Environmental Products & Services Ltd.
www.EPAS-Ltd.com

GreaseShield™

AST (Automatic Solids Transfer) Range

Automatic Grease Separation and Solids Removal

Key Benefits

- ✓ GreaseShield is the only proactive greasetrap in the world to deal with emulsified FOGs. Automatically separates grease from effluent to achieve < 100 ppm FOG Discharge.
- ✓ GreaseShield removes entrained solids in real time to reduce BOD, COD and SS loadings reducing loading on waste water treatment plants and pumping stations.
- ✓ Eliminates frequent pumping costs, harvesting a source of renewable energy.
- ✓ Self emptying and self cleaning. No need for staff to access the internal of the machine.
- ✓ User Friendly! Odour Free!
- ✓ No need to purchase enzymes or biological agents! No heating elements. Low operating costs.
- ✓ Reduce CO^2 emissions and avoid loss of a renewable energy source caused by pumping out greasetraps.
- ✓ Award Winning Modular Technology. Small, compact and easily installed in any Deli or Kitchen!
- ✓ Eco friendly, sustainable design - 99% recyclable!

ISO Certifications

Quality ISO 9001: 2008 | Environment ISO 14001: 2004 | Health & Safety OHSAS 18001:2007

Members of

BRITISH HOSPITALITY ASSOCIATION | CESA CATERING EQUIPMENT SUPPLIERS' ASSOCIATION | CEDA CATERING EQUIPMENT DISTRIBUTORS ASSOCIATION | EFOGA | BRITISH WATER expertise worldwide | RESTAURANTS ASSOCIATION OF IRELAND

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Award Winning Technology

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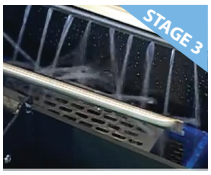
How it Works



Stage 1: Automated Food Solids Removal

o Effluent from Sinks, Ovens and other appliances enters the GreaseShield.

o Food solids automatically get screened and dewatered by an inclined auger or pre-filter and deposited into an external Food Solids Collection container.

o Pre-Filters and FilterShields available to deal with heavy food waste in busy kitchens

Stage 2: Automated Grease Separation

o GreaseShield takes advantage of waste thermal energy present in the effluent to remove emulsified animal fats and FOGs before they solidify, using a combination of retaining baffles, reverse flow configuration and the differing specific gravities of water and FOGs which are complemented by thermal layers within the effluent.

o All of these factors, working in conjunction with the properties of the unique oleophilic (attracts FOGs) and hydrophobic (repels water) FOG removal means, ensures that the objective of protecting drainage systems is achieved.

o When the FOGs Container is attached to the GreaseShield, a silicone rubber blade with anti friction properties makes contact with the slowly rotating drum allowing the FOGs to be removed externally for recycling and safe disposal.

o The treated effluent then flows under the outlet baffle and out to drain.

Stage 3: Automated Self Cleaning

o GreaseShield reuses and recirculates grey water , agitating the internal tank with intermittent cleaning cycles removing fine sedimentation and back washing internal filters preventing foul smells.

o This removes staff requirements to access the internal of the GreaseShield and eliminates any recurring expense for licensed waste contractors to pump out and dispose of GreaseShield contents.

YouTube **View the GreaseShield in operation on EPAS YouTube channel:**
www.EPAS-Ltd.com/Videos

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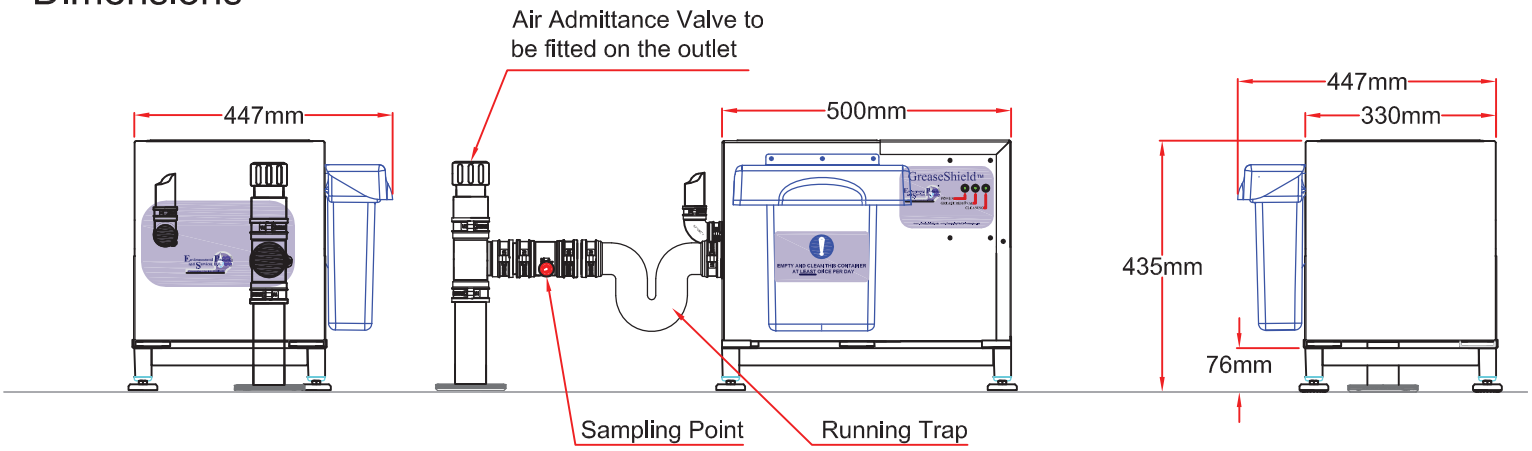
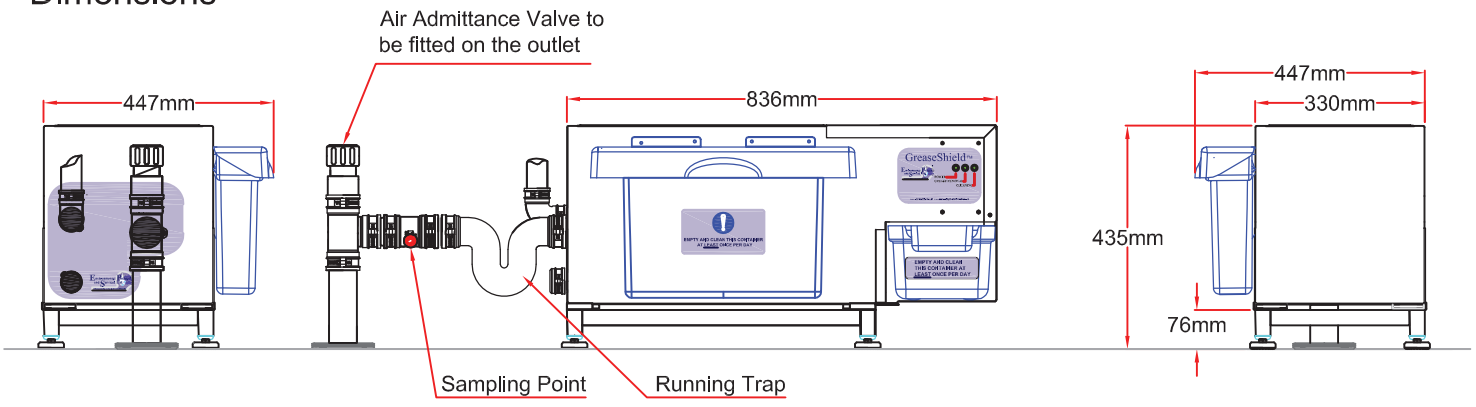
GS1000AST

Dimensions



GS1850AST

Dimensions



Award Winning Technology

GreaseShield™

Specifications and Dimensions

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Material:		Stainless 304 Brush Finish incorporating a Polypropylene Inner Tank
Weight:	**AST 1850**	34.7Kg / 76.5Lb
	AST 1000	27.4Kg / 60.4Lb
Continuous Flow Rate (Rated at 90% of max. flow rate):	**AST 1850**	1.85 l/s Continuous Flow Rate
	AST 1000	1.00 l/s Continuous Flow Rate Flows are subject to a 1 in 40 fall into the GreaseShield and rely on the drainage pipe work being either 1¼" (32mm) (GreaseShield Combi) or 1½" (38mm) (GreaseShield ETU 32/40-50). The outgoing pipe work from a GreaseShield should always be a 2" (51mm) and have no restrictions.
Antiflood/SafeGuard:	**AST 1850**	Maximum Flow Rate 2.06 + 0.44 Litres Per Second = 2.5 L/PS
	AST 1000	Maximum Flow Rate 1.11 + 0.44 Litres Per Second = 1.55 L/PS
FOG Removal Rate:	**AST 1850**	4 litres per hour
	AST 1000	2 litres per hour
FOG Removal Means:	**AST 1850**	• 385mm Long *180mm Diameter
	AST 1000	• 175mm Long *180mm Diameter
	AST 1850 & 1000	• Oleophilic, Zero Maintenance Roller • Continuously Wiped by Silicone Rubber Blade • Formed to 77 Shore Hardness For Durability • Resistant to Fats, Oils and Greases; Spices; Alkalis and Acids in pH range 4 to 10
Fats, Oils and Grease (FOGs) Cartridge Capacity:	**AST 1850**	6 Litres of FOGs (Representative of a typical day)
	AST 1000	3 Litres of FOGs (Representative of a typical day)
Automated Solids Transfer (AST) & Dewatering:		Incorporated As Standard - Capacity 30 litres per Hour
Internal Cleaning Cycles:		Incorporated As Standard - No Need To Desludge
External Solids Cartridge Storage Capacity:		7 Litres
PLC Control		Control Smart Programmable Relay - Energy Conservation
Flexibility in FOG & Solids Removal Operating Sequences:		FOG & Solids Removal can operate to specific customers requirements (opening hours/levels of contamination to be treated) and offers the flexibility of being programmed for specific needs
Motors - Single Phase 220 Volts:		2 x 24 watt = 48 watt per hour, 230v, 50Hz with automatic thermal safety protection cut-out and reset [125 Celsius +/- 10%]
GreaseShield Dimensions - Length x Height x Width:	**AST 1850**	835 x 362 x 424mm
	1000	500 x 362 x 424mm
Inlet & Outlet Diameters	**AST 1850**	Inverted Inlet 32mm, Normal Inlet 40mm, Outlet 50mm
	AST 1000	Inlets 32mm, Outlet 50mm
Inlet & Outlet Height/s (To Base of Inlets & Outlets)	**AST 1850**	Inverted Inlet 43mm, Normal Inlet 160mm, Outlet 160mm
	AST 1000	Inlet 183mm, Outlet 155mm
Usage Guidance In Relation To Specifications:	**AST 1850**	Dishwasher + 20 Grid Combi Ovens + Double Stacked Combis; Double Pot & Prep Sinks; Decarbonisers; Rotisserie Ovens. In combination with FilsterShield Waste Disposal and Dewaterer Units.
	AST 1000	Up to 4 Combi Ovens and Single Bowl Sink
Electrical Installation Requirements:		A Single Phase Dedicated 13 Amp Masterseal IP56 Unswitched one gang Socket (MK56480) or comparable
Drainage & Plumbing Requirements:		110mm Gully Trap to Drain to be located 250mm to left hand side of GreaseShield unit + ¾" BSP Connection to both Mains Cold and Hot Water Supply
Kitchen Furniture Fabrication Requirements:		Stainless Steel Table, Sinks and Stands to be fabricated to allow and ensure operational and maintenance access & ease of plumbing of GreaseShields.