BELOW GROUND GRP GREASE WATER SEPARATOR MANUAL V

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

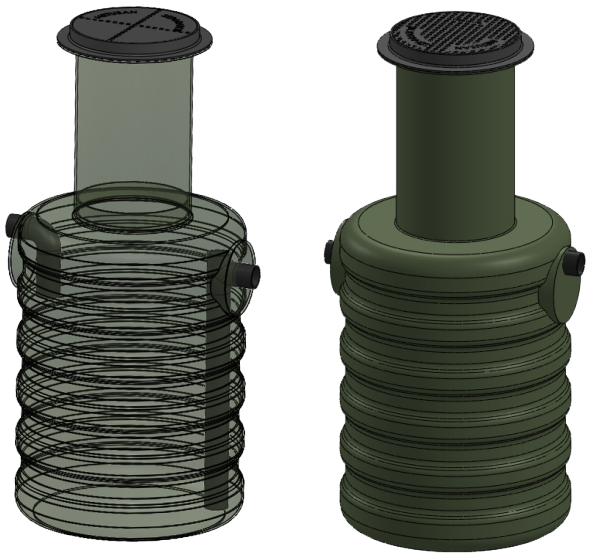
Macerators have the effect of artificially consuming the sludge capacity of the separator and thereby shortening the service interval to the separator. Additionally, under certain conditions, the process of maceration can emulsify waste products and prevent them from separating via the natural gravity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

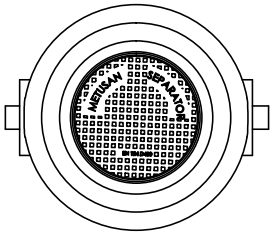
Certificate:

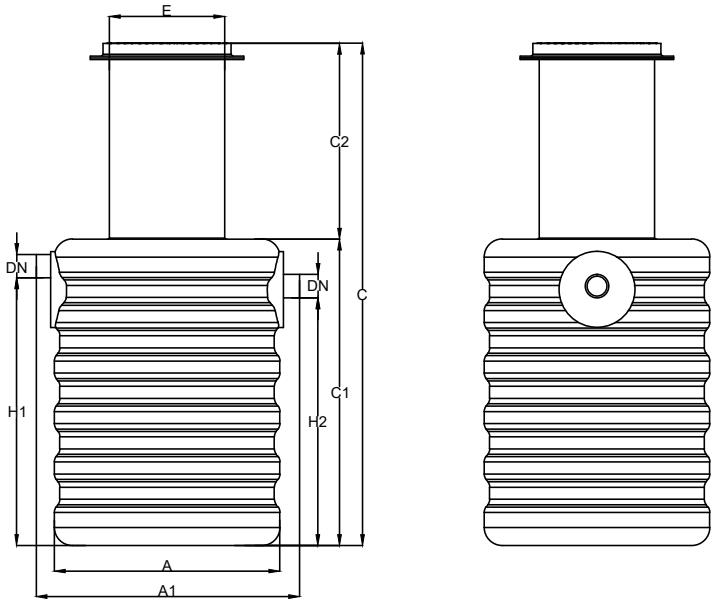
Metusan Grease Water Separators are fully certified to EN 1825.



Manual grease water separator compliant with EN 1825, is made of glass reinforced plastic (GRP) and features an integrated sludge trap. It is suitable for underground installation below the frost line. It's rounded shape and non-porous surface resistants to oil and acids on both inner and outer surfaces, it ensures easy and precise cleaning and disposal. Inlet and outlet connections are suitable push sockets or pipe connectors. Additionally, it offers direct disposal coupling-pipe equipment for odorless disposal. The separator can optionally be equipped with a grease level monitoring alarm device and a sampling shaft.

TECHNICAL SPECIFICATIONS





PRODUCT DIMENSIONS

Code	Lt/Sec	DN	Total Capacity	Grease Capacity	Sludge Trap	A	A1	C	C1	C2	H1	H2	E
41221	1	100	570	250	150	1000	1400	1080-2080	1000	1080	800	730	690
41223	3	150	1160	610	300	1000	1400	1880-2880	1800	1080	1550	1480	690
41225	5	150	1860	850	500	1000	1400	2780-3780	2700	1080	2450	2380	690
41227	7	150	2520	940	700	1200	1600	2680-3680	2600	1080	2300	2230	690
412210	10	200	3580	1110	1000	1500	1900	2580-3580	2500	1080	2100	2030	690
412212	12	200	4460	1460	1200	1500	1900	3080-4080	3000	1080	2600	2530	690
412215	15	200	5350	1820	1500	1500	1900	3680-4680	3600	1080	3100	3030	690
412220	20	200	7000	1978	2000	2000	2400	2880-3880	2800	1080	2300	2230	690
412225	25	250	9200	2290	2500	2000	2400	3580-4580	3500	1080	3000	2930	690
412230	30	250	11400	2730	3000	2350	2750	3280-4280	3200	1080	2700	2630	690
412240	40	300	14400	3165	4000	2350	2750	4080-5080	4000	1080	3400	3330	690
412250	50	300	19200	3740	5000	3000	3400	3480-4480	3400	1080	2800	2730	690

Dimensions are in mm.