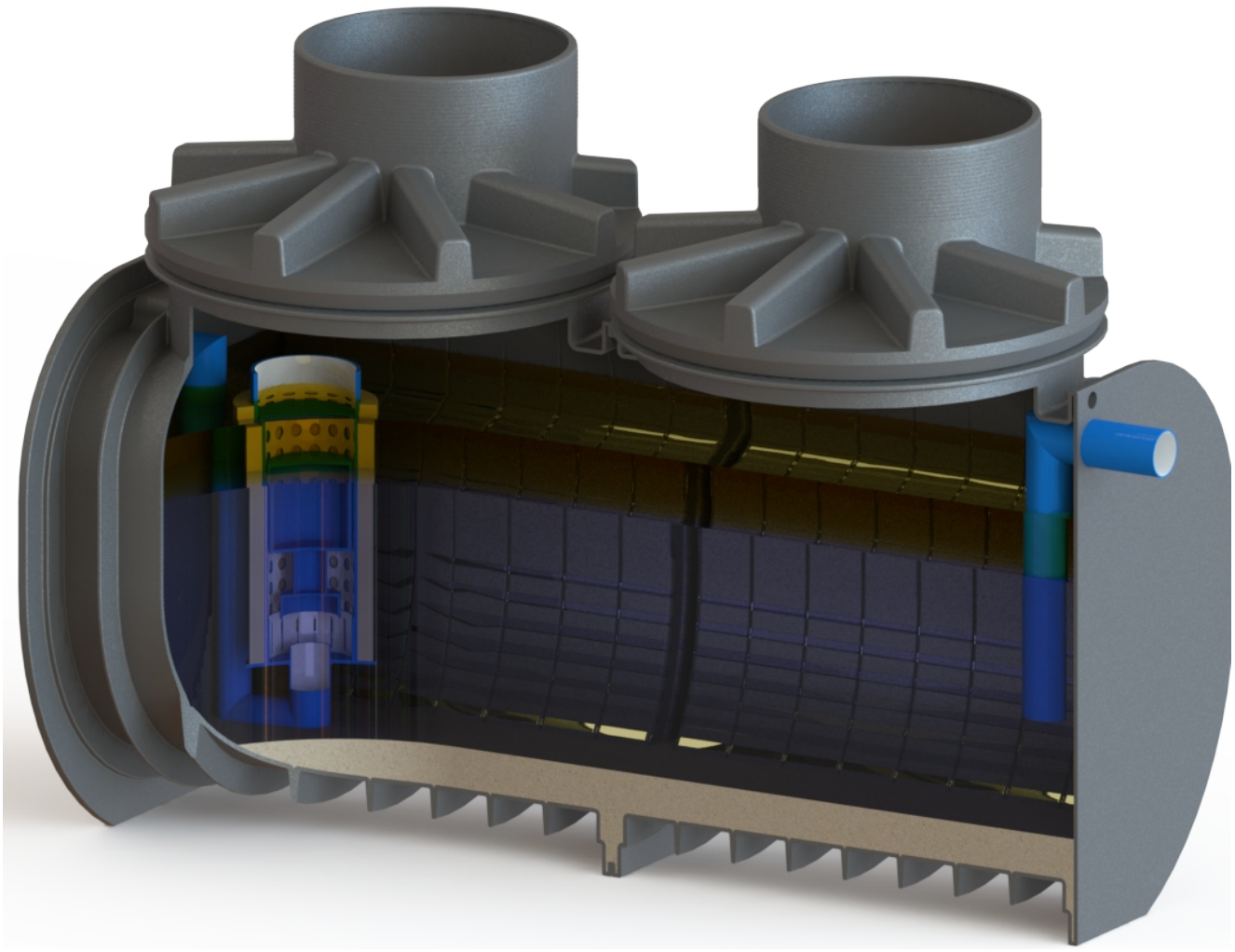
INTER CONSTRUCTION

Oil and Grease Separators



EXACT IGH

quality austria
SYSTEM CERTIFIED
ISO 9001:2008 No. AT-10310/0
ISO 14001:2004 No. AT-01397/0
BS OHSAS 18001:2007 No. AT-00569/0

CERTIFIED IQNet MANAGEMENT SYSTEM

oil and grease separators

Inter Construction oil and grease separators are used for the separation of waste grades/water from light liquids in the form of fuels and oils (<0.95 kg/l), which constitute a threat in terms of ground water pollution.

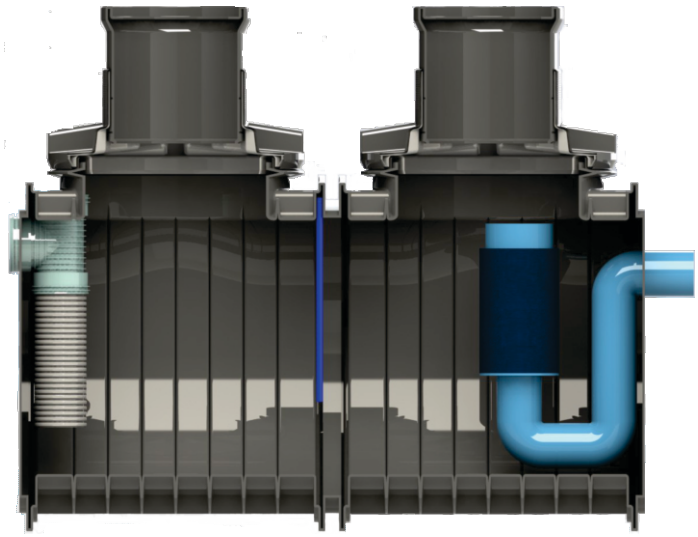
Expecially in the vicilinty of:
*petrol station/oil separator
*large multi-storey car parks/oil separator
*car parks for transport vehicles/oil separator
*car and tyre repair shops and car washes/oil separator
*as well as restaurants/grease separator

Function:

The separators operate under the principle of gravity. Oil, petrol, fuel oil, lubricants, heating oil and other liquids have a lower specific weight than water, a fact exploited by oil and grease separators by reducing the velocity and flow of meteoric water, causing light-liquid particles to separate and rise to the surface. The filtered water thus flows safely trough the drain into the sewerage system, protection the groundwater from potential pollutants.

Advantages:

*manufactured and dimensions in accordance with the standards
* high quality control
* light weight - that means easy to transport and install
* long life span (more than 50 years)
* made from high quality eco friendly materials and using high technology for producing it



Oil separators can be divide as:

* **grease separators**
* **oil separators**

Grease separators - produced in accordance with EN 1825 and it is used to separate oils/grease that are founded in waste water in restaurants, meat and food industries etc. Grease separators separate grease, as a prevention of clogging the sewage system.

Oil separators -

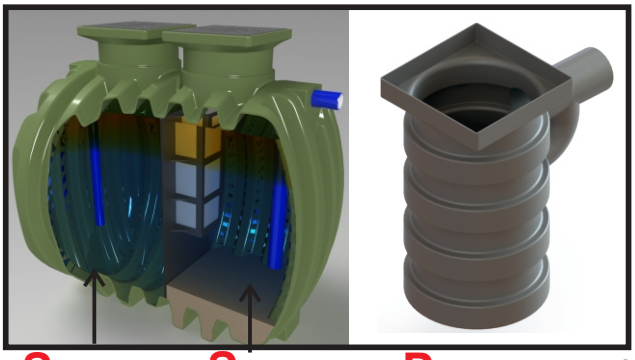
Inter Construction Oil Separator

Charachteristics of Oil Separators

1) static/stress analysis tested.
2) easy handling with fork lift grips and light weight constructions.
3) low installation costs with integrated components.
4) manhole covers will automatically compensate for settlement or heaving of the soil due to its vertically adjustable upper section.
5) lower disposal costs due to optimally designed chamber volume.
6) low maintenance costs with easy to clean/durable interior.
7) light weight, heavy duty construction.
8) easy upgraded to coalescence separator with higher separation efficiency
9) float pre-set to handle all types of oils/flues (spec.gravities from 0.85-0.95 g/cm^3

Components of separate system

Components	Symbol
Sludge trap	S
Separator Class II	II, II-b(for bypass separators)
Separator Class I	I, I-b (for bypass separators)
Sampling shaft	P



Storage capacity **S**ludge trap **P**sampling shaft

Dimensioning the oil/grease separator system

Inter Construction produces oil separators in accordance with EN 858-2

$$NS = (Qr+f_x*Qs)fd$$

NS is the nominal size of the separator

Qr is the maximum flow rate of rainwater, (l/s)

Qs is the maximum flow rate of wastewater, (l/s)

fd is the density factor for the relevant light liquid

fx is the impediment factor depending on the nature of the discharge

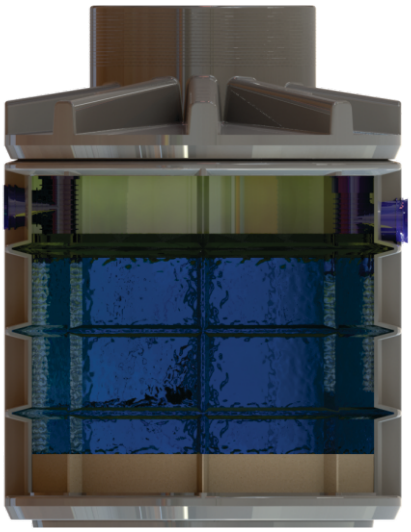
Density g/cm^3	up to 0.85	over 0.85 up to 0.90	over 0.90 up to 0.95
Combination	**Density factor fd**		
S-II-P	1	2	3
S-I-P	1-a	1,5-a	2-a
S-II-I-P	1-b	1,5-b	2-b

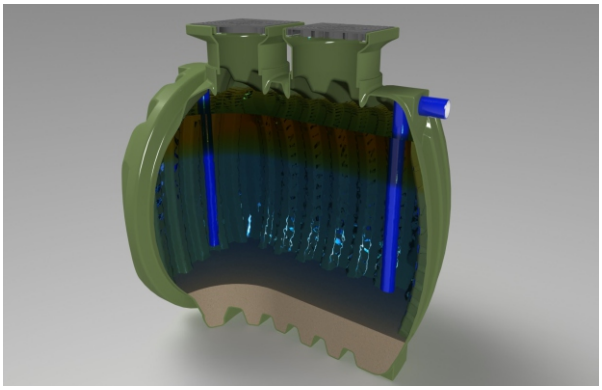
* for the other factors please contact the technical service of Inter Construction

According to EN858 standard the classification of the separators is following:

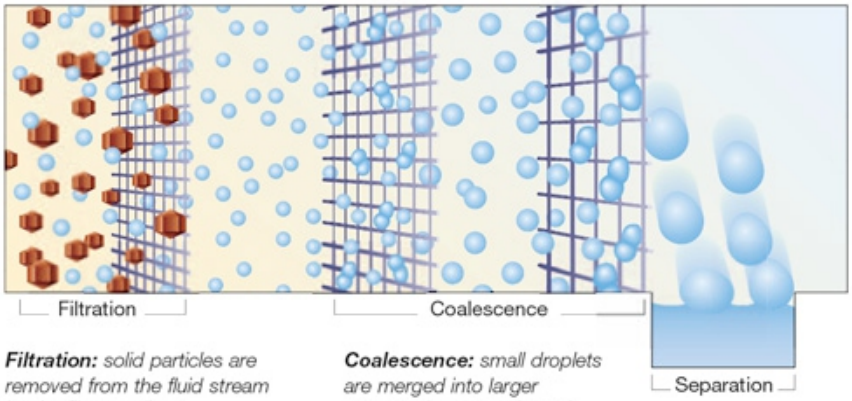
I) coalescing separator (max. permissible content of residual oil is 5,0 mg/l)
II) gravity separator (max. permissible content of residual oil is 100 mg/l)
III) bypass separator
The preferred nominal sizes of the separator systems for light liquids are:1.5, 3,6, 10, 15, 20, 30, 40, 50, 65,80,100,125,150,200,300,400 and 500.

gravity separator





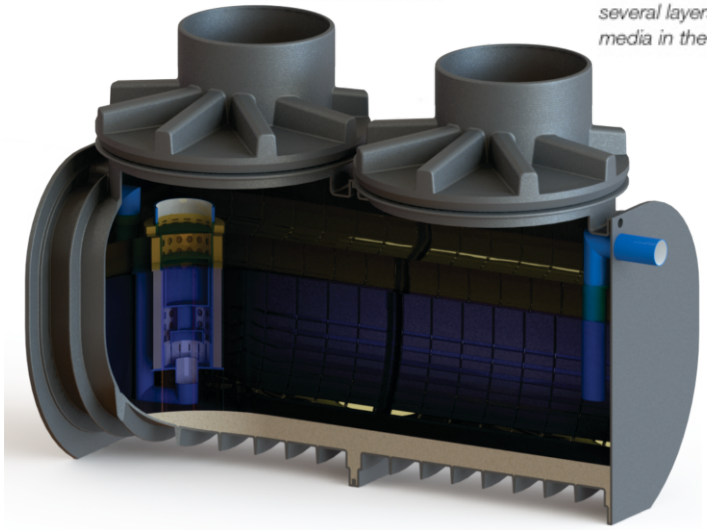
coalescent separator

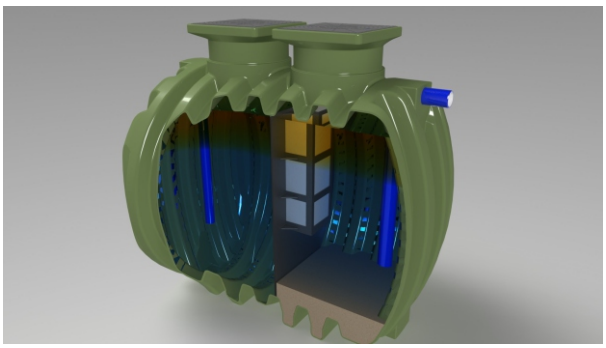


Filtration: *solid particles are removed from the fluid stream by the filter medium.*

Coalescence: *small droplets are merged into larger ones as they pass through several layers of filter media in the coalescer.*

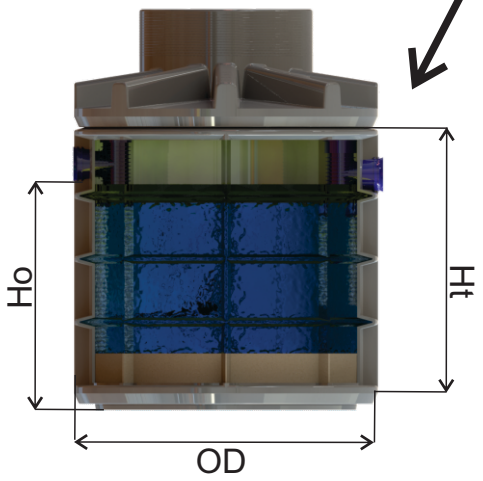
Separation: *gravity takes effect, the large droplets are separated from the product fluid stream.*

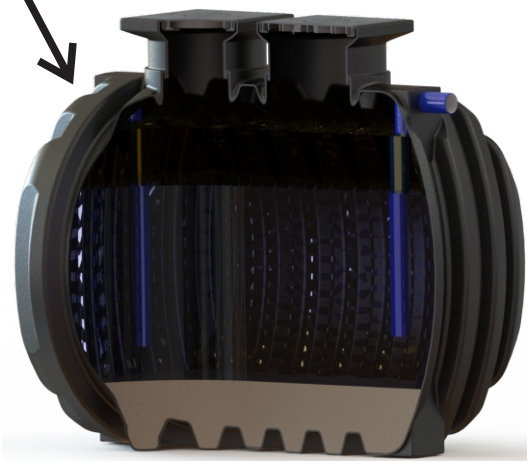




INTER CONSTRUCTION

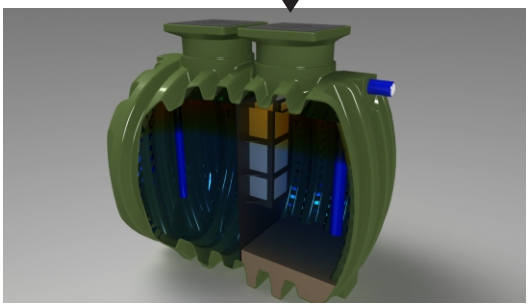
CLASS II -gravity separator

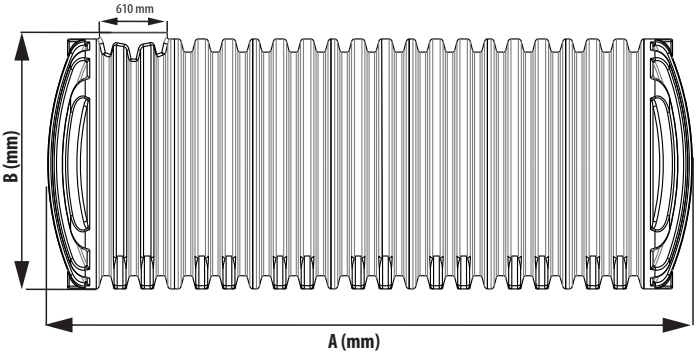




Oil separator, type II -gravity separator					
Index	Flow Q (l/s)	OD (m)	Ht (m)	Ho(m)	Total volume(m)^3
	1,5	1,28	1,52	1,25	2,0
	3	1,52	1,52	1,3	2,7
	6	1,76	1,52	1,25	4

CLASS II -gravity separator





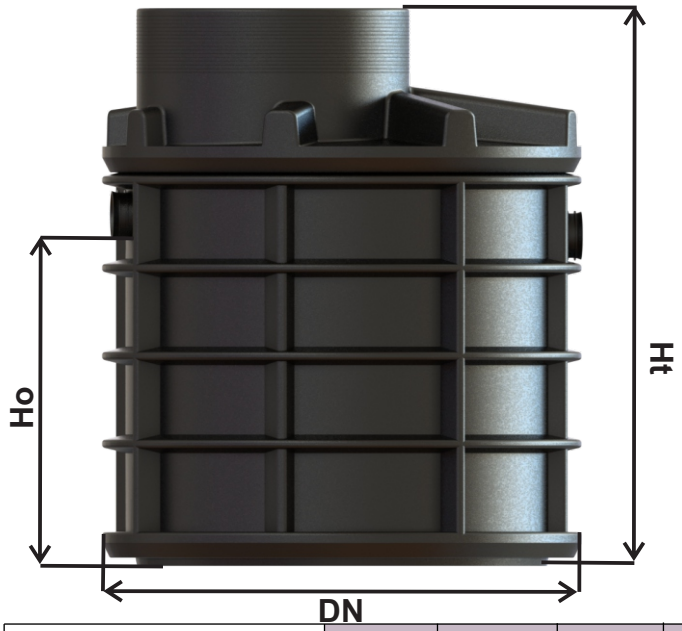
Oil separator, type II -gravity separator					
Index	Flow Q (l/s)	A (m)	B (m)	C (m)	Total volume(m)^3
	10	2,432	1,95	1,9	5,0
	15	3,185	1,95	1,9	7,0
	20	3,185	1,95	1,9	7,0
	30	3,935	1,95	1,9	9,0
	40	4,685	1,95	1,9	11,0
	50	7,69	1,95	1,9	19,0

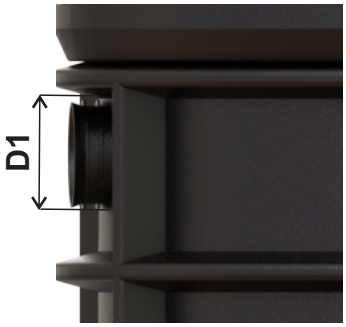
***** for bigger preferred nominal sizes of the separator systems please contact us!**

INTER CONSTRUCTION

Inter Construction Grease Separator

Inter Construction grease separator are especially suitable for restaurants, which are subject to the statutory separation of greases and oils of organic origin before wastewater is drained into the sewer, before it reaches a cesspit or treatment plant. The separator functions by retaining organic matter from the wastewater before it is drained into the sewerage system.





Influx Q (l/s)	1	2	3	4	7	10	15
Diameter DN (mm)	1100	1420	1610	1700	1900	2080	2400
Pipe connection D1 (mm)	110	110	110	110	160	200	200
Height H (mm)	1020	1020	1020	1520	1520	1770	1770
Outflow height H2 (mm)	800	800	800	1300	1250	1500	1500
Height H3 (mm)	800	800	800	800	800	800	800
Volume (l)	900	1600	2050	3400	4300	6010	8000

Тел:
00 389 034 231 300
00 389 034 231 301

Факс:
00 389 034 218 898

e-mail: interroto@gmail.com
веб страна : www.inter-construction.com.mk

Индустриска зона нас.Прдејци - Гевгелија
МАКЕДОНИЈА