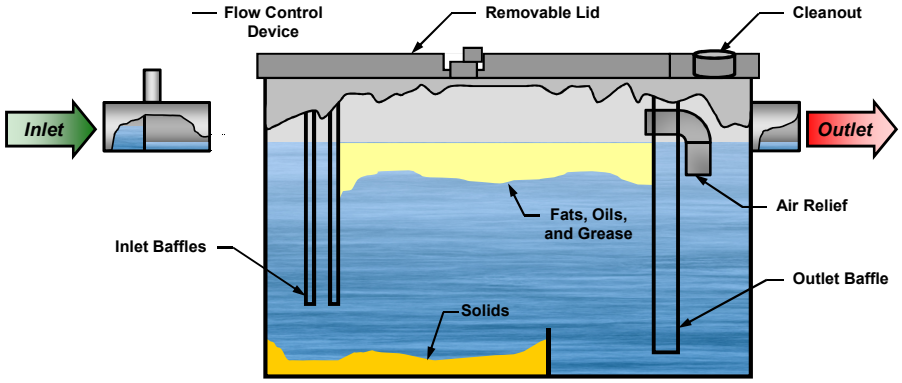
Hydromechanical Grease Interceptor (HGI)
Fact Sheet

Hydromechanical grease interceptors (HGIs) (formerly named grease traps) treat kitchen wastewater from food service establishments (FSEs) using gravity separation aided by vented flow control. They are typically installed indoors and connected to one to four sinks in the kitchen. They accumulate fats, oil and grease (FOG) and solids over time in a relatively small separator tank allowing the treated wastewater to discharge to the sanitary sewer (see the figure below).



Hydromechanical Grease Interceptor
Indoor, Above Ground (Typical)
15-60 Gallons, 20-50 GPM (Typical)
40-100 Pounds of FOG Storage (Typical)

Design and Sizing

HGIs are made of steel, fiberglass or polyethylene, typically consisting of a single compartment with baffles, and sized according to the Uniform Plumbing Code (UPC). Chapter 10, Table 10-2 of the 2006 UPC and the 2009 UPC provide two different sizing methods for HGIs. Regardless of the sizing method, HGIs are sized based on flow rate and the pounds of FOG that they can store. Typically, they treat 20-50 gallons per minute (GPM), store 40-100 pounds of FOG, and are 15-60 gallons in volume. Vented flow control devices must be installed upstream of HGIs to control the wastewater flow to match the certified flow rate of the HGI. If this flow control device is not installed, the HGI may not perform properly when the flow exceeds the certified flow rate.

Certification and Approval

HGIs are tested and certified to ASME A112.14.3 or PDI-G101 standards at the HGI's specified maximum flow rate. Sewering agencies often require that HGIs be certified to these standards before they can be approved for use in their service area. Plan check approvals should make sure that one or more HGIs are connected to all the significant grease waste drains (e.g., pot sink, pre-rinse sink, wok station).

Proper Maintenance

HGIs should be cleaned before the floating FOG and settled solids accumulation exceeds 25% of the HGI's overall capacity. In order to prevent this, daily to weekly cleaning of the HGI by kitchen staff or pumping contractors may be required to ensure proper operation. If performed by kitchen staff, solids and FOG should be dewatered (e.g., mixed with kitty litter) and discarded in the trash.

Inspections

Agency inspections should focus on making sure that the HGIs are in proper working order and are being cleaned frequently enough to prevent an over-accumulation of FOG and solids. Inspectors will typically notify the FSE if the HGI needs more frequent cleaning or maintenance. FSEs are often required to save pumper receipts or maintain logs to show the inspector that the proper maintenance is being performed.

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