

ASSESSING EXISTING GREASE TRAP CAPACITY: To estimate the minimum grease trap capacity required, you need to know your typical water consumption over the supply billing period (in cubic metres; shown in the second column from the right on your water bill) and both the total number of days and hours per day that the establishment was open over the billing period.

Table 1 on Page 4 gives the grease trap capacity (the volume of material that can be held, Column C) required for a selection of hourly water consumption rates (Column A). To calculate your hourly water consumption rate in litres:

$$A = \frac{\text{Consumption from water bill, cubic metres}}{\text{number of working days over the billing period}} \div \frac{\text{working hours}}{\text{per day}} \times 1000$$

Example:

A restaurant open 6 days per week, 14 hours per day has a typical water bill showing consumption of 985 cubic metres over a 120 day billing period. The restaurant was open 104 days during this billing period.

Therefore, $A = 985 \div 104 \div 14 \times 1000 = 677$ litres/hour. From Table 1, the grease trap capacity required is around 970 litres.

The capacity of an existing grease trap in litres can be calculated from measurements of length, width and depth (in millimeters) and allowing for 2/3 of total trap depth to be occupied by contents.

$$\text{Capacity} = \text{Length} \times \text{Width} \times \text{Total Depth} \times 2 \div 3,000,000$$

ESTIMATING CAPACITY REQUIREMENTS FOR NEW ESTABLISHMENTS:

In this case, future water consumption can be estimated from the kitchen floor area that will be provided in the new restaurant. Column C of Table 1 below shows grease trap capacity requirements for different kitchen floor areas (Column B).

Example:

A new restaurant is planned with 30 square meters of kitchen floor area. (1 square meter = 10.8 square feet). From Table 1, the grease trap capacity required is just under 1,220 litres; approximately 1180 litres.

Note that these methods of estimating grease trap capacity requirements are included here only to give an indication of the minimum grease trap size that should be provided.

If an existing grease trap is smaller than the minimum requirement, it needs to be replaced. If you use more than 1000 litres of water per hour on average, you are advised to seek expert advice (from an Authorised Person, for example) regarding the installation of a single large grease trap or numerous small grease traps to meet your needs.

Food processing factories may require additional capacity or more advanced equipment for grease and oil removal and are recommended to seek expert advice in any case.

Table 1
Grease Trap Capacity Requirements

A	B	C	D		
AVERAGE HOURLY WATER USE (litres)	KITCHEN FLOOR AREA (square metres)	MINIMUM GREASE TRAP CAPACITY (litres)	EXAMPLE INTERNAL DIMENSIONS (millimeters)		
			LENGTH	WIDTH	TOTAL DEPTH
0 - 125		250	1200	525	600
250	8	490	1450	700	725
500	16	790	1700	825	850
750	24	1,050	1800	875	1000
1,000	32	1,220	1950	950	1000

Column D of Table 1 gives examples of grease trap dimensions that will provide both the required capacity and the length, width and depth relationships set out on Page 2.

Note that the dimensions shown in Table 1 are intended to give you a feel for the size of grease trap required. There are many combinations of length, width and depth that will meet the dimensional criteria for a given grease trap capacity. Remember that the liquid depth must be no greater than 1200 mm (and the total depth no greater than 1800 mm) for grease traps in the size range considered here.

Note that the length and width dimensions given in Table 1 DO NOT include wall and cover thickness for concrete grease traps (typically 150 mm). For steel traps, wall thicknesses can be ignored.

Ensure that any new grease trap installed at your restaurant or factory provides ALL of the necessary features listed on these pages. Check existing grease traps for all items in this list. If the features described on the preceding pages are not provided, you should seriously consider modifying or replacing the grease traps currently in use. Note that exceptionally greasy waste or unusually high wastewater flows may require additional capacity or features, as may food processing factories.

Seek expert advice regarding actual installation or replacement of grease traps whenever you are in doubt.