- ★ Stock preparation equipment
- ★Paper machine
- ★Turn-key project
- ★Upgrade and accelerate of paper machine





# Integrate Chinese Resource, Serve World Market.

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## Processing equipment

Detailed design, excellent manufacturing and strict quality control make sure the quality of our products.





# Stock preparation equipments

- **★**OCC pulping line
- ★ Deinking pulp processing line
- ★Chemi-mechanical pulping line
- ★Wood pulping line
- ★ Cotton stalk and straw pulping line

### Unpacker

#### Application:

Widely used in pulp and paper-making industry waste paper processing system.

#### Design features:

- ♦ Most of the impurities will be removed to avoid them enroll in the pulp system, so as to improve the quality of the pulp.
- ♦Loosened waste paper parcel can reduce soaking time and improve efficiency while pulping, energy saving 10%-20%.
- ♦ Frequency control is adopted to adapt to different production requirements.
- ♦ Spraying dust removal equipment can effectively remove dust from the waste paper and clean the environment.



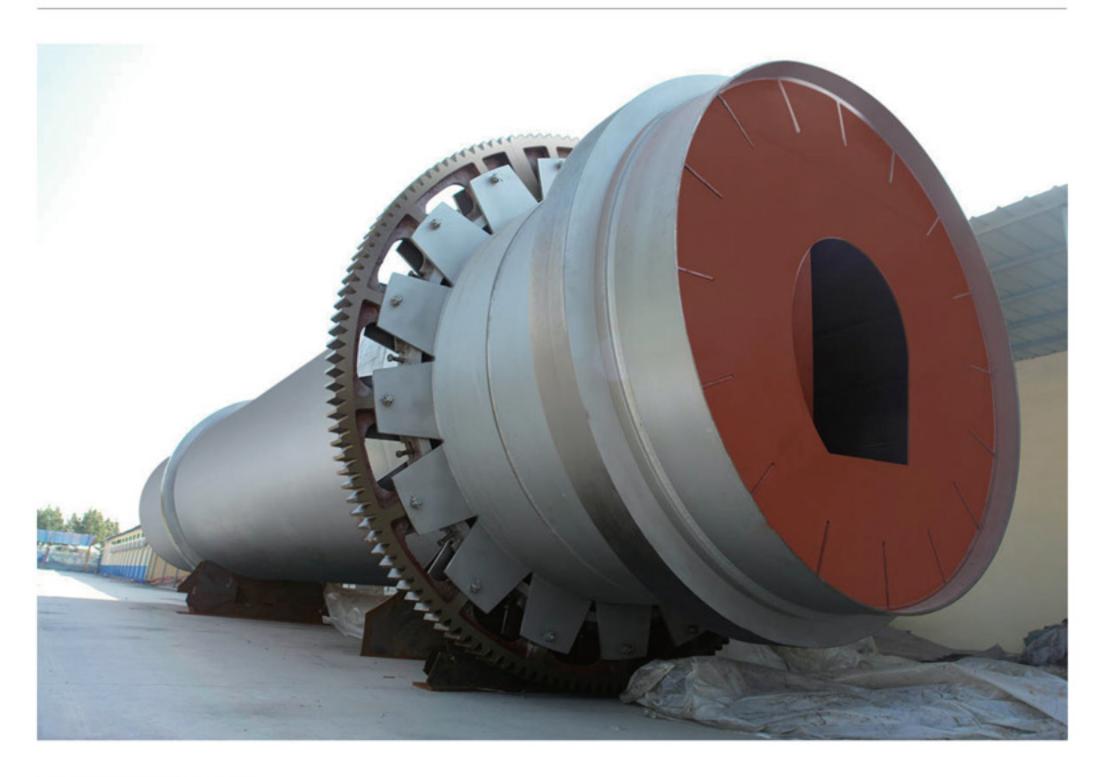
#### Main technical data:

Model	EST3.0	EST3.25	EST3.5	EST3.75				
Drum diameter (mm)	Ф3000	Ф3250	Ф3500	Ф3750				
Capacity (t/d)	300-450	400-600	500-800	650-1000				
Motor power (kw)	37	37	45	55				
Size of materials (mm)	1000*1200*1000							
Moisture (%)	< 15							

### Drum pulper

#### Five advantages:

- ♦Do not damage the fibers: comparatively soft pulping mechanism, do not damage the fibers, so as to guarantee high quality.
- ♦Do not break up impurities: maintain the integrity of the impurities, so as to reduce stress of the following section.
- Minimum complementary conditions: reduce downtime, save money.
- ♦Remarkable energy saving: energy consumption is only 1/2-1/3 of traditional hydrapulper.
- ♦ Three in one, save cost: combine pulper, roughing, impurities removal in one, greatly save invest in pulping line.



#### Main technical data:

Model	EST3000	EST3250	EST3500	EST3750	EST4000	EST4250	EST4500			
Capacity (t/d)	250-300	300-400	400-550	550-750	750-1000	1000-1400	1200-1600			
Drum size (mm)	3000	3250	3500	3750	4000	4250	4500			
Inlet consistency (%)		14-18								
Outlet consistency (%)		3–4								
Motor power (kw)	315-355	450-500	500-560	560-800	800-1000	1000-1400	1250-1600			

### D type hydrapulper

#### Application:

D-type hydrapulper is more suitable for pulping OCC, commercial waste paper continuously or intermittently. It can discharge the heavy impurities from a separately setting box so as to protect the equipment from damaging by heavy impurities. Also, it can discharge plastic pieces.

#### Design features:

New vaux rotor can strengthen hydraulic action and disintegrate fiber more effectively. D-shaped vat, changed the way of turbulence generated in the conventional pulper and intensified the turbulence. So the paper bale is quickly soaked into the liquid, the moving path of the waste paper is improved and the capacity of the pulper is increased. It can shorten the pulping time, reduce energy consumption and increase the specific capacity per unit of volume.





#### Main technical data:

Model	Capacity (t/d)	Effective volume (m³)	Consistency (%)	Motor power (kw)
EST15	100-150	15	3-5	165
EST20	150-200	20	3-5	185
EST25	200-250	25	3–5	220
EST30	250-300	30	3-5	280
EST35	300-350	35	3-5	315
EST40	350-400	40	3-5	355
EST45	400-450	45	3-5	400
EST50	450-500	50	3-5	450
EST60	500-550	60	3-5	560
EST70	600-700	70	3-5	630
EST80	700-800	80	3-5	710
EST90	800-900	90	3-5	900
EST100	900-1100	100	3-5	1120

### Middle consistency (wet strength paper) hydrapulper

#### Design features:

- ♦ The rotating rotor and the fixed rotor of this machine all use special wear-resisting alloy steel.
- ♦ Turbulence-type bed rotor, improved the dissociation ability.
- ♦ High backflow three vortex rotating rotor apply to all kinds of pulp board and waste paper.
- ♦ Intermittent operation is especially applicable for higher wet strength paper.



#### Main technical data:

Model	Nominal volume (m3)	Inlet consistency (%)	Capacity (t/d)	Motor power (kw)
EST10	10	4-8	50-75	75-110
EST15	15	4-8	80-120	110-200
EST25	25	4-8	150-250	220-400
EST30	35	4-8	250-400	400-630

### O type hydrapulper

#### **Application:**

It can be used to break up virgin pulp board, broke paper from paper machine and various kind of waste paper.

#### Design features:

Operating mode can be adjusted according to different raw material and also has wide service range.

♦Size: 2m3-70m3

♦ Capacity: 15-600t/d



### High consistency hydrapulper

#### Application:

It can be used for breaking up waste paper in high consistency during deinking processing line.

#### Design features:

- ○Compact structure; high rotation efficiency.
- ◇Three vortex tower type rotors will promote pulp circulation effectively and strengthen friction between pulp fibers. It can achieve moderate beating in high consistency state and disintegrate fiber with no impurity been broke up.

♦Size: 5m³-50m³

♦ Capacity: 20-360t/d



### Drum screen

#### Application:

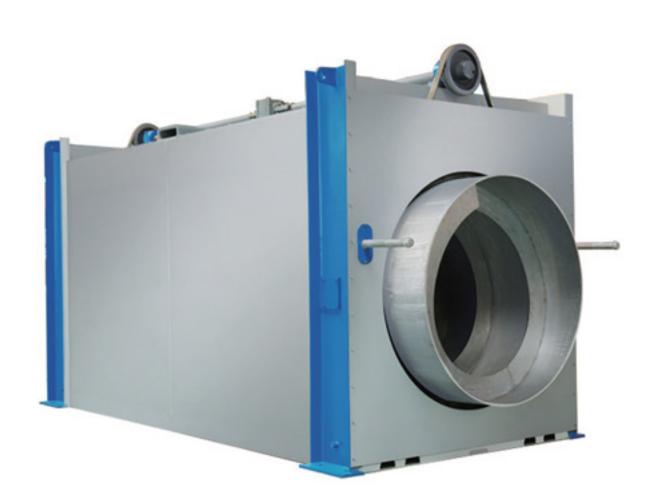
Drum screen is usually installed after pulper or impurity separator. It can screen out all kinds of light or heavy impurities whose geometric shape is larger than  $\Phi$  10mm, such as plastic, rubber, sand, stone, metal pieces, film, etc.

#### Design features:

♦While the screen drum rotating, pulp will be conveyed forward. By gravity, accepts and tiny impurities will enter the vat through Φ8−14mm screen slot; larger impurities retained on screen plate will be pushed forward to the end by screw flight. The fiber adhered to the impurities will be washed off by water ejected from the fan nozzles in order to prevent fiber loss.

- ♦ Simple structure; safe and reliable in operation and high efficiency in coarse screening.
- Used with the hydrapulper system to screen out coarse impurities and improve the purifying efficiency of process.

♦Size: Φ1000mm-Φ2500mm ♦Capacity: 3000-1000L/min



#### Main technical data:

Model	EST1000	EST1500	EST2500				
Throughput(m3/min)	2-5	3-6	4-8				
Drum size(mm)	Ф 1000	Ф 1500	Φ2500				
Screen hole (mm)	Φ8-14						
Motor power(kw)	5.5	7.5	18.5				

### **Impurity separator**

#### Application:

Impurity separator combines the functions of fiber disintegration and impurities separating into one. It is installed after pulper and used for separating light and heavy impurities, and disintegrates the stock that the hydrapulper hasn't pulped.

#### Design features:

- ♦ It consists of steel shell, horizontal defibering impeller, drive, inlet and outlet pipe, etc.
- ♦ With the weir plate inside the separator, the heavy impurities settle down to the bottom, then the stock and the light impurities enter into the circulation zone. The stock is suctioned axially and thrown out from the periphery of the impeller with high-speed to form strong turbulence circulation.
- ♦ The quality and the throughput of the stock can be controlled by adjusting the weir and the clearance between the impeller and the screen plate.
- Impurity separator works together with the pulper in order to separate the light and heavy impurities from waste paper stock, as well as to increase the capability of the pulper.
- ♦Waste paper stock can be handled with coarse screening efficiently, which results in simplifying the process and saving power consumption.

♦Size: 1.2m³-5.0m³



#### Main technical data:

Model	EST1	EST2	EST3					
Nominal volume (m3)	1.2	3	5					
Pulp consistency (%)	3	3–5						
Capacity (t/d)	35-45	60-80	100-130					
Motor power (kw)	45-55	75	160					
Overall size (mm)	3350*2350*1565	3760*1750*2700	4650*2000*3200					

### Ragger

#### Application:

It works together with the hydrapulper and served as coarse screening equipment. It twists all light impurities in waste paper stock (such as wires, plastics, cotton yarns, etc) into a strand and takes them out from the pulper.

#### Design features:

- ♦ The ragger mainly consists of the case, drive unit, winch wheel, elevator with loading wheel, etc.
- ♦ The drive unit consists of the drive shaft, bearing, winch wheel and the 2-stage reducer connected directly with the reducer.
- ♦ The elevator with loading wheel consists of the pneumatic cylinder, reversing valve, loading wheel and the loading arm, etc.



#### Main technical data:

Model	EST1 EST2					
Ragging speed (m/h)	0-30					
Motor power (kw)	2.2	3.0				
Speed ratio of reducer	29	*29				
Compressed air pressure(mpa)	≥0.15					

• The capacity may be different according to different pulp variety and consistency.So the capacity in the above chart is only used for choosing the model.

### **Cutting machine**

#### Application:

Cutting machine is equipped with the ragger so as to cut the rejects strand twisted by the ragger into small pieces, which enables the convenient process in the following procedures.

#### Design features:

- The knife of the cutting machine is pushed by hydraulic piston, which has great cutting force.
- ♦ The compact structure helps to bear the operation with heavy burden.



### Grapple

#### Application:

It is used to remove heavy impurities in trash well during continuous pulping.

#### Design features:

It can effectively reduce abrasion to impeller and screen plate of the pulper.

- ♦Easy to operate.
- ♦Size: 0.05m3-0.20m3



### High/middle consistency cleaner

#### Application:

It is used to remove heavy impurities contained in the stock.

#### Design features:

- ♦ Feeding pipe with a certain inclination angle will form a strong force of vortex flow to separate the heavy impurities effectively.
- ♦ Cone body is adopted alumina wear resistant ceramic which ensures long service time.
- ◇Two-cone structure reduce fiber loss while raise heavy impurity separation efficiency.
- ♦ Controlled by PLC automatic system, economize on manpower and materials.

#### Main technical data:

Capacity: 70-500t/d

Throughput: 900-12000m3/min







### Low consistency cleaner

#### Application:

It is used for pulp cleaning before paper machine.

#### Design features:

- ♦ Special abrasive resistance material ensures durable.
- Adopted advanced centrifugal clarification technology to make sure high accepts cleanness with high efficiency.
- ♦ Closed reject discharging system result in cleaner operation environment.
- ◇Easily to assembly and disassembly; change with fission construction.
- ♦ Compact conformation, cover small floor area.

#### Main technical data:

Capacity: 15-400t/d

Throughput: 600-800m3/min



### Single effect fiber separator

#### Application:

It combines defibering, separating and screening in one. As secondary pulping equipment, it is normally a downstream equipment of the hydrapulper. It can also work as tailings processing equipment.

#### Design features:

- ♦ Three fundamental functions: secondary defibering, separating light impurities, removing heavy and coarse impurities.
- It is possible to use the poor waste paper and reduce the treatment of the raw material with the help of this machine.
- ♦ It can increase the production capability of existing hydrapulper and reduce the specific energy consumption by about 40%-60%.
- ♦ It can help to obtain high quality stock, reduce fiber loss and increase screening efficiency. The production capability can be 2–2.5 times of the traditional one.



#### Main technical data:

Model	EST500	EST700	EST900		EST1100	EST1280	EST1420
Capacity (t/d)	83	100	160	230	300	360	420
Motor power (kw)	30	45	55	75	110	132	160
Consistency (%)				3.5-4.5			

### SCS series up-flow pressure coarse screen

#### **Application:**

Used for various waste paper pulp of coarse screening.

#### Design features:

♦ Adopted the new high efficiency and energy saving up-flow screen rotor developed based on the fluid dynamics, it has the characteristics of high performance, big let flow processing capability, save 30%-60% of the power consumption and improve the efficiency of screening.

♦ With special designed high flow structure, obtain higher producing capability; up-flow design, prolong the service life of the consumables.



#### Main technical data:

Model	EST400	EST500	EST600	EST700	EST1000	EST1300					
Hole size (mm)		Φ1.2-2.6									
Slot size (mm)		0.3-0.7									
Capacity (t/d)	250-400	350-500	400-600	500-700	900-1000	1100-1300					
Inlet consistency (%)		2.5-3.5									
Inlet pressure (mpa)		0.15-0.3									
Motor power (kw)	11-22	22-37	37-55	55-75	75-90	90-150					

### UV series up-flow pressure screen

#### **Application:**

Used for screening waste paper pulp.

#### Design features:

- ♦Up-flow design can shorten a retention time of light impurities in screening area.
- Heavy impurities are isolated and dropped to the bottom to avoid excessive abrasion to rotor and cylinder.
- ♦ There is a function of breaking to some extent.



#### Main technical data:

Model	EST0.6	EST0.8	EST1.2	EST2.0	EST3.0	EST4.0				
Hole size (mm)	Φ1.2-Φ3.0									
Slot size (mm)			0.15-	-0.75		4				
Capacity (t/d)	25-100	35-130	45–160	80-350	120-450	180-550				
Inlet consistency (%)			1-3							
Inlet pressure	0.1-0.4									
Motor power	22-45	37-75	55-110	75-132	110-220	132-220				

### Fiber fractionating screen

#### Application:

Used for separate long and short fiber in stock.

#### Design features:

- ♦ Special rotor structure, ensure a unified speed of fiber passing through screen slot, overcome the phenomenon of increasing consistency effectively.
- Protrude structure and optimized arrangement of rotor makes a fluidization of screening area and good fiber fractionation effect.



#### Main technical data:

Model	EST1.2	EST2.0	EST3.0	EST4.0	EST6.0					
Slot size (mm)		0.15–0.3								
Capacity (t/d)	70-120	110-200	180-320	220-500	350-650					
Inlet consistency (%)			1.5–3							
Inlet pressure (mpa)		0.15-0.3								
Motor power (kw)	22-75	55-90	110-160	132-200	185-280					

### Inflow pressure screen

#### Application:

It can be used as pulp screening equipment before paper machine or fine screening in pulp production system.

#### Design features:

- Impurities in the outside of the screen cylinder and get rid of the screen cylinder in the centrifugal force generated by rotor's rotation, which lessen the abrasion of the screen cylinder and prolong its life.
- Separate the impurities from the fiber in good effect to avoid block of the screen slot in the condition of proper flow and low pulsing force.
- Its performance can promote the paper machine to be in proper running with less broken paper.
- ♦ Great throughput with more long fiber; lower power consumption; high screening efficiency with less rejects



#### Main technical data:

Model	EST0.6	EST0.9	EST1.2	EST1.5	EST2.0	EST2.5	EST3.5	EST4.5	EST6.0
Inlet consistency (%)		0.5–1.2							
Inlet pressure (mpa)		0.1-0.3							
Motor power (kw)	15-22	18.5-30	22-37	30-45	37-55	37-75	45–110	55-132	75–160
Capacity (t/d)	20-30	25-60	30-80	40-120	80-210	100-230	140-280	180-350	230-500

### Outflow pressure screen

#### **Application:**

It can be a coarse screen or a fine screen for all kinds of pulp and different screening processes.

#### Design features:

- ♦ It is suitable to be as fine screen for waste paper. The screen cylinder gains long life and high throughput with the bar structure. It is convenient to clean the screen slot with high pulsing frequency in the structure of multi-foil or drum rotor. The multi-foil rotor promotes the axial mixture for the stock to avoid stock thickening in the screening process.
- ♦Good adaptability with high production capability.
- ♦High production efficiency with high flow speed.
- ♦ High removal of the adhesive materials.
- ◇Lower power consumption; simple structure and easy maintenance.



#### Main technical data:

Model	EST0.4	EST0.8	EST1.2	EST1.5	EST2.0	EST3.0	EST4.0	
Hole size (mm)		Φ1.2-Φ3.0						
Slot size (mm)		0.15-0.75						
Capacity (t/d)	50-100	60-200	80-300	90-360	120-450	180-600	220-900	
Inlet consistency (%)		High co	nsistency2%-	-5% Low	consistency0.	6%-2%		
Inlet pressure (mpa)	0.15-0.3							
Motor power (kw)	15-55	30-75	30-90	45–110	75–132	110-260	132-280	

### CR series drum type coarse screen

#### Application:

It is a coarse screen for screening fibers of waste paper and removing light or heavy impurities. It is especially suitable for waste paper recycling system to remove heavy impurities.

#### Design features:

- It combines high efficiency screening and cleaning into one.
- ♦ The rotor is fixed at the end of accepts in order to reduce the resistance of accepts passing through screen slots and increase the throughput per area unit of drum cylinder.
- It discharges heavy impurities periodically and discharges light impurities continuously.
- ♦Simple structure, easy to operate.
- ♦High screening efficiency.



#### Main technical data:

Model	ESTC2R	ESTC4R	ESTC6R	ESTC8R					
Screen area (m2)	0.5	1	1.5	2					
Inlet consistency (%)		<3							
Hole size (mm)		Ф2.4-Ф4							
Inlet pressure (mpa)	< 0.25								
Capacity (t/d)	30-60	80-180	150-300	150-380					
Motor power (kw)	22-37	45-55	75-110	110					

### **☆Various pressure screen**





### Vibration screen

#### **Application:**

It is widely used for coarse screening of different kinds of pulp such as chemical pulp, semi-chemical pulp, mechanical pulp, TMP and waste paper pulp.

It is also used in fiber recovery from the rejects and scruff pulp in the pressure screen and separator.

#### Design features:

- ♦ Damping device is made of special rubber screen, made the frame vibrate steadily.
- ♦ Two kinds of structure: spring type and condole belt type.
- ♦ Screen plate has higher self-cleaning ability thanks to special air seal room.





#### Main technical data:

Model		EST(d)1 EST(d)2 EST(d)3 EST(d)4 EST(d)5						
Screen area (m	2)	1 2 3 4 5						
Inlet	Hole screen	oreen 1.2−1.5						
consistency (%)	Slot screen			0.5-0.8				
Screen plate (mm)	Hole size	φ 2.5–12						
Screen place (mm)	Slot size			0.5-0.75				
Motor power (k	w)	2.2 3 4 5.5 5.5						
Overall size (mr	n)	2810*1930*1425   2810*1310*2220   2810*3245*1430   3590*3480*1480   4105*3332*149						

### Rejects separator

#### Application:

It is mainly used in screening system as a part of waste paper processing line or used with other vibration screen. It can screen the rejects stock with high contents of light impurities.

#### Design features:

♦ Stock flows into impurity separator under normal pressure. Affected by the centrifugal force from high-speed rotating rotor, accepts are separated from the rejects by passing through the screen plate. At the same time, with the rotating effect of the rotor, accepts will flow into the next process and the rejects will be disintegrated again. Furthermore, the rejects will be flushed continuously with water in order to recycle the stock in the rejects. ♦ Low energy consumption and cost reduction.

♦ After processed, there are less fiber and less water in the rejects.





#### Main technical data:

Model	EST280	EST380			
Size (mm)	Φ280	Φ380			
Inlet consistency (%)	1–2				
Capacity (t/d)	10-15	25–40			
Motor power (kw)	30-37	37-45			

### **High-speed washer**

#### **Application:**

It is used for washing and thickening in waste paper pulp processing.

#### Design features:

- ♦ Pressure type guniting, pulp thick and well-distributed.
- ♦ High speed (900m/min), twinver com-press, pulp dewatering fast, high rate ash removal.
- Equipped automatic correction device, adopted electromagnetic motor speed control, easy operation and working safety.



#### Main technical data:

Model		EST10 EST15 EST20 EST25						
Working width	(mm)	1000	1500	2000	2500			
Inlet consisten	cy (%)		0.8–1.5					
Outlet consiste	ncy (%)		8–15					
Capacity (t/d)	MOW	40-70	55-100	70-130	90-160			
Capacity (iru)	ONP	30-50	40-70	50-90	60-110			
Ash removal (9	%)		;	≥90				
Power of main	motor (kw)	30 37 55 75						
Power of motor for scre	w conveyor (kw)	5.5	5.5 5.5 7.5 7.5					

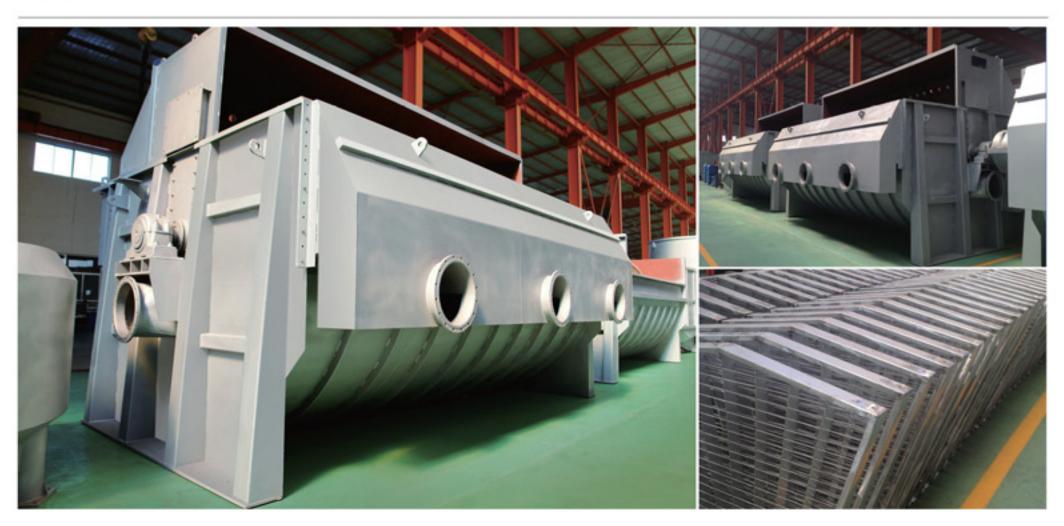
### Disc thickener

#### Application:

Disc thickener is mainly used for washing and thickening pulp in pulping and papermaking process. It dewater by gravity through level difference between pulp out of disc wire and white water in the disc. The pulp at the consistency of 0.8%~1.2% enters into the vat and then is attached to disc sector. The white water in the disc flows into the ends of the hollow shaft through slot and then discharges out. Pulp attached on disc sector is peeled off by high-pressure water. The thickened pulp at the consistency of 3%-6% flows over the plate of adjusting valve into outlet vat where it is discharged out. The outlet consistency and capacity can be regulated by adjusting the rotating speed of the main shaft.

#### Design features:

- Higher efficiency and less space required.
- ♦ Disc sector is made of stainless steel with excellent corrosion resistance.
- ♦ Thanks to the scallop structure of the disc sector, the filtration area is large, which allows filtrating large amount of white water when operating.
- ♦ The consistency of the white water filtrated by it is lower than that filtrated by the common cylinder wire thickener.



#### Main technical data:

Model		EST2510	EST2512	EST2514	EST2516	EST3510	EST3512	EST3514	EST3516	EST3518
Diameter of	disc (mm)	2500	2500 2500 2500 2500				3500	3500	3500	3500
Number of o	disc (n)	10	10 12 14 16 10				12	14	16	18
Nominal are	ea (m²)	75	75 90 105 120				180	210	240	270
Inlet consist	ency (%)				0.8-1.2					
Outlet cons	istency (%)				3.5-4.5					
Capacity	ONP				0.9-1.2					
(t/m².d)	occ	8	1.5–2.4							
Motor power (kw) 11 15 18.5 22			3	30						

### Cylinder thickener

#### Application:

It is used for washing and thickening low consistency pulp.

#### Design features:

- ♦Simple structure, safe in operation.
- It is easy to control the outlet consistency and white water consistency.
- ♦ High bulk pulp layer, strong tiny impurities penetrability and good washing effect.



#### Main technical data:

Model		EST27	EST27 EST4025 EST4525 EST5030 EST5530					
Filtratin	ng area (m²)	35	40	45	50	55	60	
Inlet co	nsistency (%)			0.5–1				
Outlet o	consistency (%)		4–6					
Capa	Rice-wheat-straw pulp	35-52	40-60	45-67	50-75	55-82	60-90	
-city	Mixed waste paper	52-70	60-80	67-90	75–100	82-110	90-120	
(t/d)	Reed pulp	70-88	80-100	90-112	100-125	110-137	120-150	
(00)	Chemical wood pulp	105-122	120-140	135-157	150-175	165-192	180-210	
Motor	power (kw)	15	A.	18.5			22	

### **Screw press**

#### **Application:**

It is used for pulp dewatering and thickening.

#### Design features:

- ♦ The screw spindle distributes the compression ratio reasonably along axial direction, which ensures a high thickening efficiency.
- ♦ There is internal dewatering unit with holes in the pulp out side, which ensures the consistency of dewatering effect of inside and outside of the pulp layer.
- Pneumatic thrust reverser ensures the stability of the outlet consistency and helps to adjust the outlet consistency.
- ♦ Easy maintenance.



#### Main technical data:

Model	EST12	EST13(A)	EST14(A)	EST15(A)	EST16(S)	
Screw specification (mm)	Ф400	Φ450	Φ600	Φ700	Ф900	
Inlet consistency (%)		10-14 8-12				
Outlet consistency (%)			25–35			
Capacity (t/d)	40-50	60-80	100-150	160-220	200-300	
Motor power (kw)	30	37	55	110	160-220	

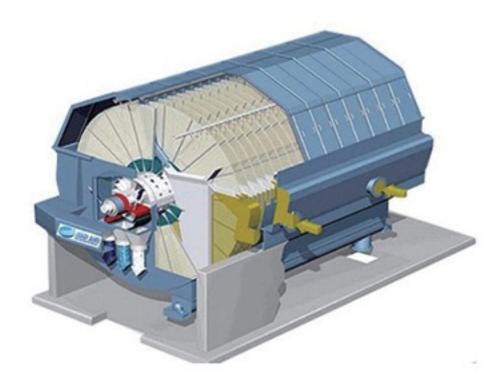
### Multi-disc filter

#### Application:

By adopting the vacuum formed by the drop leg extraction, and also with the help of the filtration media, disc filter separates the solid and the filtrate and gets filtrates in different quality divided by the distribution valve. It is widely used for white water recycling and pulp thickening. When used as saveall, it recycles water and fibers; when used for thickening, it achieves high production rate with low fiber loss via unit machine. Outlet consistency can reach to 12%~14%.

#### Design features:

- ◇Disc with different structures and high strength, ensures larger effective filtering area. It is economical and easy to replace.
- ◇All models and sizes are available. Filtering area can be modified upon capacity requirements.
- ♦ Distribution plates are made of special wear resistant material, which has good seal effect.



#### Main technical data:

Model		EST37	EST45	EST52		
Filter disc diameter (mm)		3700	4500	5200		
Filter disc number		6-16	8-20	10-20		
Single filter disc area (m²)	Single filter disc area (m²)					
Main driving motor power (kw)		7.5-15	11-18.5	15–37		
	OCC, Chemical wood pulp	0.5-1.2				
inlet consistency (%)	Deinking stock, straw pulp		0.5-1.0			
	White water recovery		0.3-0.8			
	OCC, Chemical wood pulp		8–12			
Outlet consistency (%)	Deinking stock, straw pulp		8-12			
	White water recovery		3.5-4.5	1		
	OCC, Chemical wood pulp		0.7-1.1			
Capacity (m³/m².h)	Deinking stock, straw pulp		0.5-0.7			
	White water recovery		1.6-3.8			

### Double wire double press squeezer

#### **Application:**

It is used for washing and thickening mechanical pulp, chemical pulp and waste paper pulp, especially for heat dispersion system and pulp thickening in high consistency bleaching.

#### Design features:

- ♦ Variable frequency speed regulation.
- ♦ Long pressure area, high thickening rate.
- ♦Wide pulp adaptability, less fiber loss.
- ♦ Stable pulp consistency, steady working.





#### Main technical data:

Model		EST1	EST2	EST3	EST4	EST5	EST6
Working width	(mm)	1200	1600	2000	2400	2800	3200
Inlet consistence	y (%)			3.5-	4.5		
Outlet consiste	ncy (%)			25-	35		
Inlet pressure (	mpa)	0.01-0.03					
Air source pres	sure (mpa)			0.	6		
Washing water	pressure (mpa)			0.	6		
Power of main	motor (kw)	18.5*2	22*2	22*2	30*2	37*2	45*2
Capacity (t/d)	occ	70-80	90-110	120-140	150-170	180-200	200-230
Capacity (vd)	ONP	60-70	70-90	100-120	120-150	140-170	160-200

### Double cylinder squeezer

#### **Application:**

It is used for concentrating all kinds of pulp.

#### Design features:

- ♦ Inlet consistency 3%-5%, outlet consistency 28%-32%.
- ♦ Low power consumption: the power consumption is only a quarter of that of the single spiral squeezer.
- ◇Easy repair and maintenance; easy to operate and control.



#### Main technical data:

Model	EST1015	EST1020	EST1025	EST1320	EST1325	EST1330	EST1335	
Cylinder size (mm)	Ф 1000*1500	Ф1000*2000	Ф1000*2500	Ф1000*2500	Ф 1000*2500	Ф 1000*3000	Ф 1000*3500	
Inlet consistency (%)		3%-5%						
Outlet consistency (%)				28%-32%				
Capacity (t/d)	90	120	150	160	200	250	300	
Motor power (kw)	5.5	5.5 7.5 11 18.5 22 37 45						
Pulp kind	ONP/ OCC/ WOOD PULP/							

### Disc heat-disperser

#### Application:

It is used to disperse the impurities such as gooey, grease, paraffin, plastic, rubber or ink particles.

#### Design features:

- Reasonable tooth plate structure makes sure efficient disperse for gooey and ink particles and so on.
- Automatic lubrication system makes sure the equipment run smoothly.
- ♦ Different tooth plate is configured according to different pulp type.

#### Main technical data:

Model		EST1 EST2 EST3					
Nominal diameter (mm)		Φ450 Φ710 Φ1050					
Inlet consistency (%)			28-32				
Low			4-12				
Outlet consistency (%)	High	25-30					
Treating temperature (℃)			110-120 (OCC)				
Treating temperature ( C)	`	h .	80-90 (ONP)	. No			
Capacity (t/d)		30-70 80-300 280-600					
Main motor power (kw)		110-200 160-800 630-1250					

• The capacity may be different according to different pulp variety and consistency.So the capacity in the above chart is only used for choosing the model.

### Disperser system







Preheater

Double cylinder squeezer





Screw plunger

Screw feeder





Screw crusher

Disc heat-disperser

#### Main technical data:

Model	Inlet consistency (%)	Outlet consistency (%)	Operating temperature (℃)	Operation clearance ( mm )	Feed accuracy (mm)	Capacity (t/d)	Motor power (kw)
EST710	4-10	4-30	90-120	0.1-0.5	0.01	70-300	185-560

The capacity may be different according to different pulp variety and consistency.
 So the capacity in the above chart is only used for choosing the model.

### Ellipse floatation de-inker

#### Application:

It is used for removing the dust and ink particles in the waste paper pulp, so as to get high quality paper pulp.

#### Design features:

- ♦ Self-priming can generate turbulence in different degree and bubbles in different size, more beneficial to remove ink particles and dust.
- ♦ Wide range ink separation, less fiber loss.
- ◇All floatation cells use one liquid level control circuit, easy to operate.
- ◇Large throughput, small floor space.
- ◇Can be lay flat or stacked up.



#### Main technical data:

Model		EST1	EST2		
Specifications	(mm)	3.8	3.8		
Inlet consisten	cy (%)	0.9-1.2			
Inlet pressure	(mpa)	0.10			
Operational pressure difference (mpa)		0.09-0.10			
Capacity (t/d)	Single part length:1m	65-85			
	Single part length:2m	130-170			
	Single part length:3m	195-255			
	Single part length:4m	60-340	320-400		
	Single part length:5m		400-500		

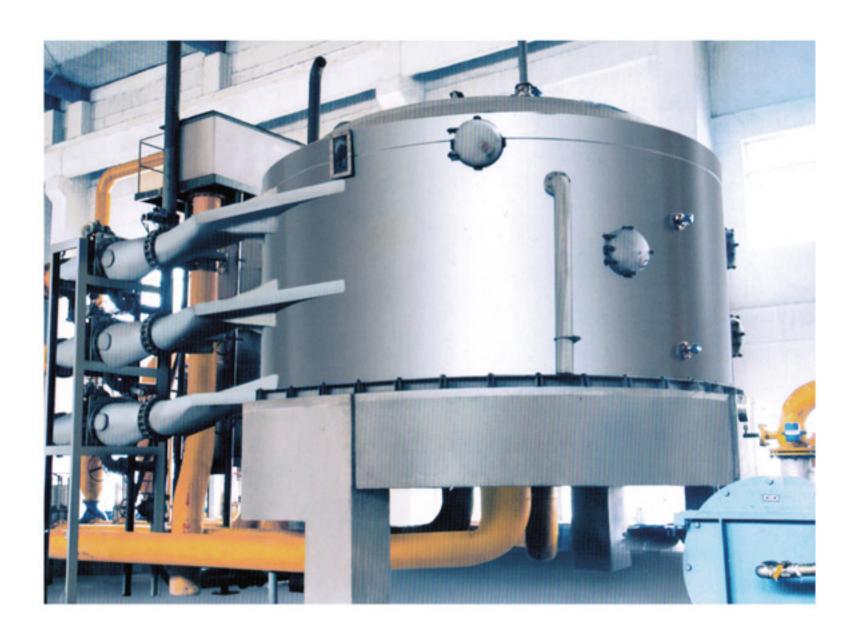
### Closed multi-stage flotation cell

#### Application:

It is used for removing the ink particles and ash in the waste paper pulp.

#### Design features:

- ♦ Self-priming jet can generate multi-stage turbulence and get broad spectrum bubbles, remove the most out of ink particles and ash in different particle size.
- ♦ Totally-closed design, good operating environment.
- ♦ Multi-stage design, bubble density are higher, better ink removing effect.
- ♦Low energy consumption.
- ♦3–5 stage flotation with one equipment, reduce floor space.



#### Main technical data:

Model	EST1	EST2	EST3	EST4	EST5	EST6	EST7	EST8	EST9	EST10
Flow rate (m3/h)	256	400	512	624	800	976	1152	1344	1456	1600
layers					4-5					
Treating consistency (%)					0.9-	-1.1				
Capacity (t/d)	55-65	55-65 85-100 110-130 130-160 170-210 210-250 240-300 290-350 310-380 340-420								
Consistency of ink (%)		2–3								

• The capacity may be different according to different pulp variety and consistency.So the capacity in the above chart is only used for choosing the model.

### Middle consistency bleaching tower

#### Application:

It is used for pulp bleaching in the middle consistency bleaching section and mainly used for waste paper bleaching.

#### Design features:

- It has special tower structure, which is beneficial for pulp going up and avoiding pulp detention.
- ♦ Baffle equipment is configured in the tower, which is beneficial for distributing pulp evenly.

#### Main technical data:

Model	Specification(m3)	Bleaching temperature (°C)	Bleaching consistency (%)	Bleaching time(min)	Processing capacity (t/d)
EST31	15				40-60
EST32	25				80-120
EST33	45	60	8-12	20-30	120-180
EST34	60		12 3,000		200-280
EST38	100				260-350

### High consistency bleaching tower

#### Application:

It is used for high consistency hydrogen peroxide bleaching of ground wood pulp or other pulps.

#### Design features:

- ♦ The tower adopted cone structure to avoid bridging of pulp.
- ♦ Special designed inside structure to make sure constant pulp descending speed and same bleaching time.
- ♦There is dilution function in the bottom of the equipment to realize high consistency bleaching and low consistency transportation.

#### Main technical data:

Model	EST43	EST44 EST45 EST4					
Nominal volume (m3)	50	70	100				
Pulp consistency (%)		2	28-32				
Bleaching temperature (℃)		E	60-70				
Bleaching time (min)		(	60-90				
Production capacity (t/d)	50-80	50-80 80-120 120-170 170-220					
Motor power (kw)	30*2	30*2	37*2	45*2			

### **Broke pulper**

#### Application:

It is used for breaking the broke that located at different parts under the paper machine.

#### Design features:

- It is furnished with unique rotor, so the instant breaking ability is strong.
- ♦ We can design the equipment individually according to the paper machine and the customer's requirements.

### **DD Series Double Disc Refiner**

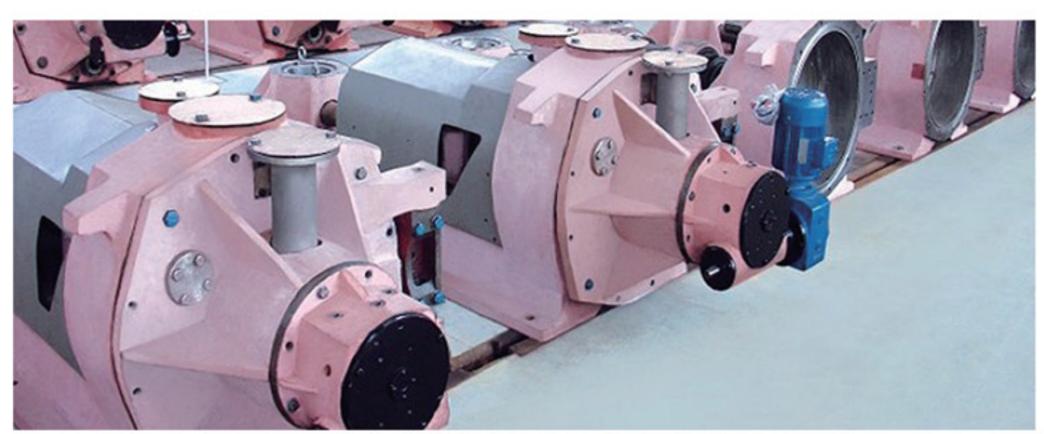
#### Application:

It is available for continuous beating of chemical wood pulp, mechanical pulp and waste paper pulp.

#### Design features:

It is manufactured with license of Metso, Finland.

♦ The equipment is furnished with automatic control system and can beat with constant power and constant energy consumption. The beating effect is stable.





#### Main technical data:

Model	DD-450	DD-500	DD-550	DD-600	DD-660	DD-720	DD-900	DD-1100
Diameter of plate (mm)	Φ450	Ф500	Φ550	Ф600	Ф660	Φ720	Ф900	Ф1100
Capacity (t/d)	8-80	10-100	10-120	12-150	15-200	15-250	20-400	40-800
Power (kw)	90-160	132-200	160-250	185–315	220-500	250-800	315-1000	400-1800
Consistency (%)				3-	-5			

• The capacity may be different according to different pulp variety and consistency.So the capacity in the above chart is only used for choosing the model.

### **ZM Series Conical Refiner**

#### **Application:**

The equipment is mainly used for coarse beating, refining and re-pulping of broke and waste paper. It is available for beating long fiber pulp such as cotton, wood and hemp.

#### Design features:

♦ The equipment is furnished with automatic control system and can beat with constant power or constant energy consumption. The beating effect is stable.

#### Main technical data:

Model	ZM-450	ZM-460	ZM-600	ZM-750
Diameter of big end of rotor (mm)	Φ450	Φ460	Φ600	Φ750
Capacity (t/d)	20-60	30-150	50-250	80-400
Power (kw)	110-132	160-315	355-500	450-900
Consistency (%)		3-5		

• The capacity may be different according to different pulp variety and consistency.So the capacity in the above chart is only used for choosing the model.



### **Toothed Deflaker**

#### Application:

It is used for fiberizing broke pulp, waste paper pulp, etc.

#### Main technical data:

Model	EST246	EST330	EST458
Diameter of rotor (mm)	Ф246	Ф330	Φ458
Capacity (t/d)	10-30	15-60	15-120
Power (kw)	45-55	30-37	75-132
Consistency (%)		3-5	

### Stepped deflaker

#### Application:

It is used for fiberizing pulp board, waste paper pulp, etc.

#### Main technical data:

Model	EST450	EST475	EST500	EST525
Diameter of rotor (mm)	Φ450	Φ475	Ф500	Φ525
Capacity (t/d)	35-180	45-210	52-260	60-310
Power (kw)	160	200	250	315
Consistency (%)		3-5		

### Claflin refiner

#### Application:

It is used for beating long fiber pulp such as cotton pulp, hemp pulp and wood pulp.

#### Design features:

♦ The fiber-to-fiber bonding strength and evenness are improved. It is a good equipment to produce finer paper and high strength paper. The equipment is furnished with automatic control system and can beat with constant power and constant energy consumption. The beating effect is stable.



Model	Diameter of beg end of rotor (mm)	Capacity (t/d)	Power (kw)	Consistency (%)
EST-800	Φ800	20-80	200-250	2–5

### High consistency refiner

#### **Application:**

It is used for refining in high consistency. It is available for wood pulp, bulrush pulp, bagasse pulp, bamboo pulp and straw pulp. It is also used in SCMP, CTMP and APMP process.

#### Design features:

♦ The equipment is furnished with automatic control system, pressure lubrication system, hydraulic performing system, detecting and protecting system. The refining effect is good.



#### Main technical data:

Model	EST600	EST900	EST1100	EST1320	EST1470
Diameter of plate (mm)	Ф600	Ф900	Ф1100	Ф 1320	Ф 1470
Rotational speed (r/min)			1500		
Inlet consistency (%)			25-35	26	
Production capacity (t/d)	15-40	40-100	60-130	100-180	130-220
Motor power (kw)	220-400	355-1000	710-1400	1400-3000	2500-4000

• The capacity may be different according to different pulp variety and consistency.So the capacity in the above chart is only used for choosing the model.

### Wedge wire screen basket

The most proper wedge bar will be selected according to different raw material and different processing position in order to develop good performance, achieve optimized screening effect and meet customer's requirements.

#### Design features:

Wedge bar material is SS316L after mechanical polishing. Good processing technology ensures fit precision of wedge bar and reinforce ring and make sure the evenness of the screen cut.

#### **Production scope:**

◇Deviation of slot width: within ±0.02mm
◇Chroming thickness: 0.20~0.30mm

♦ Surface hardness: ≥HRC60-66(HV700-900)

♦Screen area: 0.4m2~23m2



### Drilled screen basket

Various specifications and models products are precisely manufactured with features of good performance and wear well

#### Design features:

- Higher processing capability
- Lower operating costs

#### **Production scope:**

♦ Hole size deviation: ±0.05mm

♦ Chroming thickness: 0.20~0.30mm

♦Screen area: 0.4m²~23m²



### **☆Various screen basket**

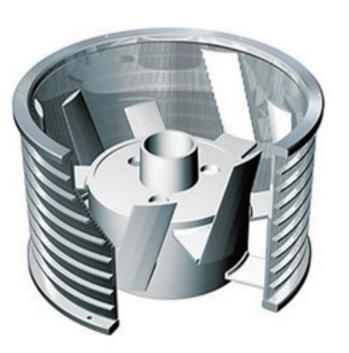


### **Screen rotor**

We will provide the most appropriate rotor according tocustomer's special request like different pulp, different consistency, different processing position etc. Also, we provide service of equipment upgrading.

The perfect combination of screen rotor and screen cylinder
The combination of screen rotor and screen cylinder will determine
and influence the running ability of the complete screen.

We will provide the most proper screen cylinder and screen rotor after accurately evaluating your screen system to reach the best running effect you want.











### D type hydrapulper spare parts

Size: 10m<sup>3</sup>-70m<sup>3</sup> Design features:

- ♦ New energy-saving rotor will strengthen the hydraulic action.
- ♦ Together with the new profiled screen plate, it will increase the fiber defibering efficiency and reduce energy cost.



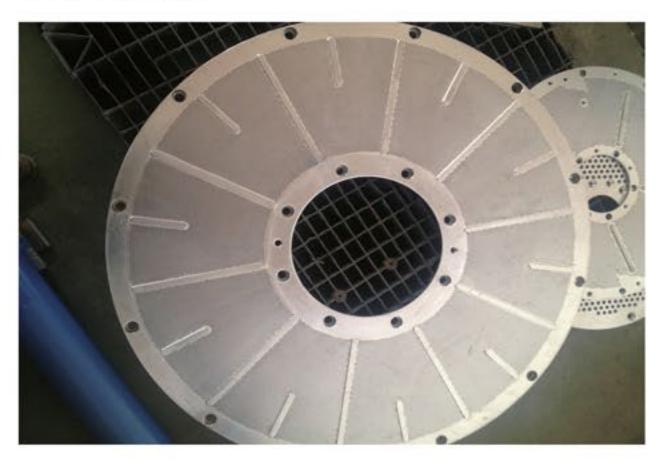


### Fiber separator spare parts

Size: Φ520mm~Φ1250mm

Design features:

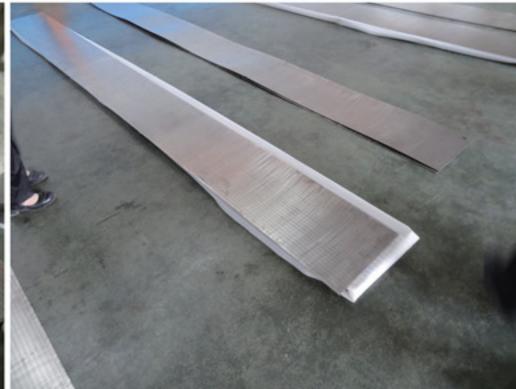
♦ The combination of new energy-saving impeller and special designed screen plate will save energy and reduce cost deeply.





### Custom design all kinds of screen plate





◆Screen plate exported to Indonesia (material: SMO254 or SS316L)

♦Hole diameter: 1.0mm or 1.2mm

### Cleaner cones

The most proper wedge bar will be selected according to different raw material and different processing position in order to develop good performance, achieve optimized screening effect and meet customer's requirements.

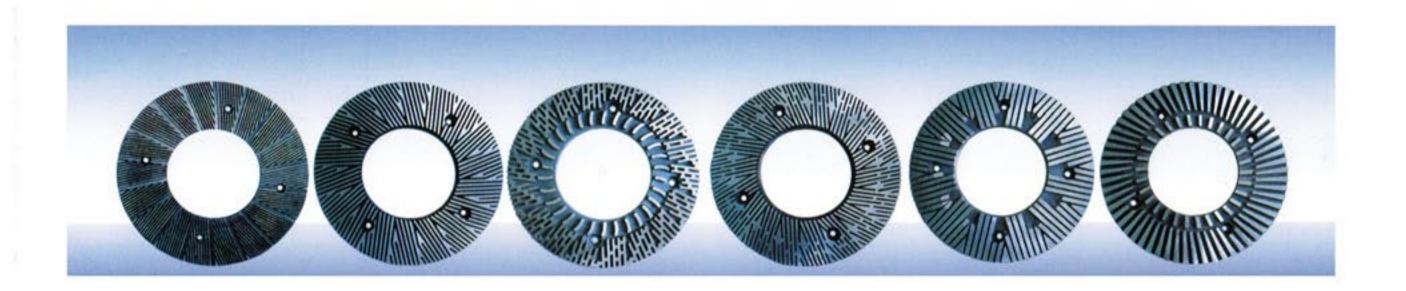
#### Design features:

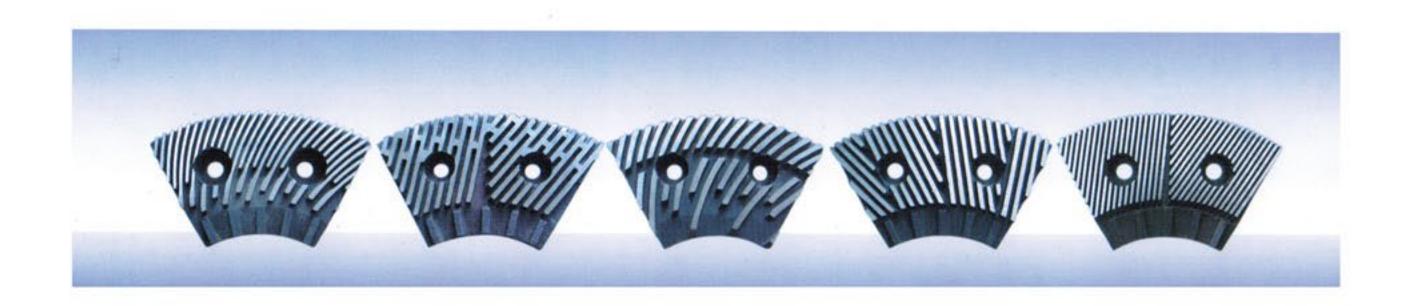
- ◇Different kinds
- ◇Best effect
- ♦High pulp remained rate
- ♦304/316L Stainless steel parts
- ♦ Wear resistance, corrosion resistance, and impact resistance
- ◇Long service time
- ♦ Ideal structure



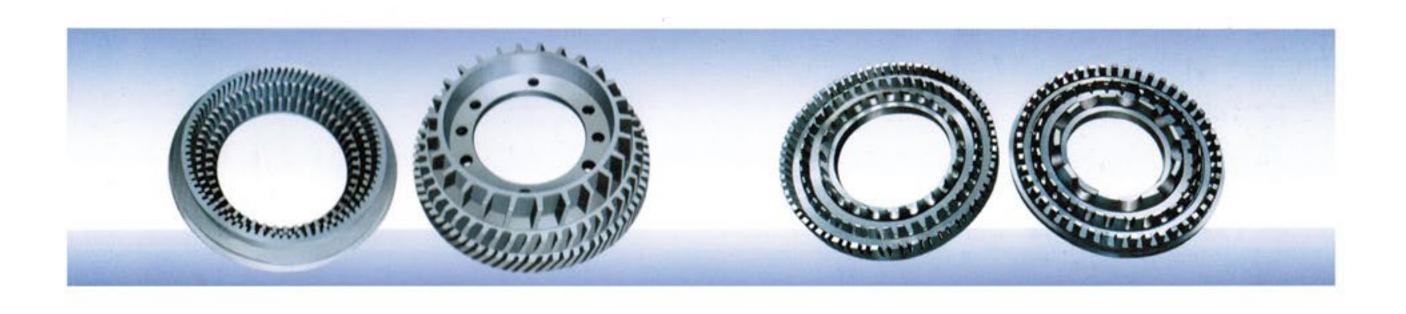


### Refiner disc, rotor and stator















# Stock preparation and paper making general equipments

- ★Raw material conveying equipments
- ★Stock transportation and storage equipments
- ★ Air compressor equipments

### Chain conveyor

#### Application:

t is specialized for conveying bundled waste paper, loose waste paper and pulp board.

#### Design features:

- ♦ Stamped heavy slab with high strength and impact resistance.
- ♦ Drivers are directly connected with main spindle gear reducer coupling, which makes the force of the whole machine more scientific.
- ♦ Chains are composed of heavy chains, heavy rollers, axis pin that can oil, heavy loading and high abrasion proof bush.
- ◇Run on a pathway, steady and low friction, low consumption.
- ◇Large conveying capability, operate steadily, low noise, easy to maintain.
- ♦ Conveying length and height can be different according to customer's requirements.



Model	EST800	EST1000	EST1200	EST1400	EST1600	EST1800	EST2000	EST2400
Width of conveyor (mm)	800	1000	1200	1400	1600	1800	2000	2400
Conveying capacity (m³/h)	35-120	50-165	65-210	80-225	95-300	110-345	135-380	155-420
Conveying speed (m/s)		0.02-0.2						
Conveying angle				0°	-30°			
Conveying length (m)		2 2		5-	100		00 2	
Materials conveyed with maximum width (mm)	35-120	50-165	65-210	80-225	95-300	110-345	135-380	155-420

### Bin discharging mobile screw conveyor

#### Application:

It is used for long bin discharging, mainly used for wood chips bin or bamboo chips bin.

#### Design features:

- It can discharge materials continuously and without dead corner. Also, it has large conveying capability.
- Conveying screws adopted variable diameter and pitch structure, materials in above 7 meters high can be discharged easily.
- ♦ Place gear and rack on both ends of the long axis, more steadily while working.
- Mobile long axis placed in conveying screw hollow axle, structure is more compact.





#### Main technical data:

Model	EST70	EST55	EST40
Conveying capacity (m3/h)	200-250	100-150	40-100
Applicable bin volume (m3)	500-1000	300-600	100-300

# Corrugated sidewall steeply inclined belt conveyor

#### Design features:

◇Different gradient can be designed according different site conditions, the maximum gradient can be 90°.

♦ It has compact structure, less construction area and large conveying capacity. Besides, bulk material does not easy to fallout.





### Belt conveyor

#### Application:

It is widely used in mining, metallurgy industry to transport both of bulk materials and end products.

#### Design features:

- ♦ Large conveying capability, simple structure, standardized parts, easy maintenance.
- It can work with a unit set or work with other belt conveyor or other conveying equipment.



	Belt			Belt v	vidth		
Kind of carrier roller	speed	500	650	800	1000	1200	1400
	(m/s)		C	Conveying $pprox$	apability(t/s)	20	
	0.8	78	131				
	1.0	97	164	278	435	655	891
	1.25	122	206	348	544	849	1115
	1.6	156	264	445	696	1048	1427
troughed rollers	2.0	191	323	546	853	11284	1748
	2.5	232	391	661	1033	1556	2118
	3.15			824	1233	1858	2528
	4.0					2202	2996
	0.8	14	67	118		6 G	
	1.0	52	88	147	230	345	460
Parallel	1.25	66	110	184	288	432	588
rollers	1.6	84	142	236	368	553	753
	2.0	103	174	289	451	677	922
	2.5	125	211	350	546	821	111

## DS Series pulp pump

#### Application:

It is used for transporting pulp, sugar, starch and chemical material.

#### Design features:

- ◇Adopt the technology of ANDRITZ.
- ♦ High efficiency.
- ♦ Anti-jammed.
- ♦ Non-leakage and easy maintenance.



Flow (m³/h)	13-2500
Head (m)	7–110
Power (kw)	0.75-280
Rotation speed (r/min)	750-3000
Connection diameter (mm)	Φ80-600
Pulp consistency (%)	≤6
Working pressure (Mpa)	≤1.6

# DSP Series hi-efficiency technical pulp pump

#### **Application:**

It is suitable for transporting pulp, cotton pulp and sewage water with fiber.

#### Design features:

- ♦ Adopt the technology of ANDRITZ.
- ♦ Single-stage and single suction.
- It has auxiliary impeller seal and impeller clearance adjustment plate.
- ♦ High efficiency.
- ⇔save energy.





Flow (m³/h)	13–2000
Head (m)	6-55
Power (kw)	1.1-250
Rotation speed (r/min)	980-1480
Connection diameter (mm)	50-350
Pulp consistency (%)	≤5
Working pressure (mpa)	≤1.0

# DWP Series Single-suction low pulse pump

#### Application:

It is suitable for the pulp-feed system of high or middle speed, and is also good for upgrading of old paper machine.

#### Design features:

- ♦ Adopt the technology of ANDRITZ.
- ♦ Single-stage and single suction.
- ♦ Combination of both semi-opened and closed impeller.
- It has auxiliary impeller seal and Impeller clearance adjustment plate.



Flow (m³/h)	55-1920
Head (m)	4-50
Power (kw)	3-250
Rotation speed (r/min)	980-1480
Connection diameter (mm)	Ф 100-350
Pulp consistency (%)	≤1.5
Working pressure (mpa)	≤1.0

# DSWB Series double-suction low pulse pump

#### Application:

It is suitable for the pulp-feed system of high or middle speed.

#### Design features:

- ♦ Adopt the technology of ANDRITZ.
- ◇Big twist vanes and stagger outlet intercalation helps to decrease the flow impulsion and depress the flow pulse efficiently.
- ♦ Horizontal type, easy to install.
- ♦ Special seal.
- Non-leakage.



Flow (m³/h)	300-2600
Head (m)	9–85
Power (kw)	45-355
Rotation speed (r/min)	980-1480
Connection diameter (mm)	Φ200-350
Pulp consistency (%)	≤1.5
Working pressure (mpa)	≤1.0

## DTJ Series adjustment safety agitator

#### Application:

It can be used in the pulp pool, pulp tower, mixed pool, dry pool as well as front pulp pool in the paper-making process.

#### Design features:

- ♦ Adopt the technology of ANDRITZ.
- ♦ The vane can be rotating adjusted by bolts.
- ♦ The seal adopts rubber ones with metal framework embedded in it.



Pulp tower volume (m³)	10-1200
Power (kw)	3-75
Rotation speed (r/min)	150-320
Pulp consistency (%)	≤4.5
Impeller diameter (mm)	Φ300-1800

## 2BE Series water ring vacuum pump

Model	Suction pressure (hpa)	pump revolution speed (r/min)	Maximum volume of working gas (m3/min)	Motor power (kw)	Type of belt drive	Motor voltage(v)	Inhalation caliber (mm)	Discharge caliber (mm)
	2BE1 202 33	790	9.5	18.5	Belt			
200700000000000000000000000000000000000		880	11	18.5	Belt	1900000	0.00	10-10-20-7
2BE1 202		980	12	22	Coupling	ng 380	125	125
		1100	14	30	Belt			
		1170	15	30	Belt			
		790	14	30	Belt			
	382320	880	16	30	Belt			
2BE1203	33	980	18	37	Coupling	380	125	125
		1100	20	45	Belt			
		1170	21	45	Belt	9,		
		558	20	30	Belt			
		660	25	37	Belt	2001	100	10.22
2BE1 252	33	740	28	45	Coupling	380	150	150
		820	30	55	Belt			
		880	33	75	Belt			
		560	28	45	Belt			
	NEES	590	30	55	Belt	02.00	150	150
2BE1 253	33	660	35	55	Belt	380		
		740	39	75	Coupling			
		820	43	90	Belt			
		466	43	55	Belt			
		520	45	75	Belt		1222	
2BE1 303	33	590	52	75	Coupling	380	200	200
		660	58	90	Belt			
		740	62	110	Coupling			
		300	68	75		380 30		300
		323	80	90	Coupling			
2BE1 400	160	367	85	110	or belt		300	
		393	92	110	or ben			
		449	110	132				
		242	125	160			380	
W	2.23	266	145	185	Coupling		380	8.22
2BE1500	2BE1500   160	294	165	200			6000	350
		336	190	250			6000	
		372	210	280			6000	
		200	180	185	Coupling		380	
	2000	236	210	250		6000	6000	400
2BE1 600	160	266	240	280			6000	
		294	260	315		6000	3	
		336	285	350			6000	

### **XStock transportation and storage equipments**

### Vacuum pump







## Air compressor

Key parts of the air compressor are manufactured in the CNC machine center. Monomer type valve block, slow speed of revolution, high compression efficiency, and easy maintenance. Crankcase, air cylinder and cylinder cover all use best cast iron, angular, strong and durable, high cost performance.

### Belt press filter

#### Application:

It is a kind of dehydration equipment. As a matching equipment of sewage disposal, it can dehydrate the suspended substance and sediment after air-flow processing, and press them into mud cake, so as to prevent the second pollution. It can also used for concentrating the pulp, extracting the black liquor and other fabrication processing.



#### Design features:

- ♦ High dehydration rate.
- ♦Long service time.

### Shallow layer air floatation machine

#### Application:

Compared with the traditional air floatation machine, the new type high efficiency shallow layer air floatation machine changes water static in-dynamic out into dynamic in-static out. The suspensions vertically float on the surface of the water and the sewage only to stay in the purifying pond about 2-3min, the processing efficiency is extremely high.



# Cavitation air flotation machine

It is the latest product developed by the introduced technology from the United States. It is widely used for sewage treatment in the industries of papermaking, chemical, printing and dyeing, oil refining, starch and foodstuff.









# Paper making equipments

- ★ Tissue paper machine
- ★Writing printing paper machine
- ★Packaging paper machine
- ★ Newsprint paper machine
- ★ Special paper machine

# Tissue paper machine

Paper grade	Tissue, napkin, hand tower, daily used paper
Type of paper machine	Vacuum cylinder mould high speed tissue machine, crescent former high speed tissue machine
Trim width (mm)	1575-5600
Working speed (m/min)	180-1600
Capacity (t/d)	20-60















# Newsprint paper machine

Paper gade	newspaper
Type of paper machine	Long wire multi-cylinder paper machine
Trim width (mm)	2362-3950
Working speed (m/min)	300-800
Capacity (t/d)	50-220

# Writing printing paper machine

Paper grade	Writing printing paper	
Type of paper machine	Fourdrinier multi-cylinder paper machine	
Trim width (mm)	1575-6000	
Working speed (m/min)	120-1000	
Capacity (t/d)	50-250	







# Packing paper machine

Paper grade	Fluting, white board paper, kraft board paper, ivory board paper
Type of paper machine	Mould machine, fourdrinier machine, overlapped machine
Trim width (mm)	1575-6000
Working speed (m/min)	80-600
Capacity (t/d)	100-950



## Special paper machine

Paper grade	All kinds of special paper
Type of paper machine	Inclined wire special paper machine;
Type of paper macrine	Fourdrinier multi – dryer special paper machine
Trim width (mm)	1092-2640
Working speed (m/min)	350-400
Capacity (t/d)	10-80



### Air-cushion headbox

Headbox is used for sizing in fourdrinier section of paper making machine for producing cardboard paper, corrugated base paper, writing and printing paper, offset paper and so on.





### **Former**

#### Application:

It works together with the piece type cylinder mould to produce paperboard of low, medium and high grade.

#### Design features:

- ♦ Square taper multi-barreled pressure pulp distribution.
- ♦ Diffusion separation chamber for rectification and pulp evenness.
- ♦ Adjustable mechanism for pulp serving on the wire to control the quality of the wet paper page.
- ♦ Paper production speed increase by 25%-40%.
- Increase the evenness, flatness and quantification of the paper.
- Increase the variety and weight range of the paper.
- Simplified structure, easy maintenance.
- ◇Low energy consumption.

Paper variety	High strength corrugated paper
Sizing grammge (g/m2)	25–100
Speed (m/min)	80–200
Width	1092-4200



# Cylinder mould

#### Type:

Paper-making cylinder mould, dewatering cylinder mould for thickener and former.

#### Structure:

Welding sheet-rounded, perforated sheet with rods, gravity type.

Φ 1000 Φ 1250 Φ 1500	Width in 1000–8000mm
Ф2000	
Φ2500	dewatering cylinder mould for thickener
Ф3000	











## **Dewatering elements**

- ♦Forming board box
- ◇Dewatering box
- ♦Ultra-low vacuum suction box
- ♦ Low vacuum suction box
- ♦ Vacuum suction box
- ♦ Felt suction box
- ◇Press shoe

### **XCylinder mould/ dewatering elements**



### Papermaking rolls

SECTION	NAME	CHARACTERISTICS
	Couch roll	Effective dewatering effect, corrosion resistance
-	Vacuum couch roll	Φ500mm-Φ1500mm, width 2000mm-8000mm, thickness 30mm-120mm, hole
Forming 	0.11	diameter Φ3mm-Φ13mm
section	Guide roll	High temperature, corrosion, tension, pressure and impact resistance, easy to scrape.
	Forward roll	Used in the rugged environment of driving unit, good frictional behavior and wear resistance.
	Suction press roll (SS shell)	The glue layer has good toughness, large tapping area (max: 50%); special designed buffer layer can disperse stress and resist impact; well dewatering effect; high quality paper product; prolong the service time of felt.
	Suction press roll	Stable hole pattern, excellent dewatering effect, stable hardness after long service time,
	(copper shell)	wear resistance and corrosion resistance.
	Soft top press roll	It has superior characteristic of releasing paper; wear, corrosion and impact resistance
		It has superior characteristic of releasing paper; stable hardness under high temperature;
	Hard top press roll	good bearing capacity under the operation of vapor spray, chemicals, high pressure and
		scraper operation.
Press	Grooved roll	Excellent wear resistance, dewatering performance
section		Liner pressure can reach 380KN/m; the surface of the coated area has 21%-23% tapping;
3654511	Blind press roll	the speed is about 1000m/min; special bonding system ensures the safe operation
		under high speed and high linear pressure; good wear resistance, effective dehydration
	Plain press roll	Good wear vesistance
	Artificial stone roll	Good paper releasing; wear resistance; scraper can be used; can satisfy severe rugged
	Artificial storie foil	environment under high linear pressure
	Guide roll	Good paper releasing; wear resistance
	Spreader roll	Good wear resistance and frictional behavior
	Pick up roll	Good paper releasing, anti-adhesive capacity; wear resistance
	Stonite roll	Compression strength: 200mpa; tensile strength: 70mpa; modulus of elasticity:
	1000 (100) (1000 (1000 (1000 (1000 (100) (1000 (1000 (1000 (1000 (100) (1000 (100) (1000 (100) (1000 (100) (1000 (100) (1000 (100) (1000 (100) (1000 (100) (1000 (100) (1000 (100) (1000 (100) (1000 (100) (1000 (100) (1000 (100) (1000 (100) (1000 (100) (1000 (100) (1000 (100) (100) (1000 (100) (100) (1000 (100) (1000 (100) (100) (1000 (100) (100) (1000 (100) (100) (100) (1000 (100) (	0.4*106E; rigidity: HV3500
Drying section	Hard breaker stack roll	Super wear and high temperature resistance; uniform surface
	Soft breaker stack roll	Super wear and high temperature resistance; good after-hardening resistance
		Super wear resistance; good reinstatement and tread forming resistance; uniform
200	Coating roll	surface; good wettability; high temperature and corrosion resistance; longer operational
Sizing/ coating		period; reduce downtime
section	Sizing roll	High temperature, wear, corrosion, thread forming resistance; good reinstatement;
		uniform and stable size; longer run operational period.
		The use of nano material improves the performance of rubber significantly. Meanwhile,
Calender		improves its elastic modulus and its impact resistance. It can keep safe performance
section	Calender roll	although in severe rugged environment of high speed, high temperature, and high linear
		pressure. At the same time, roller surface lasts stability, good abrasion resistance, and
Dooling part	Speed	a long grinding cycle.
Reeling part	Spool	Good wear and tear resistance





◆Guide roll (1)

◆Guide roll (2)





◆Couch roll

◆Forward roll





◆Stonite roll

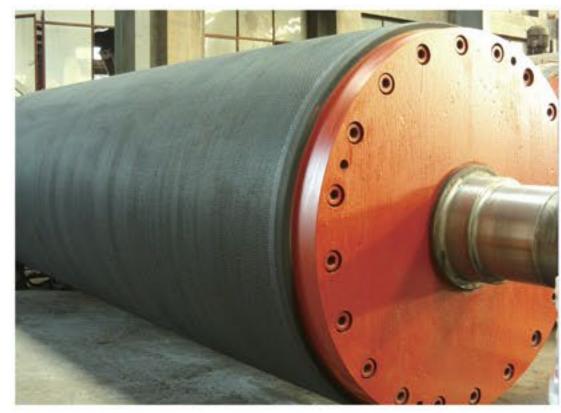
◆Vacuum roll





◆Plain press roll

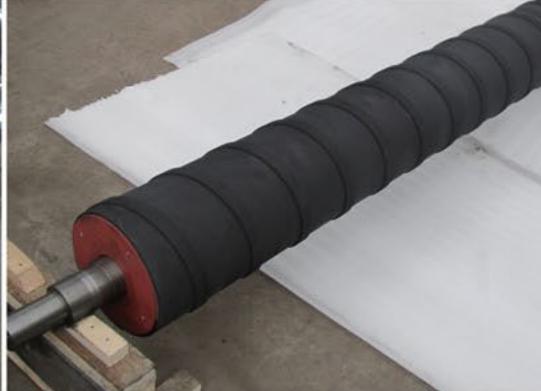
◆Grooved press roll



◆Blind press roll

◆Jumbo press roll





◆Felt roll

◆Spreader roll





◆Calender roll(1)

◆Calender roll(2)





◆Spool roll(1)

◆Spool roll(2)





◆Reeling cylinder

◆Bow roll

## Dryer cylinder and accessories

#### Product inspection standards:

- Dryer cylinder design standards can achieve the American national standards (ANSI), European standards (EN), Germany standard (DIN), France standard (NF), Britain standard (BS), Japan industrial standard (JIS), Russia standard (POCT), China national standard (GB) and some other countries' standards.
- 2. Dryer cylinder manufacturing, testing and acceptance standards: European 《PED 97/23 CE of European Union pressure equipment standard》 and (ASTM) standards and some other related standards.
- 3. Dryer cylinder supervision and inspection departments and standards: supervised and inspected by a third party of other international SGS recognized authorities according to the standard stipulated in the contract.

#### Main technical data:

Diameter (mm)	Design pressure (mpa)	Material	Hardness (hb)	Width (mm)	Thickness (mm)	Surface finish	Working speed (m/min)
< Φ 1500	0.3-0.5	HT200-250		1350-10000	18-27		
Ф 1500	0.3-0.8	HT250-300		1350-10000	25-32		
Ф1800	0.3-0.8	HT250-300		1350-10000	28-36	8	
Ф2000	0.3-0.8	HT250-300	190-240	1350-8000	30-40	0.2-0.4	200-1300
Ф2500	0.3-0.8	HT250-300	190-240	1350-8000	32-47	0.2-0.4	200-1300
Ф3000	0.3-0.8	HT250-300		1350-8000	37-56		
Ф3660	0.3-0.8	HT250-300		1350-6000	40-65		
Ф3680	0.3-0.8	HT250-300		1350-5000	Negotiation		



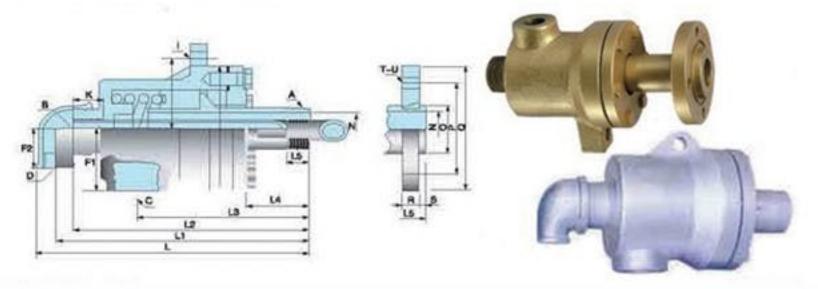
◆Dryer cylinder

### **\*Dryer cylinder and accessories**



◆Steel-sheet welded dryer





◆Rotary joint

# Other accessories for paper-making



## **XOther accessories for paper-making**

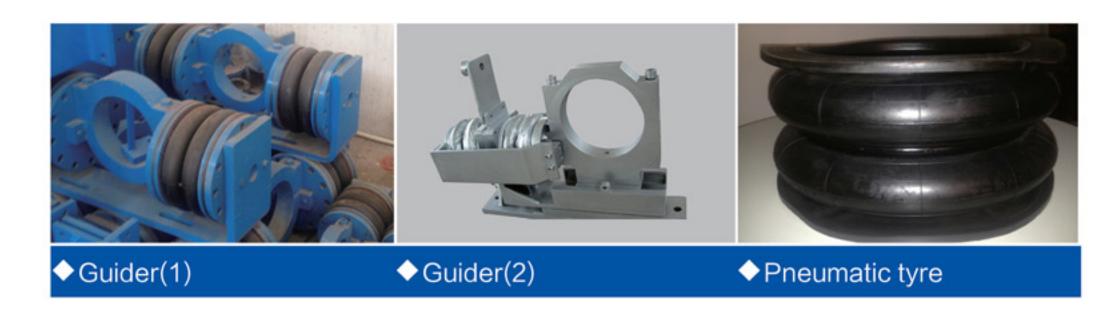








◆Blade

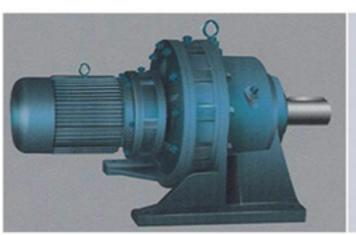








### **XOther accessories for paper-making**







◆ Gear reducer(1)

◆ Gear reducer(2)

◆ Gear reducer(3)

### Test equipment





◆Strength tester

◆ Carton box pressure testing machine



◆Tensile testing machine



◆Ashcroft tester



◆Compression equipment





◆Pulp consistency sensor ◆The paper quantitatively stabilization system ◆Pulp quantitative distribution system





# Finishing equipments

- **★**Rewinder
- ★ Sheet cutter
- ★ Calender
- ★ Size press

# High speed bottom-feeding rewinder







Trim width (mm)	2400	2640	2850	3200	3400	3600	3800	4000	4200	4400	4600	4800	5000	5200	5400	5600	5800	6000
Gauge (mm)	3500	3750	3950	4350	4550	4755	4955	5155	5355	5550	5750	5950	6150	6350	6550	6750	6950	7150
Working speed (m/min)		800-2000																
Max base paper diameter (mm)		1600-3000																
Max finished product diameter (mm)		1000-2000																
Driving Method		DC variable-speed motor driving/ variable frequency variable-speed motor driving																
Braking method		DC motor braking/ Variable frequency motor braking																

# Frame type up-feeding rewinder



Trim width (mm)	1092	1575	1760	1880	2100	2400	2640	2850	3200	3400	3600	3800	4000	4200	4400	4600	4800	5000	5200	5400	5600
Gauge (mm)	2000	2400	2600	2700	3000	3200	3500	3700	4100	4300	4500	4700	5280	5480	5680	5880	6080	6280	6480	6680	6880
Working speed (m/min)		600																			
Max base paper diameter (mm)		1200-2200																			
Max finished product diameter (mm)		1000-1500																			
Driving Method		electromagnetic variable-speed motor driving/ variable frequency variable-speed motor driving																			
Braking method		DC motor braking/ Variable frequency motor braking																			

# Single/duplex sheet cutter





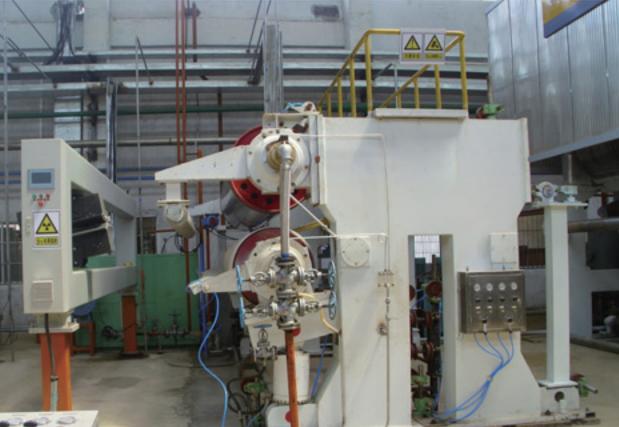
Trim width (mm)	1575	1760	1880	2100	2400	2640	2850	3200	3400	3600	3800	4000	4200	4400	4600	4800	5000
Gauge (mm)	1990	2190	2290	2540	2840	3050	3260	3610	3810	4230	4430	4630	4830	5030	5230	5430	5630
Working speed (m/min)		60-120															
Max finished roll diameter (mm)		1200-1800															
Max paper layboy (mm)		1500															

### Soft /hard calender

#### Design features:

- ♦ Opening type machine rack helps to flexibly choose layout plan for calender area.
- ♦ All kinds of test and control system are used to protect soft roller surface.
- ◇Paper has good printability and luster.
- ◇Paper lateral uniformity and strength are improved.
- ♦ Optimized size to reduce restriction of paper width and working speed.









Applicable paper type	Coated white paperboard/ ivory board/ Taxus base paper/ Decorative base paper/ newsprint paper/ writing printing paper/ cast coated paper/ Carbonless copy paper
Width (mm)	1000-10000
Working speed (m/min)	100-1000
Linear pressure (KN/m)	50-220

# Sizing press

It is used for surface sizing of cardboard paper, corrugated base paper, writing and printing paper, offset paper and so on. The maximum width of the sizing machine can be 5600mm.





#### **\*Paper converting and packaging equipments**







# Paper converting and packaging equipments

- ★Gray paperboard/white paperboard coating machine
- ★ Carbonless copy paper coating machine
- ★Thermal paper coating machine
- ★ Coated art paper coating machine
- ★ Carton Box Production Lines
- ★A4 cutting and finishing production lines
- ★Wrapping machine
- ★Packaging and conveyor line

# Cardboard paper coating machine







# Cardboard paper coating machine



# Carbonless copy paper coating machine

The carbonless copying paper coating line can produce the first layer, the middle layer and the bottom layer of the carbonless copying paper at the same time.





Thermal paper coating machine

Coated art paper coating machine



### **XPaper converting and packaging equipments**





**♦**Carton Box Production Lines

**♦**A4 cutting and finishing production lines





**◆Paperboard packaging system** 

**♦**Paperboard packaging system





**♦**Kraft paper packaging equipment

**♦**Stretch wrapping machine



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