

ROTARY DRUM VACUUM FILTER (Belt Discharge Type)

INTRODUCTION

Triveni Rotary Drum Belt Discharge type Vacuum Filter incorporates several novel design features making it one of the best available machines of its kind. The Belt Discharge Filter of **Triveni** design has performed satisfactorily on the applications even where slurries of low solid contents are to be filtered or where filter cakes of low inherent strength are to be handled. **Triveni** Rotary Drum Belt Discharge Filter is well suited for varied industrial applications e.g. coal slurry, mineral slurry, food processing, chemical processing, effluent sludge dewatering etc.

OPERATION

Essentially a belt discharge system involves forming a filter cake on an open type endless belt, which is in contact with the media in filtration, washing and drying zones. The solids thus trapped by the filter media form the cake on top of the belt. From the discharge point, the belt leaves the drum via tracking roll to the discharge roll where the cake is dislodged. The belt then goes into a wash trough over the wash roll and then after getting washed, passes over a return roll bringing it back into contact with filter drum just above the level of feed liquor in the filter trough.

FEATURES

Some of the novel features of **Triveni** Rotary Drum Belt Discharge filter are as under :-

Cake is completely supported between drum and the discharge roll. As a result very thin cakes having low inherent strength can be handled effectively.

Arrangement of separate wash trough with provision of high impact spray ensures that the contents of filter trough are not diluted as a result of washing. Spent washing liquor can be drained out.

As the wash trough is separate, a variety of belt washing media can be used without affecting the slurry to be filtered.

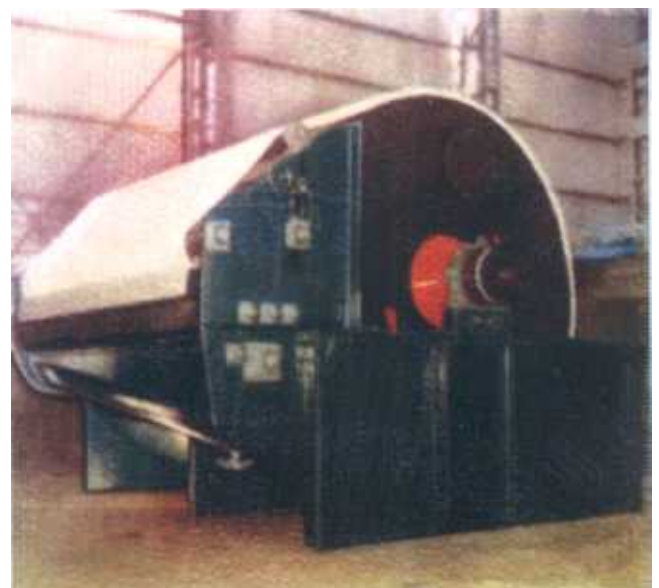
Novel design of wash roll ensures effective drainage of the wash liquor and thus avoids the possibility of sagging of belt as a result of accumulation of wash liquor. This accumulation of wash liquor on the belt can cause slippage of belt over the roll.

Discharge roll is spiral wound and, on larger size filters, is provided with a separate drive. This arrangement ensures a very effective belt tracking.

Provision of relative movement of rolls prevents the most nagging problem of belt shifting.

Comparatively high filtration rates are achieved for most applications.

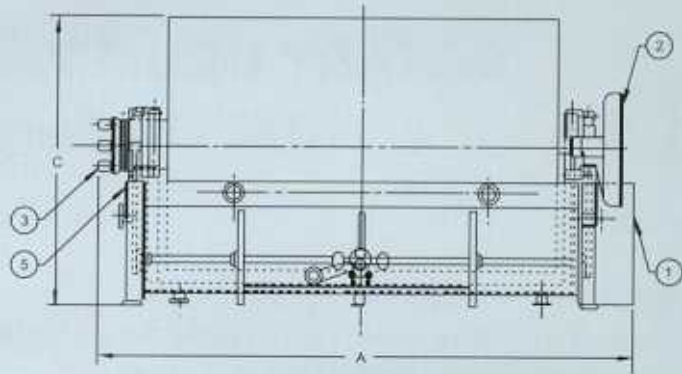
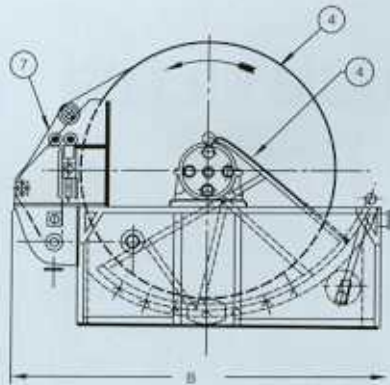
Rugged construction of filter ensures long and trouble free service with minimum maintenance.





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ITEM NO.	DESCRIPTION
1	MAIN DRIVE
2	WORM GEAR
3	VALVE
4	DRUM
5	TANK AND FRAME
6	AGITATOR
7	BELT DISCHARGE



Drum Dia.		Drum Face		Nominal Filtration Area		A Length		B Width		C Height		Weight	
Ft. ins.	Mts.	Ft. ins.	Mts.	Sq. Ft.	Sq. Mt.	Ft. ins.	Mts.	Ft. ins.	Mts.	Ft. ins.	Mts.	Lbs.	Kgs.
3-0	0.91	2-0	0.61	15	1.39	5-0	1.52	6-6	1.98	4-3	1.30	3000	1361
3-0	0.91	3-0	0.91	25	2.32	6-0	1.83	6-6	1.98	4-3	1.30	3300	1497
3-0	0.91	4-0	1.22	35	3.25	7-0	2.13	6-6	1.98	4-3	1.30	3600	1633
3-0	0.91	5-0	1.52	45	4.18	8-0	2.44	6-6	1.98	4-3	1.30	3900	1770
5-0	1.52	3-0	0.91	45	4.18	7-5	2.26	9-5	2.87	6-4	1.93	6800	3055
5-0	1.52	4-0	1.22	60	5.57	8-5	2.56	9-5	2.87	6-4	1.93	7700	3493
5-0	1.52	5-0	1.52	75	6.96	9-5	2.87	9-5	2.87	6-4	1.93	8500	3856
5-0	1.52	6-0	1.83	90	8.36	10-5	3.17	9-5	2.87	6-4	1.93	9200	4173
5-0	1.52	7-0	2.13	105	9.75	11-5	3.48	9-5	2.87	6-4	1.93	9800	4445
6-6	1.98	4-0	1.22	80	7.43	8-7	2.62	11-6	3.50	7-10	2.39	9000	4082
6-6	1.98	5-0	1.52	100	9.29	9-7	2.92	11-6	3.50	7-10	2.39	10400	4717
6-6	1.98	6-0	1.83	120	11.15	10-7	3.23	11-6	3.50	7-10	2.39	11800	5352
6-6	1.98	7-0	2.13	140	13.00	11-7	3.53	11-6	3.50	7-10	2.39	13200	5987
6-6	1.98	8-0	2.44	160	14.86	12-7	3.84	11-6	3.50	7-10	2.39	14600	6622
6-6	1.98	9-0	2.74	180	16.72	13-7	4.14	11-6	3.50	7-10	2.39	16000	7257
8-0	2.44	6-0	1.83	150	13.93	10-9	3.27	14-0	4.26	9-5	2.87	11000	4994
8-0	2.44	8-0	2.44	200	18.58	12-9	3.88	14-0	4.26	9-5	2.87	15000	6805
8-0	2.44	9-0	2.74	225	20.90	13-9	4.19	14-0	4.26	9-5	2.87	17000	7711
8-0	2.44	10-0	3.05	250	23.22	14-9	4.49	14-0	4.26	9-5	2.87	19000	8620
8-0	2.44	12-0	3.66	300	27.87	17-6	5.33	13-11	4.24	9-5	2.87	20000	9072
8-0	2.44	13-0	3.96	325	30.19	18-6	5.64	13-11	4.24	9-5	2.87	21800	9888
8-0	2.44	14-0	4.26	350	32.51	19-6	5.94	13-11	4.24	9-5	2.87	23600	10705
8-0	2.44	15-0	4.57	375	34.83	20-6	6.25	13-11	4.24	9-5	2.87	25400	11521
10-6	3.20	10-0	3.05	327	30.38	16-5	5.00	15-7	4.75	12-0	3.66	31275	14185
10-6	3.20	12-0	3.66	393	36.51	18-5	5.61	15-7	4.75	12-0	3.66	32275	14640
10-6	3.20	14-0	4.26	459	42.64	20-5	6.22	15-7	4.75	12-0	3.66	33275	15095
10-6	3.20	15-0	4.57	492	45.70	21-1	6.42	15-10	4.82	12-0	3.66	33775	15320
10-6	3.20	16-0	4.88	525	48.77	22-1	6.73	15-10	4.82	12-0	3.66	34275	15550
10-6	3.20	17-0	5.18	558	51.84	23-1	7.03	15-10	4.82	12-0	3.66	34775	15775
10-6	3.20	18-0	5.49	591	54.90	24-1	7.34	15-10	4.82	12-0	3.66	35275	16000
10-6	3.20	19-0	5.79	624	57.97	25-1	7.65	15-10	4.82	12-0	3.66	35775	16225
10-6	3.20	20-0	6.10	657	61.03	26-1	7.95	15-10	4.82	12-0	3.66	36275	16455

All informations given above are approximate only. Dimensions and filtration areas can be tailored to specific requirements. For higher size filter (>12' Dia), please contact us

Triveni also manufactures filters of other types including Rotary Drum Vacuum Filters with Knife, String, Roller & Precoat knife and also Table, Disc & Tipping pan filters.

The Company reserves the right to modify their specifications and products without notice in the interest of quality & reliability.

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