

## **Guidelines for Sizing Grease Interceptors**



## **Sizing Considerations**

- \* <u>THE TOWN IS NOT RESPONSIBLE FOR SIZING GREASE INTERCEPTORS. WE RECOMMEND A PROFESSIONAL ENGINEER PROVIDE THE CALCULATIONS NECESSARY TO PROPERLY SIZE DEVICES FOR YOUR FACILITY</u>
- A grease interceptor is designed to operate efficiently at its maximum flow rate in GPM, and a minimum of twice its rated GPM in retention capacity.
- The larger the interceptor the higher flow rate it will handle efficiently with greater quantity of grease retained before cleaning is required.
- Flow rate is the primary gauge of interceptor sizing,.
- The proper Flow Control Fitting is **required** to regulate the rate of flow into a Hydro-Mechanical Interceptor.
- A retention factor of 30 minutes shall be added to the flow rate for a Gravity Grease Interceptor (the time required to allow separation by buoyancy).

## **Sizing Method by Pipe Size**

• This method should be used when the final configuration of fixtures in a facility is not known, or to allow for future fixtures. The interceptor shall be sized for the maximum flow that the drain line can carry.

Pipe Size (inches)	Full Pipe Flow @ 1/4 Slope	Interceptor Size Req.
2"	19.44 gpm	20 gpm
3"	58.67 gpm	75 gpm

## **Standard Sizing Method**

• This method can be used for existing facilities, new facilities where fixtures are known, and there are no plans for future fixtures.

Steps	Formula	Example
1	Determine cubic content of fixture. Multiply length x width x depth.  Multiply by # of compartments.	A sink 48" long by 24" wide by 12" deep.  Cubic content
2	Determine capacity in gallons. 1 gal. = 231 cubic inches.	<b>Content in gallons.</b> 13,824/231 = 59.8 gallons
3	Determine actual drainage load. The fixture is normally filled to about 75% of capacity with water. The items being washed displace about 25% of the fixture content, thus actual drainage load = 75% of fixture capacity.	Actual drainage load .75 X 59.8 = 44.9 gallons
4	Select Interceptor which corresponds to the flow rate calculated. Note: Select next larger size when Flow Rate falls between two sizes listed.	Select Interceptor. 44.9 GPM requires PDI size 50.