



## LIST OF ADVANTAGES OF THE ROTARY PRESS versus THE BELT FILTER PRESS

ITEM	ROTARY PRESS	BELT FILTER PRESS
Labour costs	The Rotary Press requires little attention.	To properly operate the BFP, it requires constant adjustment and attention.
Airborne contamination	Totally enclosed process.  Sludge will not run on the floor.	Open process with frequent spills and sprays.  Large air handling system is required to eliminate airborne contamination, corrosion and airborne pathogens.
Spare requirements	Less	More – Higher initial investment in building space.
Maintenance costs	Maintenance is less frequent, simple and easy.  Most maintenance can be performed by one person.  Equipment is very simple and reliable.	Many parts (bearings, belts, doctor blades, shafts, etc) require frequent maintenance and adjustment, and can cause shut down of the machine.  The complex equipment can easily become unreliable.
Wash water	No continuous wash water is required.  25 USGPM/Channel for 5 minutes per day for a system flush.  (500 USG/day for a 4-channel unit).	The requirement for wash water is substantial 40 to 110 USGPM at 80 to 130 PSI (60,000 – 160,000 USG/day).  Equipment to pretreat this water may be required.  This wash water supply consumes power at a rate of 5-14 HP and needs to be considered in the overall analysis.  This wash water poses an additional load on the plant since it is sent to the head works.

P.-S. : The listed advantages are based on past experience, they must not be interpreted as a contractual guarantee.

ITEM	ROTARY PRESS	BELT FILTER PRESS
Capture Rate	A high capture rate is intrinsic in the Rotary Press design and frequent adjustment is not required to maintain it high: 95% av.	The capture rate may not be very good (less than 90%), and sometimes less than 65%.
		It depends how close the BFP is being operated to the optimum conditions.
		Analysis of the capture rate needs to take into account both filtrate and wash water.
		The solids from the filtrate and the solids from the wash water pose additional substantial loads on the plant.
Cake dryness	High	Lower
Operation	Simple and adjustments to the cake dryness are very easy.	Not so easy especially for inexperienced operators.
	Normally a PLC is included for easy control.	The BFP requires continuous adjustment.
	The control loops will allow for some variation of sludge.	
Partial operations	For a multi-channel machine, one or more channel(s) may be removed for maintenance purposes, while the machine with the remaining channel(s) may still be operated.	The whole machine is in operation or it is shut down.
Shut-down procedure	5-min system flush.  Frequent shut-down and start-ups are possible.	Thirty (30) minutes to one (1) hour plus time to wash down the belts and structural components of as required for a hygienic environment.
Total maintenance and operation costs	<b>LOW</b>	<b>HIGH</b>

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