# BELT PRESS





### YUON CHY TRADING COMPANY LIMITED

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## STAINLESS STEEL BODY

# EIGHT ADVANTAGES

#### 1.AUTOMATIC OPERATION

Timer control to allow continuous operation for present period .No operator required during the operation except for preparation of a polymer solution.

#### 2.WIDE APPLICATION

Suitable for all types of sludge irrespective of whether the sludge is organic or inorganic in nature.

#### 3.ROTARY THICKENER

This patented thickener will help to concentrate the incoming conditioned slurry by removing the excessive water. This will increase the dewatering capacity by more than 35-40% compared to the conventional belt press.



**Rotary Thickener** 



**Belt Screw Tension Adjustment** 



**Belt Air Tension Adjustment** 



Mechanical Valve

## STAINLESS STEEL BODY



**Track Adjustment** 



**Brush Device** 



The belt press is equipped with the built-in automatic tension adjustment system and also the alignment setting system.



**Brush In Spray Nozzle** 



**Emergency Stop Device** 

## 5.SELF-CLEANING MECHANISM

The belt will be automatically sprayed with water so as to maintain the belt clean all the time. Minimum water is required. When the spray nozzles are clogged, just turn the red button to clean out the obstruction.

#### **6.LOW POLYMER CONSUMPTION**

Minimum polymer is required to condition the sludge before dewatering.

## 7.LOW OPERATION AND MAINTENANCE COST

The belt press is constructed with a stainless steel structure and rollers. Low power is required to run the belt press.



The belt press is equipped with emergency stop device and a safety alarm system.



**Belt Limit Protect Device** 



Control Panel

## PROCESS DESCRIPTION

#### SLUDGE CONDITIONING-

Polymer is injected into the thickened sludge so as to make larger floc of sludge. The type of polymer to be used depends on the nature of the sludge.

#### SLUDGE THICKENER

Normally the sludge is further concentrated by the gravity thickener to about 2% solid content before it is pumped to the belt press for dewatering.

#### SLUDGE CAKE

The dewatered sludge normally has a water content of between 68-83%, depending on the types and nature of sludge.

#### ROTARY THICKENER

The conditioned sludge is first fed to the rotary thickener of the belt press. The purpose of the rotary thinkener is to remove the excessive free water quickly so as to further thinken the sludge.

#### GRAVITY DEWATERING

When the thinkened sludge left the rotary thinkener, it will reach the first part of the roller which allowed a further dewatering by gravity.

#### COMPRESSION DEWATERING

After gravity dewatering section, the sludge is carried into press dewatering section gradually and pressed wedge-shapedly. Then a certain thick sludge pass in the shear dewatering section.

#### SHEAR DEWATERING

When sludge enters the shear dewatering section, there are a number of S type rollers to form the sludge cake by the shear force.

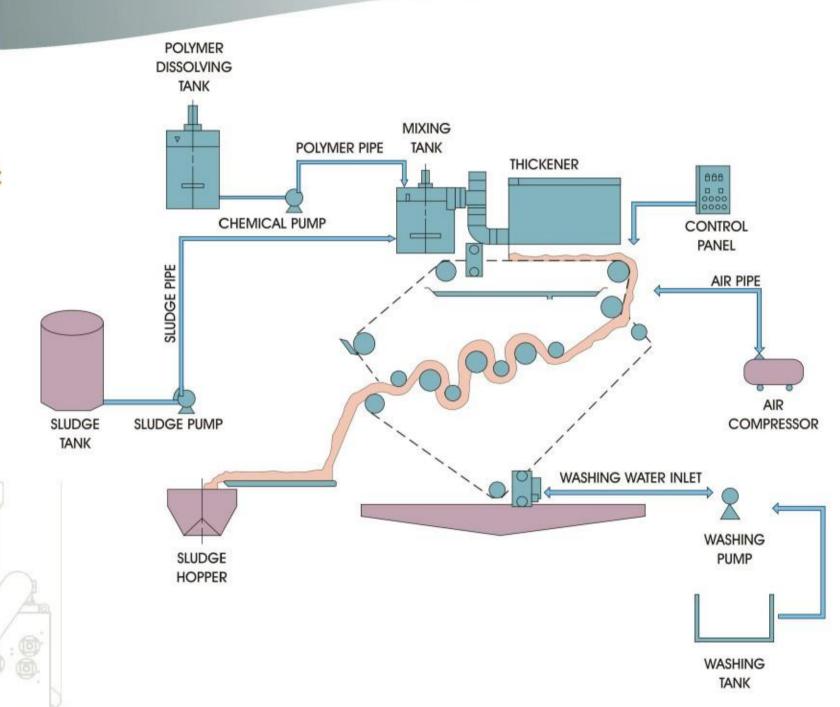
## **FLOW CHART**

#### The Quoted Belt Press Includes:

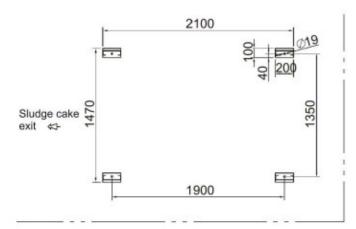
- Control Panel
- Air Compressor
- Mixing Tank
- Sludge Stirrer
- Rotary Thickener

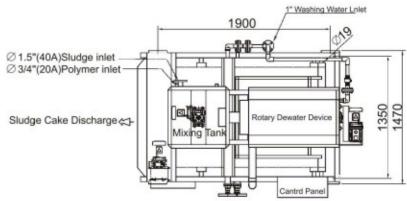
### Optional Equipments:

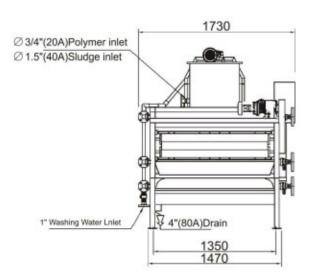
- Sludge Pump
- Washing Pump
- Chemical Pump
- Polymer Dissolving Tank
- Polymer mixer

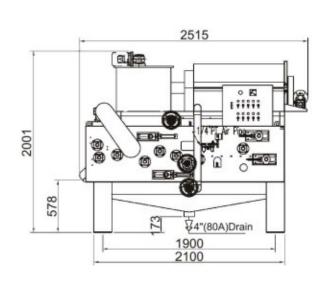


## BASIC SPECIFICATIONS OF YC-110









		Belt	Wash	Power consumption HP					Dimensions mm			
Model	Capacity M3/hr	width mm	water M3/hr	Air compressor	Main driving	Mixing tank	Rotary thickener	Belt tensioning	Standard Clean	Brush Clean	Base mm	Weight kg
				HP	HP	HP	HP		mm	mm		
YC-50K	1-2.5	500	3.8	1/2	1/2	1/4	1/4	Screw	L 2475 W 1080 H 2001	L 2475 W 1130 H 2001	L 1900 W 750	880
YC-60K	1.5-3	600	4.0	1/2	1/2	1/4	1/4	Screw	L 2475 W 980 H 2001	L 2475 W 1230 H 2001	L 1900 W 850	930
YC-80K	2.5-4	800	5.5	1/2	1/2	1/4	1/4	Screw	L 2515 W 1380 H 2001	L 2515 W 1430 H 2001	L 1900 W 1050	1030
YC-100K	3-4.5	1000	6.8	1/2	1/2	1/4	1/4	Screw	L 2515 W 1580 H 2001	L 2515 W 1630 H 2001	L 1900 W 1250	1080
YC-110K	3.5-6	1100	7.5	1/2	1/2	1/4	1/4	Screw	L 2515 W 1680 H 2001	L 2515 W 1730 H 2001	L 1900 W 1350	1110
YC-125P	5-8	1250	9.1	1/2	1/2	1/4	1/4	Auto Air	L 3545 W 1914 H 2316	L 3545 W 1935 H 2336	L 2780 W 1648	1490
YC-150P	8-13	1500	10.9	1/2	1/2	1/4	1/4	Auto Air	L 3545 W 2164 H 2316	L 3545 W 2185 H 2336	L 2780 W 1898	1680
YC-175P	12-17	1750	12.3	1/2	1	1/2	1/4	Auto Air	L 3545 W 2414 H 2452	L 3545 W 2440 H 2446	L 2780 W 2148	2000
YC-200P	15-24	2000	13.9	1/2	1	1/2	1/4	Auto Air	L 3545 W 2664 H 2452	L 4269 W 2850 H 2937	L 3400 W 2439	2200
YC-200T	18-29	2000	16.1	1	2	1/2	1/2×2	Auto Air	L 4269 W 2805 H 2917	L 4346 W 3350 H 3183	L 3400 W 2939	3300
YC-250T	29-45	2500	19.8	1	2	1/2	1/2×2	Auto Air	L 4346 W 3300 H 3153	L 4346 W 3350 H 3183	L 3400 W 2939	3950

#### **DEWATERING PERFORMANCE OF YC-125P**

Type of sludge	Solid Content of sludge %	Polymer for DS%	Capacity Ton/Hr	Water Content of Cake%	
Paper Mill sludge	2.0-4.0	0.3-0.5	4.0-6.5	65-75	
Dyeing sludge	1.5-2.5	0.2-0.6	3.3-5.8	75-83	
Gilding sludge	1.5-2.5	0.2-0.6	3.4-5.8	70-80	
Leather sludge	2.5-4.0	0.3-0.9	3.8-6.2	70-82	
Metal sludge	2.5-3.5	0.3-0.8	3.4-5.8	72-80	
Seone Stone	6.0-20.0	0.2-0.3	3.0-5.0	60-70	
Municipal Mixed Raw sludge	2.0-5.8	0.3-0.8	3.8-7.0	72-80	
Municipal Activated sludge	1.0-3.1	0.5-1.0	2.0-5.0	76-82	
Sewage Digested sludge	3.0-6.1	0.3-0.6	5.0-8.0	65-78	
Sewage Activated sludge	1.0-3.5	0.5-1.0	2.5-3.6	75-83	

- 1.Steel & Iron Works
- 2.Chemical Industry
- 3.Paper Mill
- 4. Fiber Mill
- 5. Solid & Liquid Separation Process
- 6.Ceramic Industry
- 7.Food Industry
- 8. Glass Factory
- 9.Metal Finishing Industry
- 10. Sewerage Mud Disposal Industry
- 11.Electronic Industry
- 12.Dyeing Mill
- 13.Paint Factory

14.Automobile Industry

15.Livestock Farming Waste Water

16. Hospital Waste Water

17.Stone Factory

18.City Excess Activated Sludge

19.Other Industries - Having

Mud Disposal Problem



#### 1.FINE BUBBLE RUBBER DIFFUSER

- 1. High oxygen transfer efficiency.
- 2.Lower energy consumption.
- Double backflow prevention. Non-Clog, Low Maintenance And Easy Installation.
- 4. Wide application.





## 2.AUTOMATED ROTATE DISSOLVES

**3.FILTER PRESSES** 



# SLUDGE DEWATERING MACHINE OF DOUBLE BELT FILTER PRESS



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