METUSAN LIMITED

Polyethylene (HDPE)

Oil Water Separator (EN 858-1)

Horizontal Installation Manual

Contents

1 Safety

1.1 General safety notes

Pay attention to the following points while working:

- The national and local regulations concerning general and electrical safety apply to all work to be done.
- The relevant operational safety regulations and the hazardous substances ordinance or local equivalents apply for the operation of the system.
- Check the weight of the system / system components.
- Pay attention to correct lifting (mentioned below) and ergonomic factors.
- Standing under overhead loads is prohibited at all times.
- The floor can be slippery with oily liquid during cleaning or disposal. Remove liquid spills, wear suitable footwear.
- Make sure the system is adequately ventilated. There is a risk of a hazardous atmosphere occurring in the chamber system during work. Use safety equipment such as e.g. a multi-gas warning device if necessary.
- Inadequate ventilation in connected systems can cause the gas released by the separated material to spread into downstream systems where it can cause an explosive mixture of gases.
- On connecting a separator system, ensure proper ventilation of the downstream drainage system (especially lifting stations or pumping stations).
- The cover(s) may only be transported tightly lashed down on the pallet to avoid possible risk of serious injury
- Pumps can become very hot during operation. Wear protective gloves or allow the pump to cool.
- Personnel must be qualified to apply all the operations detailed in this manual.
- The operator of the system must: Prepare a risk assessment, identify and indicate danger zones, give safety instruction to personnel, secure the system against unauthorised use.
- Operating and maintenance instructions must always be kept available by the product.

1.2 Prescribed personal protective equipment

Always use personal protective equipment (as detailed below) during installation, maintenance and disposal work on the system.

- Protective clothing
- Protective gloves
- Safety footwear
- Face protection (eye goggles, earplugs, etc.)

Operating company: Visual check.
Competent expert / inspector (familiar with, understands operating instructions) : Emptying, cleaning (inside), functional check.
Competent skilled person (specialist craftsman, in accordance with installation instructions and execution standards): Installation, replacement, maintenance of components, commissioning.
General inspector (in accordance with EN 858-1) : Leak test, checking on correct design and proper assembly before initial commissioning.

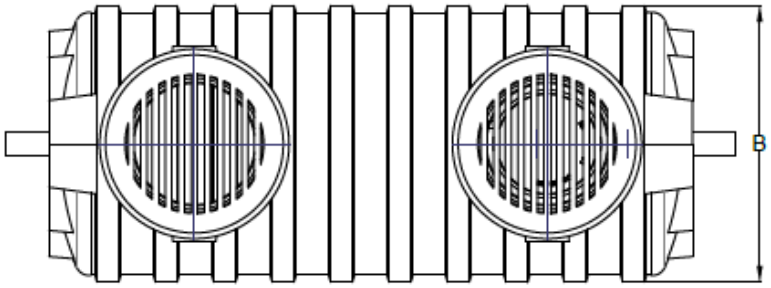
1.3 Intended use

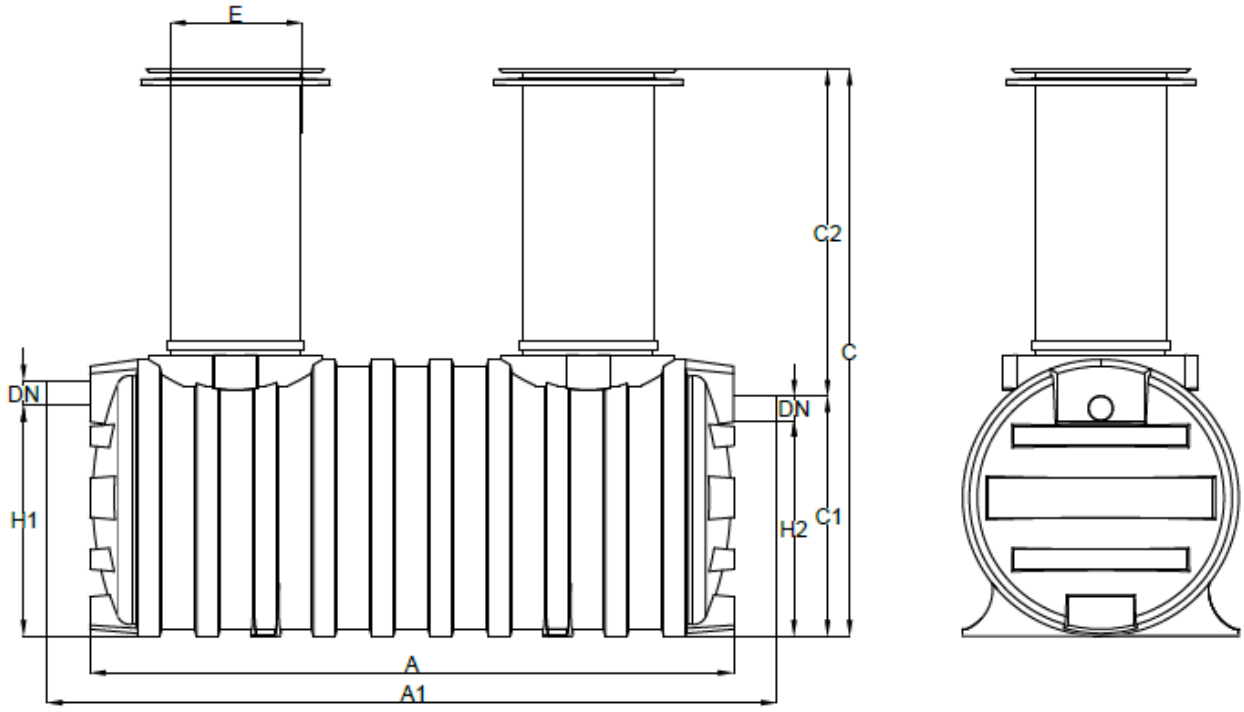
The product is a system for intercepting oil or fuel from the influent wastewater as per EN 858-1 or EN 1825-1. Mineral oils and fuels are light liquids with a density of less than 0.95 g/cm3, which are insoluble in water. Disposal and maintenance cycles as well as requirements concerning the installation site must be complied with for proper operation.

All modifications or attachments, use of non-genuine spare parts, repairs carried out by companies or persons not authorized by the manufacturer without the express and written approval of the manufacturer can lead to a loss of warranty.

2 Technical Data

2.1 Dimensions (mm)





PRODUCT DIMENSIONS

Code	NS (lt/sec)	DN	Total Volume (lt)	Grease Volume (lt)	Sludge Trap (lt)	A	A1	B	C	C1	C2	E	H1	H2
312410	10	150	2460	510	1020	2900	3300	1230	1430-2630	1180	250-1450	600	950	880
312415	15	200	4650	940	3400	2900	3300	1540	1740-2940	1490	250-1450	600	1260	1190
312420	20	200	6060	1260	2520	2900	3300	1750	2000-3200	1750	250-1450	600	1500	1430
312430	30	200	8380	1750	3550	2900	3300	2100	2400-3600	2000	250-1450	600	1700	1770

Dimensions are in mm.

3 Installation

Several key requirements must be met regarding the ground conditions. First, a survey must classify the soil according to DIN 18196 to ensure its structural suitability. Second, the maximum groundwater level must be identified and confirmed to be lower than the inlet. Finally, for any soils that are impermeable to water, effective drainage of seepage water is an absolute necessity.

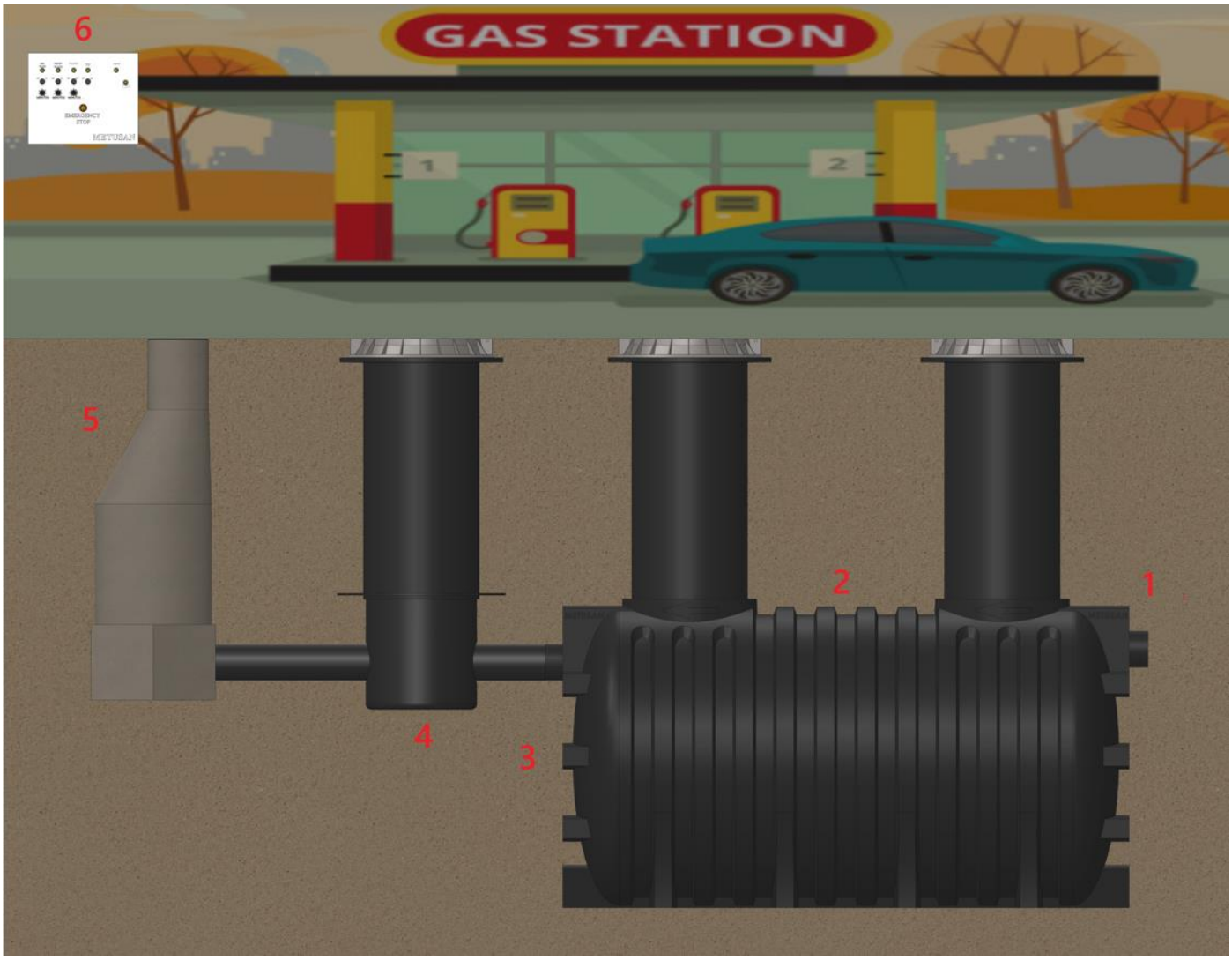
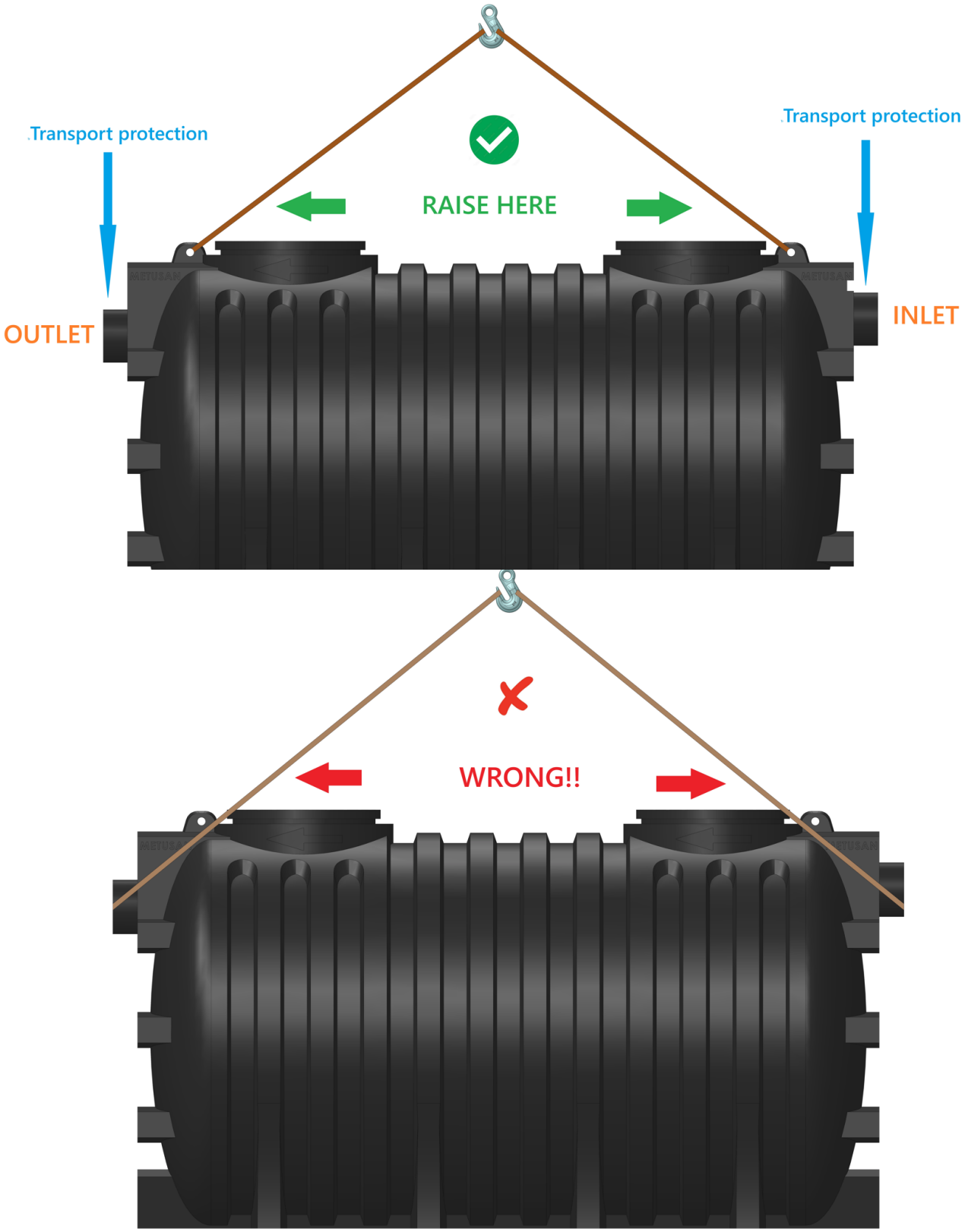


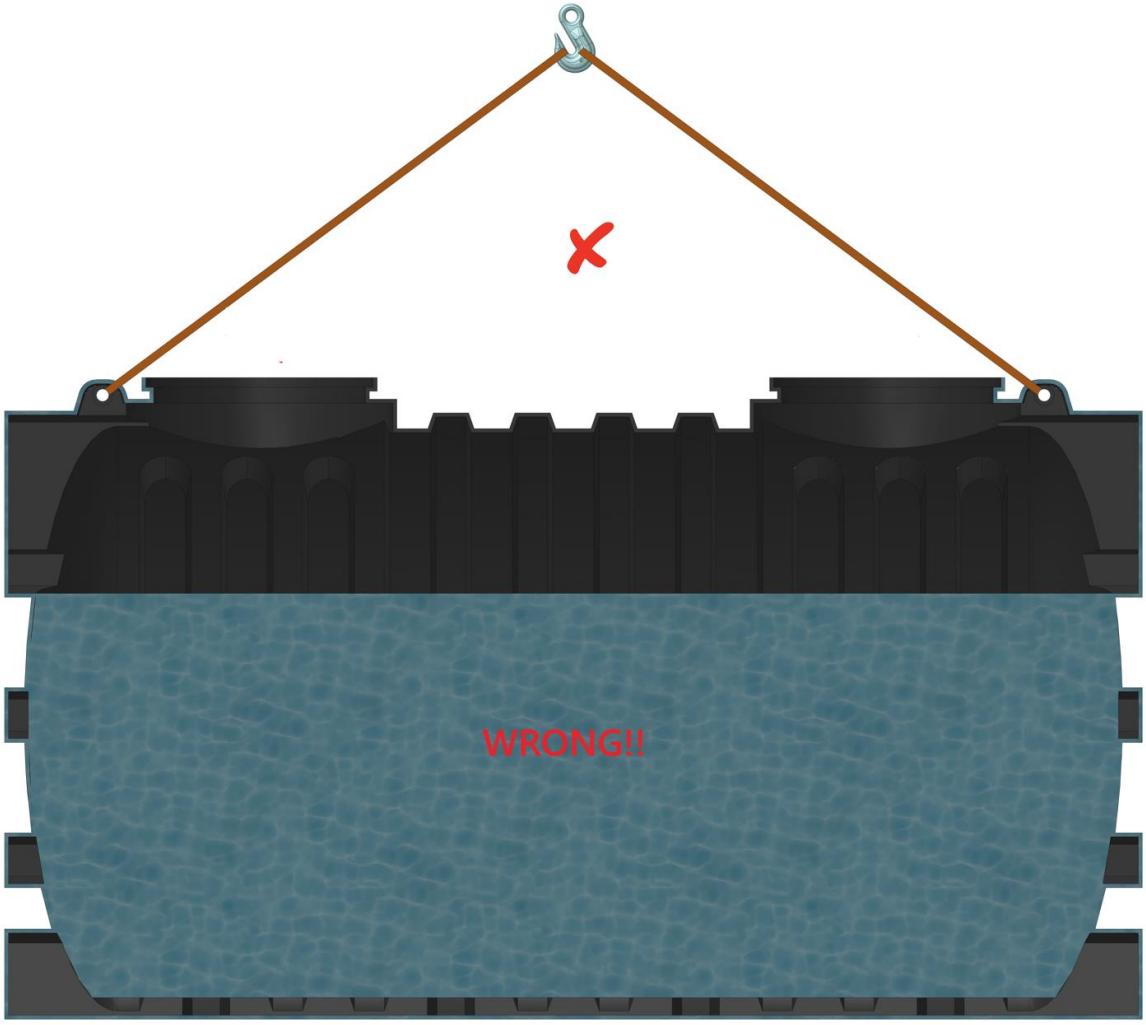
Figure 1 – Exemplary Installation Situation

1. Inlet	**2. Underground Grease Separator**	**3. Outlet**
4. Sampling Chamber (optional)	**5. Concrete Manhole (optional)**	**6. Control Panel (optional)**

3.1 Transport information

Gently unload and transport with a forklift truck.
A leak test should preferably be carried out prior to burying.
Only use the eye bolts provided on the body of the product for lifting.
Protect the inlet and outlet connections while transporting.
Never use the inlet and outlet pipes for lifting the product; this may cause serious damage and disable functionality.
Do not transport the separator while it's filled with water.





Consider inlet and outlet pipe locations and invert level heights
Prepare a sound concrete base for setup.

3.2 Installing the pipes

Lower the Grease separator into the excavation and align the inlet, outlet and ventilation pipes to required positions. Connect the inlet pipe and outlet pipe and secure with a suitable coupling direct disposal to the wastewater system. Connect vent pipe (not included in the package) attach handhole pipes**.**

3.3 Filling and finishing

Chamber installation for load class D requires a load distribution plate made of reinforced concrete.

Note the structural calculations for traffic safety.

Determine the required load class and structural calculations in accordance with the environment / use conditions.

The separator should be filled with water and backfilled with compacted sand and gravel. Ensure backfill is free of rocks, or other unsuitable materials that may damage the separator.

Adjust the hand way pipes and covers to the finishes surface level and make a reinforced concrete slab over the system exceeding minimum 50 cm.'s all around the periphery and capable to carry the designed wheel load without harming the system underneath.

To install this system correctly, you must first assess the quality and positioning of the excavation. The properties of the in-situ soil must be classified to determine its suitability for the structure, using standards such as DIN 18196 or the USCS.

If the installation area has a high groundwater level, you need to identify the maximum level. Should this level be higher than the unit's groundwater resistance (as detailed in the Technical Data section), you must contact customer service at the factory. For soils that are impermeable, it is essential to ensure proper drainage.

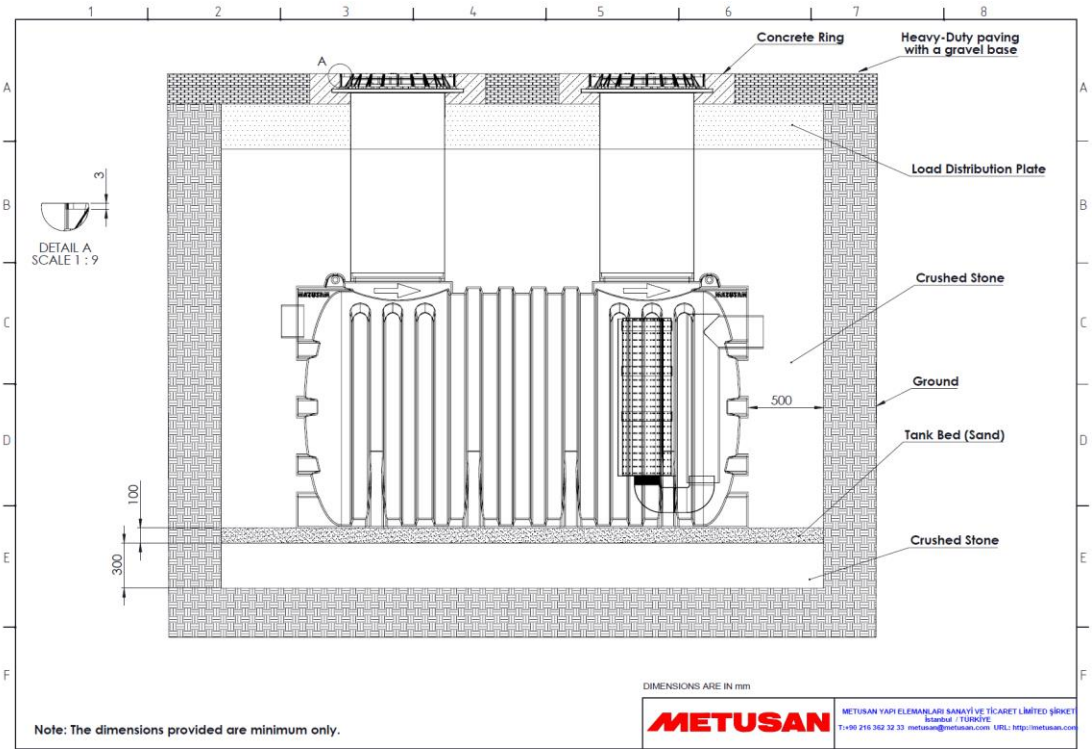
For year-round use, the inlet and outlet pipes must be installed below the frost line. The specific installation depth should be determined based on the minimum and maximum soil cover.

The traffic load, or load class, for the site must be established. If the current load class is insufficient, you will need to acquire cover plates with a higher rating and/or construct a load distribution plate on-site. In areas with traffic, all standard road construction regulations must be followed.

It is crucial to either avoid or implement on-site countermeasures against any loads originating from nearby foundations or lateral soil pressure.

Suitable materials for further pipe laying include PVC-U, PP, or PE, all of which must comply with EN 124 and EN 476 standards.

A stilling section, which is at least ten times the length of the inlet pipe's cross-section, must be installed directly before the separator. When transitioning from a downpipe to a horizontal pipe, use two 45° bends with a 250 mm section of pipe between them.


Concrete Ring
Heavy-Duty paving with a gravel base
Load Distribution Plate
Crushed Stone
Ground
Tank Bed (Sand)
Crushed Stone
500
100
300
3
DETAIL A
SCALE 1 : 9
DIMENSIONS ARE IN mm
Note: The dimensions provided are minimum only.
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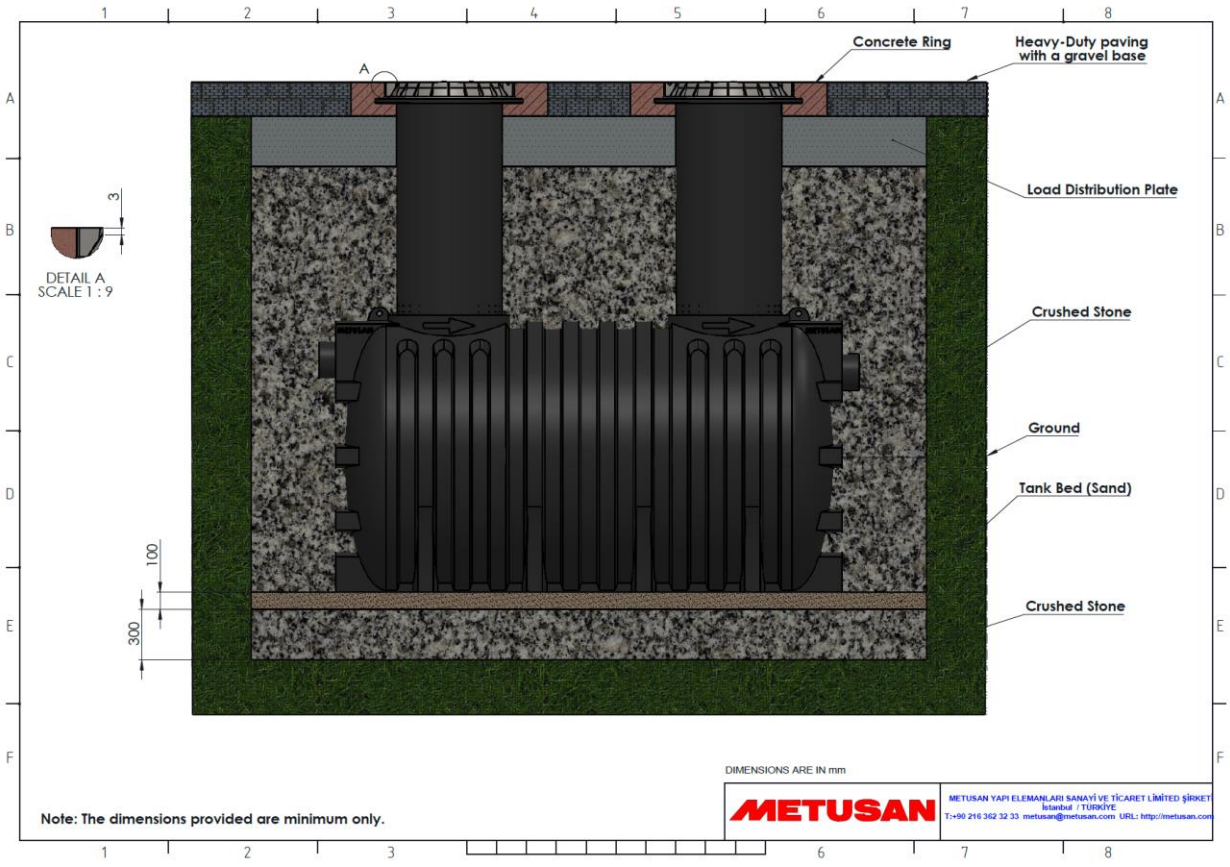
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4 Commissioning

Preparing commissioning

- Be sure that the separator is full with cold water up to the static level (invert level of the outlet pipe).
- Have a general inspection carried out (during initial commissioning and then every year).
- Give safety instructions.
- File all records in the log book and document required disposal cycle.
- All documents must be kept available at the system.
- The local supervisory authority may want to examine the documents.
- Suggested pipe coupling leakage test for inlet/outlet, vent (if any).

5 Disposal

- Open one of the handhole cover.
- Lay down the suction hose of the disposal vehicle till the bottom of the unit tank.
- Start sucking the content until it sucks the full content.
- Another way of disposal is to utilize a non-clogging submersible pump with shredder in the bottom of the tank where there is no chance to organize a disposal vehicle.
- Fill the unit with fresh water until the invert line of the outlet pipe before closing the cover.

6 Maintenance

6.1 Interval for general inspection

A general inspection must be carried out on this system every year.
The system must be serviced annually by a competent expert / inspector

6.2 Maintenance interval and tasks

- The following tasks are to be carried out during maintenance:
- Carry out disposal.
- Check the inside of the tank.
- Cleaning of the inside of the tank (particularly the inlet and outlet spots) using a high-pressure cleaning device.
- Pump out the tank again.
- Use a gripper and scraper to remove objects and deposits.
- Fill the separator with clear water up to the still water level, Check the tightness of the pipe connections.
- Record the maintenance in the log book.

METUSAN LIMITED

Declaration of Performance

Declaration of Performance according to Annex III of EU Regulation 305-2011

Document Number: METU03

Document Revision: D

1. Identification of product-type: Separator systems for light liquids (e.g. oil and petrol)

2. Type, batch or serial number or any other element allowing identification of the construction product:
MOTO Series from MOTO 1 to MOTO 10 (EN 858 Class 2 → 100 mg/Lt)
MOTO HDPE series from MOTO HDPE 1-3, MOTO HDPE 4-7, MOTO HDPE 8-13 (EN 858 Class 2 → 100 mg/Lt)
MAGNUM Series from OWS 10 to OWS 300 Carbon Steel, GRP (EN 858 Class 1 → 5 mg/Lt)

3. Intended use or uses of the construction product, in accordance with the applicable harmonised technical specification as foreseen by the manufacturer:
Oil Water separators for the catchment and drainage of surface water in areas for pedestrian and/or vehicles traffic to protect sewerage systems and surface water.

4. Name, registered trade name or registered trade mark and contact address of the manufacturer:
METUSAN YAPI ELEMANLARI SAN. TİC. LTD. ŞTİ.
Address: Eyüp Sultan Mahallesi İbni Sina
Caddesi No:38 Sancaktepe-İstanbul-Turkey
Trade Mark:METUSAN

5. Where applicable, name and contact address of the authorised representative whose mandate covers the tasks:
Not applicable

6. System or systems of assessment and verification of constancy of performance of the construction product: System 3

7. Name and identification number of notified body
Bureau Veritas B.V. Job Ref: P.C.:E40 CER-03

8. In case of the declaration of performance concerning a construction product covered by a harmonised standard: EN 858 – 1 2002 and EN 858 – 2 2003

9. In the case of declaration of performance concerning a construction product for which a European Technical Assessment has been issued: Not applicable

Metusan Yapı Elemanları San. Tic. Ltd. Şti.
Istanbul-Turkey

CE

METUSAN LIMITED

Declaration of Performance

10. Declared Performance

Essential characteristics	Performance	Harmonised technical specification
Liquid tightness	No Leakage	EN 858 – 1 and 2
Load bearing capacity	No Performance Determined. Install as per manufacturers instructions.	EN 858 – 1 and 2
Effectiveness	< 100 mg/Liter (MOTO series) < 5 mg/Liter (MAGNUM series)	EN 858 – 1 and 2
Durability	N.A. Because only mandatory for concrete	EN 858 – 1 and 2

11. The performance of the product identified in points 1 and 2 is in conformity with the declared performance:
This declaration of performance is issued under the sole responsibility of the manufacturer identified in point 4.

Signed for and on behalf of the manufacturer by:

Hilmi Çetin AKYAR
Technical Managing partner.

Signature:

17.02.2023
Istanbul-Turkey

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