

**fogi**<sup>tm</sup>  
fat oil & grease  
interceptors



good kitchens use  
**goodflo**

Designed & Manufactured in the UK 

## Introduction

Wastewater from commercial kitchens is contaminated with FOGS (fats, oils and greases). The introduction of FOGs and food solids into the general drainage/sewage system (either main sewage network or private treatment facilities) is detrimental to its proper function and has been shown to be a significant cause of blockages, restrictions and flooding.

The FOGI Grease interceptor/separator range has been designed to conform to both Building Regulations Part H and also BSEN 1825 the British Standard for Grease Separators/Interceptors. The FOGI's design will effectively intercept (FOGS) fats, oils and greases and solids before they enter a wastewater drainage system in so supporting the effectiveness of both the drainage system and the final treatment process.

FOGI interceptors/separators are designed for larger kitchens and restaurants as well as use in industrial food processing applications and meet all the requirements of the relevant legislation.

“The **fogi's** low profile tank can be installed in granular surround as against concrete, thus greatly reducing the overall installation cost against other underground systems”

## Features & Design

- Designed in accordance to en1825
- Nominal Sizes NS4 to NS20
- 1700 to 8800 litres
- All units are supplied with large lockable access cover
- Available in single stage and two stage with primary sludge trap
- Designed for larger kitchens, food manufacturing plants & abattoirs
- Super 'Heavy Duty' bodies
- Low Profile
- Minimal granular surround installation
- Huge savings on overall installation
- Corrosion Free - 50 year plus life expectancy
- Full access to all pipework for maintenance
- Designed and manufactured totally in the UK

## Relevant Legislation

- The Water Industries Act 1991 makes it a criminal offence to damage the sewer network by introducing FOGs into it.
- The Building Regulations (Approved Part H) requires any hot food premises to install BS EN1825 Grease Interceptors in its drain runs.
- The Environmental Protection Act 1990 imposes a 'Duty of Care' on commercial premises with respect to their waste and this includes FOGs.
- The Food Safety and Hygiene Regulations 2013 (including HACCP) sets out objectives including the management of FOGs.



# What size fogi interceptor do I require?

The Nominal Size stipulated in EN1825 can be used to calculate the volume of the Interceptor required.

Nominal Size	Minimum surface area of grease separation zone (m <sup>2</sup> )	Minimum volume of grease separation zone (m <sup>3</sup> )	Minimum volume of grease collection area (m <sup>3</sup> )
NS	0.25 x NS	<b>0.24 x NS</b>	0.04 x NS

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 **NS 4** the minimum grease separation chamber would have to have a volume of **960 litres** and an **NS7** would be **1680 litres** etc.

## Volume of Sludge Trap

The volume of sludge trap needs to be a minimum of **100 x NS** in litres ie. An NS4 interceptor needs to have a sludge retention volume of at least 400 litres. Subsequently for Food Processing Plants, Abbatoirs etc, where larger amounts of solids is expected, then the sludge trap needs to be at least **200 x NS** in litres, so an NS4 interceptor would need to have a sludge chamber of at least 800 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.

## What Nominal Size (NS) to chose

For the size of grease separators (inteceptors) with sludge trap the calculation method according to BSEN 1825-2 standard is the following:

$$NS = \text{Number of meals} \times V \text{ meals} \times fd \times ft \times \frac{fq}{3600 \times \text{daily operating time}}$$

fd: density factor; ft: temperature factor; fr: cleansing agent factor; fq: peak factor

The table below gives a guide to the Nominal Size of Trap/Separator you require, based on number of meals and meals per day. For larger industrial applications like food processing and abattoirs, we suggest you speak to us regards the design.

Restaurant	Hotel Restaurant	Hospital	Schools, Colleges Food Preparation	Canteen No food preparation	Nominal Size	
Number of meals		Number of meals per day				
1 service	2 services					
50	100	90	150	100	220	<b>1</b>
105	210	180	295	200	440	<b>2</b>
210	420	355	590	400	885	<b>4</b>
365	730	625	1035	700	1545	<b>7</b>
520	1040	885	1480	1010	2015	<b>10</b>
625	1250	1065	1775	1210	2455	<b>12</b>
780	1560	1330	2215	1510	3330	<b>15</b>
1040	2080	1670	2960	2020	4015	<b>20</b>

**BSEN1825 parts 1 and 2** Both the above documents are available to download from our website or can be provided electronically on request.



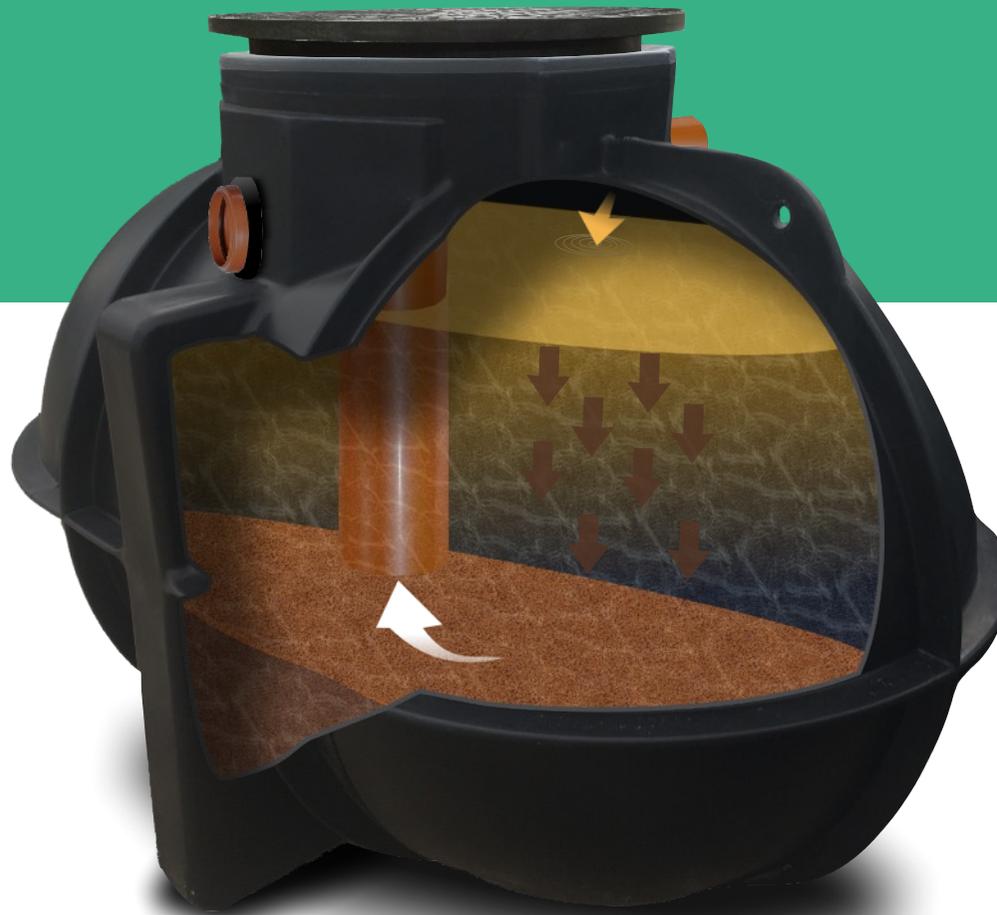
# How the **fogi** works

- ➔ Wastewater which includes FOGs (Fats, Oils and Greases) enters the FOGI via the inlet pipe and immediately the lighter oils and grease will begin to separate out in the cooler water already inside the FOGI
- ➔ Any solids within the flow, being heavier, will drop to the base of the FOGI and over time will form as a sludge which should be removed periodically. All FOGI units have been designed to retain the minimum solids/sludge according to BSEN 1825.
- ➔ In the middle section of the FOGI between the base sludge and suspended FOGs the outlet pipe is situated. Cleaner mid water will discharge at that point from the unit.

“All **fogi** interceptors come supplied with a ‘LARGE’ 625mm lockable sealed access cover”



There is an option to have a flow splitter attached (as shown above). This will give more even distribution of suspended greases and oils at the top surface of the unit .

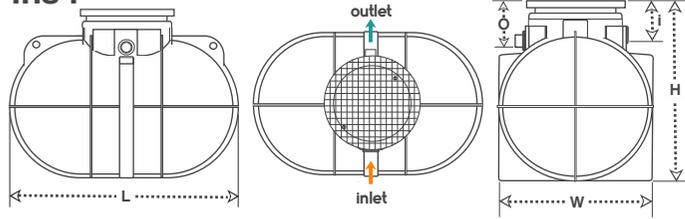




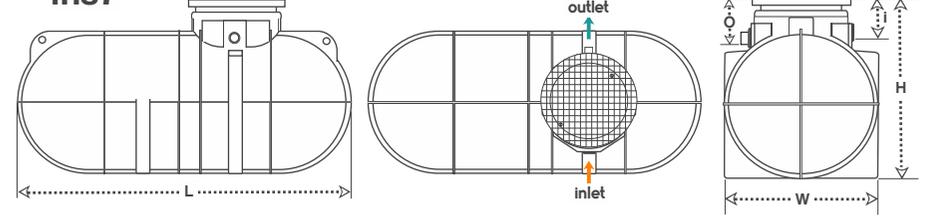
## single stage interceptors with integral sludge retention

Designed to conform to en1825 for underground installation. Designed for larger Kitchens, Restaurants Pubs, Fast Food Outlets and Food and Meat Processing Plants.

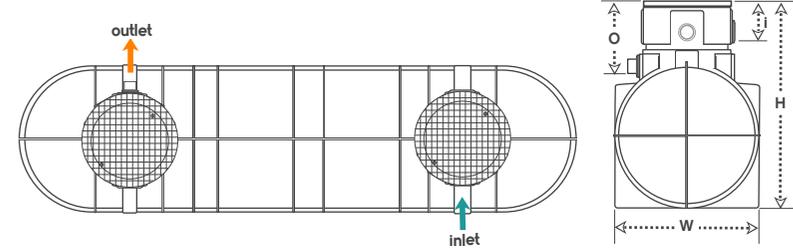
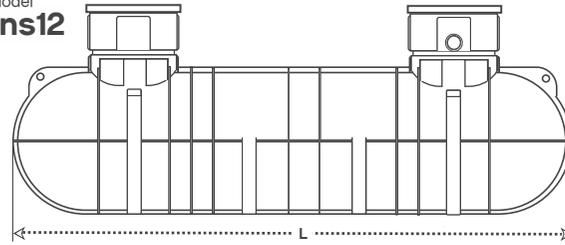
Model **fns4**



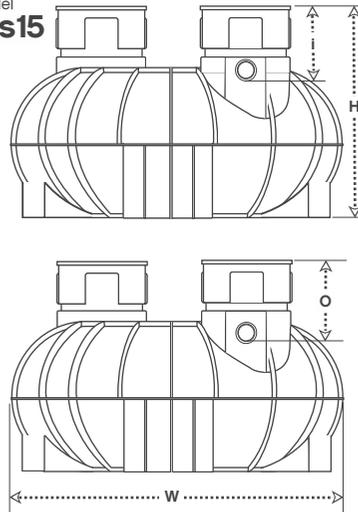
Model **fns7**



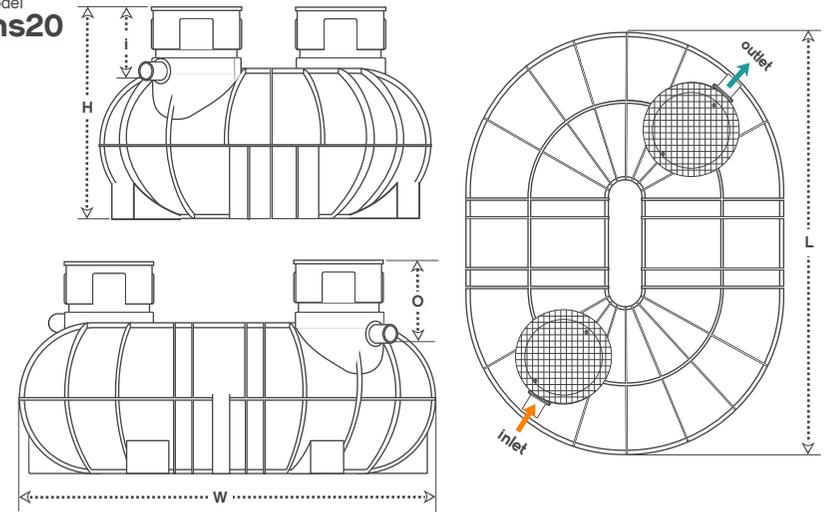
Model **fns12**



Model **fns15**



Model **fns20**



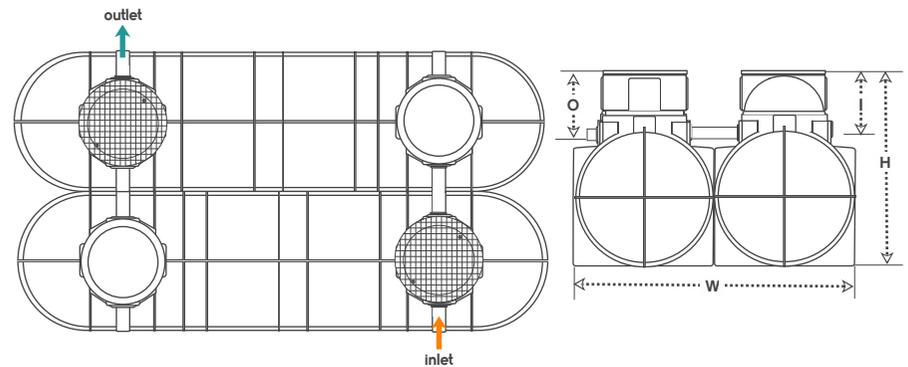
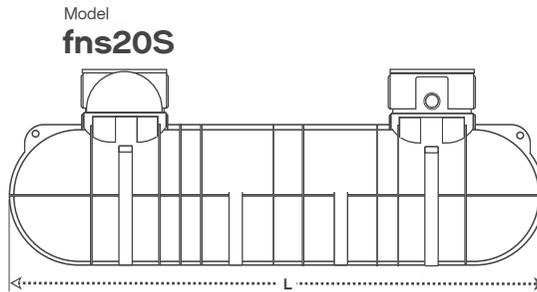
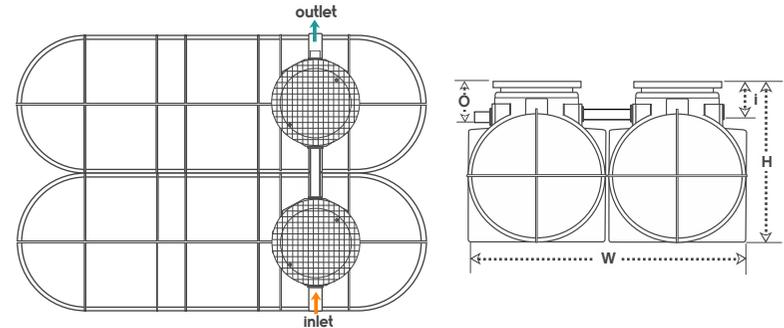
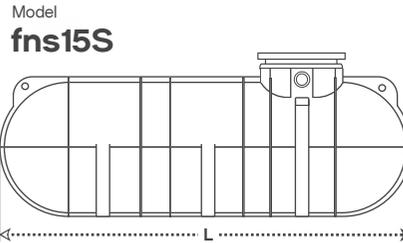
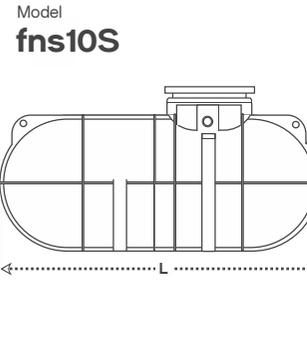
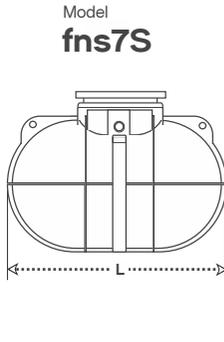
Model	Nominal Size	Nominal Capacity (litres)	Grease Separator (litres)	Sludge Trap (litres)	L	W	H	I	O	Pipework Options Ø	Access & Invert Riser Opening Ø	*Invert Riser Height	Approx. Weight (kilos)
<b>fns4</b>	4 - 5	1700	1200	500	2080	1260	1395	300	350	110 -160	625	400 - 750	100
<b>fns7</b>	7	2380	1680	700	2880	1260	1395	300	350	110 -160	625	400 - 750	125
<b>fns12</b>	12	4080	2880	1200	4510	1260	1750	300	575	110 -160	625	400 - 750	240
<b>fns15</b>	15	5100	3600	1500	2700	2700	1750	610	680	110 - 200	625	400 - 750	280
<b>fns20</b>	20	6800	4800	2000	2700	3420	1750	610	680	110 - 200	625	400 - 750	390

**Please Note:** All dimensions in millimetres.  
 Nominal Sizes based on BSEN 1825  
 Pipework may vary dependant on site. Please request required pipework on application.  
 \* invert risers are optional and not supplied with unit. NS 12 to 20 require 2 risers.  
 200kg Lockable Access Covers are supplied with units . Heavier duty covers are on request.



## two stage interceptors with primary sludge retention tank

Designed to conform to en1825 for underground installation outside of Abattoirs, Meat Processing Plants etc. These units have twice the required sludge storage capacity of the standard FOGI interceptor. This allows for the increased solids into the interceptor from the given process.



Model	Nominal Size	Nominal Capacity (litres)	Grease Separator (litres)	Sludge Trap (litres)	L	W	H	I	O	Pipework Options Ø	Access & Invert Riser Opening Ø	*Invert Riser Height	Approx. Weight (kilos)
<b>fns7S</b>	7	3400	1680	1400	2080	2520	1395	300	350	110 -160	2 x 625	400 - 750	200
<b>fns10S</b>	10	4800	2400	2000	2880	2520	1395	300	350	110 -160	2 x 625	400 - 750	250
<b>fns15S</b>	15	6800	3600	3000	3680	2520	1395	300	350	110 -200	2 x 625	400 - 750	480
<b>fns20S</b>	20	8800	4800	4000	4510	2520	1750	610	680	110 -200	2 x 625	400 - 750	560

**Please Note:** All dimensions in millimetres.

Nominal Sizes based on BSEN 1825

Pipework may vary dependant on site. Please request required pipework on application.

\* invert risers are optional and not supplied with unit. NS 7S to NS20S all have two accesses, so require 2 risers per unit.

Access Covers are Pedestrian Duty only. Heavier duty covers are on request.

# Optional Extras

## Extension Risers



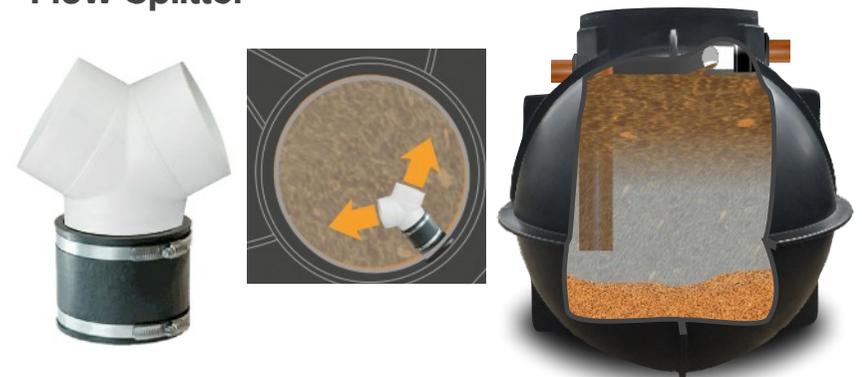
Extension risers are available for all the units (as shown above). These accommodate the respective access and access cover and can be cut to desired length with a standard saw. We recommend no more than 1000mm of extension is used via extension risers. For deeper inverts use prefabricated concrete rings or sections

## Heavy Duty Covers



The FOGI range is supplied with a 625mm lockable pedestrian duty access cover. However 'Heavy Duty' D400 loading covers can be supplied at extra cost

## Flow Splitter



Flow Splitters can be attached to the inlet of the FOGI. The flow splitter splits and distributes the influent in separate directions which supports effective oil and grease separation.

“fogi interceptors can be designed specifically for your application. Please ask for more details” . .



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