

# OFFSHORE WIND INDUSTRY

Making the world safer, healthier and more productive.

ООО «ТИ-СИСТЕМС» ИНЖИНИРИНГ И ПОСТАВКА ТЕХНОЛОГИ<mark>ЧЕСКОГО О</mark>БОРУДОВАНИЯ Интернет: www.tisys.ru www.tisys.kz www.tisys.by www.tesec.ru www.ти-системс.рф Телефоны: +7 (495) 7774788, 7489626, (925) 5007155, 54, 65 Эл. почта: info@tisys.ru info@tisys.kz info@tisys.by Facet is aware of the high effluent quality requirements and of the harsh environmental conditions placed on Offshore Substations (OSS) in Offshore Wind Farms.

With these requirements in mind we have developed a new range of products which will assist in pollution prevention systems to treat effluents coming from oily drain systems and water drain systems within the OSS. We have also designed our products to withstand the extreme environmental conditions that OSS are exposed to.

Facet leverages the knowledge and expertise of our professionals and our high manufacturing quality standards to facilitate the study, design, supply, erection, installation and maintenance of the units supplied.



## **Units and Applications**

Oil-Water Separators include coalescing media compatible with the operational conditions.

Applications served include oily drain systems (helifuel, lube/ hydraulic oil, and drip tray from equipment containing oil) and water drain system (fire water, rainwater, sewage and seawater).

Facet MAS Series are EN-858-1 approved. Facet CPS B Mk III Separators are IMO approved.



## **Design Options**

- Stainless Steel vessel
- IMO approved (MARPOL 73-78 Annex I) Oil PPM analyzer
- Suitable for Area Classification according to EN60079:10 Zone 2 Group and Category II / 3
- Electrical Heaters, tracing and thermal isolation for freezing purposes
- MOV at the water discharge of Separator
- Instrumentation (LS, LT, Oil layer sensors)
- Control Panel



# REFERENCES

Below you will find a few of the OSS in Offshore Wind Farms where Facet Separators have been installed:

- Amrumbank (North Sea German)
- Wikinger (Baltic Sea German)
- Dudgeon (North Sea UK)
- Hornsea I (Nort Sea UK)
- East Anglia I (North Sea UK)
- MOG (North Sea Belgium)
- HKZ Alpha & Beta (North Sea Dutch)
- Hornsea II (North Sea UK)
- Changhua I (Taiwan)
- Changhua II (Taiwan)



Filtration Group<sup>®</sup> Интернет: www.tisys.ru www.tisys.kz www.tisys.by www.tesec.ru www.ти-системс.рф Tелефоны: +7 (495) 7774788, 7489626, (925) 5007155, 54, 65 Эл. почта: info@tisys.ru info@tisys.kz info@tisys.by

# ADDITIONAL FACET SOLUTIONS FOR OFFSHORE SUBSTATIONS (OSS)



## Seawater Automatic Back Flushing Filters

With flexible designs to suit your application, this filter is a reliable and cost-effective choice for the filtration of seawater.

Protecting equipment such as water injection pumps, cooling medium/seawater exchangers, seawater lift filters, seawater lift pumps motors, MGPS packages, cargo pump motor / pump bearing / local seal panel, inert gas generators and other critical equipment.

#### APPLICATIONS

Seawater automatic filters are suitable for all types of water particle filtration as the main full flow or as a by-pass filter.

- Seawater for cooling engines, generators, heat exchangers and other special equipment that needs protection
- Process and waste water from petrochemical and chemical plants
- Process water for the oil and gas industry
- Cooling water
- Fire water
- Potable water
- RO membrane protection
- Prevention by algae blockage



#### Sewage Treatment Plants

Sewage treatment plants are active sludge aerobic and extended aeration type. By treating sewage by biological means the need for other type of dosing or additives is no longer required for purification.

Facet's sewage treatment systems are specifically designed for the treatment of black and grey water generated on-board marine and offshore applications.

#### ADVANTAGES

- Flexible design to suit your application
- No sludge generation
- No odor generation
- Access and inspection manholes in every chamber
- Easy transportation and installation
- IMO Resolutions MEPC-227(64) and MEPC-159(55) approved
- Certified by the CE and the Maritime and Coastguard Agency



#### **Refueling Systems**

Facet's proven refueling systems are compact, packaged solutions, designed for the supply of clean, dry fuel to helicopters on offshore platforms.

Because of their flexibility in design, Facet will work with you to tailor your refueling system to suit the needs of your project.



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