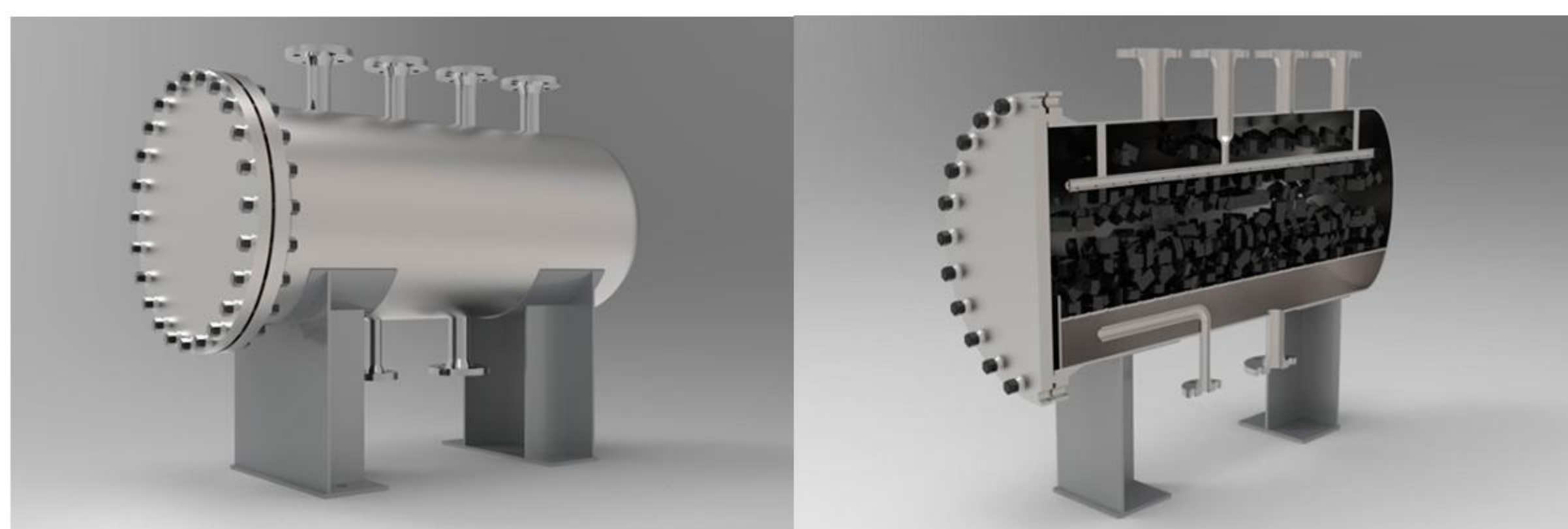




## HYDROPHOBIC AND LIPOPHILIC FILTER

### Product Description

MstnLand's hydrophobic and lipophilic filter is a kind of oily water separator used in industrial environmental protection treatment. The device uses the oilphilicity and hydrophobicity of graphene to improve the properties of conventional adsorbent materials, The adsorption material can absorb oil and do not absorb water, so as to effectively remove oil slick, dispersed oil, dissolved oil and part of soluble organic solvent in the water, to achieve the purpose of oil and water separation.



### Technical Specifications

Item	Parameter
Oil content (Inlet)	≤50000mg/L
Oil content (Outlet)	≤50mg/L
Suspended solid content (Inlet)	≤600mg/L
Suspended solid content (Outlet)	≤50mg/L
Treatment capacity	1-10m <sup>3</sup> /h
Operating pressure	≤0.2MPa
Operation mode	Full-automatic

### Product Advantages

- It has good removal effect on floating oil, emulsified oil and partially dissolved oil in water;
- The core lipophilic and hydrophobic adsorption material can be reused and has a long service life;
- There is no need to add extra chemicals, and the rate of water content of regenerated oil is low, which can be used for oil recovery;
- The adsorption rate is high, and the adsorption of crude oil can reach more than 120 times of its own weight (the traditional adsorption material can only reach about 20 times);
- The desorption rate of oil phase is high, which can reach more than 95%;
- The regeneration of adsorption material is simple, which can be completed only by extrusion or back blowing. And the regeneration energy consumption is low;
- reduce safety risks.
- The size of hydrophobic and oleophilic materials can be customized according to needs, and the equipment can be adjusted according to different water quality.

### Applicable Fields

- Oily sewage in oil refining, petrochemical, metallurgy, cement, coal, biodiesel and other industries.
- Processing oily sewage in printing and dyeing, paper making, leather, textile, baking, frozen food and other industries.

### Project Case

- Oily sewage treatment project of an oil refinery (Comparison of sewage before and after treatment)



BEFORE



经过石墨烯海绵填料装置前的油水混合溶液

AFTER



经过石墨烯海绵填料装置后的澄清溶液