

# ABOVE GROUND POLYETHYLENE (HDPE) OIL WATER SEPARATOR CLASS II MANUAL

Oil-water separator:

The "Metusan" oil-water separator operates on the principle of gravity, leveraging the fact that oil is lighter than water and will naturally float, while solids are heavier and therefore sink. This system only requires periodic removal of solids and oils for the rest of the effective lifespan.

Oil-water separators are gravity-based devices designed to separate lightweight liquids, such as mineral oils, fuels, and hydrocarbons, as well as suspended solids from contaminated water before it is released into the sewer system. Light liquids, such as oil, have a specific density less than 1 (water), while solids, in the form of sludge, have a specific density greater than 1.

Fields of usage:

Gas stations, Parking areas, Truck yards, Car dealerships, Auto repair shops, Car wash, Bus garage  
Military hangar and storage facility, Fire station, Engine cleaning, workshops, vehicle recovery, Airport aprons, Railway – Metro stations, Container terminals, Industrial facilities, oil facilities with risk of accidental oil spills.

Requirement:

Municipal sewer regulations, as well as state environmental laws, outline specific scenarios mandating the use of oil-water separators. These regulations play a crucial role in reducing water pollution, ensuring clean water for present society, and preserving the environment for future generations.

Working principles:

Oil-water separators that are used in the construction industry operate on the principle of gravity. Oils, with a specific gravity ranging from 0.8 to 0.94, are lighter than water (1) and naturally rise to the surface. Conversely, solids, which have a specific gravity higher than water, sink to the bottom. Initially, oil-water separators were basic large containers, typically made of concrete, where this separation process occurred.

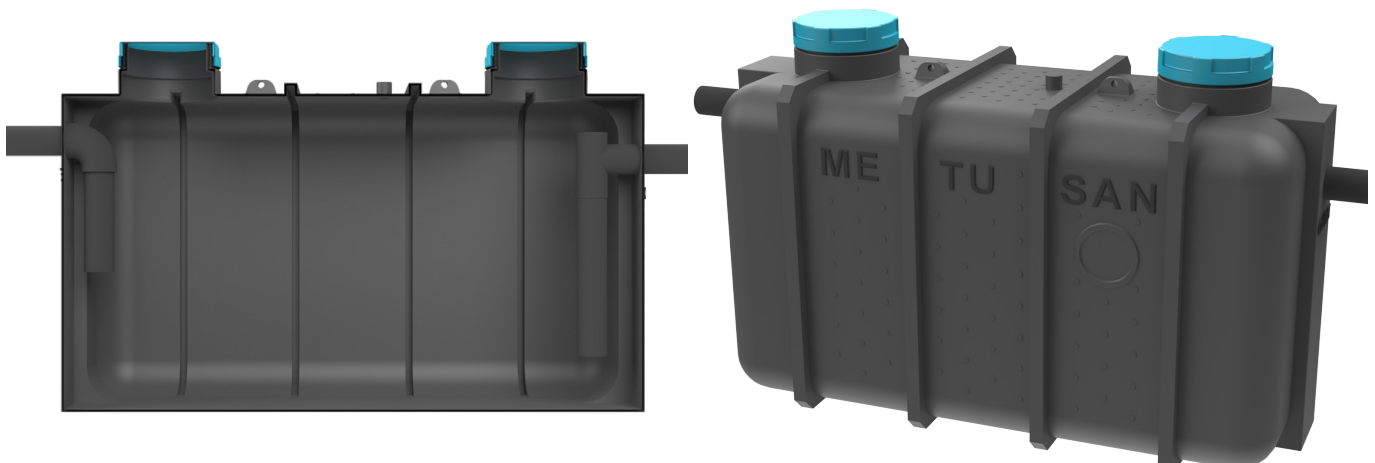
The duration that polluted water remains in the separator, flowing from the inlet to the outlet, is referred to as retention time. A key factor in effective separation is the size of the container; larger containers provide a longer retention time, leading to enhanced separation efficiency.

Advantages:

The Metusan oil-water separators boast a contemporary design aligned with the European standard EN858 compliance. These separators offer industry-leading oil separation efficiency within a space-saving tank. Equipped with a mechanical valve, they automatically shut off when the maximum oil capacity is reached, safeguarding the sewer system, equipment, and the environment. These units come with a 20-year structural warranty that provides protection against leaks, ensuring both reliability and affordability.

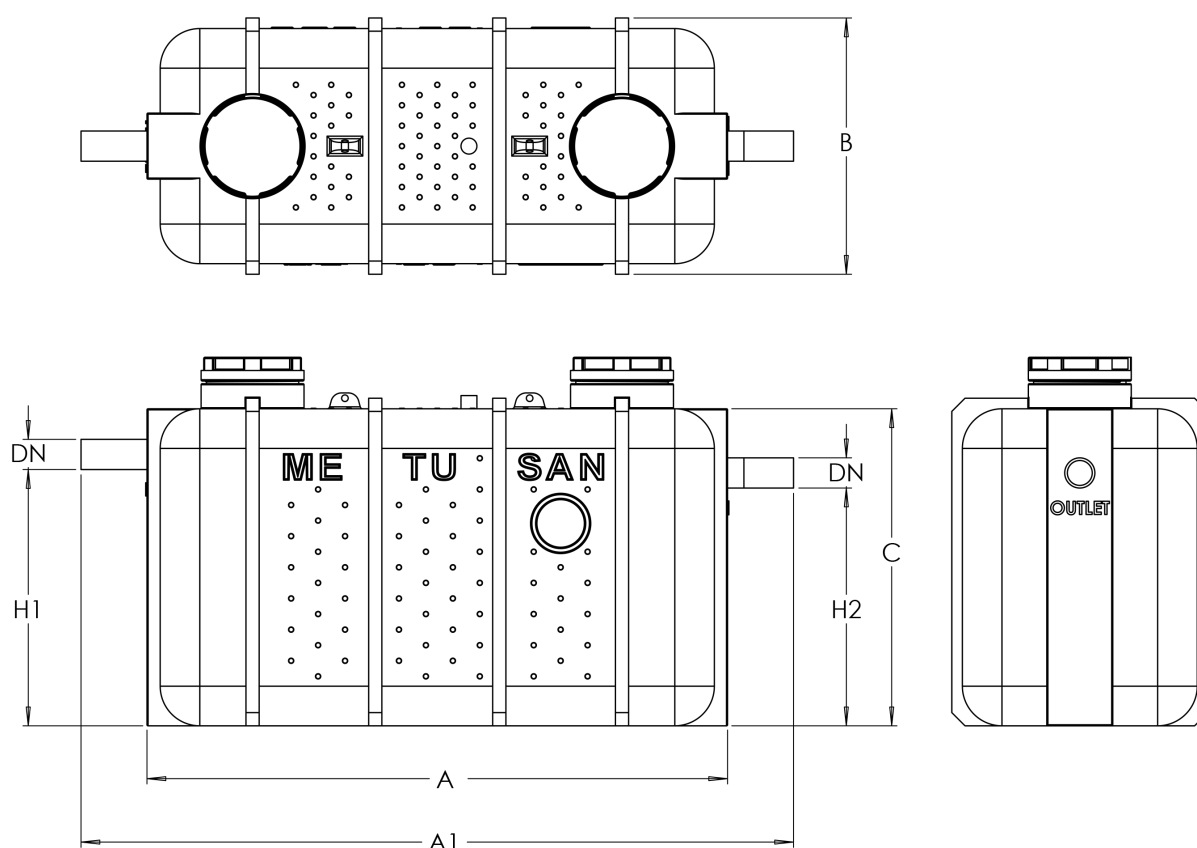
Oil interceptor according to EN 858, made of high density polyethylene (HDPE) with integrated sludge trap. It is free standing and suitable for installation on floor or in floor type applications, at the places free from frost. Inlet and outlet pipes are suitable to connect to the appropriate size (DIN 19522) SML Centrifugally cast drain pipes or (DIN 19560) plastic pipe. Easy removable, gasketed inspection covers, which is hermetically sealed to avoid smell. For vacuum suction of the waste, there is a 2½ "Storz-B coupling connection or DN65, DN80 or DN100 - PN10 (DIN 2501) drain flange. One-piece molded body, which is resistant against waste oil and aggressive wastewaters do not leak and completely water tight. Inner and outer surfaces of the unit are smooth enough to avoid residues and facilitate easy cleaning. Lightweight construction ensure easy transport and installation. Transport handles are good for handling with forklifts. On some models, cleaning operation can be made by special washer system, manually/ automatically switchable between washing with installed spray jet to disposal of the contents. This high-pressure aner models is delivered either with internal sump pump or exterior-mounted pump (IP 68 protection class, 400V, 50 Hz), refilling can be made by solenoid valve equipment on demand. Control panel can be mounted either right or left side of the unit.

Optionally, special features can be added as sight glass with wiper inside and floor tilt alignment that can adjust +/- 5 ° of the unit.



Manual oil water separator according to EN 858 class II, is made of environmentally friendly recycled high-density polyethylene (HDPE) with a monolithic rotomolded body and features an integrated sludge trap. It is free standing and suitable for installation on floor or in floor type applications, at the places free from frost. Easy removable, gasketed access covers designed for maintenance and disposal purposes. One-piece rotomolded body, which is resistant against waste oil and aggressive wastewaters do not leak and completely water tight, Inner and outer surfaces of the unit are smooth enough to avoid residues and facilitate easy cleaning. Lightweight construction ensure easy transport and installation. Transport handles are good for handling with forklifts. Inlet and outlet connections compliant with SML cast iron and plastic pipe connections according to EN 877 standards, optionally equipped with an oil level monitoring alarm device and a sampling shaft.

## TECHNICAL SPECIFICATIONS



## PRODUCT DIMENSIONS

| Code   | NS<br>(lt/sec) | DN  | Total<br>Volume<br>(lt) | Oil<br>Volume<br>(lt) | Sludge<br>Trap<br>(lt) | A    | A1   | B    | C    | H1   | H2   |
|--------|----------------|-----|-------------------------|-----------------------|------------------------|------|------|------|------|------|------|
| 33213  | 3              | 100 | 1089                    | 150                   | 360                    | 1360 | 1540 | 890  | 1390 | 970  | 900  |
| 33217  | 7              | 100 | 1762                    | 350                   | 580                    | 2200 | 2380 | 890  | 1390 | 970  | 900  |
| 332113 | 13             | 150 | 3124                    | 650                   | 1030                   | 2700 | 3100 | 950  | 1600 | 1470 | 1400 |
| 332120 | 20             | 200 | 4960                    | 1000                  | 2220                   | 2900 | 3300 | 1300 | 1800 | 1470 | 1400 |

Dimensions are in mm.