

PETROCHEMICAL APPLICATION

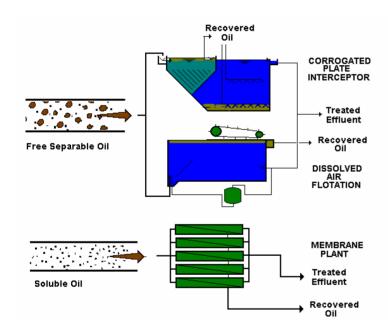
OIL RECOVERY

ESMIL PROCESS SYSTEMS has installed oily water separators to the Oil and Gas Industry for the past 25 years from Abu Dhabi to Zimbabwe and from Nigeria to Siberia.

APPLICATIONS

Esmil offer a range of solids removal and oily-water separation process technologies.

- Produced Water separated during the separation of crude oil;
- Desalter Water generated during crude oil washing;
- Ballast Water for incoming sea tankers;
- Terminal and Refinery Process Drainage oil spills and general oily waste waters.



Corrogated Plate Inteceptors (CPI's)

- Efficient gravity sepatators;
- Removal of gross solids and free oil;
- >75% free oil removal.

Dissolved Air Flotation (DAF)

- Highly efficient air assisted separators;
- Treatment of effluent from CPI's:
- >95% free oil removal.

Membrane systems

- Optimum soluble oil recovery;
- < 1ppm oil in filtrate;
- Low capital and operating costs.

Oily water separators are simple to maintain and operate, having few moving parts. Esmil offer systems for both onshore and offshore installations. Services include project management, design and engineering, specification and procurement, delivery and installation.

INNOVATION THROUGH DEVELOPMENT

In 1999, ESMIL PROCESS SYSTEMS was awarded the Queens Award for Environmental Achievement for the development of "State of the Art" treatment and Recovery Plants.

REFERENCES

ESMIL have installed over 50 installation over the past 25 years, including:

- CPI Unit, 220m³/h Oil Refinery, Kuwait National Petroleum Company, Kuwait
- CPI Unit, 420m³/h Oil Refinery, M W Kellogg, Shell Oil, UK
- DAF Unit, 140 m³/h Oil Refinery, Hydrotechnik GmbH, Al Madain, Iraq
- CPI and Membrane, 240m³/d Produced Water, Petrofac Ltd, Siberia



SPECIALISTS IN THE TREATMENT OF CHALLENGING INDUSTRIAL EFFLUENTS

PROVEN MEMBRANE APPLICATIONS

INDUSTRY	APPLICATION
Metal processing Metal preparation Metal finishing	Recovery and reuse of Sulphuric Acid Reclamation of metal salts Treatment and recycle of rinse water
Panel Board Industry Pulp & Paper Industry	Product (fibre) recovery from effluent Effluent treatment – reduction of suspended and soluble organics Treated effluent reduction, recycle and re-use
Textile Dye Manufacturing Industrial Laundries	Product (dye) concentration, purification and recovery Oily waste water treatment Treated effluent reduction, recycle and re-use
Food & Beverage Processing	Product concentration, purification and recovery Recovery and re-use of contaminated condensate Treatment and recycle of bottle washing effluent
Pharmaceutical Industry Biotechnology	Product recovery by separation and fractionation Effluent treatment – reduction of suspended and soluble organics Treated effluent reduction, recycle and re-use