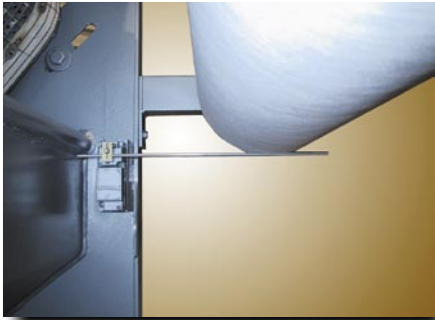


HIGH PERFORMANCE GRAVITY FILTER (HGF)

FILTRATION
FT
234D
WASTE DISPOSAL

COOLANT CLARIFICATION WITH "DEEP LIQUID POOL" GRAVITY FILTER

The Filtertech Model HGF Deep Bed Gravity Filter provides effective clarification for a variety of applications. The Model HGF combines a compact design with a deep liquid pool. This is accomplished by using our patented labyrinth side seal design, which provides an efficient seal along each edge of the filter media. This eliminates the migration of solids around the edge which is a common problem with "wheel" type cylindrical bed filters or shallow bed gravity filters.

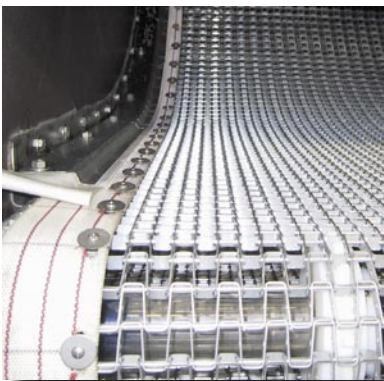


End-of-Media
Switch

The design allows the ability to generate a deeper liquid pool above the filter media because the seal runs the entire length of the filter bed, unlike "wheel" type filters whereby the seal is lost when the filter media separates from the wheel radius. The deep liquid pool creates a high pressure differential across the media allowing higher filtration rates and lower filter media consumption.



Dirty Inlet Distribution Header



Patented Labyrinth Moving
and Stationary Side Seals

PRODUCT BULLETIN



Model HGF4-1000
Deep Bed Gravity Filter
with Patented Labyrinth Side Seals

EQUIPMENT FEATURES

Standard

- Weldment constructed of 3/16" thick (5.0 mm) hot rolled steel.
- Internal manifold and distribution header submerged within the liquid pool constructed of hot rolled steel with top inlet connection.
- Heavy-duty flat wire belt conveyor constructed of galvanized steel.
- High-strength polymer sprockets with steel shafts.
- Adjustable take-up bearings.
- Direct drive system with inline gear reducer and fractional HP, T.E.F.C. motor.
- External overflow connection.
- Patented labyrinth moving side seals with stationary upper seals and stainless steel/Teflon® retainer.
- Extended area out of the liquid pool to allow additional drying time for the spent media prior to being discharged.
- Moderate incline media discharge prevents solids from falling back into the liquid pool.
- Deep liquid pool allows high pressure drop across the filter media and maximum utilization of the filter area.
- 5" diameter stainless steel float ball assembly, fully adjustable for height and position for automatic indexing of the filter media.
- Control panel mounted and wired for 110-volt single phase operation.
- End-of-media sensor.
- 125-yard roll of filter media.

Optional

- Full covers with inspection hatch constructed of 12 gauge (3.0 mm) hot rolled steel.
- Epoxy coated wetted surface steel construction.
- Cor-ten® steel construction.
- Stainless steel construction.
- Collection hopper constructed of hot rolled steel.
- Spent media rewinder/sludge separator (see Product Bulletin FT230).
- 3-Phase control panel.

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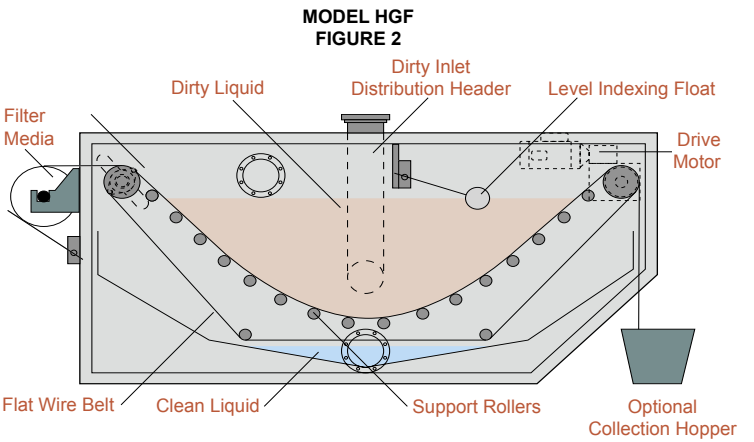
MODE OF OPERATION

The dirty liquid to be clarified is either pumped or flows by gravity in to the top inlet of the filter. The liquid passes through the low velocity inlet distribution header where it is discharged in to the bed of the filter.

A layer of disposable filter media is positioned within the filter and is supported by a flat wire conveyor belt. As the dirty liquid passes through the filter, solids are removed by the disposable filter media allowing only the clean liquid to pass through, which drains out of the bottom of the filter by gravity.

Solids accumulate on the surface of the media to form a filter "cake" which further improves filtrate clarity through depth filtration. The inlet header is submerged in the liquid pool to minimize disturbance of the filter "cake" and foaming of the liquid. The filter also includes Filtertech's patented labyrinth type positive side seal design which creates a double side seal to prevent migration of solids around the edge of the filter media.

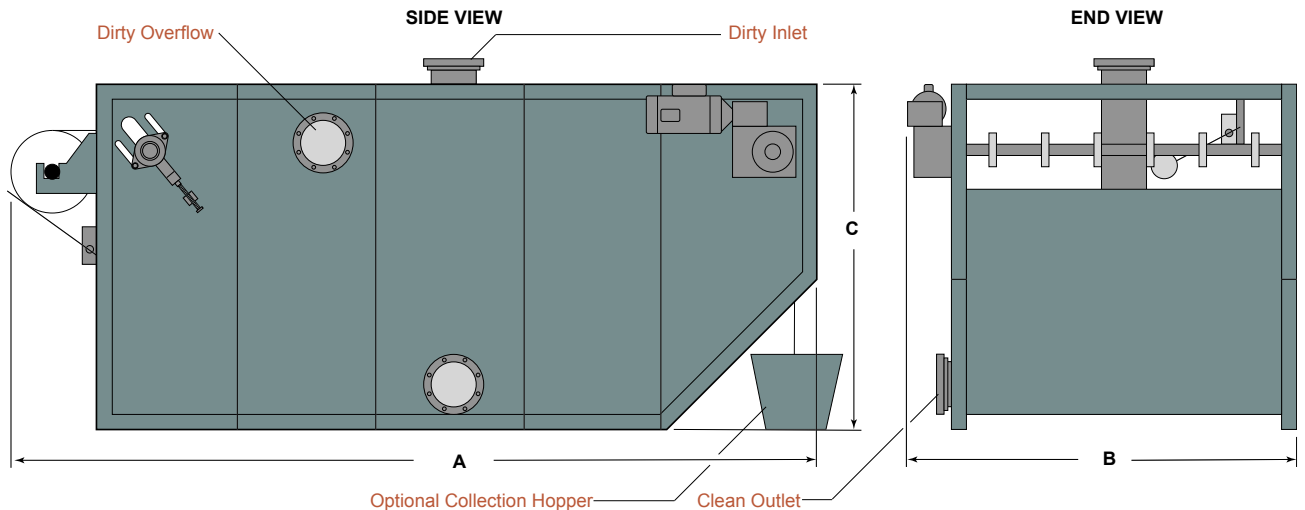
Over time the filter "cake" becomes thicker and more dense such that the filtrate rate through the



media decreases causing the level in the liquid pool to rise. This is sensed by a level control float which then automatically indexes the dirty media out of the filter in short increments while also introducing fresh media into the filter. The liquid level drops whereby indexing is stopped, thus, providing for completely-automatic operation.

To help prevent the roll of filter media from running out, the Model HGF is equipped with an end-of-media switch which senses when the media roll is almost depleted and annunciates an alarm condition on the filter control panel.

**FIGURE 3
MODEL HGF GRAVITY**



SPECIFICATIONS

Model†	Dimension ft-in (cm)			Electrical	Est. Weight lbs.(kgs.)	
	A	B	C		Dry	Wet
HGF3-800	9'-2" (264)	4'-5" (135)	3'-11" (119)	110V / ¼Hp	2,100 (955)	3,300 (1500)
HGF4-1000	10'-0" (290)	6'-7" (173)	3'-11" (119)	110V / ¼Hp	2,400 (1090)	4,100 (1865)
HGF4-1280	11'-3" (328)	6'-7" (173)	3'-11" (119)	110V / ¼Hp	2,560 (1165)	4,900 (2230)
HGF4-1600	12'-11" (394)	6'-7" (173)	3'-11" (119)	110V / ¼Hp	2,700 (1225)	5,300 (2404)
HGF6-1600	10'-0" (290)	8'-6" (226)	3'-11" (119)	110V / ¼Hp	2,750 (1250)	5,350 (2435)
HGF6-2000	11'-3" (328)	8'-6" (226)	3'-11" (119)	110V / ¼Hp	3,010 (1370)	6,300 (2865)
HGF6-2400	12'-11" (394)	8'-6" (226)	3'-11" (119)	110V / ½Hp	3,260 (1485)	7,750 (3525)
HGF6-2800	14'-7" (445)	8'-9" (267)	3'-11" (119)	110V / ½Hp	3,490 (1590)	9,200 (4185)
HGF6-3200	16'-3" (495)	8'-9" (267)	3'-11" (119)	110V / ½Hp	3,730 (1700)	10,600 (4820)
HGF6-3600	17'-11" (546)	8'-9" (267)	3'-11" (119)	110V / ½Hp	3,970 (1805)	12,000 (5455)
HGF6-4000	19'-7" (597)	8'-9" (267)	3'-11" (119)	110V / ½Hp	4,210 (1915)	13,400 (6090)

† Other systems are available on a custom basis.

Note: Flow rate based on rate for water-soluble fluids.

Specifications subject to change without notice.

HIGH PERFORMANCE GRAVITY FILTER (HGF)