ABOVE GROUND POLYETHYLENE (HDPE) GREASE WATER SEPARATOR AUTOMATIC

System:

In places like hotels, canteens, restaurants, and food production facilities where greasy wastewater is generated, it's essential to have grease water separators installed. These separators, complying with standards like EN 1825, prevent organic-based grease and oil from wastewater, ensuring they are not released into sewers. Metusan offers various grease separators for standalone, mobile, or in-ground installation. These units come in different types - full and partial disposal, and are made from hygienic stainless steel or polyethylene or glass reinforced plastics in oval, round, or rectangular shape. Additionally, there are optional components like grease layer thickness measuring devices, Building Management System connection that can enhance the functionality of your unit.

Requirement:

If your business, such as catering or food processing, generates greasy wastewater, it's mandatory to install a grease separator as per regulations. Failing to do so can lead to the formation of stubborn, foul-smelling deposits in the drainage system, making removal challenging. Besides fines, not using a separator can result in costly damages like pipe blockages, corrosion, and disruptions in wastewater treatment plants and lifting stations.

Fields of usage:

Grease separators, complying with standards such as EN 1825, are essential to prevent severe consequences. They must be installed whenever wastewater contains vegetable and animal grease and oil that need to be retained. This requirement applies to various commercial and industrial businesses, including:

-Kitchen operations catering establishments
-Restaurants and hotels
-Motorway service stations and canteens
-Butcher shops
-Slaughterhouses
-Oil mills
-Cooking oil refineries
-Canning factories
-Grilling, roasting- frying kitchens

This product is a system designed to separate grease from both domestic and commercial wastewater in accordance with EN 1825 standards. Greases referred to here are substances of vegetable or animal origin, having a density of less than 0.95 g/cm3 and being partially or completely insoluble in water. Proper operation necessitates adherence to disposal and maintenance cycles.

Working principles:

The operation of grease separators relies on the principle of gravity: the varying densities of water, grease, and dirt particles (sludge) cause these materials to separate naturally within the separator tank.

All Gravity Grease Separators require periodic maintenance to remove the fats, oils and grease together with sludge deposits that have been separated from the waste water. Such maintenance is usually undertaken by a specialist waste contractor. The frequency of maintenance will depend on the volume of FOGs and the volume of sludge that is generated in the food production process. Sludge volume can be significantly reduced by effective use of strainers on sink outlets.

Only waste water containing organic FOGs should be discharged to a grease separator.

Effluent from the following should not be connected to the separator:
-Toilets
-Rainwater
-Oil of mineral origin
-Macerators

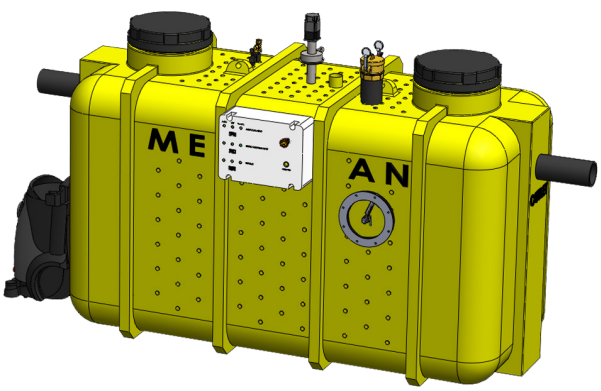
Macerators have the effect of artificially consuming the sludge capacity of the separator and thereby shortening the service interval to the separator. Additionally, under certain conditions, the process of maceration can emulsify waste products and prevent them from separating via the natural gravity process, thereby reducing the separation efficiency of the unit.

Disposal:

Sludge separators require thorough cleaning and complete emptying at least once a month, ideally every two weeks. Following cleaning, the separators must be refilled with water, such as drinking water, processed water, or treated water from the grease separator. This regular maintenance routine is essential to ensure the proper functioning of the system.

Certificate:

Metusan Grease Water Separators are fully certified to EN 1825.



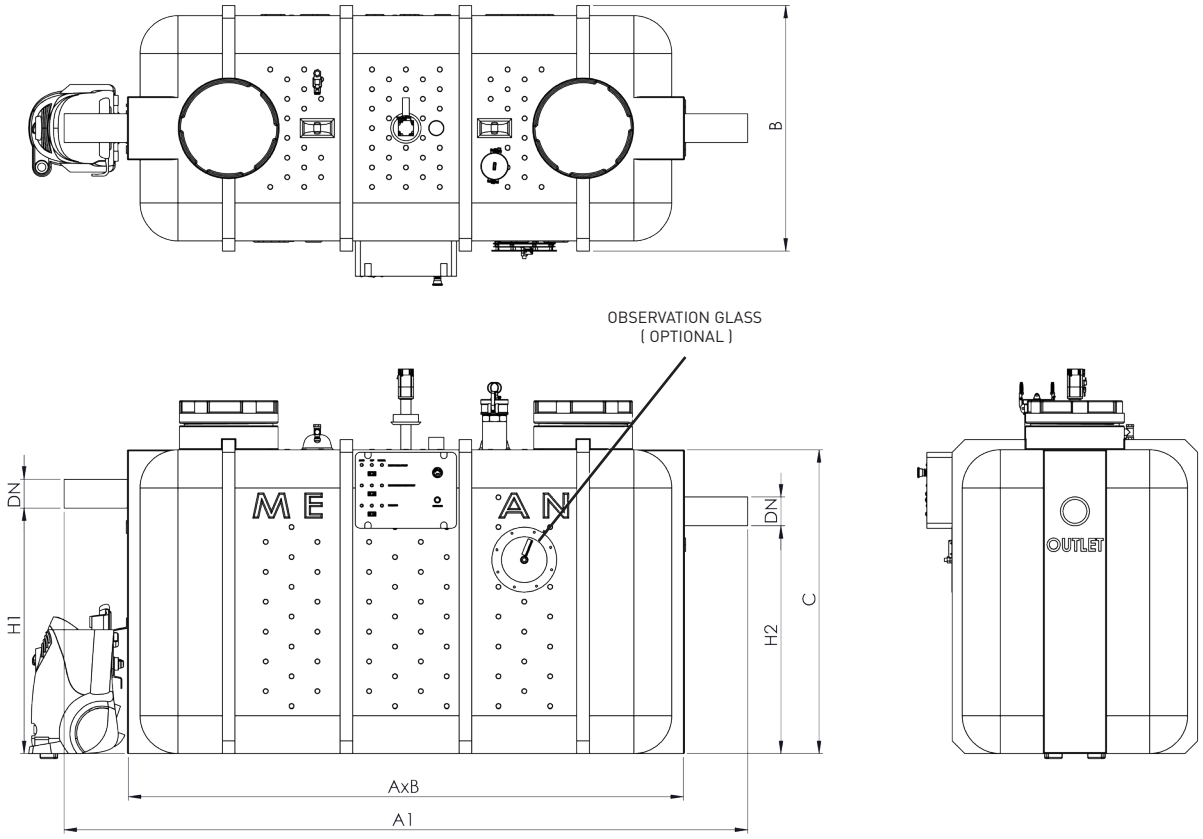
Automatic grease water separator according to EN 1825, made of high density polyethylene (HDPE) with integrated sludge trap. It is free standing and suitable for installation on floor or in floor type applications, at the places free from frost.

Inlet and outlet pipes are suitable to connect to the appropriate size (EN 877) SML Centrifugally cast drain pipes or plastic pipe. Easy removable, gasketed inspection covers, which is hermetically sealed to avoid smell. For vacuum suction of the waste, there is a 2" storz coupling connection. One-piece rotomolded body, which is resistant against waste oil and aggressive wastewaters do not leak and completely water tight, Inner and outer surfaces of the unit are smooth enough to avoid residues and facilitate easy cleaning. Lightweight construction ensure easy transport and installation. Transport handles are good for handling with forklifts.

The separator cleaning operation can be made by motorized head that rotates 360 degrees on 2 axes, with a pressure of 150 bars, capable of breaking down solidified grease and residue, the separator is delivered with a vortex impeller with grinder pump to dispose accumulated residue, greywater, and grease to the vacuum truck, featuring a grease level sensor. It includes a vortex impeller with grinder pump for to dispose accumulated grease, a 2" (DN50) storz coupling connection, a clean water filling unit controlled by a solenoid valve, and the ability to send grease level information, failure information, washing information, disposal information, and filling information from the control panel to the Building Management System (BMS).Control panel can be mounted either right or left side of the unit or removeable to wall.

Optionally, special features can be added as wipe sight glass, sampling shaft.

TECHNICAL SPECIFICATIONS



PRODUCT DIMENSIONS

Code	NS (lt/sec)	DN	Total Volume (lt)	Grease Volume (lt)	Sludge Trap (lt)	A	A1	B	C	H1	H2
31313	3	100	995	150	330	1360	1540	890	1390	970	900
31317	7	100	1685	300	725	2200	2380	890	1390	970	900
313113	13	150	3150	500	1560	2700	3100	950	1600	1220	1150
313120	20	200	4960	1000	2220	2900	3300	1300	1800	1470	1400

Dimensions are in mm.