OIL SEPARATOR

INDUSTRIAL OIL SEPARATORS:
HYDROCARBONS AND RESIDUAL OIL-WATER SEPARATOR

OIL CONTENT IN EFFLUENT WATER AFTER SEPARATOR LESS THAN 5 ppm

CAPACITIES: from 3 litres/second to 600 litres/second
LARGE SCALE INDUSTRIAL OIL SEPARATORS

Applications:

- Electric Power Stations
- Oil Depots & Storage Facilities
- Marine Oil Terminals
- Oil Pipelines
- Steel Manufacturing
- Oil fields & Refineries
- Harbours & Shipyards
- Airports
FREYLIT Large Scale Industrial Oil Separators

The FREYLIT modular plate-pack system the perfect solution for oil separation in large scale industrial oil separators. In many industries process waters are contaminated with oil which needs to be removed before returning the water into the process cycle, for example in steel mills. Coalescent plate pack separators are the most economic method of treating such process waters efficiently. Large scale oil separators are also used for the environmentally friendly disposal of waste waters from power stations, fuel storage facilities, airports, harbours, marine oil terminals, etc. FREYLIT oil separators are also used for the recovery of valuable oil from oil/water mixtures at oil fields.

The separators usually comprise a concrete basin (silt chamber) for the settlement of solid particles followed by concrete cells for the oil separators. FREYLIT designs such systems and supplies the necessary components which are installed inside the concrete basins.

FREYLIT oil separators are designed to the exact specifications and requirements of our clients, and therefore ensure that desired results are achieved with the most economical system solution. Flow rates range from 36 m³/hour to 10,000 m³/hour, or even larger. In order to design the correct dimensions FREYLIT receives the project parameters which include: flow rates, specific gravity and nature of the oil, operating temperatures, presence of solids, laminar flow or pumping into the separator, etc. From this information FREYLIT produces the relevant design drawings, which serve as the basis for the civil works, and supplies the necessary components to build the separators. Every system comes with detailed installation instructions and operation and maintenance manuals.
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Projects in China (2002/3):

- Sichuan Dongfang Electric Company: 600 m³ / hour
- Wuhan Iron & Steel Corp. of China: 4000 m³ / hour
- Lianyuang Steel Company: 6000 m³ / hour
- Liujiang Power Plant: 15 m³ / hour
- HuangShi Power Plant: 15 m³ / hour
- Guizhou Nanyong Power Plant: 30 m³ / hour
- Shandong Tengzhou Power Plant: 15 m³ / hour
- Shanxi Datang Pingwang Power Plant: 10 m³ / hour
- Hainan Petrochemical Incorporation: 30 m³ / hour
- Qinghuangdao Marine oil terminal: 100 m³ / hour
INFORMATION required to calculate the FREYLIT plate packs is:

- Type of application
- Fluid flow rate
- Temperature range
- Type of oil and specific gravity
- Influent oil levels - normal and maximum - in ppm
- Effluent requirements
- Physical size limitations of installations
- Type of water (fresh, salt) and specific gravity
- Presence and identity of surfactants
- Nature of solids, type and specific gravity
- Gravity or pump flow (make, type and rating of pump)
FREYLIT Oil Separators  
Client Questionnaire

Company Name: ____________________________
Address: __________________________________

Contact Person: ____________________________
Phone: ___________________ FAX: ____________
e-mail: ___________________ Web site: __________

Briefly describe the process which is the source of the wastewater / effluent stream containing the oil to be removed. If you have more than one process stream or type of wastewater, but they are ultimately combined (at present) in your facility prior to treatment or discharge, please describe them individually (use one sheet per process stream):

Please Sketch Your Current Process

(ATTACH DRAWINGS IF NECESSARY)

For each effluent stream, please provide the following information, if available:

Feed flow rate: ______ minimum ______ maximum ______ average
Hours of operation: ______ hrs / day ______ days / week ______ days / yr
Daily Total Flow: ______ minimum ______ maximum ______ average
Continuous Flow?: Yes No
Temperature range: ______ min ______ max
pH: ________ Oil Content: ppm Min Max: ________ Specific Gravity of Oil: ________
TSS: ________ TDS: ________ BOD: ________ COD: ________
Particle Size & Distribution (attach)

Other pertinent information such as the presence of solvents, oxidants, polymers, etc:

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

Do you currently treat this effluent in any way? If yes, please describe:

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

(ATTACH DRAWINGS IF NECESSARY)

Project Objectives:

Effluent Oil Content Target: __________
Desired Effluent Solids Content: ________________________________
Is water reuse/recycling desirable? ________________________________
Additional Comments: __________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
POWER STATION BAGHDAD, IRAQ
POWER STATION BAGHDAD, IRAQ
① Abdeckung mind. ø600, für Kontrolle und Wartung des Schwimmerkörpers
② Abdeckung mind. ø600, für Ölzugseinrichtung
③ Abdeckung mind. 600/1000, für Ausbau und Reinigung der Wellplatten

Maße in mm!
WUHAN STEEL COMPANY, CHINA
WUHAN STEEL COMPANY, CHINA
WUHAN STEEL COMPANY, CHINA
OIL SEPARATOR
for Lianyung Steel Company, China
OIL SEPARATOR
OIL SEPARATOR
CAPACITY 240 m³/h
SILT CHAMBER

TREATED WATER STORAGE TANK

TREATED WATER STORAGE TANK

inlet

inlet

inlet

outlet

outlet

outlet

sludge removal pipe

CAPACITY 5500 bbl/day

OIL SEPARATOR

2 x M+R 60

Presson-Descon_02

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