ABOVE GROUND STAINLESS STEEL 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

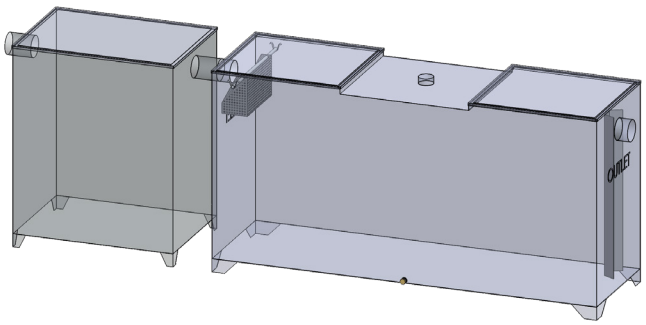
Macerators have the effect of artificially consuming the sludge capacity of the separator and thereby shortening the service interval to the separator. Additionally, under certain conditions, the process of maceration can emulsify waste products and prevent them from separating via the natural gravity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

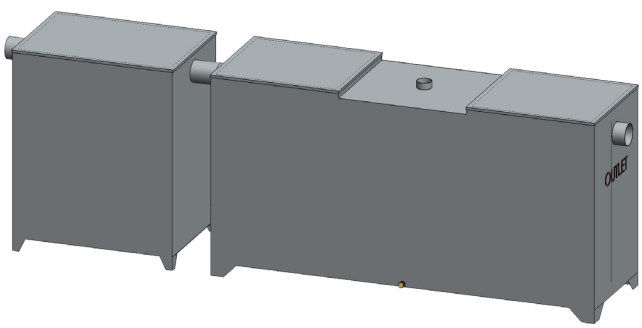
Disposal:

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:

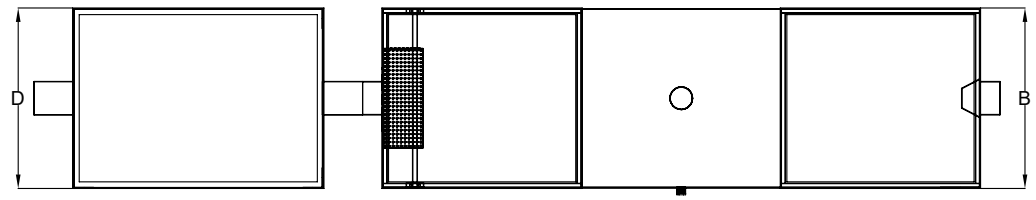
Metusan Grease Water Separators are fully certified to EN 1825.

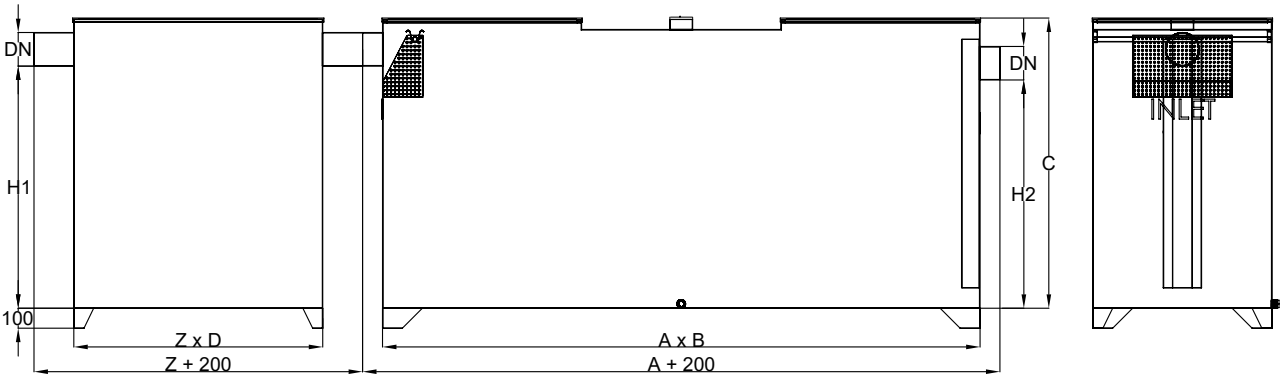




Manual grease-water separator according to EN 1825, is suitable for free standing application and for installation on floor or in floor type applications, at the places free from frost. It is manufactured from AISI 304 or AISI 316 grade stainless steel, separated with a residue and particle trap system. It should feature a removable and cleanable stainless steel residue basket, equipped with appropriate discharge plugs and valves, ensuring fast and easy opening and closing of the lid. The separator should be odorless, leak-proof, and facilitate quick and easy maintenance.

TECHNICAL SPECIFICATIONS





PRODUCT DIMENSIONS

Code		NS	DN	Total Volume	Grease Volume	Sludge Trap	A	B	C	D	Z	H1	H2
ss304	ss316	(lt/sec)		(lt)	(lt)	(lt)							
12211	22211	1	100	404	80	174	750	600	750	600	500	580	510
12212	22212	2	100	1062	105	372	1000	750	1180	750	500	990	920
12213	22213	3	100	1372	156	557	1500	750	1180	750	750	990	920
12214	22214	4	100	1940	246	557	2000	750	1180	750	750	990	920
12215	22215	5	125	1940	287	557	2000	750	1200	750	750	990	920
12216	22216	6	125	2015	308	632	2000	750	1200	750	850	990	920
12217	22217	7	150	2595	345	837	2000	750	1480	750	900	1240	1170
12218	22218	8	150	3335	408	992	2500	800	1480	800	1000	1240	1170
12219	22219	9	150	3750	448	1116	2500	900	1480	900	1000	1240	1170
122110	222110	10	150	4165	528	1240	2500	1000	1480	1000	1000	1240	1170
122112	222112	12	200	5042	610	1240	3250	1000	1550	1000	1000	1240	1170
122115	222115	15	200	7055	792	1937	3500	1250	1550	1250	1250	1240	1170
122120	222120	20	200	7787	998	1937	4000	1250	1550	1250	1250	1240	1170

Dimensions are in mm.