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# **GREASE SEPARATORS**

## **ECODEPUR<sup>®</sup> GORTECH<sup>®</sup>**

UNDERGROUND SOLUTION - HIGH CAPACITY FOR GREASE SEPARATION AND STORAGE

## ECODEPUR® GORTECH® GREASE SEPARATORS

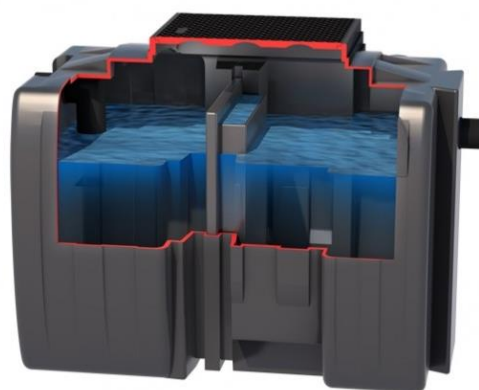
The **ECODEPUR® GORTECH®** Grease Separator goal is the reception and treatment of fat wastewaters from the handling of food products in a domestic or industrial environment.

The **ECODEPUR® GORTECH®** Grease Separators have CE marking, in accordance with the legal obligations that stems from the entry into force of the UE Regulation N. ° 305/2011 about Construction Products, fulfilling all the requisites of the European Standard EN 1825- 1.

The raw material used (Polyethylene) was tested by an independent entity, in accordance with the requirements of Standard EN1825-1, guaranteeing high mechanical resistance and corrosion protection.

### ADVANTAGES

- CE Marketing according to the EN1825-1;
- Built-in sludge trap;
- Polyethylene Protection Cover;
- Possibility to incorporate a by-pass directly within the equipment structure;
- High storage capacity for separated products;
- Light and easy to install and maintain;
- High mechanical resistance and corrosion protection;
- Totally watertight (due to the construction materials, there are no leaks in the walls, in contrast with the traditional concrete systems);
- Without odours if provided adequate ventilation;
- No power consumption.



### APPLICATION

The wastewater produced in food processing is full of oils and fats that interfere with drainage systems and sewage treatment systems.

PLUMBING	BIOLOGICAL TREATMENT	SLUDGE TREATMENT	
<ul style="list-style-type: none"> <li>• Total or partial obstruction, due to the gradual accumulation of oils and fats;</li> <li>• Plumbing wear and degradation;</li> <li>• High costs associated with plumbing cleaning;</li> <li>• Unpleasant odours arising from the plumbing system.</li> </ul>	<ul style="list-style-type: none"> <li>• Increase of the organic load;</li> <li>• Reduction of effluent's biodegradability;</li> <li>• Enhancing foaming due to the change of the surface tension of residual water;</li> <li>• Increased energy consumption on the treatment systems due to reduced oxygen transfer coefficient;</li> <li>• One of the causes for failure to comply with discharge parameters.</li> </ul>	<ul style="list-style-type: none"> <li>• Operation problems with sludge treatment because the presence of oil and fat;</li> <li>• Raise in energy consumption;</li> <li>• Difficulty in sending the sludge to a suitable final destination;</li> <li>• It can interfere with the operation conditions of the anaerobic digester, if there's any, by inhibiting the growth of microorganisms necessary for its operation.</li> </ul>	

The installation of a grease separator can retain oils and fats, avoiding damage to downstream sanitation systems Its application is recommended for the following establishments:

- Restaurants;
- Hotels;
- Bars;
- Camping Parks;
- Canteens;
- School's;
- Residential areas;
- Laundries.

## CONFORMITY WITH THE EN 1825-1

Grease separators - Part 1: Principles of design, performance and testing, marking and quality control

The grease separators must have CE marking according to legal requirements that come from the European Parliament Regulation N° 305/2011, about the construction products. Each separator must be accompanied by the respective **performance statement** with the following information:

**PRODUCT: Grease Separator**

**INTENDED USE: Separate greases from wastewater to protect sewerage systems and surface water.**

Essential Characteristics	REQUIREMENT WITH THE STANDARD EN 1825-1	PERFORMANCE
FIRE REACTION	5.2.9	F
LIQUID TIGHTNESS	5.3.2	Pass
EFFECTIVENESS	4, 5.3.1, 5.3.3. to 5.3.10, 5.5	Pass
LOAD BEARING CAPACITY	5.4	Pass
DURABILITY	5.2	Pass

At the same time the manufacturer must ensure an **internal quality control**, for example, a quality management system according to ISO 9001 for devices' production.

## MAIN CHARACTERISTICS

EUROPEAN STANDARD	EN 1825-1
EQUIPMENT IDENTIFICATION	Grease Separator
BRAND	ECODEPUR®
TYPE	GORTECH®
FIRE REACTION CLASS	F
MATERIAL	Polyethylene
SLUDGE TRAP	Included
VENTILATION OUTLET	Included
COVER	Polyethylene

**Technical Note I:** In accordance with European Standard EN 1825-1 point 5.3.7, access covers must comply with the EN124 Standard featuring the inscription "SEPARATOR". **ECODEPUR® GORTECH® Grease Separators includes a polyethylene protection cover. ECODEPUR® have available a Cast Iron Cover, complying with the European Standard EN124. Is Customer responsibility the acquisition and installation of a cover complying with EN124.**

## OPERATION

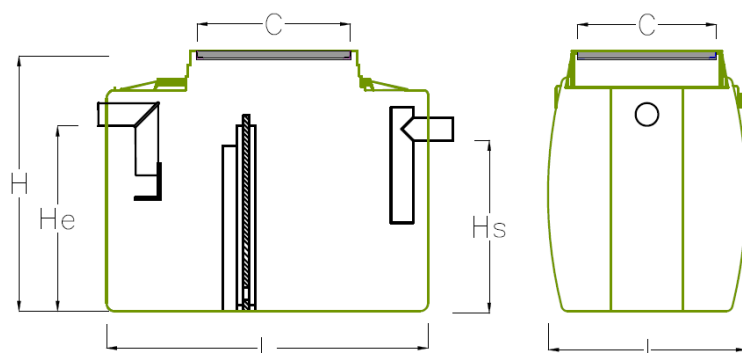
ECODEPUR® GORTECH® Grease Separators does not need any power consumption; it's based on the gravitational separation of materials with different densities than the water.

Heavier materials (sludge, sand, etc) settle into the Sludge Trap compartment and are trapped there. This compartment also holds Grease that easily floats.

For the separation zone goes water and substances lighter than water, including grease which will be separated.

The grease will accumulate on the surface, while the clean water is drained at a level that does not allow the mixing of the phases.

## DIMENSIONS



### OPTIONS

OIL ALARM SYSTEM  
CAST IRON COVER  
ENZYMATIC ACTIVATION KIT  
BIOLOGICAL SOLUTION TO DEGRADE  
OILS AND FATS

TYPE	NS (l/s)	VOLUME TOTAL (l)	L (mm)	I (mm)	H (mm)	He (mm)	Hs (mm)	C (mm)	Ø PIPE (mm)	WEIGHT (kg)
GORTECH® NS 2	2	1.360	1.560	960	1.230	930	820	750 x 750	110	100
GORTECH® NS 4	4	2.410	2.580	960	1.230	930	820	750 x 1415	110	165
GORTECH® NS 6	6	3.770	4.060	960	1.230	915	805	(750 x 750) + (750 x 1.415)	125	270
GORTECH® NS 10	10	4.820	5.080	960	1.230	880	770	2 x (750 x 1.415)	160	305

The pictures and dimensions can be changed without notice.  
The dimensions indicated have a tolerance of  $\pm 2\%$ .

Grease separators with higher treatment capacity are available – Information upon request

## DIMENSIONS OF GREASE SEPARATION CHAMBERS

VOLUMES IN ACCORDANCE TO THE REQUIREMENTS OF THE EUROPEAN STANDARD EN 1825-1.

TYPE	SUPERFACE OF GREASE SEPARATION ZONE (m <sup>2</sup> )	VOLUME OF GREASE SEPARATION ZONE (l)	VOLUME OF GREASE COLLECTION AREA (l)	VOLUME OF SLUDGE TRAP (l)
GORTECH® NS 2	1,30	510	250	490
GORTECH® NS 4	2,20	970	430	990
GORTECH® NS 6	3,40	1.810	880	1.080
GORTECH® NS 10	4,40	2.620	1.300	1.010

## INSTALLATION

ECODEPUR® GORTECH® Grease Separators installation must follow the recommendations of the document supplied Installation Instructions for Polyethylene Reactors/Tanks (<10.000l).

Simultaneously, please bear in mind the following consideration:

1. The protection covers supplied with this equipment are made in polyethylene. Is a Customer responsibility the acquisition and installation of a cover complying with EN124 with the inscription "SEPARATOR" according with EN1825. The access covers installation must be on surface of the installation respecting the class mark on the covers (Ex: class B125 - Footways, pedestrian areas and comparable areas, car parks or car parking decks);

In case of doubt do not hesitate to contact our technical services.

## MAINTENANCE

ECODEPUR® GORTECH® Grease Separators do not need special care from a structural point of view, due to the high resistance and corrosion protection of the material from which they are made.

ECODEPUR® GORTECH® Grease Separators should be inspected, emptied, cleaned and refilled with clean water.

The frequency of inspection, emptying and cleaning should be determined with regard to the grease and sludge storage capacity of the separator and in accordance with operational experience.

## WARRANTY

Five (5) years, covering any manufacturing defects.

ECODEPUR® – Tecnologias de Protecção Ambiental, Lda will be responsible for introducing corrective measures aimed at correct equipment operation, if necessary.

ECODEPUR® – Tecnologias de Protecção Ambiental, Lda will not be responsible if there are clear indications of poor installation, misuse (including the use of chemical emulsifiers) or poor maintenance, or if it is shown that the equipment was overloaded, based on the terms stipulated in Standard EN 1825-1.

## CONTACTS

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## WATER AND WASTEWATER TECHNOLOGIES

All technical data, indications, photographs or other information provided in our brochures and publications are provided for guidance only. ECODEPUR® reserves the right to modify the information presented without prior notice.