ABOVE GROUND POLYETHYLENE (HDPE) GREASE WATER SEPARATOR MANUAL

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:

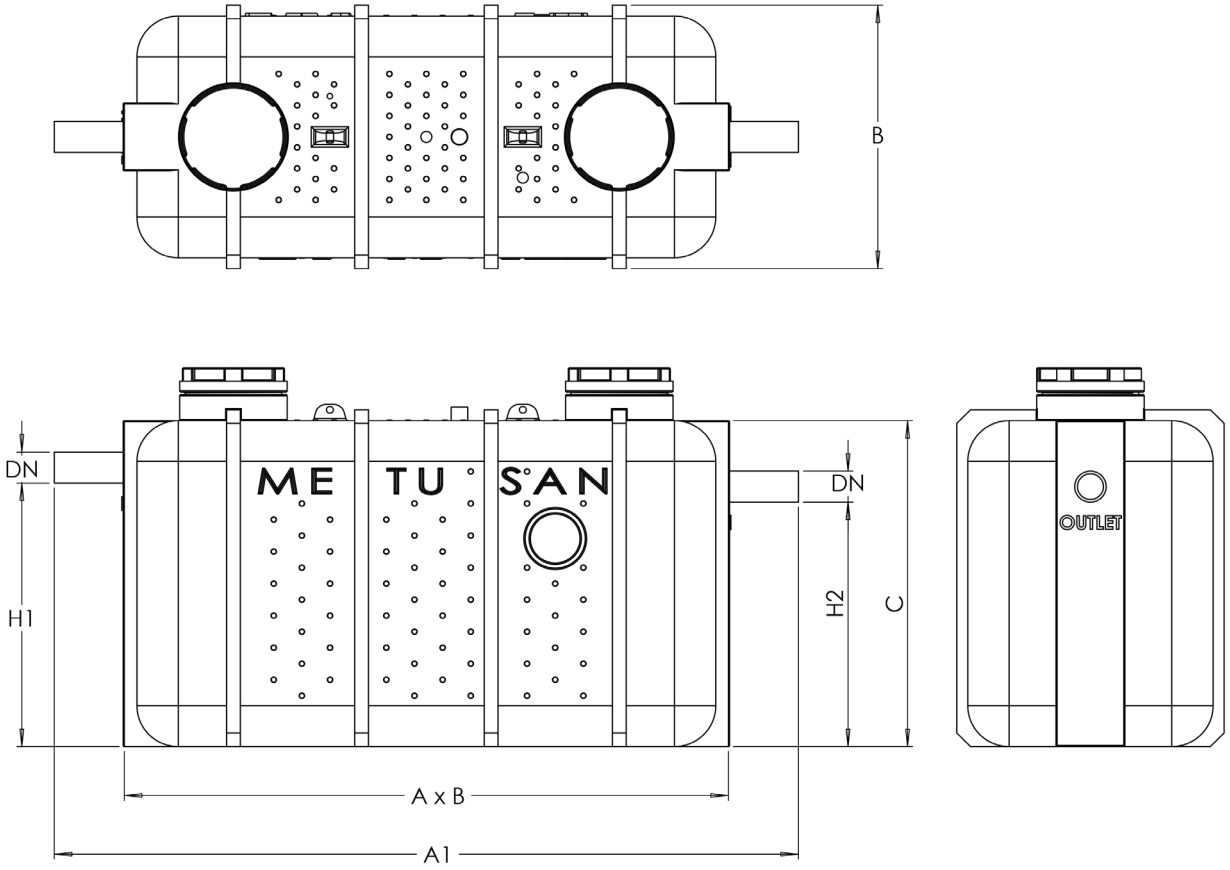
Sludge separators require thorough cleaning and complete emptying at least once a month, ideally every two weeks. Following cleaning, the separators must be refilled with water, such as drinking water, processed water, or treated water from the grease separator. This regular maintenance routine is essential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

Certificate:

Metusan Grease Water Separators are fully certified to EN 1825.

Grease interceptor according to EN 1825-1, 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 (DIN 19522) SML Centrifugally cast drain pipes or (DIN 19560) plastic pipe. Easy removable, gasketed inspection covers, which is hermetically sealed to avoid smell. For vacuum suction of the waste, there is a 2½ "Storz-B coupling connection or DN65, DN80 or DN100 - PN10 (DIN 2501) drain flange. One-piece molded 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.

TECHNICAL SPECIFICATIONS



PRODUCT DIMENSIONS

Code	NS (lt/sec)	DN	Total Volume (lt)	Grease Volume (lt)	Sludge Trap (lt)	A	A1	B	C	H1	H2
31213	3	100	995	150	330	1360	1540	890	1390	970	900
31217	7	100	1685	350	725	2200	2380	890	1390	970	900
312113	13	150	3150	650	1560	2700	3100	950	1600	1470	1400
312120	20	200	4960	1000	2220	2900	3300	1300	1800	1470	1400

Dimensions are in mm.