# FOG FAT OIL & GREASE INTERCEPTORS TO



INCLUDING NEW HORIZONTAL RANGE



# FOGI is an underground, fat oil & grease interceptor, designed to work passively.

Passive designs work by simply slowing the flow of wastewater, allowing it to cool and separate into 3 layers within the interceptor- FOGs, solids and water. FOG's - Fats Oils and Greases, have a specific gravity, less than the water, so as the waste water enters the unit, it will then begin to separate from the water and FOG's will float to the top water level. This is known as 'Gravity Separation', which is a proven design and the principal that all passive grease traps/interceptors work. The FOG's form a "grease layer" at the top of the unit, solids and food waste being heavier, will drop to the base of the unit.

## There are two models in the FOGI range - Vertical & Horizontal

Both FOGI models are designed to comply with BS EN1825

# Vertical models Nominal Sizes: 2 to 4

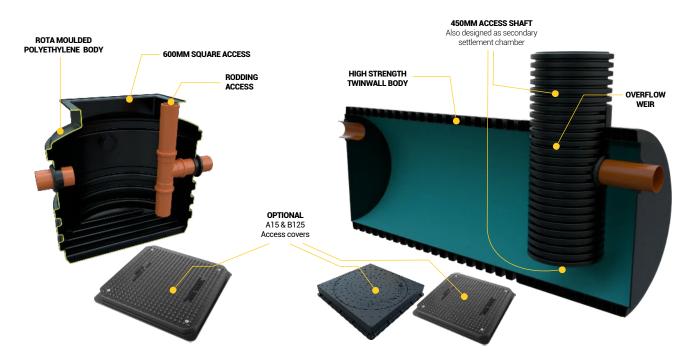
Single piece rota moulded polyethylene units, factory fitted and supplied to site with all required pipework connections.

Capacities from 680 litres to 1360 litres respectively.

# Horizontal models Nominal Sizes: 4 to 15

Fabricated in our factory and supplied to site as single piece units. Manufactured from high strength polyethylene twinwall, the units are delivered to site with all required pipework connections. These units are capable of being installed in reclaimed/as-dug material or granular surround.

Capacities from 1360 litres to 5100 litres respectively.



#### **Location and Ventilation**

So that the wastewater from the facility has a chance to cool down before entering the unit, we suggest that it is placed a minimum of 3 metres away from the final sink or discharge point and that it is connected to a vent stack. If located inside a building, then a sealed access cover will need to be used to prevent odours.

#### Maintenance

Regular checks must be prescribed for the FOGI unit, to check the levels of FOG's and more so the solids, which without regular emptying could build up quickly and block the base of the secondary settlement chamber. We recommend minimum monthly inspection and a minimum 12 monthly full clean and emptying.

Cleaning and maintenance could be more regular, dependant on the type of facility the unit is installed. Full maintenance should be carried out by a recognised/authorised contractor.



The Nominal Size stipulated in BS EN 1825 can be used to calculate the volume of the trap or separator required.

| NS              | (m²)<br>0.25 x NS                                 | (m³)                                     | (m³)<br>0.04 x NS                        |  |
|-----------------|---|--|--|--|
| Nominal<br>Size | Minimum surface area of<br>grease separation zone | Minimum volume of grease separation zone | Minimum volume of grease collection area |  |

#### Volume of the Separation Chamber

The above table shows that the minimum volume required for the grease separation chamber is the Nominal Size multiplied by 0.24 of a cubic metre which is equal to 240 litres. So for an NS2 the minimum grease separation chamber would need to be 480 litres.

#### Design of Sludge Trap

The Sludge trap can be situated integrally within a single stage interceptor or as a separate unit situated before the grease separation trap/tank.

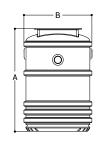
#### Volume of Sludge Trap

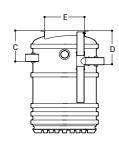
The volume of sludge trap needs to be a minimum of  $100 \times NS$  in litres ie. So for an Nominal Size NS2, this needs to have a sludge retention volume of at least 200 litres. Subsequently for food processing plants, abattoirs etc, where larger amounts of solids are expected, then the sludge trap needs to be at least 200 x NS in litres.

The table below is taken from BS EN 1825 and gives a guide to the Nominal Size and FOGI unit required, based on number of meals per day.

| Nominal<br>Size | FOGI Unit<br>Required | Restaurant   |               | Hotel<br>Restaurant | Hospital    | Schools &<br>Colleges with<br>food prep. | Canteen with no food prep. |
|-----------------|-----------------------|--------------|---------------|---------------------|-------------|--|----------------------------|
|                 |                       | 1<br>service | 2<br>services | Approximate         | number of r | meals per day -                          | <b></b>                    |
| NS2             | FNS2                  | 105          | 210           | 180                 | 295         | 200                                      | 440                        |
| NS4             | FNS4/<br>FNSH4        | 210          | 420           | 355                 | 590         | 400                                      | 885                        |
| NS7             | FNSH7                 | 365          | 730           | 625                 | 1035        | 700                                      | 1545                       |
| NS10            | FNSH10                | 520          | 1040          | 885                 | 1480        | 1010                                     | 2015                       |
| NS15            | FNSH15                | 780          | 1560          | 1330                | 2215        | 1510                                     | 3330                       |



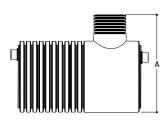


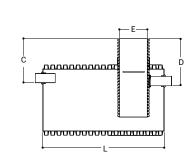


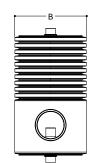


| Product<br>Code | Capacity | Sludge<br>storage | Height<br><b>A</b> | Dia.<br><b>B</b> | Inlet invert<br>C | Outlet invert<br>D | Standard<br>pipework | Access<br>E | Approx.<br>Weight |
|-----------------|----------|-------------------|--------------------|------------------|-------------------|--------------------|----------------------|-------------|-------------------|
|                 | Litres   | Litres            | mm                 | mm               | mm                | mm                 | mm                   | mm          | Kg                |
| FNS 2           | 680      | 200               | 1000               | 1030             | 425               | 495                | 110                  | 600 X 600   | 35                |
| FNS 3           | 1020     | 300               | 1500               | 1030             | 450               | 520                | 110                  | 600 X 600   | 50                |
| FNS 4           | 1340     | 400               | 2000               | 1030             | 450               | 520                | 110                  | 600 X 600   | 65                |









## **HORIZONTAL MODELS**

| Product<br>Code | Capacity | Sludge<br>storage | Height<br><b>A</b> | Dia.<br><b>B</b> | Length<br>L | Inlet invert<br>C | Outlet invert<br>D | Standard<br>pipework | Access<br>E | Approx.<br>Weight |
|-----------------|----------|-------------------|--------------------|------------------|-------------|-------------------|--------------------|----------------------|-------------|-------------------|
|                 | Litres   | Litres            | mm                 | mm               | mm          | mm                | mm                 | mm                   | mm          | Kg                |
| FNSH 4          | 1340     | 400               | 1650               | 1030             | 1979        | 750               | 800                | 160                  | Ø450        | 150               |
| FNSH 7          | 2380     | 700               | 1650               | 1030             | 3010        | 750               | 800                | 160                  | Ø450        | 205               |
| FNSH 10         | 3400     | 1000              | 1650               | 1030             | 3937        | 750               | 800                | 160                  | Ø450        | 255               |
| FNSH 15         | 5100     | 1500              | 1650               | 1030             | 6000        | 750               | 800                | 160                  | Ø450        | 460               |



