

# ABOVE GROUND STAINLESS STEEL 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/cm<sup>3</sup> 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

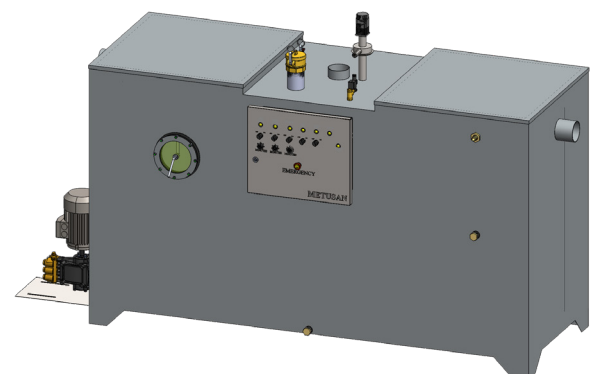
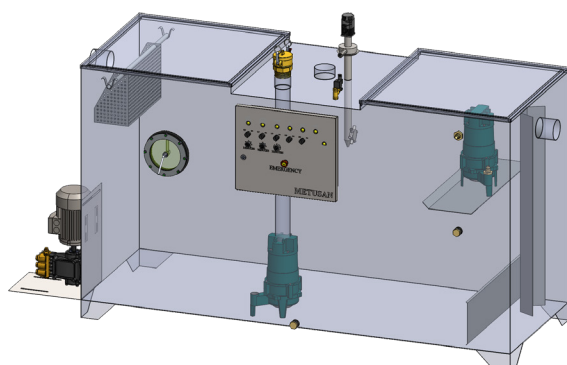
Macerators have the effect of artificially consuming the sludge capacity of the separator and thereby shortening the service interval to the separator. Additionally, under certain conditions, the process of maceration can emulsify waste products and prevent them from separating via the natural gravity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

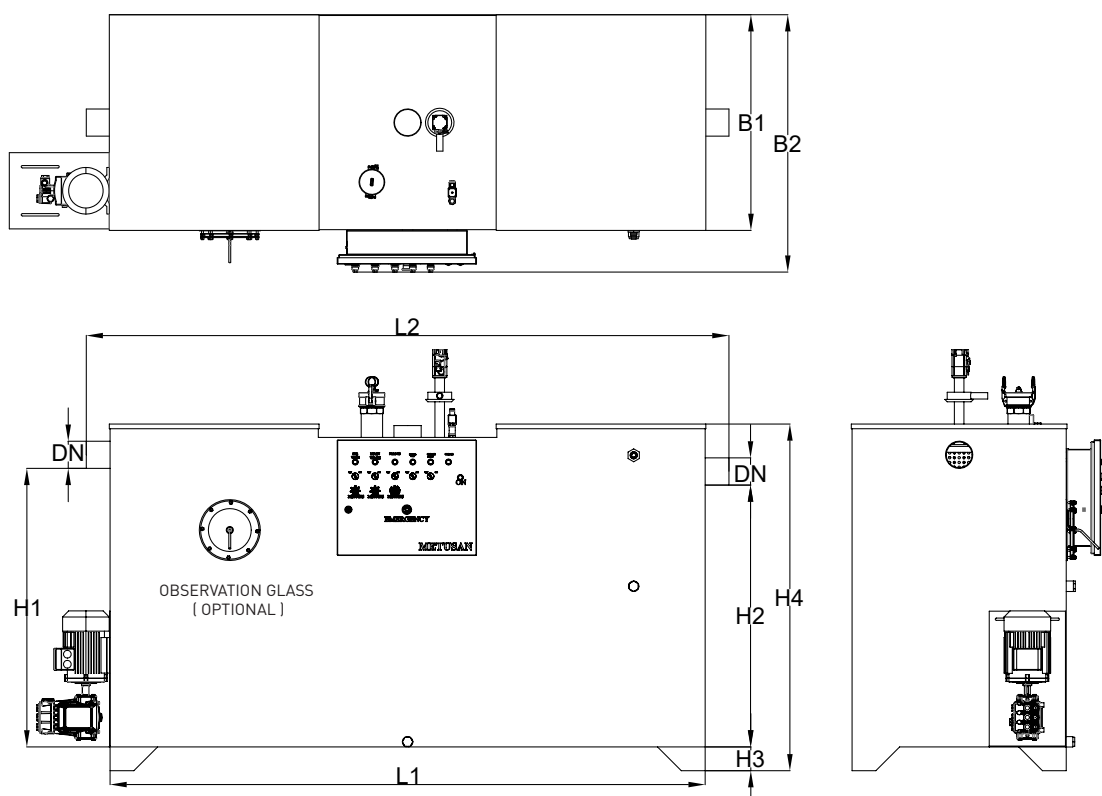
## Certificate:

Metusan Grease Water Separators are fully certified to EN 1825.



Automatic grease-water separator according to EN 1825, 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, integrated 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. Automatic grease-water separator capable of cleaning grease and dirt from surfaces using a motorized head that rotates 360 degrees on 2 axes, with a pressure of 150 bars, capable of breaking down solidified grease and residue. Equipped 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).

## TECHNICAL SPECIFICATIONS



## PRODUCT DIMENSIONS

Code		NS (lt/sec)	DN	Total Volume (lt)	Grease Volume (lt)	Sludge Trap (lt)	H1	H2	H3	H4	L1	L2	B1	B2
ss304	ss316													
11311	21311	1	100	250	100	100	570	500	100	826	1000	1200	500	700
11312	21312	2	100	504	120	200	750	680	100	1006	1200	1400	600	800
11313	21313	3	100	720	150	300	830	760	100	1106	1500	1700	600	800
11314	21314	4	100	998	200	400	1000	980	100	1256	1500	1700	700	900
11315	21315	5	100	1232	300	500	1165	1095	100	1417	1500	1700	750	950
11317	21317	7	150	1890	450	700	1050	980	100	1356	2000	2200	800	1000
11319	21319	9	150	2250	600	900	1050	980	100	1356	2500	2700	900	1100
113110	213110	10	150	2500	700	1000	1150	1080	100	1457	2500	2700	900	1100
113113	213113	13	200	3429	900	1300	1250	1180	100	1557	3000	3200	900	1100
113116	213116	16	200	4158	1100	1600	1300	1230	100	1607	3500	3700	900	1100
113120	213120	20	200	5280	1400	2000	1300	1230	100	1608	4000	4200	1000	1200
113130	213130	30	250	7200	1800	3000	1300	1230	100	1700	5300	5500	1100	1300

Dimensions are in mm.