

# Lifetime Guaranteed Construction

with unique built-in installation and maintenance features

## Did You Know?

Great Basin grease interceptors are 100% non-corrosive, and come with the only Lifetime Warranty in the industry.

Great Basin grease interceptors provide the best in quality materials and engineered craftsmanship. Units are rotationally molded 3/8" thick from high density polyethylene (HDPE) providing a uniform wall thickness that won't crack, chip or bulge under extreme impact, sunlight or temperature changes.



## Additional Engineering Information



Tank body passes structural loading design requirements of ASTM C890-06 for A-16 vehicle loading (per AASHTO HS20-44)



Temperature resistant up to 190° F



Molded with UV resistant HDPE



TeleGlide assembly fastened with EPDM seal and black oxide coated stainless steel clamps



\*Standard traffic rated cover and frame passes AASHTO #M306-09 for H-20 & HS-20 loading

\* H-20/HS-20 cover provided on GB-75 and GB-250 only. Kitchen duty cover on GB-35 and GB-50 units.



# Designed for All Applications

new construction | replacement | indoor | outdoor | above grade | below grade

## Did You Know?

The wastewater in a grease interceptor is so acidic that it meets EPA requirements for neutralization (pH<5). Acidic waste is extremely corrosive to steel and concrete.\*\*

## Indoor Installations

**Typical Lifespan of a Steel Interceptor: 2-7 years**

If guaranteed corrosion wasn't enough, traditional fabricated steel grease interceptors are only manufactured to meet minimum performance ratings by way of inefficient baffled designs and troublesome external flow control fittings.



Photo Series:  
replacement of failed steel  
interceptor (Chuck E. Cheese)



the grease  
capacity you  
need, designed  
to fit any  
project

## Outdoor Installations

**Typical Lifespan of a Concrete Interceptor: 1-10 years**

\*According to the Portland Cement Association, fats, fatty acids, vegetable oils, salts, sugars, acids, bleach and even water will disintegrate concrete without proper protective coatings. In time, concrete interceptors will crack and deteriorate, leaching contaminated wastewater into the ground.



Photo Series:  
GB-250 installed inside failed  
precast interceptor (McDonalds)



\* Information from Portland Cement Association: "Effects of Substances on Concrete and Guide to Protective Treatments" (2001)  
\*\* Information from WERF "Assessment of Grease Interceptor Performance", EPA Model Pretreatment Ordinance (2008)



The TeleGlide is the only riser system to allow finished grade adjustments from rough-in, up to final concrete pour.

**Introducing the TeleGlide™**  
fully adjustable riser system  
for perfect flush with grade cover and zero downtime

### Features

- Easy assembly during rough-in or finished grade work
- Adjust riser(s) to grade anywhere from 3 1/2" up to 76" using no more than 2 riser units per cover
- Adapter(s) included with every unit providing up to 6" of "free" adjustability\*
- Measure, cut and assemble riser unit(s) in the field for a perfect pour

### Components



- Tilts 10 degrees in any direction for sloped grades



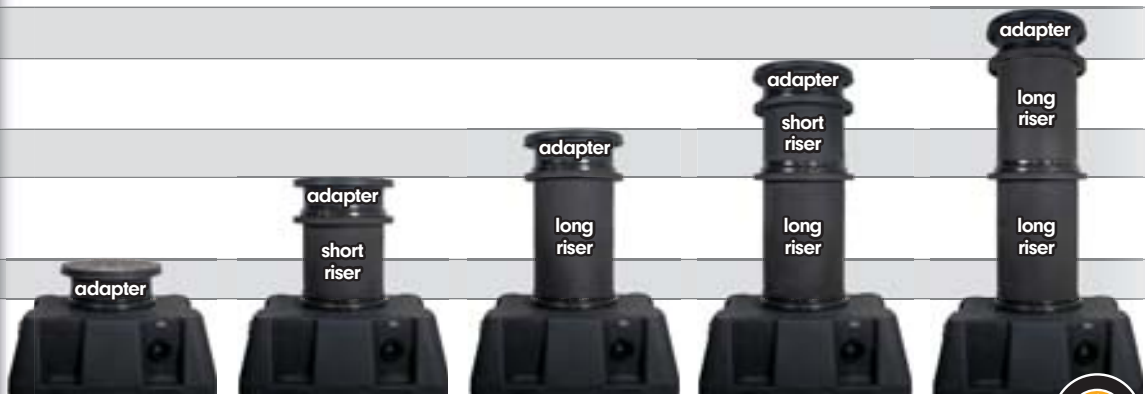
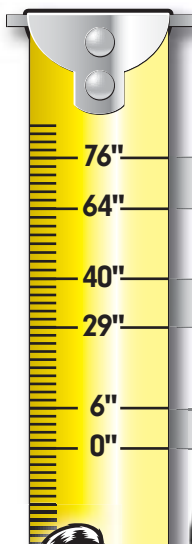
(Typical concrete riser)

20"

## 0" - 76" Depth Range

Riser/adapter combinations shown with GB-75 unit. GB-250 unit has two covers and requires 2 sets of riser/adapter units. For depths greater than 76" contact Schier Products.

\*GB-35 and GB-50 adapter max height is 3 1/2". Subtract 2 1/2" from the following ranges shown to determine riser combinations.



# Diffusion Flow™ Technology

for maximum grease separation performance

## Did You Know?

With comparable grease capacities at a 1/4 the size of precast units and an average pump-out cost of \$0.41/gal. the Great Basin offers significant maintenance savings. \*\*\*\*\*



## Code Compliance

Great Basin hydromechanical grease interceptors are performance-tested and listed by NSF and IAPMO to ASME #A112.14.3, greatly exceeding requirements for grease separation and storage. They are compliant to the Uniform Plumbing Code and International Plumbing Code and have been approved by most municipal pretreatment authorities as equivalent to larger, less efficient gravity grease interceptors.

## Efficient Flow Design

Great Basin grease interceptors incorporate Schier's patented Diffusion Flow™ design for maximum grease separation performance. Grease or FOG (fats, oils and grease) is lighter than water – it naturally separates under the right conditions and usually within the first few minutes of retention. Diffusion Flow simply generates the most effective flow pattern, enabling maximum separation and storage. In fact, WERF's independent flow study indicates that a "distributed no baffle configuration", much like Schier's Diffusion Flow design, provides the possible best grease interceptor performance.\*



- 1 Inflow passes through pre-calibrated built-in flow control
- 2 Flow moves downward to center of unit minimizing disruption of the grease/solids layers
- 3 Flow is diffused upward through wet volume to begin separation
- 4 Grease rises and collects to surface while heavier food waste falls out
- 5 Free of grease and food waste, effluent flows through outlet

## Comparison to Gravity Grease Interceptors

**Gravity Grease Interceptors			***Great Basin Grease Interceptors			
Liquid Holding (Gal.)	Grease Storage (Lbs.)	Unit Weight (Lbs.)	Model	Liquid Holding (Gal.)	Grease Storage (Lbs.)	Unit Weight (Lbs.)
300	280	3,366	GB-50	52	249	90
500	467	5,610	GB-75	125	616	130
750	712	8,415	GB-75	125	616	130
1000	933	11,220	GB-250	250	1,076	230
1,250	1,167	14,025	GB-250	250	1,076	230
1,500	1,400	16,830	GB-75 (2 units)	250	1,232	260
2,000	1,866	22,440	GB-250 (2 units)	500	2,152	460
2,500	2,333	28,050	GB-250 (2 units)	500	2,152	460
3,000	2,799	33,660	GB-250 (3 units)	750	3,228	690
4,000	3,732	38,200	GB-250 (4 units)	1,000	4,304	920
5,000	4,665	47,650	GB-250 (4 units)	1,000	4,304	920



\* Interpretation based on WERF (Water Environment Research Foundation) study titled "Assessment of Grease Interceptor Performance".

\*\* Gravity Grease Interceptor ratings based on typical 1/3:2/3 compartment design and published capacities of 5 common GGI manufacturers.

\*\*\* Only certified Great Basin grease interceptor models are shown.

\*\*\*\* Average pump out cost based on 2009 Schier national survey.

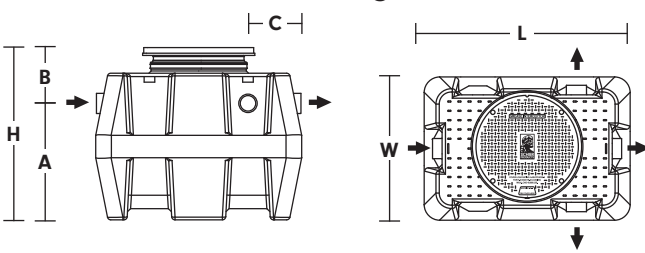


# Great Basin™ Indoor/Outdoor Polyethylene Grease Interceptor Series

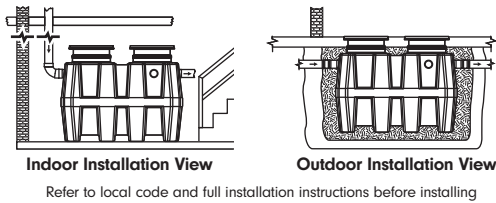
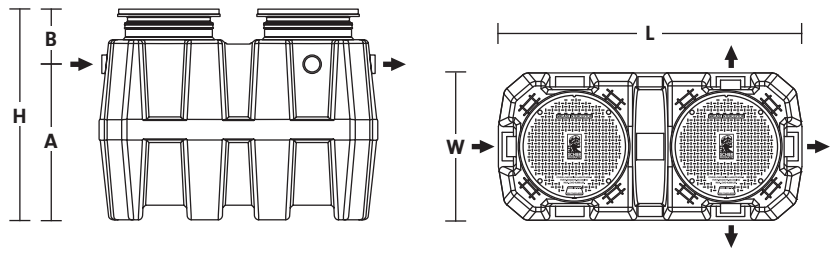
Specifications																	List Prices				
Schier Model	G.P.M.	Capacity			Outside Dimensions (in.)			Pipe Size (Plain End SCH.40)		Option	Piping Dimensions (in.)			No. of Covers**	Cover Dia.	Weight (lbs.)	NSF IAPMO Listed	Base Unit	Options		
		Grease (lbs.)	Solids (gal.)	Liquid (gal.)	L	W	H*	Standard	Option PS-__	Male Pipe Thread MPT-__	A	B	C						TeleGlide Risers (price/each) see order guide below	Anchor Kit available with GB-75 through 250. Use only when required. Kit heights vary with unit. Specify on order.	Pickable Cast Iron Ring & Cover (GB-35 & up)
GB-15	15	Coming Summer 2011															Coming Summer 2011	SR18	Coming Summer 2011		
GB-20	20																LR18				
GB-25	25																				
GB-35***	35	142	7	35	33	25	25	3	2, 4	3, 4	15	10	7 1/2	1	24	77	yes	\$1,000	SR24	\$500	
GB-50***	50	249	10	52	37	28	28 1/2	4	3	3, 4	18	10 1/2	9	1	24	90	yes	\$1,300			
GB-75	75	616	13	125	46	32	38 1/2	4	3, 6	3, 4	26	12 1/2	12	1	24	130	yes	\$2,310			
GB-125	100	450	13	125	46	32	38 1/2	4	3, 6	3, 4	26	12 1/2	12	1	24	130	no	\$2,310	LR24	\$630	
GB-250****	100	1,076	90	250	68	33 1/2	51 1/2	4	3, 6	3, 4	38	13 1/2	16	2	24	230	yes	\$4,510			

\* With adapter at zero height. Adapter may be adjusted up to 6" for GB-75, 125, & 250 and 3.5" for GB-35 & 50. Add according height to B & H dimensions when elevated.  
 \*\* H-20/HS-20 cover provided on GB-75 and GB-250 only. Kitchen duty cover on GB-35 and GB-50 units. \*\*\* Coming January 1st 2011 \*\*\*\* For flow rates higher than 100 GPM and grease capacities larger than 1,076 lbs see table below

## GB-35 through GB-125



## GB-250



## Installation Considerations



Anchor Kit (Includes two)



TeleGlide Assembly

TeleGlide Riser Order Guide						
Schier Model	GB-35 & 50		Schier Model	GB-75 & 125		GB-250
Riser Item #	SR24	LR24	Riser Item #	SR24	LR24	SR24
>3"-26"	1	0	>6"-29"	1	0	2
>26"-37"	0	1	>29"-40"	0	1	0
>37"-49"	2	0	>40"-52"	2	0	4
>49"-61"	1	1	>52"-64"	1	1	2
>61"-73"	0	2	>64"-76"	0	2	4

## Sizing Considerations

The following sizing may be applicable. Always consult local guidelines before sizing.

**Sizing By Flow Rate (per 2009 UPC, IPC & ASME A112.14.3)**  
 Where fixture dimensions and flow rates of all connected fixtures and equipment are known, interceptors may be sized as follows:

$$\frac{L'' \times W'' \times H''}{231} \times 0.75 = \text{GPM}$$

1 or 2 min.

- Calculate the volume of each connected fixture.
- Multiply the volume of all connected fixtures by a fill factor of 0.75 to obtain the discharge volume.
- Divide the fixture discharge volume by a drain period of one minute or two minutes for slower drain time.
- Add flow rates of appliances, hydrants and equipment.
- The minimum grease interceptor size is the sum of all flow rates discharging to the interceptor.

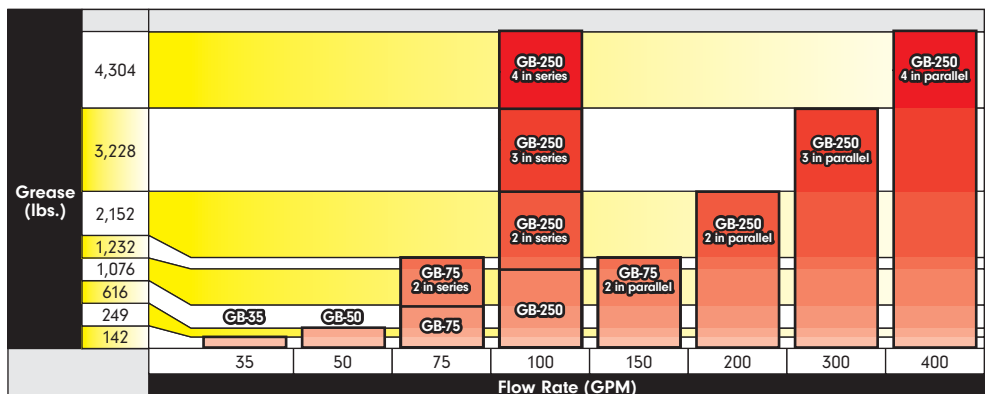
**Sizing by Pipe Size** Where fixture dimensions and flow rates are unknown, sizing may be achieved through calculating flow through primary drain line.

*Flow Rates by Pipe Size						
Pipe Size (in.)	Pitch (in.)	Flow Rate (GPM)				
		ASPE full pipe	ASPE 2/3 pipe	ASPE 1/2 pipe	UPC	
2	1/4	18	14	9	20	
3	1/4	51	41	26	60	
4	1/4	110	87	55	125	
6	1/4	314	248	157	375	

**Food Waste Solids** A natural amount of food waste solids will find its way to all grease interceptors. Great Basin grease interceptors, by way of their unique flow design, provide natural fallout space for solids settling without disturbing the grease storage capacity. If installing a garbage disposal in front of grease interceptor, Schier recommends a solids interceptor be installed before the grease interceptor.

**Choosing Parallel Versus Series Installations** The Great Basin series was designed in a modular way to allow installations that flex to meet project requirements. There are three base configurations available (single unit, multiple tanks in parallel (manifold) and multiple tanks in series (one after the other). Sizing should be calculated first by flow rate (GPM) then select desired grease storage capacity (lbs.). It is important to consider that flow rate studies at restaurants of all sizes indicate flows from 5-20 GPM, which is significantly lower than what industry sizing methods (at left) often calculate\*\*. In addition, during flow testing, Schier units in parallel did not achieve uniform flow distribution until 50 GPM or higher.

After calculating flow rate, choose best configuration for desired grease capacity.



\*ASPE Plumbing Engineering Design Handbook 2: Plumbing Systems (2006-2007) and 2009 UPC code  
 \*\*WERF FOG Interceptor Design Operation Guidance Manual

Download technical documents at [www.schierproducts.com](http://www.schierproducts.com)

B-GB-1110





Since 1972

# Indoor/Outdoor Grease Interceptor Series

# Great Basin™

Introducing the next generation of the Great Basin

Effective November 1<sup>st</sup> 2010

**6 New  
Features**

including the patent-  
pending TeleGlide™  
fully adjustable  
riser system

GB-250



GB-75

**Plus 5 New Models  
Coming Soon**

(see page 6 for details)

Pioneering Drain Line Purity



grease  
interceptors



oil  
separators



solids  
interceptors



chemical  
waste tanks