

## Hydraulic round filter press

### Description

Junyi series round type filter press is a high pressure filter ( at 1.0---2.5Mpa). It has the feature of higher filtration pressure and lower moisture content in the cake.

### Application Industries

Solid-liquid separation for stone wastewater, ceramics, kaolin, bentonite, activated soil, building materials and other industries.

### Product Features

A. **Filtration pressure:** 2.0Mpa

B. **Discharge filtrate method - Open flow:** The filtrate flows out from the bottom of the filter plates.

C. **Choice of filter cloth material:** PP non-woven cloth.

D. **Rack surface treatment:** When the slurry is PH value neutral or weak acid base: The surface of the filter press frame is sandblasted first, and then sprayed with primer and anti-corrosion paint. When the PH value of slurry is strong acid or strong alkaline, the surface of the filter press frame is sandblasted, sprayed with primer, and the surface is wrapped with stainless steel or PP plate.

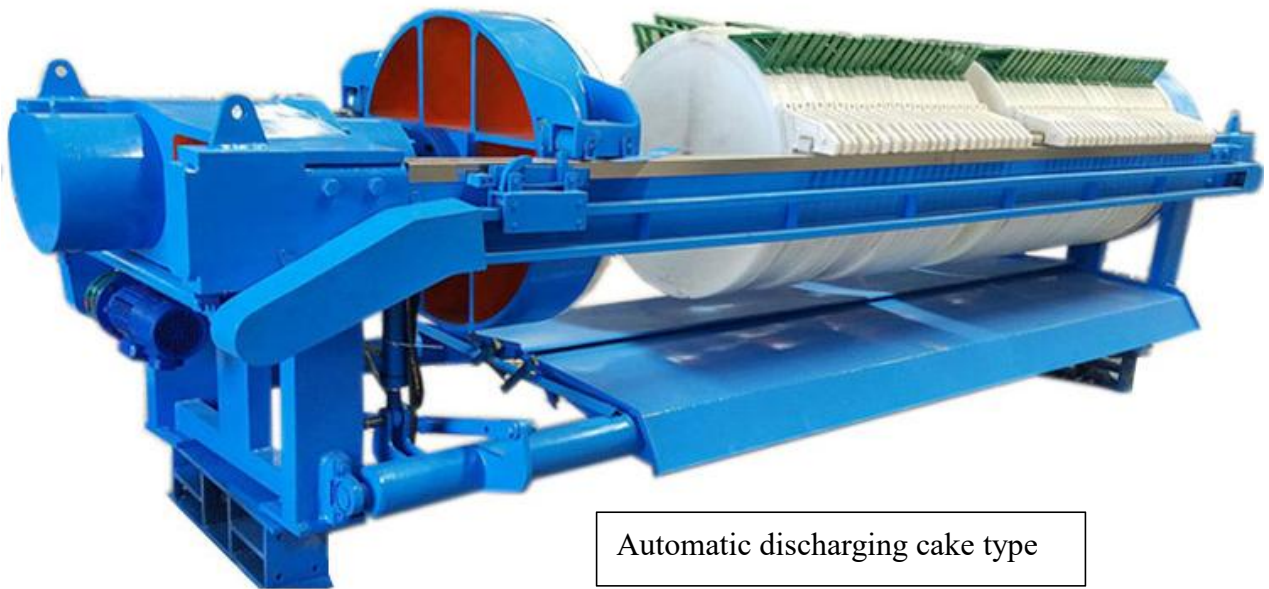
**Circular filter press operation:** Automatic hydraulic pressing, manual or automatic pull filter plate when discharging cake.

Optional devices of filter press: Drip tray, cake conveyor belt, water sink for receiving filtrate, etc.

E. **Circle filter press supporting the choice of feed pump:** High-pressure plunger pump, please email for details.



Manual discharging cake type

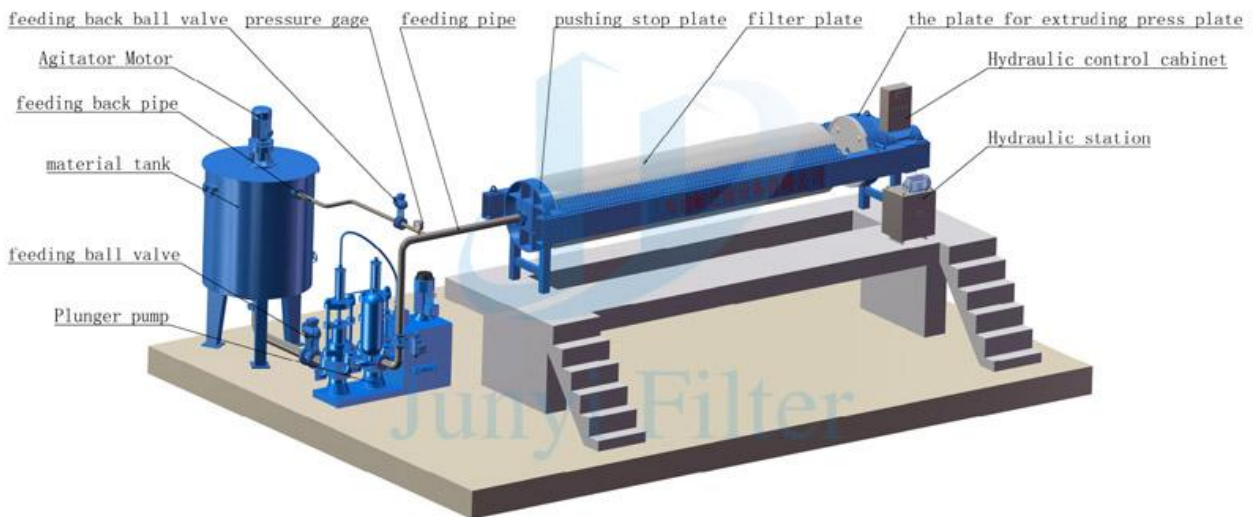
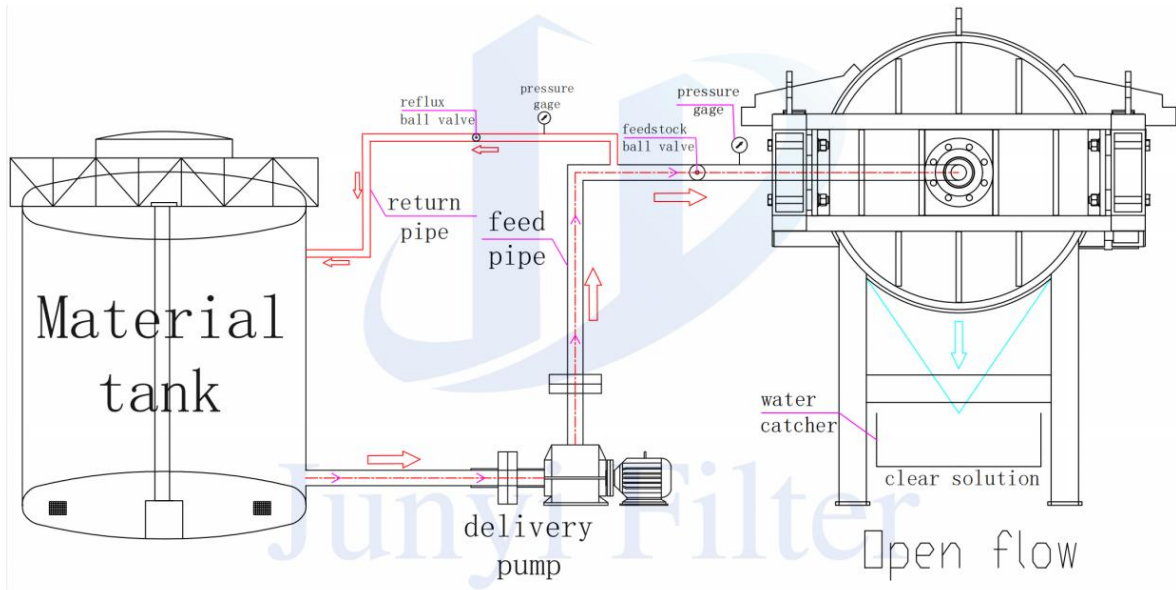


Automatic discharging cake type

Filter Press Model Guidance

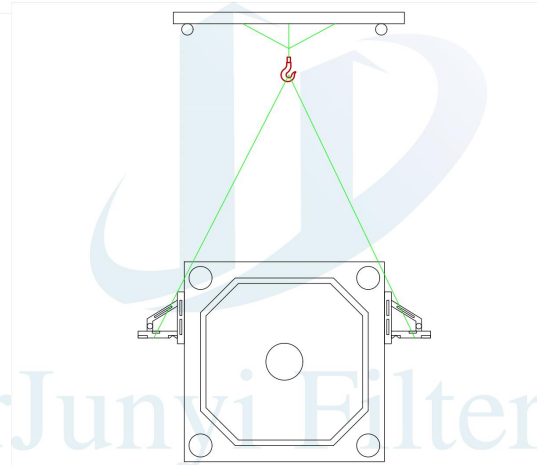
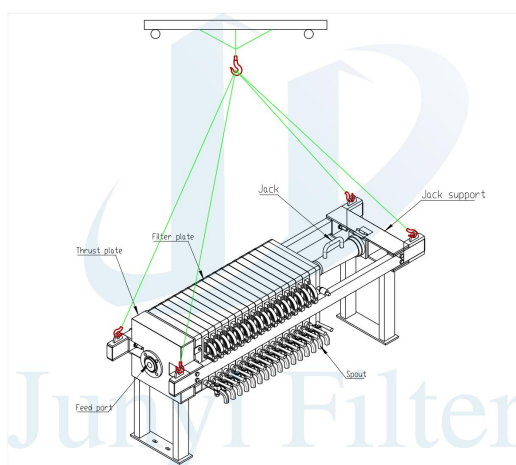
Liquid name	Solid-liquid ratio (%)	Specific gravity of solids	Material status	PH value	Solid particle size (mesh)
Temperature (°C)	Recovery of liquids/solids	Water content of filter cake	Working hours/day	Capacity/day	Whether the liquid evaporates or not

## Feeding process

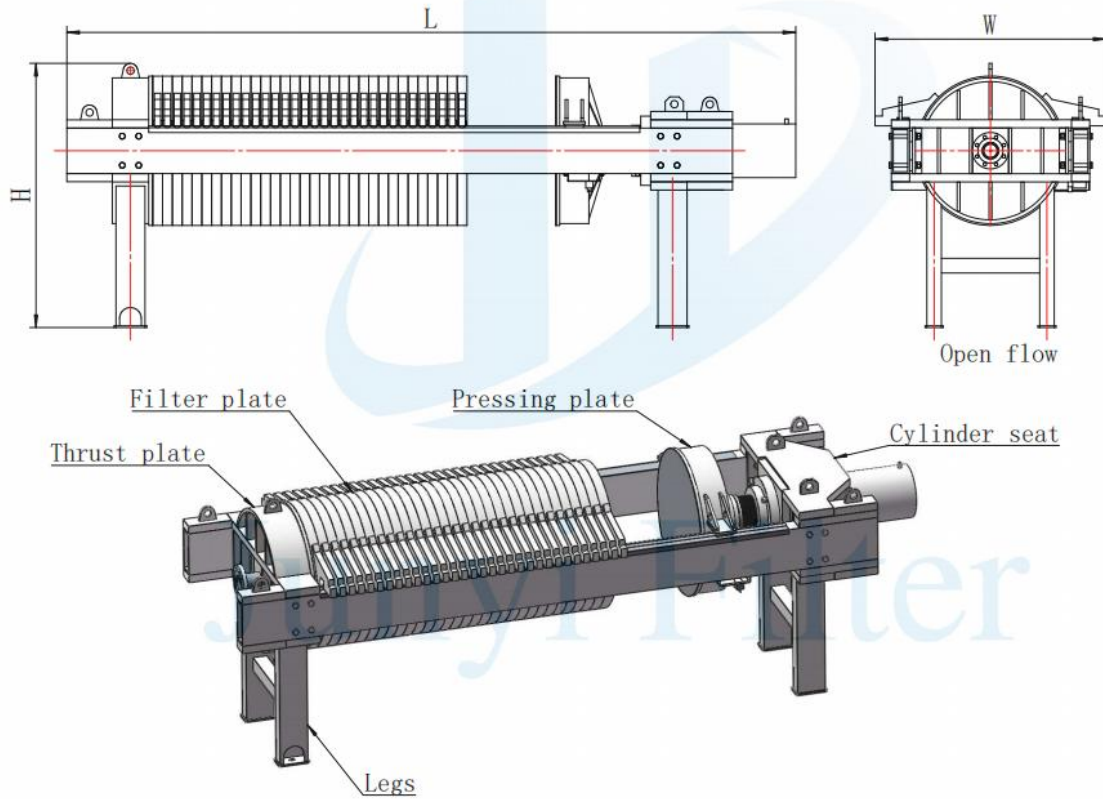


## Hoisting diagram of filter press

## Filter board hoisting diagram



## Dimension Drawing of Circular filter press



## Technical parameter

Model	Filter area (m <sup>2</sup> )	Plate Size (mm)	Chamber volume (L)	Plate Qty (pcs)	Weight (Kg)	Motor Power (Kw)	Overall dimension (mm)			Inlet	Outlet
							Length (L)	Width (W)	Height (H)		
JYFPRA30/800	30	Φ 800	377	30	3590	4.0	3780	1200	1100	DN80	G1/2
JYFPRA40/800	40		499	40	4554		4300				
JYFPRA60/800	60		750	60	5600		5340				
JYFPRA80/800	80		1160	80	6860						
JYFPRA60/1000	60	Φ 1000	790	45	4510	5.5	4705	1500	1400	DN80	G3/6
JYFPRA80/1000	80		1030	60	4968		5500				
JYFPRA100/1000	100		1320	76	5685		6348				
JYFPRA90/1250	90	Φ 1250	1160	41	7687	7.5	4905	1800	1600	DN100	G
JYFPRA130/1250	130		1700	60	8777		5950				
JYFPRA160/1250	160		2090	74	10490		6720				
JYFPRA200/1250	200		2550	92	13060		7710				
JYFPRA120/1500	120	Φ 1500	1550	37	13636	11.0	5150	2200	1900	DN1250	G1
JYFPRA180/1500	180		2350	57	17134		6350				
JYFPRA230/1500	230		3000	73	19466		7310				
JYFPRA300/1500	300		3900	85	24130		8030				



## Requirements for use of filter presses

1. According to the process requirements to make pipeline connection, and do water inlet test, detect the air tightness of the pipeline;
2. For the connection of the input power supply (3 phase + neutral), it is best to use a ground wire for the electric control cabinet;
3. Connection between control cabinet and surrounding equipment. Some wires has been connected. The output line terminals of the control cabinet are labeled. Refer to the circuit diagram to check the wiring and connect it. If there is any looseness in the fixed terminal, compress again;
4. Fill the hydraulic station with 46 # hydraulic oil, the hydraulic oil should be seen in the tank observation window. If the filter press operates continuously for 240 hours, replace or filter the hydraulic oil;
5. Installation of cylinder pressure gauge. Use a wrench to avoid manual rotation during installation. Use an O-ring at the connection between the pressure gauge and the oil cylinder;
6. The first time the oil cylinder runs, the motor of the hydraulic station should be rotated clockwise (indicated on the motor). When the oil cylinder is pushed forward, the pressure gauge base should discharge air, and the oil cylinder should be repeatedly pushed forward and backward (the upper limit pressure of the pressure gauge is 10Mpa) and air should be discharged simultaneously;
7. The filter press runs for the first time, select the manual state of control cabinet to run different functions respectively; After the functions are normal, you can select the automatic state;
8. Installation of filter cloth. During the trial operation of the filter press, the filter plate should be equipped with filter cloth in advance. Install the filter cloth on the filter plate to ensure that the filter cloth is flat and there are no creases or overlaps. Manually push the filter plate to ensure that the filter cloth is flat.
9. During the operation of the filter press, if an accident occurs, the operator presses the emergency stop button or pulls the emergency rope;

## Main faults and troubleshooting methods

Fault phenomenon	Fault Principle	Troubleshooting
Severe noise or unstable pressure in the hydraulic system	1. The oil pump is empty or the oil suction pipe is blocked.	Oil tank refueling, solve suction pipe leakage
	2. The sealing surface of the filter plate is caught with misc.	Clean sealing surfaces
	3. Air in the oil circuit	Exhaust air
	4. Oil pump damaged or worn	Replace or repair
	5. The relief valve is unstable	Replace or repair
	6. Pipe vibration	Tightening or reinforcing
Insufficient or no pressure in the hydraulic system	1. Oil pump damage	Replace or repair
	2. Pressure adjusted incorrectly	recalibration
	3. Oil viscosity is too low	Replacement of oil
	4. There is a leak in the oil pump system	Repair after examination
Insufficient pressure during compression	1. Damaged or stuck high pressure relief valve	Replace or repair
	2. Damaged reversing valve	Replace or repair
	3. Damaged large piston seal	replacement
	4. Damaged small piston "O" seal	replacement
	5. Damaged oil pump	Replace or repair
	6. Pressure adjusted incorrectly	recalibrate
Insufficient pressure when returning	1. Damaged or stuck low pressure relief valve	Replace or repair
	2. Damaged small piston seal	replacement
	3. Damaged small piston "O" seal	replacement
Piston crawling	Air in the oil circuit	Replace or repair
Serious transmission noise	1. Bearing damage	replacement
	2. Gear striking or wearing	Replace or repair
Serious leakage between plates and frames	1. Plate and frame deformation	replacement
	2. Debris on sealing surface	Clean
	3. Filter cloth with folds, overlaps, etc.	Qualified for finishing or replacement
	4. Insufficient compression force	Appropriate increase in compression force
The plate and frame are broken or deformed	1. Filter pressure too high	turn down the pressure
	2. High material temperature	Appropriately lowered temperatures
	3. Compression force too high	Adjust the compression force appropriately
	4. Filtering too fast	Reduced filtration rate
	5. Clogged feed hole	Cleaning the feed hole

	6. Stopping in the middle of filtration	Do not stop in the middle of filtration
The replenishment system works frequently	1. The hydraulic control check valve is not tightly closed	replacement
	2. Leakage in the cylinder	Replacement of cylinder seals
Hydraulic reversing valve failure	Spool stuck or damaged	Disassemble and clean or replace the directional valve
The trolley can't be pulled back because of the back and forth impact.	1. Low oil motor oil circuit pressure	adjust
	2. The pressure relay pressure is low	adjust
Failure to follow procedures	Failure of a component of the hydraulic system, electrical system	Repair or replace symptomatically after inspection
Diaphragm damage	1. insufficient air pressure	Reduced press pressure
	2. Insufficient feed	Pressing after filling the chamber with material
	3. A foreign object has punctured the diaphragm.	foreign matter removal
Bending damage to main beam	1. Poor or uneven foundations	Refurbish or redo

Note: Above data for reference, we also accept customization.

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