# Grease Guardian<sup>®</sup>

Sustainable Grease Management

2023





















## **KITCHEN SOLUTIONS:**

A holistic approach to trapping grease













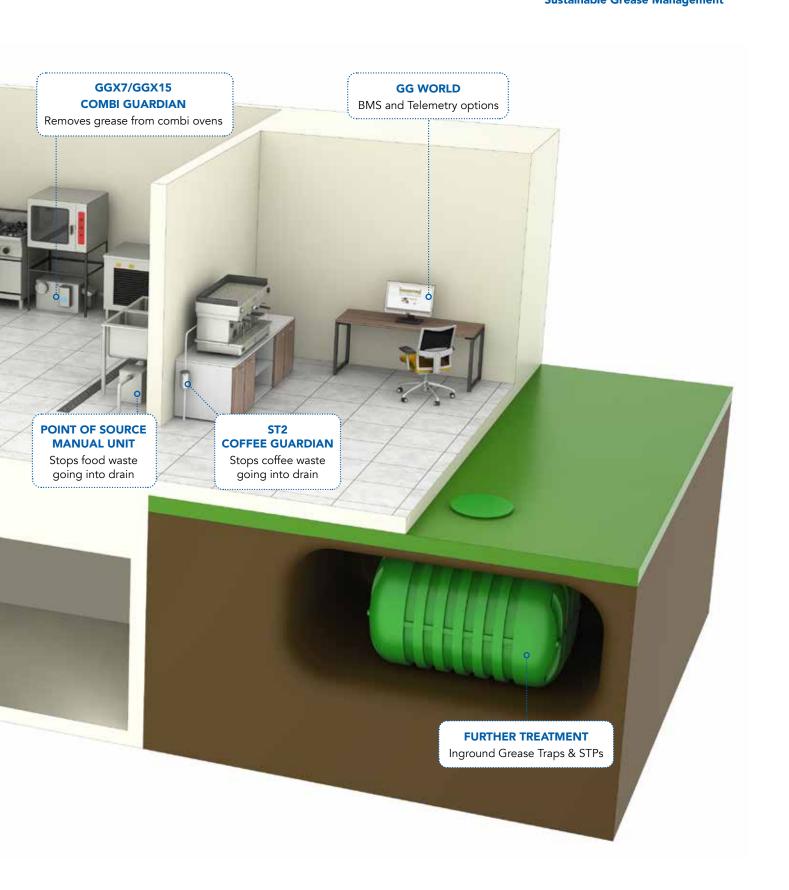












www.greaseguardian.com



# **ABOUT US**

**CORPORATE VIDEO** 

The FM Environmental Group, incorporating its Ireland, UK, Malta, Malaysia and United States Sales offices is one of the world's longest established water and wastewater engineering companies.

Headquartered in Northern Ireland, FM Environmental exports its products and services worldwide; constantly evolving its technologies to suit the diverse and demanding international marketplace.

With a history going back to the early 1970's, FM Environmental is internationally recognised for providing design, manufacture, installation and servicing of grease management technologies. Grease Guardian is an international success story in the area of drainage and grease management, with over 20,000 units installed globally. Through our chain of distributors, we can offer a personalised service and individually design units to suit your needs.





















#### **GREASE RECOVERY DEVICES:**

Typically installed under sinks or in basements. Trap and remove grease automatically.

#### **SINK STRAINERS & SOLIDS**

**TRAPS:** Designed to fit onto sinks to strain food waste.

**COFFEE FILTERS:** Connected to sinks or the coffee machine itself.

#### **MANUAL UNDERSINK GREASE**

**TRAPS:** A basic system that fits under sinks. Needs to be pumped out regularly to maintain efficiency.

#### **UNDERGROUND GREASE**

**TRAPS:** Large grease trap that must be pumped out at least once a month.

#### WHY IS FOODWASTE AND GREASE A PROBLEM?

Each year nearly half a million tonnes of grease and fat enter the UK and Ireland's sewerage system. Grease will stick to pipe walls and eventually cause blockages. Fats and oils get just about everywhere and can seriously damage waste water treatment equipment, costing municipalities millions in repairs every year. Fats, oils and grease (FOG) allowed to enter a natural water course will cause damage to the environment.

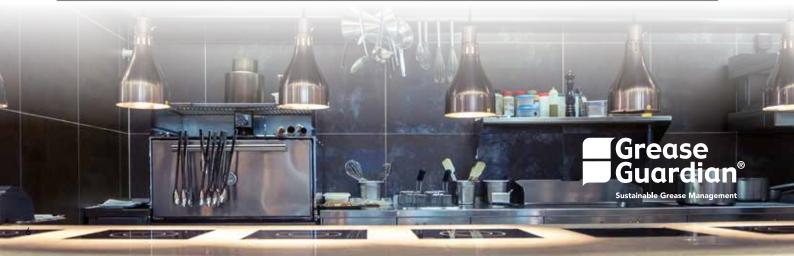
Grease is a problem for most city municipalities and consequently legislation to prevent FOG pollution is being enforced. Polluters face large fines or closure if they fail to manage their FOG waste effectively. Luckily there are numerous systems for handling FOG. Grease traps and grease removal units can be installed by kitchen operators to trap FOG at source and remove it before any damage is caused.

## What system is for me?

There are many ways to trap and remove grease. The traditional method is to install a large grease trap into the ground outside the kitchen. This trap then needs to be emptied every month by a licensed pumper/recycler. If there is no space outside then the option to install a grease trap inside the kitchen exists. A manual grease trap can be installed under a sink but must be emptied at least once a month, depending on how busy the kitchen is.

In some cases the grease inside the trap can be treated with chemicals, enzymes or bacteria. For busier kitchens it is advised to install an automatic grease removal unit, capable of trapping and removing the FOG waste on a daily basis. Both manual and automatic traps can be installed in basements when there is no space in the kitchen or outside. **Use the table below to help you decide which system suits best.** 

NS Range for basement installations	Centrally located and designed in accordance with EN1825. Includes remote alarms, pump removal system and self-cleaning options.	Moderate to High flow, large capacity heavy duty design with easy monitoring and maintenance features	Hotels, airports, shopping centres, high rise buildings, casinos
GG Centralised grease removal units	Centrally located grease stainless steel traps with inbuilt solids filtration and grease removal system	Moderate flow rates with reduced pump out requirements thanks to in built grease removal feature	Hotels, offices
GGX Point of Source grease removal device	Installed at the source of the problem and removes the trapped grease automatically	Small foot print, close to problem does not need continuous pump outs	Restaurants, fastfood, deli areas, remote applications
GGX Point of Source manual grease trap	Installed at the source of the problem	Small foot print, low start up costs	Cafés, restaurants
GG Marine	Grease removal units designed for sea going applications.	316 stainless steel grease removal at source and centralised units designed for high sea activity	Superyachts, naval vessels, cruise ships
Solid Filtration Systems for point or Source and Centralised Application	Installed at source or centrally located depending on the model, to block and reduce the solid presence in drains	Fabricated in stainless steel. Can be installed as a stand alone solution or in combination with other Grease Guardian products.	Any of the above
In ground EN1825 Grease Traps	Polyethylene grease traps Installed outside and below ground certified to EN1825 standards	Moderate to High flow, large capacity grease traps for below surface installations	Schools, supermarkets



# We can help you

#### SINGLE FIXTURE POINT OF SOURCE SIZING RECOMMENDATIONS

Select the fixture on to which you need to install a Grease Guardian Automatic Grease Removal Unit. For multiple fixtures please contact your distributor or email sales@greaseguardian.com for full selection guide.

Fixture	COMPARTMENT SIZE (MM)	PIPE SIZE (MM)	Flow Rating I/s	Grease Guardian Automatic Model Required	Grease Guardian Manual Model Required
Pre-Rinse Sink	650 x 450 x 350 (x1)	50	0.65	GGX15	GGXM15
Single Compartment Sink	450 x 450 x 250 (x1)	50	0.35	GGX7S	GGXM15
	600 x 450 x 400 (x1)	50	0.65	GGX15	GGXM15
Double Compartment Sink	450 x 450 x 250 (x2)	50	0.65	GGX15	GGXM15
	550 x 450 x 350 (x2)	50	1.25	GGX25	GGXM25
	650 x 450 x 450 (x2)	50	2.0	GGX35	GGXM35
Triple Compartment Sink	450 x 450 x 250 (x3)	50	1.0	GGX25	GGXM25
	550 x 450 x 350 (x3)	50	1.8	GGX35	GGXM35
Wok Range	N/A	40 - 50	0.5 - 0.95	GGX15	
Combi Steam Oven	N/A	40 - 50	0.5	GGX7C	

For multiple fixtures add the individual fixture flow rates and this will generate your larger flow rate (see below table). Other equipment or sink sizes not listed can be checked by contacting your supplier or emailing sales@greaseguardian.com

#### MULTIPLE FIXTURES BASEMENT GREASE REMOVAL DEVICE

Select the meals per day and pipe diameters to determine most appropriate Grease Guardian model. Always consult your distributor or email sales@greaseguardian.com for most accurate selection.

Meals Per Day/Customers Model	Pipe Size (mm)	Flow Rating I/s	Grease Guardian Model Required	Options
100-200	90	3.5 - 5 l/s	GGX75	IS/AST
200-500	90	3.5 - 5 l/s	GGX75 + Solids Trap (ST)	IS/AST
500-1000	90-110	5 - 8 l/s	GGX125	IS/AST
1000+	90-110	5 - 8 l/s	GGX125 + Solids Trap (ST)	IS/AST
1000+	110-150	8 - 10 l/s	GGX150 + Solids Trap (ST)	IS/AST

MEALS P	ER DAY*	*Information related to page 11			
NS	Catering Facility	Restaurant	Hotel		
2	1 - 300	1 - 150	1 - 100		
4	300 - 600	150 - 300	100 - 250		
6	600 - 900	300 - 450	250 - 350		
10	900 - 1500	450 - 750	350 - 650		
15	1500 - 2250	750 - 1150	650 - 950		

The amount of Meals Per Day stated in the table above are calculated based on a 12 hours operations per day with Peak flow coefficient values: Catering Establishment: 20, Restaurant: 8.5, Hotel: 5.0, and Volume of water per meal: Catering Establishment: 10 I, Restaurant: 50 I, Hotel: 100 I as specified in the EN1825-2:2004 standard.

#### **Installation Recommendations**

Ensure all units are correctly sized and provide access to front control panel, basket removal area, grease collection bucket and wiper blade area. It is also recommended to ensure access to the main tank for occasional desludging. Pipe connections should be at least 50 mm, the outlet being equal or greater than the inlet to allow for gravity fall of waste pipes to and from grease removal equipment. The outlet pipe should be vented. Only connect the hot water pipe to spray connection when required and in accordance with local plumbing code recommendations. An RCD connected power supply is required to operate these units. Some models may vary always consult your supplier. Refer to the online sizing calculator at: www.greaseguardian.com



# GREASE REMOVAL UNIT (UNDERSINK)





X SERIES
KEY FEATURES:
SIDE BASKET,
LID GASKET & DRUM





Traps grease & foodwaste

Removes grease automatically

Reduces pump out requirements

Robust stainless steel construction

Easy to install and maintain

Protects drains (point of source)

Collected waste can be recycled

Pre-programmed digital controls

Tested and approved internationally

Self-cleaning options available

Side mounted 3mm solids screening

No need to open main lid

No enzymes or bacteria dosing needed

Extended warranty options













#### **THREE-STAGE OPERATION SYSTEM**

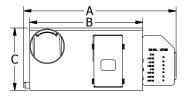
#### **STAGE 1 Solids Collection**

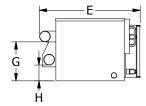
Wastewater from the kitchen is directed through the inlet of the **Grease Guardian®** where a side mounted removable strainer basket collects any solid debris.

#### **STAGE 2 Grease & Oil Separation**

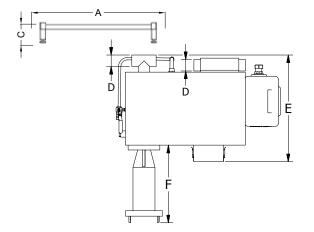
Grease in the wastewater floats to the surface and is trapped while the clear water leaves the unit and enters the drainage system.

#### **Series X Configuration**





With frame



#### **STAGE 3 Grease Removal**

The PLC programmed heating element is activated to liquefy grease, which is then removed by the skimming drum and deposited into a portable container for recycling. Can be connected to: pot wash sinks, pre-rinse sinks, combi ovens, Asian woks and floor drains.

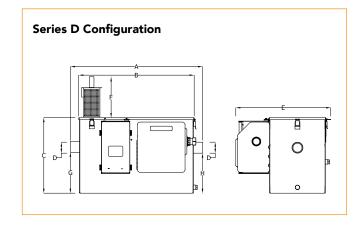
#### **STAGE 4 Further Treatment Options**





Automatic washing kit

Blower kit

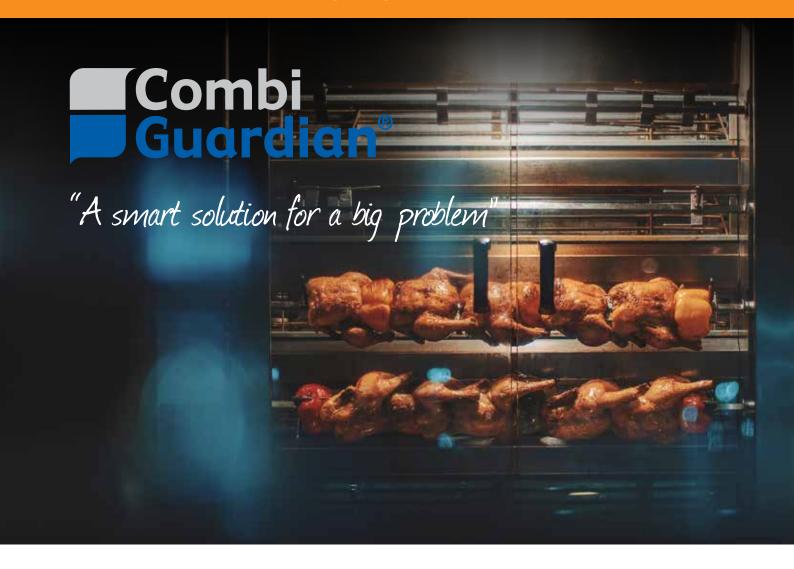


Model	Length	Length	Height	Inlet/	Width		Inlet Height	Outlet Height	Max Flow
	(A)	(B)	(C)	Outlet (D)	(E)	(F)	(G)	(H)	
	INCLUDES	TANK ONLY	/with		INCLUDES	CLEARANCE	INLET	OUTLET	
	CONTAINER		Frame		PANEL	NEEDED			
GGX7(S)	662	443	344/444	48	516	405	321	251	0.50 l/s
GGX15	842	623	346/446	60	557	405	215	87	1.00 l/s
GGX25	870	657	423/523	60	570	405	298	170	1.58 l/s
GGX35	1092	873	422/522	89	577	405	281	170	2.21 1/s
D1	643	543	326/426	60	515	174	150	150	0.75 1/s
D1 Low Inle	et 643	543	326/426	60	515	212	115	115	0.75 l/s
D2	723	623	415/515	60	515	212	224	219	1.25 1/9
D3	812	712	453/553	90	515	290	311	263	1.75 l/s

All dimensions in mm. Inlet / outlet height from the bottom of the pipe.

Please note dimensions are subject to change without notice. Always request the latest drawings from your suppliers.

**Specification:** Automatic grease trap with inbuilt FOG treatment, FOG removal and self cleaning mechanisms. 16 Gauge 304 Stainless Steel with bright finish, 25 Watt, 230VAC; 50Hz Motor. 600-Watt Heater X7, X15, X25, D1, D2; 1000-Watt X35, D3 Heater with Thermal Cut Out included. Logic Controller with Backlit Display. Skimming Drum is nominally capable of skimming 5 l per hour. Can be connected to pot wash sinks, pre-rinse sinks, combi ovens, Chinese cookers, floor drains and most grease producing kitchen appliances. UL, PDI, CSA, and ASME tested.



# GREASE REMOVAL UNIT (STEAM OVENS & WOKS)









Traps grease and food waste

Automatically separates & removes fat from oven

3mm Solids Filtration as standard

Stainless steel construction

Automatic wash down as standard

Easy to install & maintain

Collected waste can be recycled

Programmable logic control

Full customer support

Up to 3 years warranty

Side access to basket & wiper blade

Fits under most ovens

#### **FOUR-STAGE OPERATION SYSTEM**

#### **STAGE 1 Solids Collection**

Wastewater from the kitchen is directed through the inlet of the **Grease Guardian®** where a removable strainer basket collects any solid debris.

#### **STAGE 2 Grease & Oil Separation**

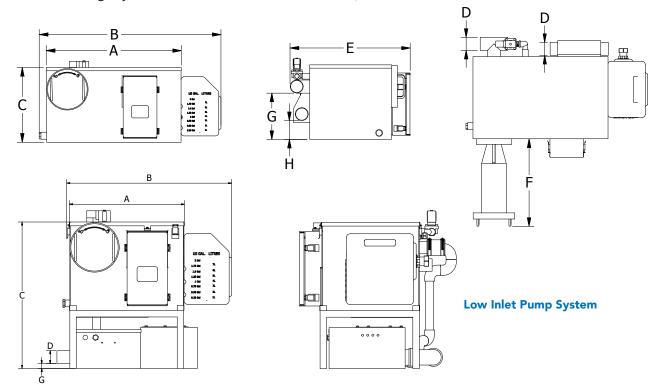
Grease in the wastewater floats to the surface and is trapped while the clear water leaves the unit and enters the drainage system.

#### **STAGE 3 Self Cleaning & Grease Removal**

The PLC programmed heating element is activated to liquefy grease, which is then removed by the skimming drum and deposited into a portable container for recycling. Can be connected to: pot and single bowl sink fixtures.

#### **STAGE 4 Automatic Spray System**

An automatic spray system activates to clean unit and replenish water level for continuous skimming of grease\*.



Model	Length	Length	_	Inlet/Outlet	Width	Basket	Inlet Height	Outlet	Max Flow
	(A)	(B)	(C)	(D)	(E)	(F)	( <b>G</b> )	Height	
	INCLUDES	TANK ONLY			INCLUDES	CLEARANCE	INLET	(H)	
	CONTAINER				PANEL	NEEDED		OUTLET	
GGX7(C)	662	443	344	48	539	405	221	151	0.5 l/s
GGX7(C)		4.40		10	500	405	00	440	0.51/
with pump	662	443	605	48	539	405	20	412	0.5 l/s
GGX15(C)	842	623	346	60	557	405	215	87	1.0 l/s

All dimensions in mm.

**Specification:** Automatic grease removal unit (AGRU) with built in automatic grease removal and dry, front-loading solids strainer. 16 Gauge 304 Bright Finish Stainless Steel. Sealed, Stainless Steel Top. 25 Watt, 230v; 50Hz Motor. 600-Watt Heater with Thermal Cut Out. User friendly Logic Controller with Backlit Display. Skimming Drum is capable of skimming 5 litres per hour. Can be connected to combi ovens. Automatic solenoid valve for spray wash as standard. Please note dimensions are subject to change without notice.







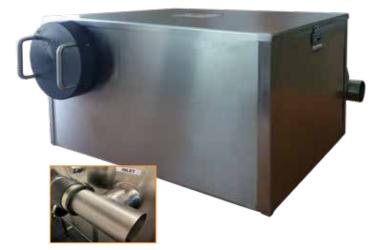






<sup>\*</sup> Warm water connection required









#### **MANUAL GREASE TRAP RANGE**

Suitable for coffee shops, cake shops, snack bars, patisseries and other small catering applications

Stainless steel fabrication

Intelligent design

Traps food waste & grease

Small foot-print and portable

Easy to install and maintain

Full customer support













#### THREE-STAGE OPERATION SYSTEM

#### **STAGE 1 Solids Collection**

Wastewater from the kitchen is directed through the inlet of the Grease Guardian® where a removable strainer basket collects any solid debris.

#### **STAGE 2 Grease & Oil Separation**

Grease in the wastewater floats to the surface and is trapped while the clear water leaves the unit and enters the drainage system.

#### **STAGE 3 (OPTIONAL) Dosing**

The trapped grease can be treated by using the FatBio solution which combines a lipase producing non pathogenic bacteria with nutrients and enzymes.



New Strainer Basket Design.

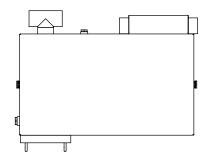
The basket is positioned above water level, allowing trapped solid to drip. It is lightweight making it easier to use.

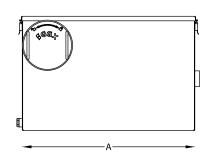


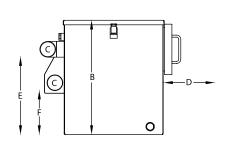
New basket front position facilitates installations in confined spaces thus allowing the use of bigger models when needed.



New lid closure gasket, secures a better seal.

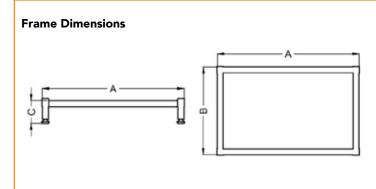






Model	Length (A)	Height (B)	Inlet/Outlet (C)	Basket (D)	Inlet Height (E)	Outlet Height (F)	Max Flow
	TANK ONLY			CLEARANCE NEEDED	INLET	OUTLET	
GGXM15	623	356	60	404	215	87	1 l/s
GGXM25	658	436	60	404	295	167	1.58 l/s
GGXM35	873	436	89	404	281	170	2.21 l/s

All dimensions in mm. Inlet / outlet height from the bottom of the pipe.
All drawings in this brochure are guidelines and are subject to change. Always request the latest drawings from your suppliers.



Model	Length (A)	Length (B)	Height (C)
GGX7 Stand	446	390	100 - 120
GGX15 Stand	625	380	100 - 120
GGX25 Stand	660	380	100 - 120
GGX35 Stand	880	380	100 - 120
All dimensions in m	m.		

#### **CENTRALISED GRU**









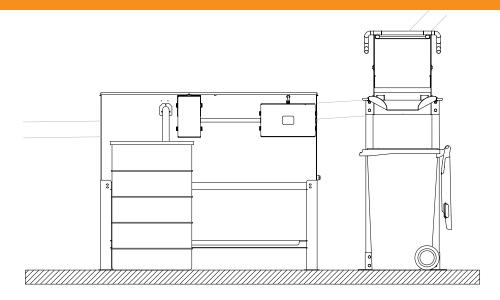








#### **CENTRALISED GRU**



#### **FOUR-STAGE OPERATION SYSTEM**

#### **STAGE 1 Solids removal (Manual/Automatic options)**

Waste enters the Grease Guardian through the rear inlet. Foodwaste is screened with an internal basket (IS) or prescreen (ST30) with the option of incidental solids being removed by pump (AST).

#### **STAGE 2 Grease Trapped**

After entering the main tank grease which is lighter than water separates naturally and remains trapped. The heavier "clean" water leaves the tank under a baffle before being discharged to drain.

#### **STAGE 3 Grease Removal Programme**

A preprogrammed removal cycle starts by first agitating the trapped grease waste. This hel/s suspended grease globules to further separate and directs the waste towards the skimming mechanism. The waste is then heated and the grease liquefies. The liquefied grease is then skimmed and transferred to external receptacles to await recycling.

#### **STAGE 4 Self Cleaning**

A wash down programme is automatically activated to ensure the screening and skimming system remains clean.

Model	LENGTH	WIDTH	HEIGHT	Inlet/Outlet	Flow Rate
D5	1396	712	597	115	3.50 l/s
GGX50 IS	1000	613	502	90	3.15 l/s
GGX75 IS	1100	756	548	115	4.75 l/s
GGX75 AST	1100	800	548	115	4.75 l/s
GGX75 AST* + ST30	1870	920	1665	115	4.75 l/s
GGX125 IS	1500	756	624	115	7.91 l/s
GGX125 AST	1500	800	548	115	7.91 l/s
GGX125 AST* + ST30	2265	920	1665	115	7.91 l/s

<sup>\*</sup>Includes 5mm solids screening before pumping

All dimensions in mm.

All drawings in this brochure are guidelines and are subject to change.

For full specifications and latest drawings on individual models please refer to www.greaseguardian.com or contact your local supplier.

For invert levels please contact your local supplier.



EN 1825 fully certified

Robust body constructed in Stainless Steel 304 matt finishing

High efficiency on Grease and Sludge collection

Minimal maintenance required

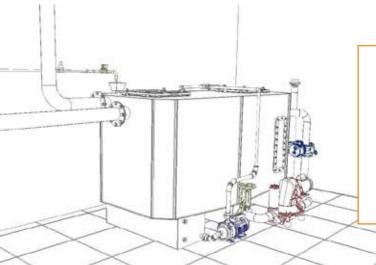
Easy to install and maintain

Suitable from 2 to 30 l/s (with tandem applications)

Airtight enclosure

Full size inspection window

Full customer support



#### **OPTIONAL FEATURES**

High pressure washing kit with rotating multi jet nozzles

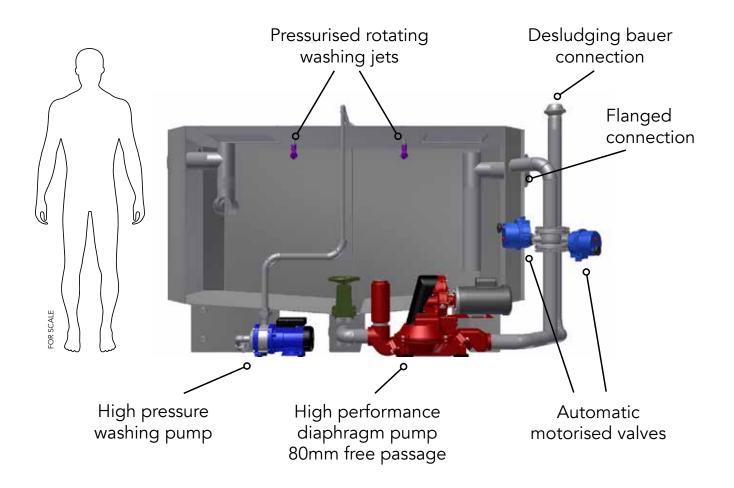
Category 5 washing system with integrated storage tank

Diaphragm pump for recirculating process and desludging

Automatically controlled motorised valves

Level sensor for high grease level

Telemetry or BMS volt free connection



#### THREE-STAGE OPERATION SYSTEM

#### STAGE 1 GREASE AND SOLIDS SEPARATION

When wastewater enters the tank, sediment and other solid waste fall to the bottom and remain in the sludge compartment. Each tank has enough volume in the separation compartment to allow fats, oils and grease (FOG) to separate. The FOG rises to the surface and is trapped behind a baffle. Only the clean water is allowed to flow down the drain. Basic Model GGNS.

#### **STAGE 2 MANUAL EMPTYING**

The entire tank should be emptied when the grease storage capacity is reached. This can be checked from the inspection window available on all models as standard as a standard feature. Alternatively, install an optional level sensor (GGNS-L) to indicate each time the unit has reached the maximum capacity.

#### **STAGE 3 REFILLING**

Every time the unit is emptied, it must be refilled with fresh water in accordance with the EN 1825 standard.

#### **Pipe Connection Option (C)**

For easier connection to external desludging pipe allowing lid to remain closed during emptying.

#### **Washing System Option (W)**

For automated internal cleaning and refill. Comes with pipe connection (P).

#### With Diaphragm Pump (PD)

For automated emptying of the grease trap on models NS4 to NS15. Comes with washing system (+W).

# With Diaphragm Pump (P) and Recirculation of waste (R) Combo & Wash System (W)

Pump and recirculation option for mixing of grease/sludge waste for more efficient pumping. Includes washing system.

#### With Centrifugal Pump (P)

For automated emptying of the grease trap on models NS4 to NS15. For heavy duty or industrial grease/food.

#### **DIFFERENT CONFIGURATIONS**



**GGNS-B BASIC MODEL** Available from size: NS2, 4, 6, 10, 15



**GGNS-C** WITH PIPE CONNECTION Available from size: NS2, 4, 6, 10, 15



**GGNS-C-W** WITH PIPE CONNECTION & **WASHING SYSTEM** Available from size: NS4, 6, 10, 15



**GGNS-W-PD WITH WASHING AND DIAPHRAGM PUMP** Available from size: NS6, 10, 15



**GGNS-W-PD-R** WITH WASHING **DIAPHRAGM PUMP AND** RECIRCULATION Available from size: NS6, 10, 15



**GGNS-P WITH CENTRIFUGAL PUMP** Available from size: NS4, 6, 10, 15



**GGNS-W-P** WITH WASHING AND CENTRIFUGAL **PUMP** Available from size: NS4, 6, 10, 15

All dimensions in mm. All drawings in this brochure are guidelines and are subject to change. For full specifications and latest drawings on individual models please refer to www.greaseguardian.com or contact your local supplier.

For invert levels please contact your local supplier.

\*Please refer to full sizing details on page 8

For specifications and detailes dimensions contact your local distributor or Grease Guardian Head Office

Optional extras available for all models: Level Sensor GGNS-L























## **GREASE GUARDIAN NS RANGE**

Model	Configuration	Flow Rate L/S	Meals Day	Capacity	Overall Length	Overall Height	Overall Width	Connection Diameter
NS2-B	Basic	2	200	745	1565	1363	720	114
NS4-B	Basic	4	400	1451	2006	1363	1015	114
NS6-B	Basic	6	600	2185	2565	1367	1100	129
NS10-B	Basic	10	1000	3713	2840	1513	1475	168
NS15-B	Basic	15	1500	5449	2945	1730	1475	219
NS4-C	c/w Pipe	4	400	1451	2006	1363	1015	114
NS6-C	c/w Pipe	6	600	2185	2565	1367	1100	129
NS10-C	c/w Pipe	10	1000	3713	2840	1513	1475	168
NS15-C	c/w Pipe	15	1500	5449	2945	1730	1475	219
NS4-C-W	+Wash System	4	400	1451	2006	1363	1015	114
NS6-C-W	+Wash System	6	600	2185	2565	1367	1100	129
NS10-C-W	+Wash System	10	1000	3713	2840	1513	1475	168
NS15-C-W	+Wash System	15	1500	5449	2945	1730	1475	219
NS6-PD	Diaphragm Pump	6	600	2185	2565	1367	1100	129
NS10-PD	Diaphragm Pump	10	1000	3713	2840	1513	1475	168
NS15-PD	Diaphragm Pump	15	1500	5449	2945	1730	1475	219
NS6-W-PD	Diap Pump+Wash	6	600	2185	2565	1367	1100	129
NS10-W-PD	Diap Pump+Wash	10	1000	3713	2840	1513	1475	168
NS15-W-PD	Diap Pump+Wash	15	1500	5449	2945	1730	1475	219
NS10-W-PD-R	+Recirculation	10	1000	3713	2840	1513	1475	168
NS15-W-PD-R	+Recirculation	15	1500	5449	2945	1730	1475	219
NS4-PC	Centrifugal Pump	4	400	1451	2006	1363	1015	114
NS6-PC	Centrifugal Pump	6	600	2185	2565	1367	1100	129
NS10-PC	Centrifugal Pump	10	1000	3713	2840	1513	1475	168
NS15-PC	Centrifugal Pump	15	1500	5449	2945	1730	1475	219
NS4-W-PC	CP + Washing	4	400	1451	2006	1363	1015	114
NS6-W-PC	CP + Washing	6	600	2185	2565	1367	1100	129
NS10-W-PC	CP + Washing	10	1000	3713	2840	1513	1475	168
NS15-W-PC	CP + Washing	15	1500	5449	2945	1730	1475	219

Sludge volume:100 l x flow Grease retention: 40 l x flow

All dimensions in mm. Inlet / outlet height from the bottom of the pipe.
All drawings in this brochure are guidelines and are subject to change. Always request the latest drawings from your suppliers.





# **GREASE MANAGEMENT SOLUTIONS AT SEA**

Galley and centrally located grease traps for vessels

Manual emptying or automatic grease removal options

316 Stainless Steel

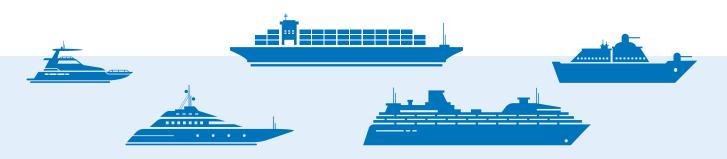
Compact footprint for confined spaces

High efficiency Levels

1 l/s to 20 l/s options

Easy to install including retrofit

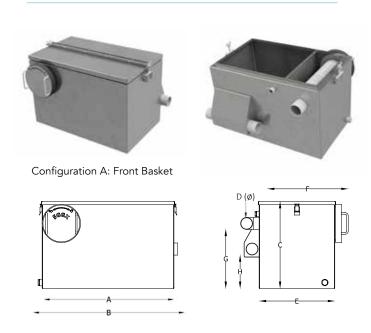
Designed for high seas

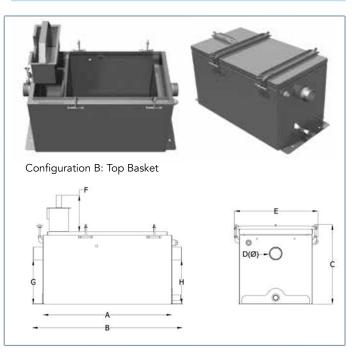


## AT SOURCE GREASE TRAP (MANUAL)

316 Stainless steel grease traps from 1 l/s to 2 for undersink or compact locations

#### Traps grease and solids allowing only cleaner water through





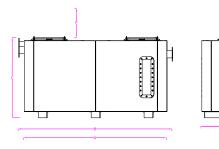
Model	Length (A) INCLUDES CONTAINER	Length (B) TANK ONLY	Height (C)	Inlet/Outlet (D)	Width (E) INCLUDES PANEL	Basket (F) CLEARANCE NEEDED	Inlet Height (G) INLET	Outlet Height (H) OUTLET	Max Flow
MGT1 B	600	700	370	60.3 DN50	380	170	208	208	0.75 l/s
MGT2 A	620	677	440	60.3 DN50	380	405 front	262	87	1. l/s
<b>М</b> GТ3 В	660	760	460	60.3 DN50	380	205	300	300	1.25 l/s

All dimensions in mm. Inlet / outlet height from the bottom of the pipe.
All drawings in this brochure are guidelines and are subject to change. Always request the latest drawings from your suppliers.

# **CENTRALISED GREASE TRAP (MANUAL)**

316 Stainless steel grease trap for centrally located applications on vessels

Traps grease and solids allowing only cleaner water through.





Model	Length (A)	Length (B)	Height (C)	Inlet/Outlet (D)	Width (E)	Basket (F)	Inlet Height	Outlet Height (H)	Max Flow
	INCLUDES CONTAINER	ES TANK ONLY	(6)		INCLUDES PANEL	CLEARANCE NEEDED	INLET	OUTLET	
MGNS1	1204	1325	892	114.3DN100	660	500	602	532	NS1
MGNS2	1415	1565	1380	114.3 DN100	765	500	1059	989	NS2

All dimensions in mm. Inlet / outlet height from the bottom of the pipe.

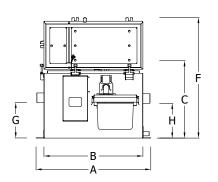
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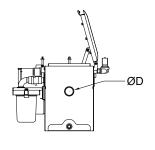
## AT SOURCE GREASE TRAP (AUTO-SKIM)

316 Stainless steel grease traps from 1 to 2.25 l/s for undersink or compact locations.

Traps grease and filters solids allowing only cleaner water through.

Captured grease automatically skimmed to external collection point







Model	Length (A) INCLUDES MOUNTING	Length (B) TANK ONLY	Height (C)	Inlet/Outlet (D)	Width (E) INCLUDES PANEL	Basket (F) CLEARANCE NEEDED	Inlet Height (G) INLET	Outlet Height (H) OUTLET	Max Flow
MGD1	643	543	380	60.3 DN50	610	665	150	150	0.75 l/s
MGD2	723	623	466	60.3 DN50	610	760	225	220	1.25 l/s
MGD3	812	664	515	88.9 DN80	610	806	314	267	1.75 l/s
MGD4	764	864	515	114.3 DN100	610	793	302	224	2.25 l/s

All dimensions in mm. Inlet / outlet height from the bottom of the pipe.
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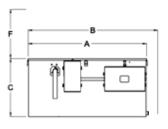
## **CENTRALISED GREASE TRAP (AUTO-SKIM)**

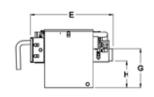
316 Stainless steel grease traps from 3.5 to 7.9 l/s

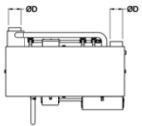
Traps grease and filters solids allowing only cleaner water through.

Captured grease automatically skimmed to external collection point

Automatic solids transfer option







						0			
Model	Length (A)	Length (B)	Height (C)	Inlet/Outlet (D)	Width (E)	Basket (F)	Inlet Height (G)	Outlet Height (H)	Max Flow
	INCLUDES CONTAINER	TANK ONLY			INCLUDES PANEL	CLEARANCE NEEDED	INLET	OUTLET	
MGD5	1251	1395	625	114.3DN100	870	930	6 407	334	3.5 l/s
MGX75*	1100	1100	545	114.3 DN100	1060	1045	5 363	249	4.7 l/s
MGX125	<b>*</b> 1500	1500	625	114.3 DN100	1060	112!	5 445	328	7.9 l/s

All dimensions in mm. Inlet / outlet height from the bottom of the pipe.

All drawings in this brochure are guidelines and are subject to change. Always request the latest drawings from your suppliers.

<sup>\*</sup> Available with Solid Strainer Basket (IS) or Solid Removal Pump (AST).

## **CUSTOMISED OPTIONS**

For specific requirements such as higher flows, naval applications, monitoring, shock mounted equipment and other requirements contact your supplier for details.

#### **DECIDING WHICH MARINE GUARDIAN TO SELECT**

#### **SPACE**

If space is a premium on board, then selecting our at source options will ensure minimum space is occupied. At source also means close to the problem keeping more pipes protected. If space is available consider centrally locating the grease trap.

#### **EMPTYING**

If emptying of the grease trap is problematic because of the trap's location, facilities at port or safety on board, then select the auto-skim option. This removes the trapped grease into an easy to transport and store collection container.

#### **SIMPLICITY**

For the most basic option select "manual". Manual grease traps require no power and are emptied manually, by using at wet vac or licensed grease trap cleaning company.



#### **STORAGE**

If the vessel has onboard food waste storage tanks for holding waste during long voyages, select the Autromatic Solids Transfer options (AST)

#### **NAVAL VESSELS**

For naval vessels with specific needs contact your supplier to discuss options.

For larger flow layouts and combinations such as D5, D10 and D20 Marine, contact supplier



D5 5 l/s In line or stackable for easy installation in restricted space



D20 20 l/s In line ASRD unit



## **ST1 (3 IN 1) SINK STRAINER**

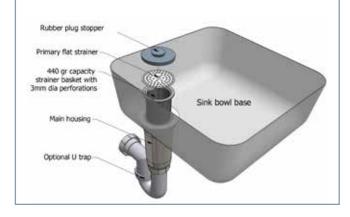
Plug strainer

**Basket Strainer** 

Permanent Strainer

Installed in sink

Stainless Steel fabrication



# ST8-ST23 FOOD WASTE STRAINERS

Prevents food waste blockages

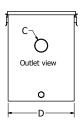
Interchangeable filter options

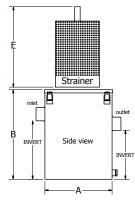
Small footprint and portable

Easy to install and maintain

Under sink installation







# ST30 TILTING HIGH-FLOW BASKET CENTRALISED FOOD STRAINER

Ideal for centralised installation

High capacity

Easy empty (Tilt feature)

Ideal for basement installation

Can be used with GGX 75 and GGX 125





Model	Length	Height	Inlet/	Width	Basket	Capacity	Options	Invert
			Outlet		CLEARANCE NEEDED	LITRES	INLET/OUTLET (F)	Levels MM FROM THE BOTTOM
FGST1	-	203	-	90	200	450ml	U bend Invert	-
FGST8	300	400	60	300	360	8	Basket/Coffee Filter/Bag	320 / 220*
FGST12	300	500	90	300	460	12	Basket only	340/340
FGST23	400	560	114	300	467	23	Basket only	420/20*
FGST30	616	1492	114	934	1177	30	Basket tilt	1310/917

Specification: Floor standing sediment trap. 1.2mm/1.5mm, 304 Stainless Steel with bright finish.
\*Note: low outlet level of 25mm is standard for ST23 models and optional on request for ST8 and 12 models





# Lid closed Lid open Cutaway showing internal strainer

INLET/OUTLET connections available for 16mm and 20mm ID. Allow minimum clearance required for servicing as per table below (E).

#### **ST2** Coffee machine waste filter

The ST2 is a filter for industrial coffee machines, specifically designed to treat the waste flow of the backwash before going to the drain. Coffee grounds are strained through an ultra fine fabric mesh filter.

The ST2 is easy to fit and comes with pipe fittings and wall brackets for easy installation. The ultra fine fabric mesh filter can be used to strain the grounds.

#### **COFFEE WASTE FILTER**

Stainless steel fabrication

Installed under sink and/or coffee machine

Prevents blockages

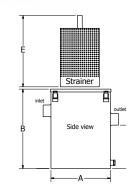
Filters coffee grounds

0.6, 4 & 8 litre capacity options

Easy to install & maintain

Compact in size

Full customer support





# **ST4 & ST8** Undersink Solid Strainer with coffee filter attachmnet

The ST4 and ST8 coffee waste filters can be installed under sinks used in cafes to strain coffee grounds and other fine sediment. The under-sink option can take the waste from the sink as well as the coffee machine itself.

Outlet view

With the ST8 floor mounted trap, several filtration methods are available to choose from, including mesh bags, ultra fine fabric mesh filter and stainless steel basket options.

Maintenance is easy. Once a day or when a reduced flow is noticed from the sink, simply open the tank and remove the filtration device, empty and replace.

Model	Length (A)	Height (B)	Inlet/ Outlet (C)	Width (D)	Min. Clearance (E)	Strainer Capacity Litres	Invert Level	Filter options
ST2	115	220	16/20	n/a	135	0.6	235/35	CF
ST4	250	355	50	250	210	4	278/55	CF/MS
ST8	300	400	60	300	360	8	320/220	CF/MS/MB

All dimensions in mm. All drawings in this brochure are guidelines and are subject to change. Always request the latest drawings from your suppliers.



# **Our Philosophy**

FM ENVIRONMENTAL'S CORPORATE VISION IS TO BE A COMPANY
THAT CONTINUOUSLY INSPIRES, INNOVATES AND EXCELS AT EVERYTHING IT DOES

## **INSPIRATION**

The Company is committed to developing and fostering an enthusiastic and motivated workforce with staff who can inspire each other as well as the customer through their energy, expertise and excellence. Rather than merely selling the features and benefits of FM's range of products and services it will also be our objective to inspire in customers the desire to work only with FM. This will come from developing close relationships with customers through slick service, value-orientated products and services and customer-driven staff.

## INNOVATION

The Company will apply an innovative approach to its products and processes in an effort to gain and maintain a competitive advantage over other companies. This will involve: inventing new and better ways of providing value and service to employees and customers; reinventing ourselves and how we do things to give a fresh and competitive edge to our daily operations; stimulating and liberating a culture of innovation within the organisation that will enable us to face the challenges of a rapidly changing and developing marketplace.

## **EXCELLENCE**

It is the Company's over-riding strategic objective that staff become operationally excellent at everything they do, from how they deal with customers and work with suppliers to how they interact with each other on a daily basis. The Company will strive to refine processes and procedures, to work closely with approved suppliers and to perfect the customer supply chain so that we can deliver what we promise when we promise it. The ISO9001:2015, OHSAS 18001 and ISO 14001 Quality Control Procedures, along with our Investors In People Accreditation will be used as tools to achieving this goal.



www.greaseguardian.com

# Global Presence



GRAND CENTRAL TERMINAL NEW YORK



EMIRATES STADIUM LONDON



EMPIRE STATE BUILDING NEW YORK



CANARY WHARF COMPLEX LONDON



HILTON HOTEL
MALTA



TD GARDEN
BOSTON



MILITARY VESSELS WORLDWIDE



CHANGI AIRPORT SINGAPORE



EMIRATES TOWERS HOTEL
DUBAI



PALACE OF VERSAILLES
PARIS



ONE BANGKOK
THAILAND

# AND THOUSANDS OF UNITS ALL AROUND THE WORLD



























## **DOWNLOAD CUSTOMER SUPPORT APP**



# www.greaseguardian.com











#### **Manufacturers**

FM Environmental Greenbank Industrial Estate Newry BT34 2QX Northern Ireland

T: +44(0)28 302 66616 F: +44(0)28 302 63233 E: sales@greaseguardian.com

#### Malta

FM Environmental (Malta) Ltd Water Technology House A15B Industrial Estate Marsa, Malta

T: +356 2122 6172 F: +356 2122 6171 E: fmmalta@fmenvironmental.com

#### **United States**

Grease Guardian LLC 43 Capral Lane New City NY 10956

T: 800 677 7861, 914 375 0902 M: 914 316 5671

E: info@greaseguardian.com







