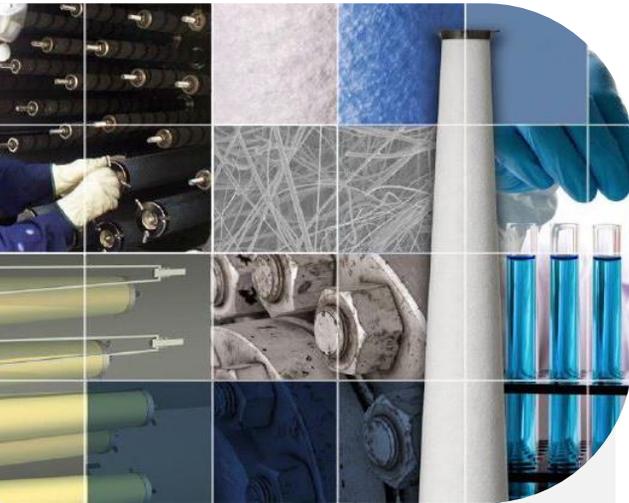


# SLUDGE SEPARATION FROM CRUDE OIL



## ABOUT US

Potentia engineering with over 25 year of experience employing advanced and high-performance particle separation along with advanced coalescing technology can remove free & emulsified hydrocarbons as well as suspended solids trapped hydrocarbons from CRUDE in order to meet the TSS and water cut requirement.

## OUR OFFERINGS

We offer Hydrocarbon Recovery Technology capable of separating any free dispersed and emulsified droplets of oil from the oily water stream and can handle up to 5% (50,000 ppm) of discontinues phase to deliver treated product with less than 10 to 15 ppm of waste as per design requirement. The technology affords proven performance while eliminating the need for expensive excess processing, chemical additives, and storage tank capacity. With hydrocarbon recovery efficiencies of 99.98%, it produces a sellable product, balancing or even outweighing operating costs and capital investment.

Operational flexibility

Elimination of energy requirement

Elimination of the need for chemicals

Minimal operational intervention

Improved process control

Improved effluent discharge quality

Maximized product recovery

Compact footprint and Modular Design

Infinite Turndown

Increased Reliability

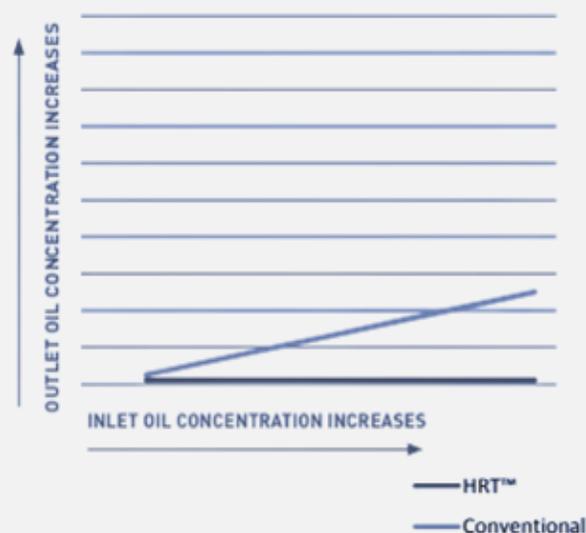


# BENEFITS

## Why is HRT® better than conventional solutions?

Residence tanks are ineffective at separating emulsified hydrocarbon from feed streams, allowing essentially all dispersed hydrocarbon to pass through. Likewise, walnut shell filters, or induced gas/dissolved air flotation (IGF or DAF) are limited to applications with less than 200-300 ppm oil and under the best of circumstances are typically 90% - 95% effective.

HRT® was developed to remove solids as fine as ½ micron to 99.98% efficiency allowing effective separation of hydrocarbons as heavy as polynuclear aromatic oils. It will intercept and recover even stable emulsified hydrocarbons, allowing essentially zero free hydrocarbons to pass through.



# Separation Stages



## STAGE 1 - PARTICLE SEPARATION

To remove particles from the stream  
Separation up to 0.5 microns  
99.98% separation efficiency



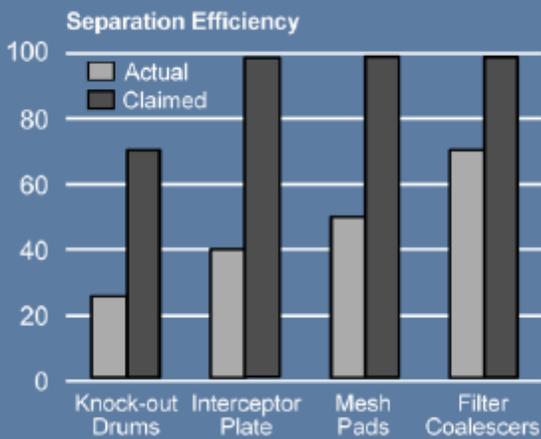
## STAGE 2 - HYDROCARBON RECOVERY

Separation of Hydrocarbon from water by:

- Agglomerating free oil
  - Emulsifying submicron droplets
- Trapped Hydrocarbon bled off as sellable product



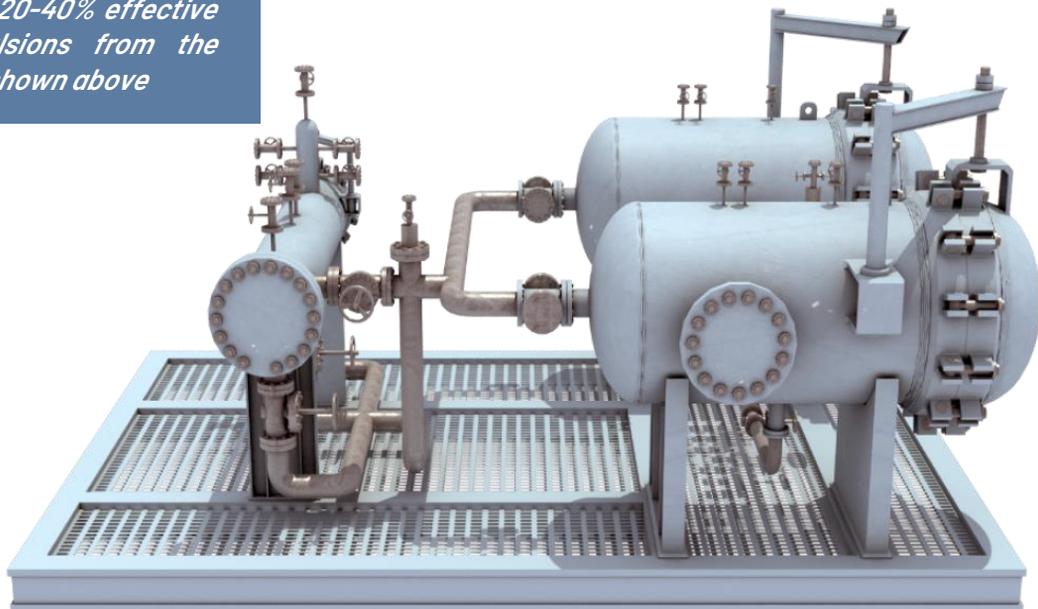
Before After



*Conventional Approaches to separating the emulsified aqueous contamination or haze have been approximately 20-40% effective at removing the emulsions from the hydrocarbon streams, as shown above*



*Unlike conventional string wound, sock, molded, spray spun, depth or pleated filter cartridges which have rigid cores, high performance media technology with its proven coreless filter design to deliver maximum disposability, high surface area and reliable performance while addressing today's environment needs.*



SCAN ME



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