OWNER'S MANUAL GREAT BASIN[®] GREASE INTERCEPTORS





Congratulations!

You are the owner of a Great Basin[™], the world's best grease interceptor. Please use the information in this manual to make the most of your Great Basin[™]. We are confident that you will be happy with your investment and we truly value your business. Please contact Schier anytime with questions or feedback or just to say hi.

Table of Contents

| Why Grease Interceptors Are Necessary | 2 |
|---|---|
| Suggested Maintenance Procedure | 3 |
| Calculating Pump-Out Frequency | 4 |
| Core Samples | 5 |
| Kitchen Best Management Practices | 6 |
| Maintenance Log | 7 |
| Great Basin [™] Specifications | 8 |



Why Grease Interceptors Are Necessary

Grease interceptors, sometimes called grease traps or grease pits, are required in most food service establishments. The primary function is to separate and store the fats, oils and greases that are washed down the drain during food prep and dishwashing. Without grease interceptors, fats, oils and greases will build up on the walls of drainage piping, ultimately causing a blockage. This can lead to an immediate back-up in your kitchen, or worse, the City's wastewater collection system. When a blockage happens in the City's system, it can lead to a Sanitary Sewer Overflow (SSO), which results in raw sewage flooding out of manhole covers spreading dangerous bacteria into streets and walkways. SSOs are a leading cause of fresh water contamination and can be deadly for fish, plankton and other aquatic life. By properly maintaining your Great Basin[™], you are doing your part to protect the environment.



interceptor that has not been properly maintained





Maintenance Procedure

- 1. Remove cover(s).
- 2. Remove all contents of the grease interceptor including grease, sediment and wastewater. For most thorough cleaning contact a professional pumper contractor.
- 3. Run sinks to fill unit(s) with cold water.
- 4. Inspect cover gasket for wear and tear. Replace cover(s)
- 5. Dispose of grease per local code.

NOTE: It is not necessary to remove the diffusers during maintenance unless there is a backup or drain lines require jetting. To remove the inlet and outlet diffusers hand loosen the green locking collars. Clean the drain lines, diffusers and air relief thoroughly of all debris as necessary.



Grease Interceptor Anatomy (Current GB-250 Model Shown)



Calculating Pump-Out Frequency

All grease interceptors have a maximum grease holding capacity. Once that maximum capacity is exceeded, fats, oils and grease (FOG) will bypass to the collection system, creating the potential for blockages. It's critical to determine an accurate pump-out schedule that ensures the interceptor gets pumped out only as often as necessary, but before it reaches its maximum rated capacity. Your Great Basin[™] grease interceptor should have been sized according to the Grease Production Sizing Method (GPSM) and assigned a pump-out schedule prior to installation. If it wasn't, or if circumstances have changed, use the following formula to get your pump-out schedule back on track.

| Grease Capacity (See Below) \div (Meals Per Day \star Grease Production Values (see $@ @ @ @ @ @ @ below$) = Operating Days Per Pump-out Cycle | | | | | | | | | |
|--|---|-------|-------|-------|---|-------|-------|--------|--|
| model | | GB-15 | GB-20 | GB-25 | GB-35 | GB-50 | GB-75 | GB-250 | |
| maximum grease capacity (lbs.) | | 74 | 109 | 75 | 142 | 249 | 616 | 1,076 | |
| Restaurant Type Grease Production Values Examples | | | | | | | | | |
| Low Grease Production | (A) 0.005 lbs (2.268 g) / meal (no flatware) | | | | Sandwich Shop, Convenience Store, Bar, Sushi Bar, Delicatessen, Snack Bar, Frozen Yogurt, Hotel Breakfast Bar, Residential | | | | |
| | B 0.0065 lbs (2.948 g) / meal (with flatware) | | | | | | | | |
| Medium Grease | O .025 lbs (11.340 g) / meal (no flatware) | | | | Coffee House, Pizza, Grocery Store (no fryer), Ice Cream Parlor, Fast Food, Greek, Indian, Low Grease Output FSE (w/fryer) | | | | |
| Production | • 0.0325 lbs (14.742 g) / meal(with flatware) | | | | | | | | |
| High Grease | th Grease (B) 0.035 lbs (15.876 g) / meal (no flatware) | | | | Cafeteria, Family Restaurant, Italian, Steak House, Bakery, Chinese, | | | | |

When scheduling pump-outs, Schier recommends a pumping frequency between 30 and 90 days. Your calculations should be updated if number of meals per day, operating days per week or the menu types (more greasy or less greasy) change.

Buffet, Mexican, Seafood, Fried Chicken, Grocery Store (w/fryer)

0.0455 lbs (20.638 g) / meal (with flatware)

Production



Core Samples

If you prefer not to rely solely on the GPSM to dictate pre-scheduled monthly pump-outs, you can take a more commanding role in dictating pump-out frequency with some simple tools and regular inspections. To do this you will need a core sampler. Common trade names include DipStick Pro and Sludge Judge .

Once you have your core sampler, it can be outfitted with some simple labeling (via high adhesive tape or permanent marker) to indicate your pump-out levels (see below).

NOTE: Series Installations

-00-00-00-

When installed in series, initially the first unit will fill up with grease while passing some grease to subsequent unit(s). As the grease layer in the first unit grows, more grease will pass to subsequent units. When it reaches maximum capacity, the first unit will pass all grease to subsequent unit(s). Core samples should be taken from the final tank in the series and pump-out scheduling should be conducted when it is near full capacity.

Core Sample Measurements at Full Capacity

| model | GB-15 | GB-20 | GB-25 | GB-35 | GB-50 | GB-75 | GB-250 |
|--------------------------------|-------|-------|-------|-------|-------|-------|--------|
| total liquid height (inches) | 9.0 | 10.0 | 10.0 | 14.0 | 16.0 | 24.0 | 36.0 |
| maximum grease height (inches) | 5.0 | 6.6 | 4.4 | 6.2 | 9.1 | 16.6 | 18.8 |
| maximum grease % of volume | 63% | 68% | 47% | 56% | 66% | 68% | 54% |
| maximum solids height (inches) | 2.0 | 2.0 | 2.0 | 2.6 | 3.3 | 1.5 | 12.8 |

GB-250 Core Sample at Full Capacity



Kitchen Best Management Practices

The following kitchen best management practices (BMPs) will help reduce the cost to clean and maintain your grease interceptor and keep your facility in good standing with local pretreatment authorities.



Use debris screens in all floor and sink drains. Regularly empty screens into trash.



Minimize use of food waste disposals to improve interceptor storage and reduce maintenance costs.



Dry-wipe food waste from dishes before washing and clean grease spills with disposable materials.



NEVER pour oil, fry oil, or melted lard or butter down drain line. Dispose these oils in appropriate container.



NEVER put chemicals for reducing grease into the drain system. The temporarily dissolved grease will bypass the interceptor and harden in downstream piping.



Implement BMP training program for kitchen staff.



Observe pumper contractor work to ensure interceptor is fully pumped out, properly cleaned and in good condition.



Make sure to run sinks to refill unit with cold water after pump-out.



Keep maintenance log detailing pump-outs, repairs and condition of interceptor.

Maintenance Log

| Date | Action (Inspection/ pump-out) | Grease Level (inches) | Solids Level (inches) | Notes |
|------|-------------------------------------|-----------------------------|-----------------------------|-------|
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

| CONTACT INFORMATION | Grease Permit # |
|----------------------------|-----------------|
| Pumper Contractor | |
| Sewer and Drain Contractor | |
| Local AHJ | |

History

The very first Great Basin[™] grease interceptor was installed in 2006, forging a new category in the world of grease interceptors. Prior to 2006, it was undersized steel grease traps inside of the building and oversized concrete grease interceptors outside of the building. These products offered little-to-no information in the way of performance. Worse, due to inferior materials and the corrosiveness of commercial kitchen wastewater, all of these units are guaranteed to fail.

The Great Basin[™] was designed to offer better performance and better pump-out information along with the only lifetime warranty in the industry. With over 70,000 installations from San Francisco to Singapore, Schier has a growing fleet of corporate account specifications, installations at over 15 professional sports stadiums, thousands of restaurants, schools, corporate campuses, One World Trade Center and (we've been told) the White House.

Great Basin[®] Series Specifications





100 GPM flow rate 1,076 lbs. grease capacity 105 gal. solids capacity 275 gal. liquid capacity





25 GPM flow rate 75 lbs. grease capacity 6.4 gal. solids capacity 22 gal. liquid capacity



GB-75

75 GPM flow rate 616 lbs. grease capacity 19.2 gal. solids capacity 125 gal. liquid capacity

| Tan | | |
|-----|----|--|
| TP | 10 | |
| | | |

20 GPM flow rate 109 lbs. grease capacity 6.4 gal. solids capacity 22 gal. liquid capacity



GB-50

50 GPM flow rate 249 lbs. grease capacity 12.5 gal. solids capacity 52 gal. liquid capacity



GB-15

15 GPM flow rate 74 lbs. grease capacity 3.9 gal. solids capacity 16 gal. liquid capacity



GB-35

35 GPM flow rate 142 lbs. grease capacity 9.5 gal. solids capacity 35 gal. liquid capacity

For buried models look under the lid to find your product ID label