump motor on charging pump is controlled via MCC, the metering pump is controlled locally or at driller's house. Backup interfaces for 3-phase power supply and single-phase power supply are retained in MCC house, the interfaces meet the explosive-proof requirements.

MCC distribution list:

Control mode introduction: **HOA** = manual– stop – automatic
 3WRC = soft start, 3-line remote control
 DS= direct-on starting
 CB= Circuit breaker

S/N	Description	Capacity	Voltage	Qty.	Control
1	Charging pump	55KW	380V	2	3WRC
2	Desilting pump	55KW	380V	1	3WRC
3	Desanding pump	55KW	380V	1	3WRC
4	Mixing pump	55KW	380V	2	3WRC
5	Backup	55KW	380V	3	3WRC
6	Spray pump	2.2KW	380V	2	DS
7	Mud tank area	150AF/150AT/3P	380V	3	CB
8	Main rig power supply	100AF/100AT/3P	380V	1	CB
9	Diesel tank	100AF/25AT/3P	380V	1	CB
10	Air compressor	100AF/100AT/3P	380V	2	CB
11	Combined HPU motor	150AF/150AT/3P	380V	1	CB
12	Lighting panel	150AF/150AT/3P	380V	1	CB
13	Water tank	100AF/63AT/3P	380V	1	CB
14	Power supply of well control house	100AF/63AT/3P	380V	1	CB
15	Power supply of mud pump	63AF/25AT/3P	380V	2	CB

16	Power supply of air source house	63AF/60AT/3P	380V	1	CB
17	Power supply of driller's house	63AF/63AT/3P	380V	1	CB
18	Backup	150AF/150AT/3P	380V	2	CB
19	Backup	100AF/100AT/3P	380V	2	CB
20	Backup	100AF/63AT/3P	380V	2	CB
21	Backup	60AF/25AT/3P	380V	2	CB
22	Backup	25AT/1P	220V	5	CB
23	Backup	16AT/1P	220V	5	CB

21.4 Oil field standard lightening system

- Explosion proof: acc. to API standard (RP 500B).
- Ambient temperature between (-20 to +50) oC and in a windy and dusty desert atmospheres with relative high humidity up to 90% (at 20 oC)
- Explosion proof control box is made of Aluminium.
- All cable are type to resist heat & oil & acids.
- Complete earthing system
- Rated voltage: 380/220V(3 phase, 4 wire)
- Rated frequency: 50Hz

Includes all the control devices and cables of AC equipments. The ground cables from MCC to solid control system and the ground cables from MCC to main rig area will equipped with groove, used for protecting the cables. All the lighting circuit and lamps installation (mast, substructure, carrier, circulating tank, oil and water tank, mud tanks etc.), The lighting fixtures use explosive-proof fluorescent lamp. The height of lamp bracket on solid control area can be adjusted and can be laid down when transportation. The lighting cables on mast and substructure should be covered with galvanized pipes. The explosive-proof cabinet will be arranged reasonably. All the explosive-proof electrical apparatus in the wellsite should be equipped with airproof sealing adapters, the antihazard classification is ExdIIBT4, and the protection grade can meet IP55 specification.

21.5 Supply scope

S/N	Qty.	Description
1	1 set	MCC house

2	1 set	Generator house
3	2 sets	Generating set
4	2 sets	Generating set control cabinet
5	1 set	incoming cubicle
6	2 sets	MCC cabinet
7	1 set	Lighting panel
8	1 set	Power and control cables
9	1 set	Plug cabinet
10	1 set	Wellsite explosion-proof circuit
11	1 set	Cable groove
12	3 sets	Soft starting cabinet
13	2 sets	1.5P air conditioner

22. Air supply system

22.1 Screw type Air Compressor

- Qty: 1 set
- Rated power: 22 KW
- Work pressure: 1MPa
- Air production: 3 m3/min

22.2 Dryer

- Qty: 1 set
- Rated power: 1.2KW
- Work pressure: 1MPa

22.3 Air storage tanks

- Qty: 1 sets
- Volume: 3m3
- Work pressure: 1 MPa