# 污污形形式 Belt Press

# 專利 Patents

# 最新型超省水高壓往復式清洗系統裝置(選配

The newest super water saving, high-pressure reciprocating type washing system. (optional accessory)

專利證號 Patent Certificates:

台灣 Taiwan Patent No. M276045

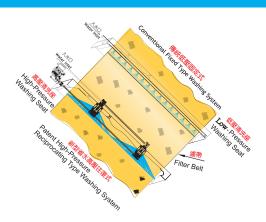
中國 China Patent No. ZL95215797.7

德國 Germany Patent Nr. 202005006697.4





- ▲運用高壓泵噴射水柱·對濾帶作來回往復噴洗動作·以確保維持濾帶透水功能及其壽命·並降低 泥餅含水率及增加處理功效。
- ▲徹底解決過去傳統低壓式固定高清洗水量詬病,並可節省相當龐大的後序迴流處理增加費用。 (請參考下列比較表)
- ▲在往復式系統結構上,裝置注油潤滑器,以確保系統使用壽命。
- ▲ Making use of our patent high-pressure reciprocating type washing system to wash the filter-belt completely will maintain the permeability of the filter-belt, lengthen its life span and reduce the water content's rate of the sludge cake, add the treating effectiveness of the belt press.
- ▲ Using the conventional type washing system will consume a lot of washing water, but our patent high-pressure reciprocating type washing system may substitute and solve the shortcomings of using the conventional type, meanwhile, save the huge cost of the treating recycling filtrate of post-process. (Please refer to the following comparison sheet)
- ▲ Lubricating oil filler: can maintain the high-pressure reciprocating type washing system to run normally and increase its life span.







#### 濾帶清洗水量比較表 The filter-belt washing water consumption comparison sheet

傳統低壓固定式 (不含轉鼓濃縮或重力濃縮水量)					新型高壓往復式 (不含轉鼓濃縮或重力濃縮水量)						
Conventional fixed type washing system ( not including thickening system )					Patent high-pressure reciprocating type washing system ( not Including thickening system						
濾帶寬度 (mm)	噴嘴型式	清洗水壓 (kg/cm²)	噴嘴總量 (pcs)	總水量(M³/hr)	噴嘴型式	清洗水壓 (kg/cm²)	噴嘴總量 (pcs)	總水量(M³/hr)	節省效率 (%		
Belt width	Nozzle type	Washing pressure	Numbers of nozzles	Total water consumption	Nozzle type	Washing pressure	Numbers of nozzles	Total water consumption	Water saving pero		
500	扇型 Sector 65°-30B	5	12	1.86	針型 Needle 0°-43#	20	4	0.85	55		
750	扇型 Sector 65°-30B	5	18	2.79	針型 Needle 0°-43#	20	4	0.85	70		
1000	扇型 Sector 65°-30B	5	25	3.87	針型 Needle 0°-43#	20	8	1.70	57		
1250	扇型 Sector 65°-30B	5	31	4.80	針型 Needle 0°-43#	20	8	1.70	65		
1500	扇型 Sector 65°-30B	5	38	5.88	針型 Needle 0°-43#	20	8	1.70	72		
2000	扇型 Sector 65°-30B	5	51	7.89	針型 Needle 0°-43#	20	12	2.55	68		
2500	扇型 Sector 65°-30B	5	64	9.91	針型 Needle 0°-43#	20	16	3.40	66		
3000	扇型 Sector 65°-30B	5	77	11.92	針型 Needle 0°-43#	20	16	3.40	72		

- The water consumption of the above nozzles may be adjusted by the different slurry.
   The company reserves the right of the above design modification.
- 晴嘴耗水量可依處理不同種類之污泥加以調整改變。○ 以上規格本公司保留設計變更之權利。

### Features

- ◎ 污泥均配器:可將濾帶上之污泥層·披散成均一厚度·確保污泥壓榨受力均勻,提升濾帶使用壽命。 (限有轉鼓濃縮系列)
- ® 電控箱:漏電斷路器裝置,可自動切斷電源,確保操作上的安全。(限TB/TBH/TB3/TE/TE3系列)
- ⑤ 濾帶:材質為polyester (P.E.S 聚酯纖維),濾水及耐化學性佳,使用壽命長。
- 梳泥器:強迫分割濾帶上均佈之污泥層,可增加濾帶之有效過濾面積,提升濃縮效率。(限有濾帶濃縮系列)
- © 空壓不足安全裝置。(限有糾偏系統用)
- ⑤ 濾帶異常偏離停止警報裝置。
- ⑤ 緊急停止安全開關裝置。(限TB/TBH/TB3/TE/TE3系列)
- ® Slurry spread guiding & arraying device : Slurry flocks are arrayed evenly on the central area of the filter-belt by this device, meanwhile, confirm the sludge squeezed evenly on the filter-belt with rollers and increase the life span of the filter-belt. (For drum thickening device series only)
- ® Electric control panel: Our circuit breaker will cut off power supply automatically for protecting the safety of the operators if electric leakage occurred. (For TB / TBH / TB3 / TE / TE3 Series only)
- © Filter belt : Polyester-Material, with good permeability and resistance to chemicals, with long life span when used normally.
- @ Plows : Force and turn the slurry over for assisting create a drainage path for the water phase, add the effective filter area of the filter-belt and increase the thickening effectiveness, (only used for belt thickening systems).
- © Air pressure shortage safety device. (only used for tracking systems)
- © Stop & alarm device when abnormal deflection on filter-belt.
- © Emergency stop & safety device. (For TB / TBH / TB3 / TE / TE3 Series only)





E.F.G 項需視機型而定裝面 The assembly of item No.: E.F.G depends on the machine models

4~9%(例圖),達到濃縮及減量功能。

# 轉鼓篩網濃縮系統 Rotary drum type thickening system

專利證號 Patent Certificates 台灣 Taiwan Patent No. 119141; M348113

- 中國 China Patent No. ZL96249032.6 ▲污泥調理膠羽後,大量的表面自由水、經篩除分離後,S.S 濃度可提高至
- ▲經轉鼓篩除後的泥糰結構穩定,無漫流側溢情形,可確實降低濾帶透水負 荷,並提高處理量及降低泥餅含水率。
- ▲ The free water separated from the sludge(which mixed and flocked with polymer solution), suspended solid consistency will be adjusted up to  $4\sim$ 9%(example photo as above) and reach the function of sludge thickening and reduction
- ▲ The sludge structure is stable after rotary drum thickening and will be no side-leakage, increase the permeability of filter-belt and treating quantity, decrease the water content's rate of sludge cake.





濃縮後實例照片 Example photo (sludge after thickening)

# 立毛纖維植毛濾帶(選購配備)

#### Planting fiber filter belt with upright fiber (optional)

#### 特點

- ▲粗網目基布之開孔率高,具有高透水特性。
- ▲立毛纖維之高摩擦力,可有效攔阻污泥及聚集污泥並防止側漏。
- ▲對於難處理之含油污泥、黏性污泥、活性污泥等脫水效果顯著。

#### 運作説明

- ④脫水前:濾帶尚未加壓時,立毛傾斜站立於基布;濾帶開孔率大
  - ·易於濾水及污泥聚集。
- ⑧脫水時:加壓脫水時,立毛纖維呈現同方向倒下狀態,濾液大量
  - 藉由毛細現象排出,污泥則被阻隔集於高密度之濾毛上
  - ,不會有側溢及堵塞的問題。
- ②脫水後:除壓後立毛纖維自動恢復彈性,泥餅會被彈起完全剝離
  - , 毛端上污泥殘留少, 不易堵塞。

#### **Features**

- ▲Percentage open area of the thick mesh kieb is high,has the high water percolation characteristic.
- ▲Sets up the wool textile fiber the high friction force, but detains the sludge and the accumulation sludge effectively and prevents the side to leak.
- ▲ Oiliness of sludge regarding difficult processing, stickiness sludge, active sludge and so on the dehydrated effect is remarkable.

#### Application instructions

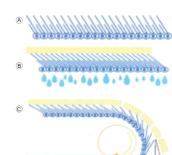
- Before dehydration : before pressurized filter belt, upright fiber tilt standing on base cloth; filter belt with large openings rate, easy to filter water and accumulate sludge.
- ® During dehydration : pressurized dehydration, upright fiber exhibits the same direction down state, and the filtrate were discharged a lot by capillary phenomenon, sludge were berried on high density filter fiber, there will be no side leakage and clogging problems.
- © After dehydration : the upright fiber restores elasticity automatically after release pressure, sludge cake will be completely bounce stripped, less residue sludge and clogging.

# 各機型配備説明

#### The description of functions and accessories for all models

★註Remark: V 有Yes ×無None ●可選購Available ▲不可選購Unavailable

	機型 Model			系列 Series				
說明 Desci	iption	TD	TA	TB	TE			
	主機本體不銹鋼 SUS304 材質製造	V	v	v	V			
S	Main structure made of stainless steel SUS304 濾帶 (組裝機台上)							
anc =	Filter belt (installed on machine)	V	V	V	V			
lard 標	調理槽(含攪拌機)	٧	V	V	٧			
標準配備 標準配備	Conditioning or mixing tank (including agitator) 電控箱(材質:碳鋼+二道樹脂防銹處理) (組裝於機台上)							
ces 備	Control panel ( Material: carbon steel + 2 layers of resin antirust painting ) (installed on machine)	V	V	V	٧			
sori	前段濃縮系統	x	V	V	٧			
es	Pre-thickening system  保養手冊/保固書	(TDR V)						
	Operation & maintenance manual / product certificate	V	V	V	V			
	空氣壓縮機	<b>A</b>	•	•	•			
	Air compressor 清洗泵浦							
	Washing pump	•	•	•	•			
Perip	污泥輸送泵浦	•	•	•	•			
iphe <sup>ij</sup>								
era 🦷	Polymer solution dosing pump	•	•	•	•			
Peripheral equipments	絮凝劑溶解泡藥機(或攪拌機/儲存桶)	•	•	•	•			
uip ii								
nen ∉	Filtrate recycling pump (depend on the positioning condition of the machine)	•	•	•	•			
O Its	清洗水過濾回收再利用系統	<b>A</b>	•	•	•			
ption 選	Filtrate reusing system for filter-belt washing 泥餅螺旋輸送機							
nal 購	Screw conveyor for sludge cake	<b>A</b>	•	•	•			
Optional accessories	主體修改為不銹鋼 SUS316 / 316L 或碳鋼材質製造	<b>A</b>	•	•	•			
ess 備	Main structure made of stainless steel SUS316 / 316L or carbon steel 超省水高壓住復式清洗系統							
orie	Super water saving, high - pressure reciprocating type washing system	<b>A</b>	•	•	•			
**	濾帶自動張緊系統(三濾帶式濃縮段為固定方式) Filter belt auto-tensioning system ( Triple-belt type - thickening section: fixed type)	<b>A</b>	•	V	٧			
ung I								
Ction 均	Appriliability and all attitudes to 101.00 and all lands are all lands and interest	<b>A</b>	•	•	•			
n n n n n		<b>A</b>	•	•	•			
写育チ糸 Function upgrade								
ade	Central oil-supply lubricating device	<b>A</b>	•	•	•			
	安全防護網 Machine outside safekeeping net							
	緊急停止安全拉繩 Emergency stop pull-rope 集氣罩 Waste air collecting device	•	•	•	•			
	濾帶變類調速 Frequency converter adjusting device							
	濾帶斷裂偵測 Belt broken-down detective device 濾帶速度顯示 Monitor of belt driving speed	<b>A</b>	•	•	•			
	MR TO ALL DE MAY TO MICHIGATION OF DOLL CHANING SPECCO							





(含油污泥脫水實例) (Example for oil-retaining sludge cake outlet)



清洗水過濾回收再利用系統 Filtrate reusing system for filter-belt washing