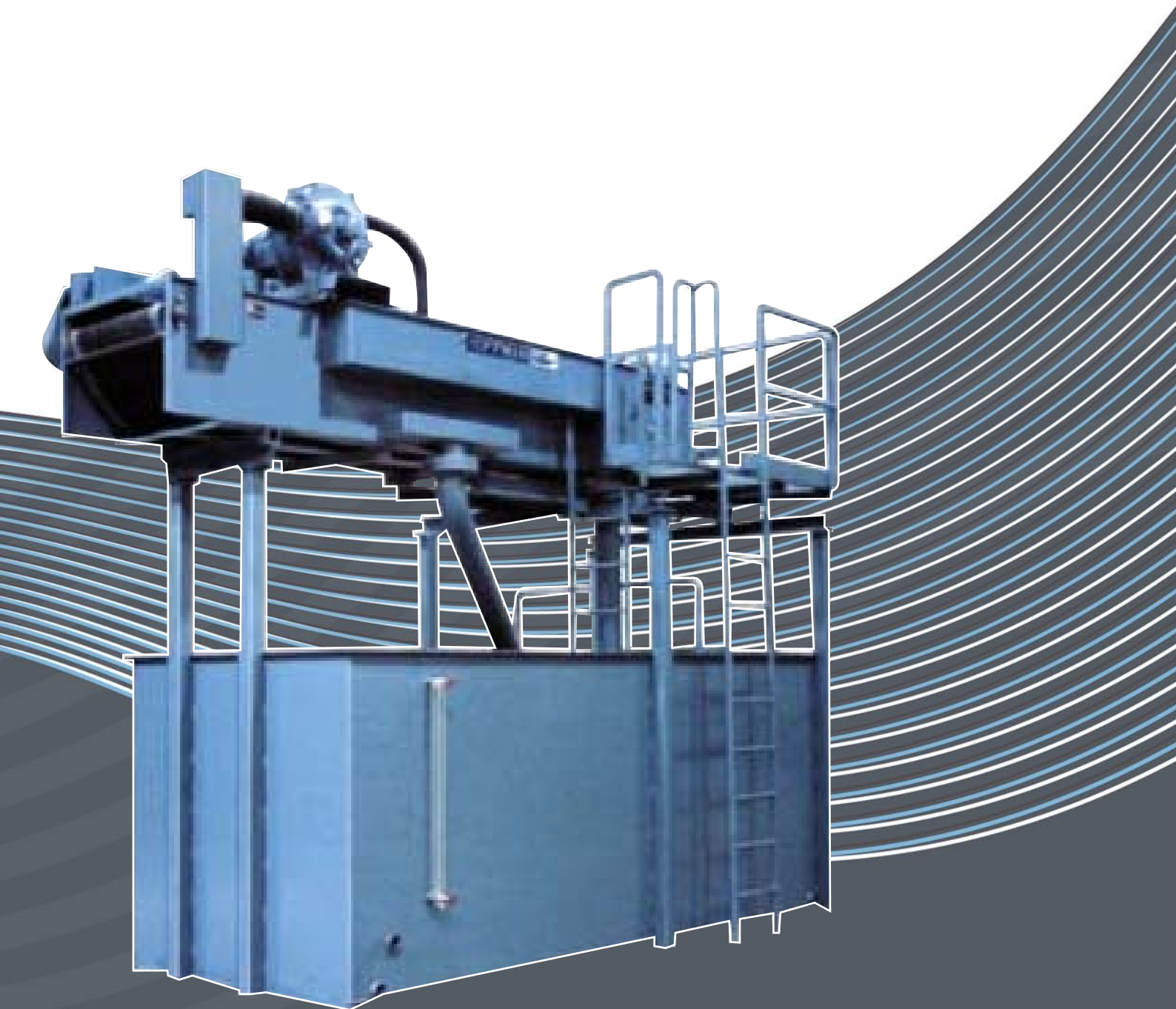




interfil

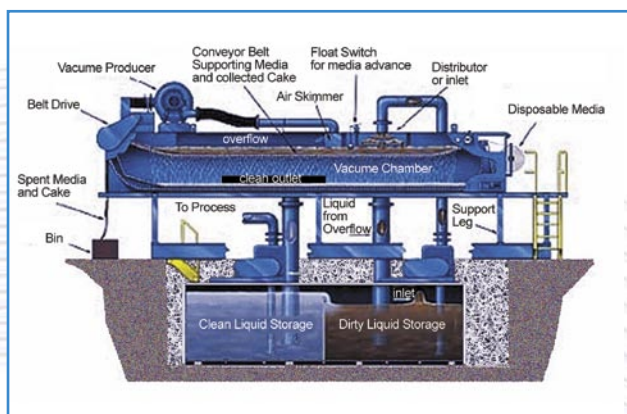
Hoffman Flatbed Vacuumatic Coolant Filtration



◆ Hi-Flo Vacuumatic Operation

The filter feed pump supplies the Vacuumatic with process fluid from the dirty tank. This liquid is pumped to the distributor and evenly apportioned across the filter bed pool. The bed consists of a flat wire belt supporting the filter media.

A Hoffman exhaustor produces vacuum in the chamber beneath the filter bed, drawing the liquid through the media and the built up deposit of solids (filter cake). When the pressure drop across the filter cake/media reaches a given limit, an electrical switch is closed. This indexes the media and, as a result, discharges spent media and dried filter cake into the disposal container. At the same time, clean media is drawn onto the filter bed. Both the vacuum in the chamber and the liquid level drop due to the in-rush of liquid through this fresh media. This sudden flow builds the filter cake back to a functional level.



The clean liquid passing through the filter cake and media drains into the clean liquid compartment of the holding tank. A "water leg" is maintained in the clean overflow pipe to sustain a vacuum in the filter.

Where excessive floating solids or tramp oil exist in the incoming liquid, discharge air from the vacuum producer can operate an optional air skimmer. This moves floating materials toward the dirty end for removal as media is indexed. Should the filter bed become flooded due to mechanical malfunction or unexpected impurities in the process, the liquid level is reduced via the overflow slot connected to the side gutter. This is connected to an overflow drain pipe dumping into the dirty compartment of the holding tank.

◆ Principles ...

Hoffman Vacuumatic Filters are flatbed vacuum units. A continuous metal conveyor belt supports the disposable media, while a heavy-duty Hoffman exhaustor creates a vacuum beneath the media. As liquid increases and, at a preset limit, a vacuum switch causes the belt (and media) to be indexed. As media is newly exposed, it can be pre-coated by dirty liquid prior to entering the vacuum chamber.



... And Benefits

The Vacuumatic relies on the flow of air to perform three major functions. First, air is used to dry the cake prior to sludge removal. This minimizes loss of process liquids and reduces sludge disposal costs. Second, using the optional air skimmer, air flow is directed by the exhaustor discharge over the liquid pool to skim away floating contaminants. Third, air passing the filter chamber aerates the cleaned liquid. This is particularly important in the case of coolants to control bacterial growth and resulting coolant rancidity.

◆ Vacumatic Specifications

The table below indicates approximate flow capacities for the Hoffman Vacumatic vacuum filters based on water soluble emulsion (50 SSU) and a nominal clarity of 50 - 70 microns. Flows must be adjusted for higher viscosity or a higher level of cleanliness. For application specific capacities please contact the Hoffman Filtration Department.

Vacumatic Filter	Filter Area		Minimum Flow Capacity		Maximum Flow Capacity		Approximate Footprint	
	Feet	Metres	Gallons per Min	Litres per Min	Gallons per Min	Litres per Min	Square Feet	Square Metres
Vac-F40	4.2	0.39	4	16	21	79	3 x 7	1 x 2
Vac-F60	4.2	0.39	4	16	21	79	3 x 7	1 x 2
Vac-F80	12	1.11	12	45	60	227	5 x 9	1 x 2
Vac-F120	12	1.11	24	91	180	681	5 x 9	1.5 x 3
Vac-F122	16.6	1.54	33	126	249	943	5 x 11	1.5 x 3.5
Vac-F124	21	1.95	42	159	315	1192	5 x 13	1.5 x 4
Vac-F126	26	2.42	52	197	390	1476	5 x 15	1.5 x 5
Vac-F200	17	1.58	34	129	255	965	4 x 13	1.5 x 4
Vac-F300	23	2.14	46	174	345	1306	4 x 16	1.5 x 5
Vac-F400	26	2.42	52	197	390	1476	6 x 17	2 x 5
Vac-F500	29	2.69	58	220	435	1647	6 x 18	2 x 5.5
Vac-F750	35	3.25	70	265	525	1987	6 x 20	2 x 6
Vac-F1000	45	4.18	225	852	900	3407	7 x 21	2 x 6.5
Vac-F1500	55	5.11	275	1041	1100	4164	7 x 24	2 x 7.5
Vac-F2000	72	6.69	360	1363	1440	5451	7 x 28	2 x 8.5
Vac-F2500	89	8.27	445	1685	1780	6738	7 x 33	2 x 10
Vac-F3000	110	10.22	550	2082	2200	8328	8 x 36	2.5 x 11
Vac-F3500	129	11.98	645	2442	2580	9766	8 x 41	2.5 x 12.5
Vac-F4000	147	13.66	735	2782	2940	11129	8 x 45	2.5 x 14
Vac-F4500	165	15.33	825	3123	3300	12492	8 x 50	2.5 x 15.5
Vac-W75	75	6.97	375	1420	1500	5678	9 x 22	3 x 7
Vac-W90	90	8.36	450	1703	1800	6814	9 x 25	3 x 8
Vac-W120	120	11.15	600	2271	2400	9085	9 x 29	3 x 9
Vac-W148	148	13.75	740	2801	2960	11205	9 x 34	3 x 10.5
Vac-W162	162	15.05	810	3066	3240	12265	10 x 37	3 x 11
Vac-W190	190	17.65	950	3596	3800	14385	10 x 41	3 x 12.5

Phone 02 9533 4433
Fax 02 9534 6313
Email sales@interfil.com.au
Web www.interfil.com.au

2/66 Barry Ave
Mortdale NSW 2223
PO Box 72
Penshurst NSW 2222