DS21.COM

DS 21
A CECO ENVIRONMENTAL BRAND

OILY WATER TREATMENT

CONTAMINANT REMOVAL FROM WASTEWATER

The Oily Water System from DS21 removes free oil and suspended solids from oily water.

DS21's Oily Water separator systems are designed to remove free oil and suspended solids from industrial, storm and other contaminated wastewater. The systems separate oil, water and sludge through gravity, air or gas and adsorption media.

If emulsified oil is present in the oily water, additional equipment is required.

API SEPARATOR

CORRUGATED PLATE INTERCEPTOR

OILY WATER TREATMENT PROCESS

WASTEWATER POND → CPI OIL SEPARATOR → A/C FILTER → DISCHARGE

TEL: 82-32-512-3152

TECHNOLOGIES OVERVIEW

EIP (EFFECTIVE INTERCEPTOR PLATE PACK) OIL-WATER SEPARATOR

DS21's patented EIP Oil-Water Separator, referred to as the new CPI type, is installed to remove free oil (particles larger than 30-60㎛) and total suspended solids (TSS) from wastewater.

DAF/DGF (DISSOLVED AIR/GAG FLOTATION)

DAF/ DGF is a water treatment technique used to clarify wastewater by removing suspended matter such as oil or solids. This process involves saturating treated water with air or gas in a pressurized vessel and then releasing it at atmospheric pressure in a flotation tank or basin. The released air or gas forms tiny bubbles that attach to the suspended matter, causing it to float to the surface, where it can be removed by a skimming device.

CPI (CORRUGATED PLATE INTERCEPTOR) OIL-WATER SEPARATOR

CPI is the most widely used oil-water separator, utilizing the specific gravity difference method to separate oil and sludge from oily wastewater. It employs multiple slate or corrugated plates, or enhanced oil separation plates, which are installed either slanted at 45~60° angle. This design directs the flow from the upper portion to the lower portion, increasing the effective horizontal surface area of the separator without enlarging the separator basin.

IAF/IGF (INDUCED AIR/ GAS FLOTATION)

A water treatment process that clarifies wastewater (or other waters) by removing suspended matter such as oil or solids. This removal is accomplished by injecting air or gas bubbles into the water or wastewater in a flotation tank or basin or a mechanical type that employs a motor-driven rotor (impeller) to draw air or gas from the vapor phase at the top of the vessel directly into the water phase.

WALNUT SHELL FILTER

The Walnut Shell Filter effectively removes free oil and suspended solids from produced water, refinery wastewater and any water source. It is highly efficient in treating suspended solids, oily residues, ash and metallic hydroxides from industrial liquids generated by petrochemical and other industries. Walnut shell media are resistant to heavy oil surges and experience significantly less fouling compared to other media.

API (AMERICAN PETROLEUM INSTITUTE) SEPARATOR

DS21's patented API Oil-Water Separator is a device specifically designed to separate substantial amounts of oil and suspended solids from wastewater effluents. The API Separator effectively removes free oil particles larger than 150 μm as a pre-treatment step.

WALNUT SHELL FILTER

MANUFACTURING DAF