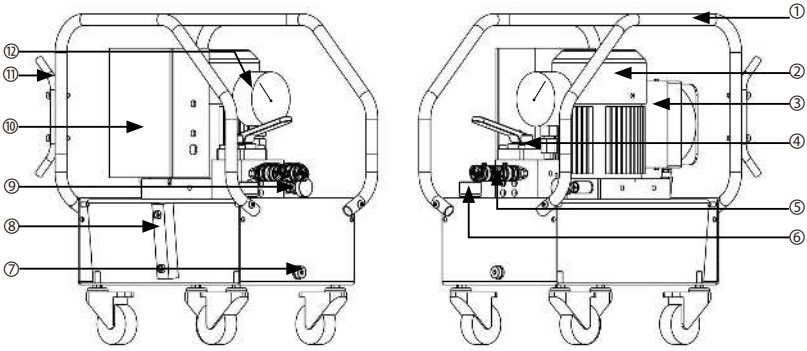
EDP2000-10 Product Components:



NO	Name
1	Protected Framework
2	Power-Driven Machine
3	Air Cooling Radiator
4	Manual Directional Valve
5	Quick Interface
6	Refueling And Exhaust Outlet
7	Oil Outlet
8	Oil Level Gauge
9	Relief Valve
10	Electric Cabinet
11	Cable Collector
12	Manometer

Component Function Introduction:

Control handle

The EDP2000-10 is equipped with a single-button handle. The start and stop of the pump are controlled by the control handle. The handle comes standard with a non-preserved button. Pressing the button starts the motor, and releasing it stops the motor. Once the pressure is reached, release the button; if additional pressure is needed, restart the pump. Do not run for long periods after reaching the pressure, as this can cause overheating or damage.

Overflow Pressure Regulating Valve

Before use, adjust the system pressure through the overflow control valve first, then connect the tool to prevent excessive pressure from damaging it. Loosen the locking nut on the overflow valve and rotate it counterclockwise a few times to ensure that the current pressure is below the target pressure. Press the handle button to start the motor, and the pressure begins to build up. Continue pressing the button while rotating the overflow control valve clockwise to the target pressure, then tighten the locking nut.

Manual Directional Valve

The manual directional control valve can adjust the oil flow direction in the hydraulic system, and has three gears: A, hold (hold pressure), and B. When A is in gear A, the oil outlet of A is pressurized to supply pressure to the actuator; when B is in gear B, the oil return is depressurized to 0.

Hold (hold pressure) the valve, the directional control valve cuts off the oil passage, the oil in port A and B is closed, the system pressure is stable, and the system enters the hold pressure state.

When B is in the file, the oil flow changes direction, the oil outlet of B builds pressure, and the return oil of A unloads to 0.

Refueling And Exhaust Outlet

This port is a non-sealed port, and the slight leakage of hydraulic oil during transportation is normal. The exhaust plug should be installed when using to ensure good ventilation of the tank.

▶ Oil Level Indicator

Before starting, check the pump's oil level; it should be above 2/3 of the upper gauge. If the oil level is too low, prolonged operation without oil can affect the lifespan of the pump head and impair its normal use, potentially damaging the motor. When hydraulic oil is insufficient, open the filler port and inject the same type of anti-wear hydraulic oil as the original pump.
(it is recommended to use hydraulic oil with grade ISO VG46).
The oil level should be observed after all the actuating elements have returned to their positions.

▶ Product usage steps:

1.Preparation Before Use

-Check all parts (frame, motor, pressure gauge, etc.) are undamaged, the feet are stable, and the connection is not loose.

-Check the rated voltage (EDP2000-10 electric ultra-high pressure pump has a rated voltage of 380V)

Check the electronic control box to determine the rated.

◆After confirming that the voltage is consistent, use a power socket in accordance with specifications to connect reliably. If the voltage is not consistent, do not force the adapter connection to avoid burning out the motor or causing short circuit

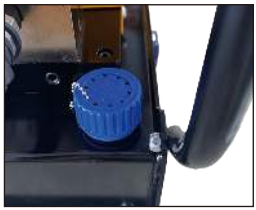
-Check the hydraulic oil level of the pump. The oil level should be above 2/3 of the upper oil gauge. When the hydraulic oil is insufficient, open the filling port and inject the wear-resistant hydraulic oil of the same model as the original pump (it is recommended to use the hydraulic oil grade ISO VG46). The maximum filling amount is the top of the oil gauge.

Hydraulic oil level

If the oil level is lower than 2/3 of the upper oil gauge scale line,the outlet plug should be removed and the hydraulic oil replenishment operation should be performed.

-Install the exhaust plug, align the exhaust plug with the fuel filling exhaust port, and then rotate it slowly in a clockwise direction until it is tightened to the appropriate degree. Ensure that the tank ventilation function is maintained; replace the exhaust plug during handling or transportation, and reinstall the sealing plug to ensure that it is sealed to prevent oil leakage.

Exhaust plug


Install the exhaust plug

◆If the exhaust plug is not installed to discharge air, it will seriously affect the normal operation of the equipment. The internal air in the oil tank will cause pressure fluctuation and flow deviation, causing component wear and failure, reducing the smoothness and accuracy of operation.

2.Start And Pressure Setting

-Turn on the power supply, press the motor switch button of the handle, touch the generator to run, and check whether the motor is running normally.


Press the motor start button (A) to start the motor.

When the equipment is powered on, the motor does not respond when the operation motor start button is pressed. This indicates that the power phase sequence error causes the motor to be out of phase or the reverse protection is triggered.

Solution: Cut off the power supply first, switch the two live wires of the external power supply, then reconnect the power supply, and press the motor switch button again, the motor can start normally.

-Set the working pressure

-Setting of working pressure (Setting pressure at port A)

Preparations: Before pressure adjustment, make sure the pump is not connected to tools or other hydraulic equipment.

Initial adjustment: rotate the locking nut on the relief valve counterclockwise to the release state, and rotate the relief valve counterclockwise several times to ensure that the real-time pressure is lower than the target pressure.

Start and observation: After connecting the power supply, press the motor start button on the control handle, the motor starts, switch the manual directional valve to A gear, and the A port begins to press to establish.

Switching and voltage regulation:

-Set target pressure:

•Continue to press the control handle button and slowly rotate the relief valve clockwise until the pressure gauge shows the target pressure.

•Maximum pressure limit: EDP2000-10 rated pressure is 2000bar.

◆ The pump pressure can only be adjusted from low to high, not in reverse. If the pressure needs to be adjusted from high to low, unloading is required first. The relief valve pressure should be adjusted below the target pressure, and then the relief valve should be repressurized to the target pressure.

-Pressure holding verification:

• Loosen the handle button, switch the hand control directional valve to the middle position, and the system automatically maintains pressure after the motor stops.

◆If overpressure occurs, switch the hand-controlled directional valve to "B" and readjust after the pressure at port A drops to 0.

◆In the state of pressure preservation, adjusting the relief valve counterclockwise does not affect the outlet pressure.

Locking and closing:

- Lock the nut on the relief valve.

◆The operating method of setting pressure at port B is similar to the operating method mentioned above.

Loosen the locking nut to adjust the overflow pressure.

Slowly open the unloading valve when depressurizing,and reduce the system pressure to the pressure indicator number 0.

-**Connect the extender**, and install a CEJN female (or male) fitting at the outlet. The outlet thread is G1/4, with standard plug. The rated pressure of the electric pump is 2000 Bar.

Retreat of the outer lock ring: Push the outer lock ring of the joint axially backward to make the joint in a state of connection.

Axial alignment insertion: Keep the tubing and fitting aligned axially, and slowly and smoothly insert the tubing into the fitting along the axial direction.

Forward push rotation lock of the outer lock ring: When the tubing is fully inserted into the joint, push the outer lock ring forward along the axial direction until the outer lock ring reaches the locking position and is firmly locked. The fixing condition of the outer lock ring can be checked by pushing it appropriately to ensure that it is locked in place.

The outer lock ring is pushed back, and the oil pipe is fully pushed into the outlet by axial alignment.

After pushing the oil pipe, push the outer lock ring forward and rotate it clockwise to lock.

◆The EDP2000-10 ultra-high pressure electric pump must be connected to the same or higher pressure and matching joints or hoses when in use. Connecting to a joint or hose with a lower pressure rating may cause the joint to fly out or the oil pipe to break, thus causing personal injury to the user.

3.Operation And Adjustment Of Work

-Start the electric pump, confirm that the pressure has been set and the load equipment connection is correct, press the motor start button on the control handle, start the electric pump.

-When the pressure exceeds the target range, open the unloading valve to perform unloading operations until the pressure drops to 0. Then, readjust the target pressure according to the set pressure method.

- A check valve is configured between the pressure regulating valve and the oil outlet. The pressure can only be adjusted in sequence from small to large and cannot be adjusted in reverse.
- The operation method of overpressure in port B is similar to that mentioned above.

-EDP2000-10 ultra high pressure pump is equipped with three-four way manual directional valve. The three-four way directional valve can realize double oil outlet, and the middle position can be selected as O/M type.

-Use the manual directional valve to adjust the direction of oil flow in the hydraulic system. There are three positions to choose from: A, hold (hold pressure), and B.

- When A is open, oil is discharged from port A to build pressure and supply pressure to the actuator; oil is discharged from port B to unload pressure to 0.
- Keep (hold pressure) the valve, the directional control valve cuts off the oil passage, the oil in ports A and B is closed, the system pressure is stable, and the system enters the hold pressure state.
- When B is in the third gear, the oil flow changes direction, the oil outlet of B builds pressure, and the return oil of A unloads to 0.

The third gear switching can flexibly control the working state of the system.

The hand-controlled directional valve has two working oil ports A and B. Push the valve stem to the corresponding gear to realize the switching of oil direction.

4.Monitoring During Operation

-Pressure monitoring: pay real-time attention to the pressure gauge value, and stabilize the working pressure of the system at the target value by fine-tuning the overflow pressure regulating valve, so as to ensure that the pressure fluctuation is controlled within the target value range.

-Oil level monitoring: continuously observe the oil level of the oil gauge. If the oil level is lower than 1/3, stop the machine immediately. After the equipment is cooled, slowly inject an appropriate amount of ISO VG46 anti-wear hydraulic oil through the oil filling and exhaust port to restore the oil level to the normal range. During the oil filling process, pay attention to avoid impurities mixing into the hydraulic oil..

5.Release Pressure And Shut Down

-Close the motor: After the work is completed, press the motor stop button on the control handle first, close the motor, then cut off the power supply, pull out the power plug, and ensure that the equipment is completely powered off.

-Cut off the oil line: slowly open the unloading valve to reduce the system pressure to the pressure indicator 0. Achieve the unloading of the system.

-Remove the hydraulic line: After the system pressure has completely dropped to 0 and the actuator has fully returned, carefully remove the hydraulic line. When removing the line, be cautious to avoid splashing any remaining hydraulic fluid inside, which could cause injury or contaminate the work environment. After removing the line, store it properly for future use.

Troubleshooting:

Troubleshooting Guide		
Issue	Possible causes.	Solution
1. The pump does not start	Not connected to a power source.	Check whether the circuit is connected normally and restart.
	The electrical circuit of the pump is short-circuited or tripped.	Check whether the circuit is connected normally and restart.
	The voltage is too low.	Check the voltage and turn off other electrical loads.
	The socket cord is too long and too thin	Replace the high-power socket strip
	The handle button is damaged.	Contact the manufacturer for repair.
	Pump components are damaged.	Contact the manufacturer for repair.
2. The motor stops during pressurization	The voltage is too low.	Check the voltage and turn off other electrical loads. Replace the strip and check the input voltage.
	Current overload	Check the system for large damping terms that are causing overpressure.
3. The pump is not pressurized or the upper pressure is too low	Insufficient amount of oil.	Check the oil level and inject new hydraulic oil.
	Leakage from the outside of the pump.	Observe leaks and carry out repairs or replacement of accessories.
	The hydraulic oil is too dirty and blocking the suction port.	Change the hydraulic oil and clean the suction port.
	Leakage inside the pump.	Contact the manufacturer for repair.
	System leaks.	Check for system leaks and repair them.
4. The system establishes pressure, and the tool does not move	Overloaded.	Check and select the right load.
	System congestion.	Check if the system is clogged and unblock the system.
5. The flow is too small	The hydraulic oil is too dirty and blocking the suction port.	Change the hydraulic oil and clean the suction port.
	There is a throttle valve in the system	Adjust the throttle flow.
	System congestion.	Check if the system is clogged and unblock the system.
6. The tool cannot be returned normally	The tool backstroke has a large damping	Check and remove the large damping term.
	The system has a return throttle valve.	Check the system and adjust the throttle valve.
	The system throttle valve adjustment is smaller.	Check the circuit and readjust the flow valve.
	Motor failure.	Contact the manufacturer for repair.
7. Severe fever	The system throttle valve adjustment is smaller.	Check the circuit and readjust the flow valve.
	Motor failure.	Contact the manufacturer for repair.