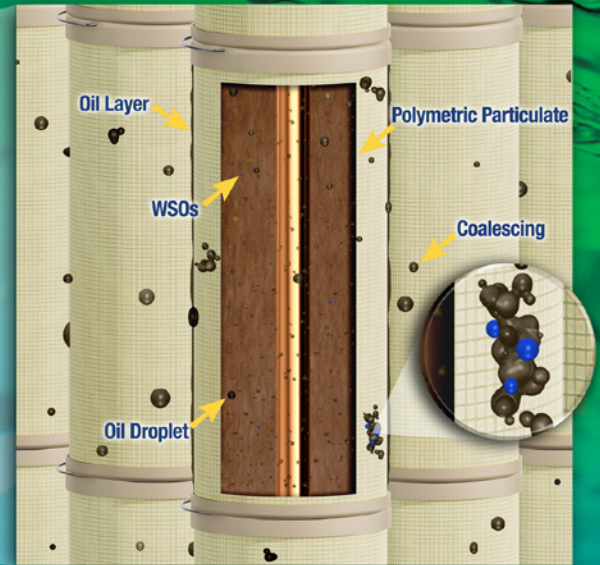


# Hi-Flow<sup>®</sup> Process US Patent No. 7,297,279

Advanced Coalescing Technology



# CETCO

ENERGY SERVICES

A Minerals Technologies Company

## CLEAR SOLUTIONS for complex fluids

Hi-Flow<sup>®</sup> is a patented coalescer technology developed as a produced water excursion system which can be used as a polishing stage during planned or unplanned shut-downs as well as a stand-alone system for produced water treatment.

The Hi-Flow<sup>®</sup> Process uses advanced coalescing technology to treat high rates of produced water, allowing operators to return the produced water back into the environment in compliance with state and federal regulations. Hi-Flow<sup>®</sup> radial-flow canisters are stacked in a proprietary compact configuration to minimize vessel dimensions. Ask for BundleLift<sup>™</sup> proprietary enhancement for additional savings.

## ABOUT US

**CETCO ENERGY SERVICES (CETCO)**, the trusted partner and complex fluid experts equipped and ready to solve your fluid challenges; delivering clear and proven results by increasing operator efficiency, reducing downtime, and maximizing output while safely protecting the environment.

**16 WORLDWIDE  
LOCATIONS  
≥10 COUNTRIES**  
\*Headquarters Houston, TX

## OUR EXPERTISE

- ✓ Advanced Coalescing Technology
- ✓ Safety Performance
- ✓ Globally Innovative
- ✓ Environmentally Conscious

## Hi-Flow® Process US Patent No. 7,297,279

### Advanced Coalescing Technology

In the process, Hi-Flow® canisters are stacked and sealed onto internal guide rods. The fluid is forced through the media where the physical pathways and media interactions force free oil to merge and release for accelerated gravitational separation. Our Hi-Flow® Process is highly flexible to accommodate a multitude of operating scenarios. Hi-Flow® can handle small to large volumes of liquid (275 bwpd to > 40,000 bwpd), is not hindered by large fluctuations in oil and grease. In addition to long or short duration projects, Hi-Flow® is also used in well completion flowbacks, workovers, scale squeeze flowbacks, acid flowbacks and high-rate pipeline dewatering applications.

### Features & Benefits

- Meets overboard discharge requirements without further treatment
- Tolerates large inlet fluctuations without affecting performance
- Minimizes operator intervention
- Small footprint
- Regenerates by backflushing
- Low OPEX
- Lower CAPEX costs for flow capacity
- Lower media replacement costs
- Reduces need for chemicals
- Provides downstream solids protection
- Increases turndown capability

