Pan America Environmental, Inc.

262.716.0105 · www.panamenv.com
technical@panamenv.com

ENGINEERING SPECIFICATION

HDQPak Coalescing Oil Water Separation Media

Engineering Specification

GET A QUOTE	SPEAK TO AN ENGINEER
technical@panamenv.com	262.716.0105

PRODUCT PAGE

https://www.panamenv.com/coalescing-media/hdqpak/

SECTION 1.0 HDQPak OIL SEPARATION MEDIA DESIGN

Purpose, Performance & Applications

The typical performance we design for is: 10 mg/l or less of oil droplets 30 micron and larger of non-emulsified, free and dispersed oils.

Applications

- Stormwater oil removal media
- Industrial water media
- Refinery oil water separation media
- Machining coolant media
- Separator retrofit media
- Canmaking coolant oil removal
- Precast vault oil water separators
- Parking lot oil water separators

Preliminary Sizing Detail

For accurate sizing our sales engineers can run calculations based on API 421 to quickly size and quote a HDQPak system for you. How to size coalescing media: We will need the following details to perform the review:

- Flow GPM
- Oil/fuel type & concentration
- Water temperature
- Solids type and concentration
- Discharge limitations (if available)

HDQPak Coalescing Media Product Specification

Manufacturer:	Pan America Environmental, Inc. Product Name: HDQPak Coalescing Media Product Type: High-performance grid-style coalescing media for oil/water separation

©1991–2026

Description

HDQPak is a high surface area, grid-structured coalescing media designed for use in oil water separators (OWS). It promotes efficient coalescence of oil droplets from wastewater streams by providing a large effective surface area and optimized drip points. The media is constructed from polypropylene plates in a rigid grid configuration, making it suitable for high-flow and high-efficiency oil removal applications. It is commonly used for replacement, retrofitting, or new installation in industrial oil/water separation systems.

Key Features

- High surface area grid design for superior oil droplet coalescence
- Robust polypropylene construction for durability and chemical resistance
- Multiple plate spacing and material options available across the media family
- Supports high flow rates and various solids loading conditions
- Easy to install in modular configurations
- Effective for oils, fuels, vegetable oils, biodiesel, and other hydrocarbons

Physical Characteristics

Property	Specification
Material	Polypropylene (standard)
Plate Spacing	1/4" (6.35 mm)
Specific Surface Area	132 ft^2/ft^3 (effective biomass up to 300 ft^2/ft^3)
Drip Points	75,000 per ft^3
Bulk Density	7.5 lb/ft^3
Void Fraction	87.8%
Smallest Grid Opening	0.16" × 0.16"
Standard Module Size	12" × 12" × 12"

Performance Benefits

- Significantly increases oil/water separator efficiency and throughput
- Flow rates supported: 5 to 250,000+ GPM (depending on system design)
- High temperature capabilities (material-dependent)
- Suitable for low-solids to high-solids wastewater streams
- Reduces effluent oil concentrations effectively
- Long service life with proper maintenance

Applications

- Industrial wastewater treatment
- Oil water separators (new or retrofit)
- Removal of free and dispersed oils, fuels, and hydrocarbons
- Food processing, manufacturing, transportation, and environmental remediation
- Compatible with Pan America Environmental's Flopak, Retpak, TPI (Tilted Plate Interceptor), and other media systems

©1991–2026

Installation & Maintenance

- Modules are stackable and configurable to fit existing or new separator tanks
- Periodic inspection and cleaning recommended based on solids loading
- Backwashing or pressure washing can restore performance in many cases

Related Products

- Flopak Coalescing Media
- Retpak Secondary Coalescing Media
- TPI / CPI Tilted Plate Packs
- Media Pack Systems

For custom specifications, sizing calculations, engineering support, or quotations, contact Pan America Environmental, Inc. at 262-716-0105 or visit

Specifying a HDQPak Coalescing Oil Water Separation Media for your project?

technical@panamenv.com · 262.716.0105 · www.panamenv.com

The materials in this document are for general reference only and not for design or construction. Pan America Environmental, Inc. is not responsible or liable for use by third parties.