



Filtration & Separation

# TITAN PuraSep™

## Reinventing the Filter-Sep



Performance Enhanced with PEACH® Cartridge Technology

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**Includes Dry Gas Design**

OUT WITH  
THE OLD

# TITAN

IN WITH  
THE NEW

## PuraSep™

### THE FIRST OF ITS KIND QUICK CHANGE FILTER-SEP

Reduces cartridge change-out time by **85%** or more\*

#### SAFER

- Reduces operator contact with hazardous materials
- Minimizes confined space entry

#### FASTER

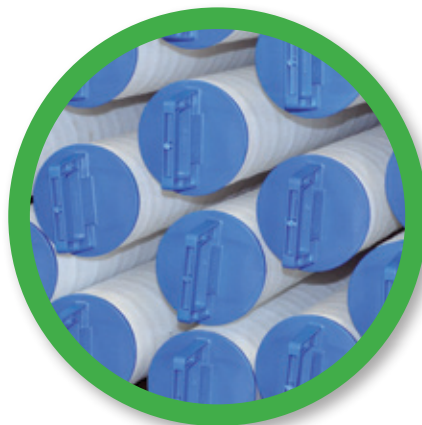
- No tools required to secure cartridges
- Quick cartridge change-out
- Minimizes maintenance time and costs

#### BETTER

- EZ-Align™ holds cartridge concentric with the sealing surface to ensure cartridges do not sag
- State-of-the-art pressure loading enhancement seal to ensure no gas bypass

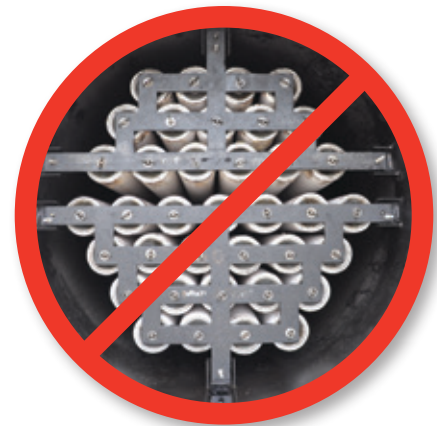


No Washer/Nut/Thread Assembly



User friendly design with fast install and removal

Say **YES**  
to a hassle free  
design!



No Complicated Spider Assembly

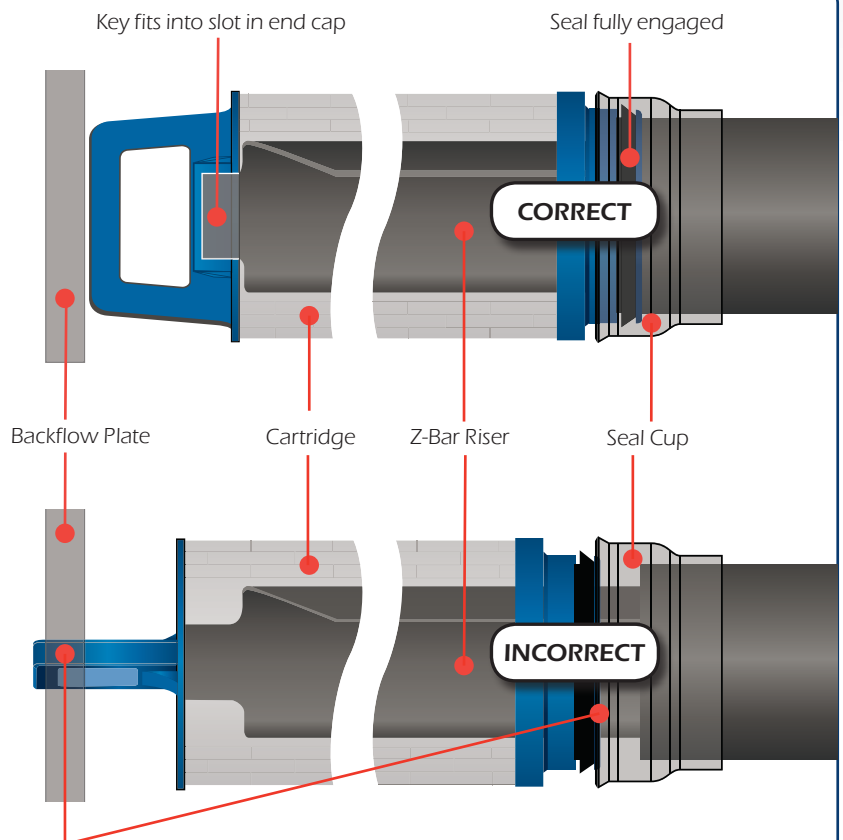
## EZ-Align™

EZ-Align™ features an alignment key between the housing riser and cartridge end cap. This allows the cartridge to be held concentric to the riser and will prevent sagging as the cartridge becomes loaded with liquid wetted contaminants. It also ensures that the cartridge gasket seal remains firm against the riser seal cup wall so bypass does not occur. Even better, no tools are required to install or remove cartridges, making change-outs a breeze!

Z-Bar Riser Alignment Key fits into slot in cartridge end cap

## FEATURES & BENEFITS

- **Two Stage Design**
  - 1st stage removes bulk liquids and particulate
  - 2nd stage removes coalesced liquids
- **Full End Closure**
  - Minimizes confined space entry
- **Backflow Plate**
  - No tools required to remove
  - Permanently fixed in closure
  - Ensures cartridge installed correctly
  - Prevents cartridge from unseating
- **EZ-Align™**
  - Holds cartridge concentric to riser
  - Prevents cartridge sagging
  - Allows for quick change-out of cartridges
  - Ensures cartridge sealing
- **Gas Entry on Pipe Risers**
  - Knocks out bulk liquids
  - Decreases turbulent gas entry
  - Protects cartridges from damage
- **Redesigned Cartridge End Caps**
  - No tools required to install or remove cartridges
- **Advanced Cartridge Technology**
  - PEACH® depth, helical style design
  - Pleated, large surface area style design
- **High Performance Mist Extraction Device** (on 75HTL & 75VTL versions)
  - Unique "wave" vane profile
  - Resists plugging by semi-solid contaminants
- **Dual Downcomers to 1st Stage Sump** (on 75HTL version)
  - Eliminates vapor locking during upset conditions

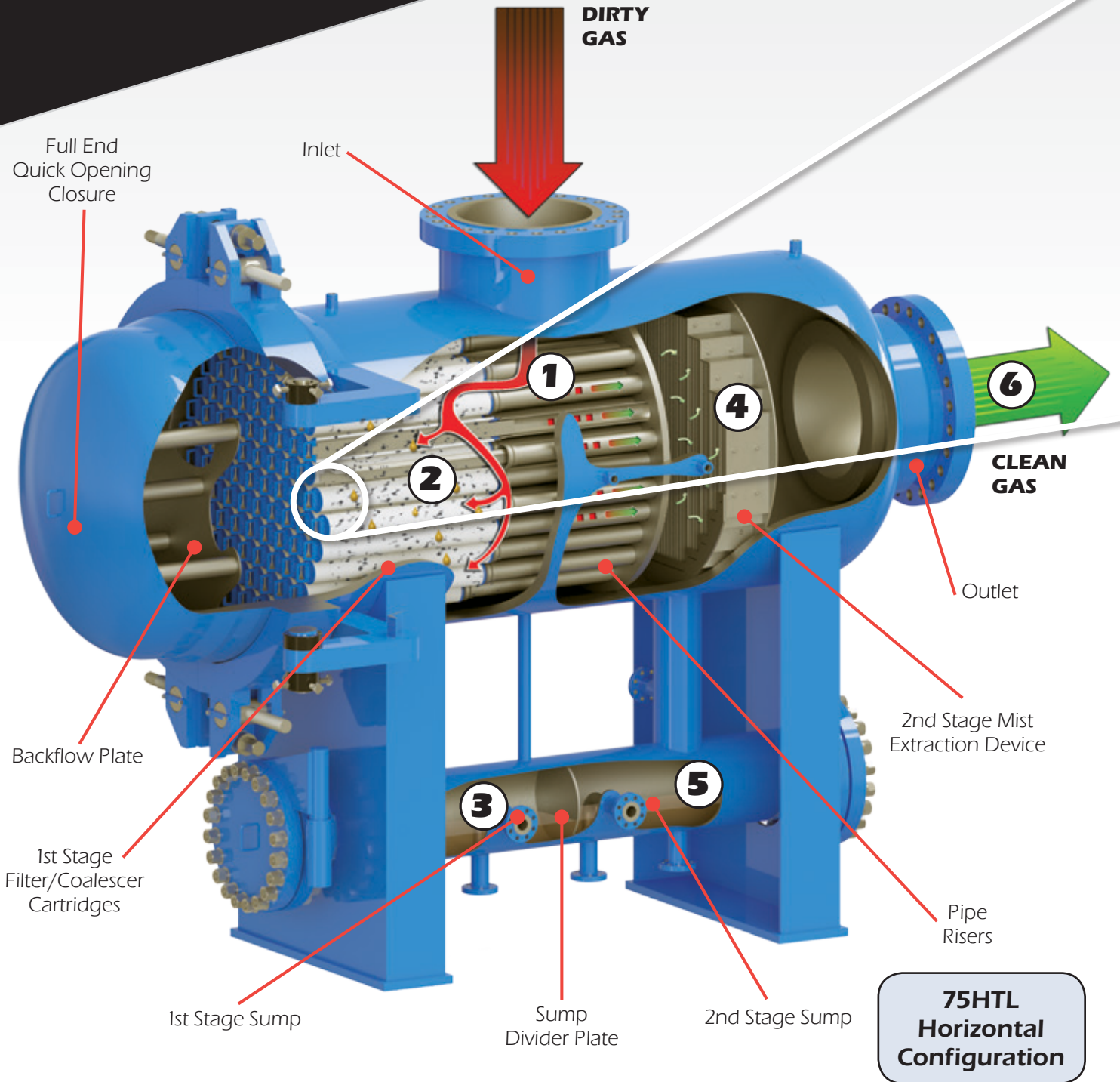


Backflow plate prevents the housing door from closing if any cartridge is not aligned and the seal is not fully engaged.

### CARTRIDGE ALIGNMENT

\* Change-out time reduction based on a comparison of a 48" TITAN PuraSep™ design and a 48" traditional filter-sep design (using double open end cartridges with washer/nut/thread assemblies). Does not include closure opening or closing time.

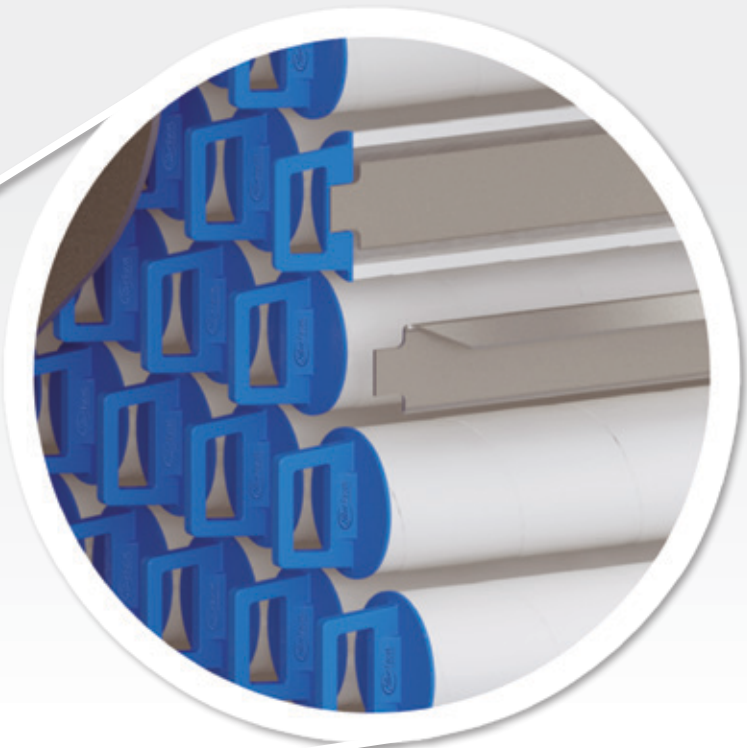
# 75HTL & 75VTL FILTER-SEP



## TYPICAL APPLICATIONS

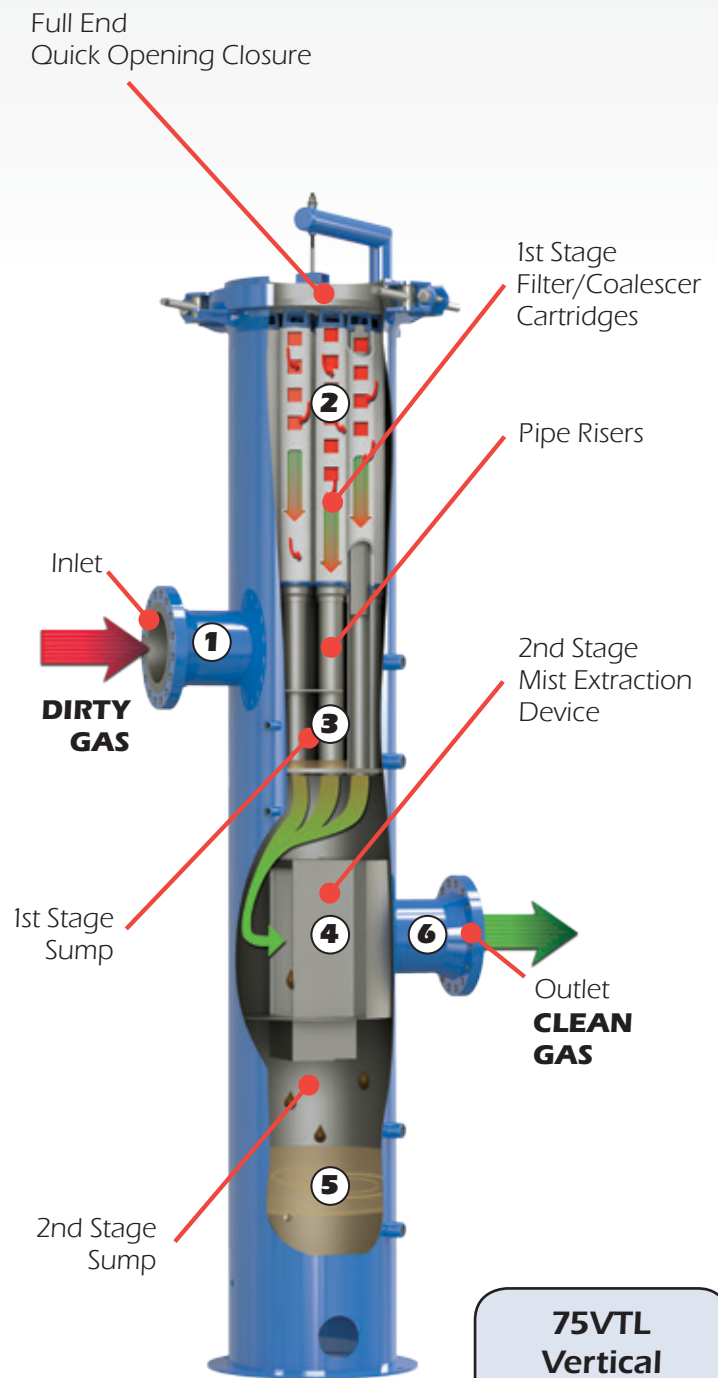
City Gate • Compressor & Turbine Suction • Contact Towers (Inlet & Overhead) • Custody Transfer  
 Fuel Gas • Gas Distribution • Gas Storage • Gas Transmission • Gas Treating & Dehydration  
 Landfill Gas • M&R Stations • Plant Entrance Gas

# Efficient Removal of Solid and Liquid Pipeline Contaminants



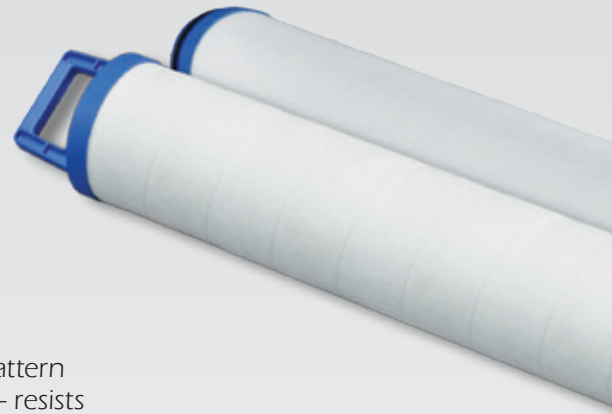
## HOW IT WORKS

- 1 Contaminated gas enters and impinges on the pipe risers
  - Risers also serve to evenly distribute the gas through the 1st stage cartridges
- 2 Gas flows through the cartridges from outside-to-inside in the 1st stage of the housing
  - Solid contaminants are trapped and removed from the gas stream
  - Liquid particles are coalesced
- 3 1st stage coalesced liquids are collected in 1st stage sump
- 4 2nd stage mist extraction device removes large coalesced droplets
- 5 2nd stage coalesced liquids are collected in 2nd stage sump
- 6 Dry, clean gas exits the housing



**75VTL  
Vertical  
Configuration**

# 75HTL & 75VTL INTERNALS

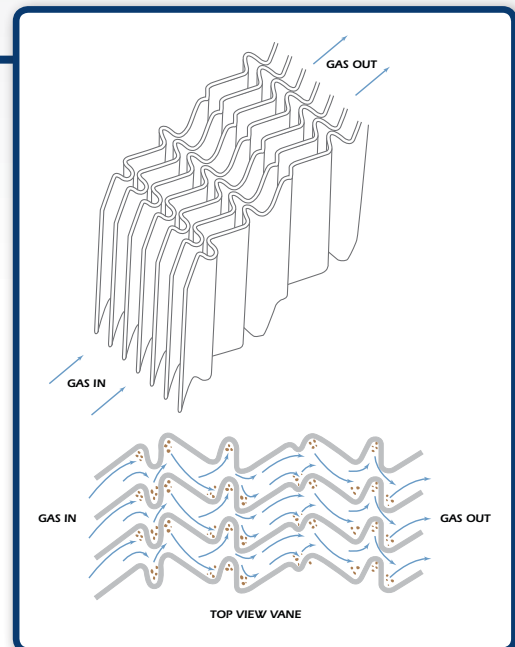


## 1st Stage Advanced Technology Cartridges

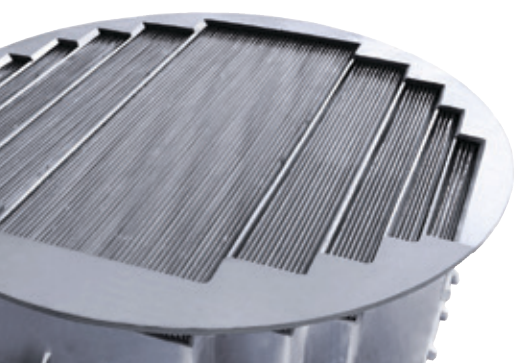
- **PEACH® DynaSep™ Cartridge**
  - Advanced depth filter/coalescer cartridge is a proven performer at removing deformable and shear sensitive contaminants
  - Absolute rated synthetic media
  - Each media layer of the cartridge is thermally bonded in a helical pattern to create a rigid structure that maintains porosity and permeability – resists compression & abrasion
  - Provides extended filtration capacity compared to traditional fiberglass cartridge
  - Tortuous flow path (three flow patterns – helical, radial, axial) provides a longer amount of time for contaminant to travel within the cartridge depth which then increases the probability for the contaminant particles to impact fibers and be captured
- **Newly designed end caps**
  - No tools required to install or remove cartridge from housing
  - Top cap handle allows for easy holding of the cartridge
  - Closed top cap means no need for washer/nut assembly
  - Bottom cap has patented pressure loading gasket seal that fits firmly inside support riser seal cup to ensure no gas bypass
- **Newly designed cartridge support riser**
  - Handles heavy liquid loads without damaging the cartridges or housing
  - Knocks out large amount of free liquids into 2nd stage sump
  - Decreases turbulent gas entry into housing versus housings with baffle design
  - Seal cup provides complete engagement of cartridge gasket
  - Z-bar design provides full support to cartridge internal diameter
- **EZ-Align™**
  - Holds cartridge concentric to riser
  - Prevents cartridge sagging
  - Allows for quick change-out of cartridges
  - Ensures cartridge sealing

## 2nd Stage Mist Extraction Device

- **Wave Plate Vane**
  - Unique “wave” profile produces an enhanced inertial impaction separation mechanism to remove coalesced liquid droplets
  - High efficiency removal with low differential pressure
  - Resists plugging by semi-solid type contaminants
  - Designed to resist extreme process upsets
  - More support bolting than other similar designs



Wave Plate Vane

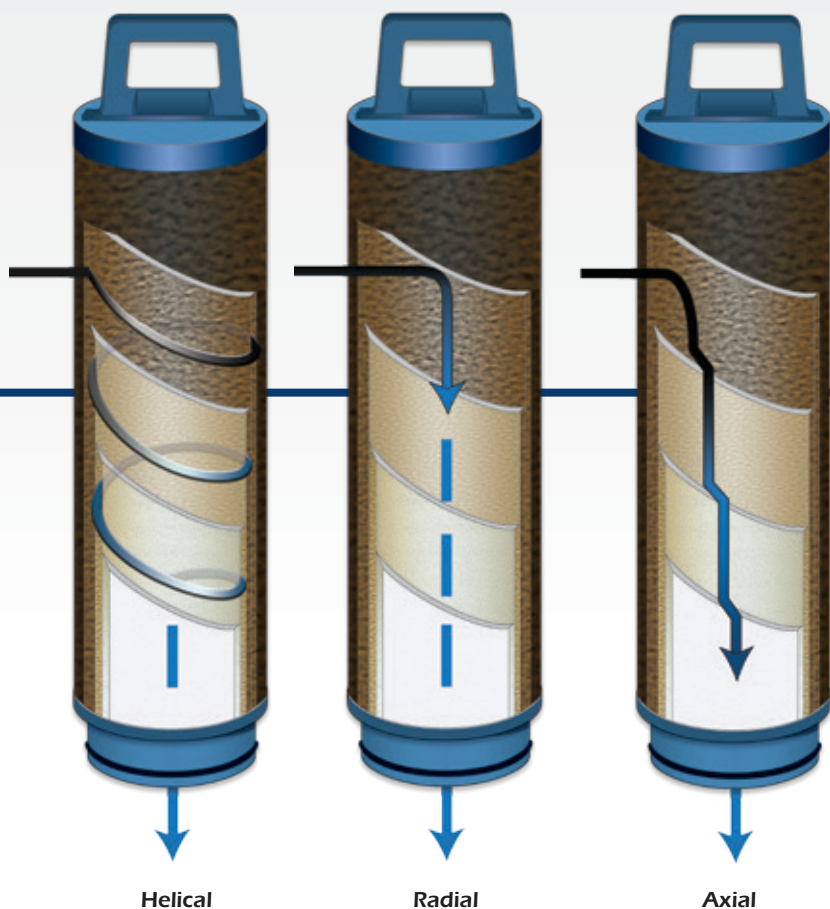


Wire mesh and Cyclotube®  
options available upon request.



**PEACH® DynaSep™  
Cartridge Model EZ-PCHG**

Available in polyester or polypropylene media  
and micron ratings of 0.1, 0.3, 0.5, 1, 5 and 10.



**Three Flow Paths for Unparalleled Filtration**

PEACH® DynaSep™ provides a multi-directional, tortuous flow path (helical, radial and axial) to increase the probability of capturing particles throughout the filter media. The unique helical bonded layers create a true gradient depth for contaminant to be removed throughout the filter.

## HOUSING SPECIFICATIONS

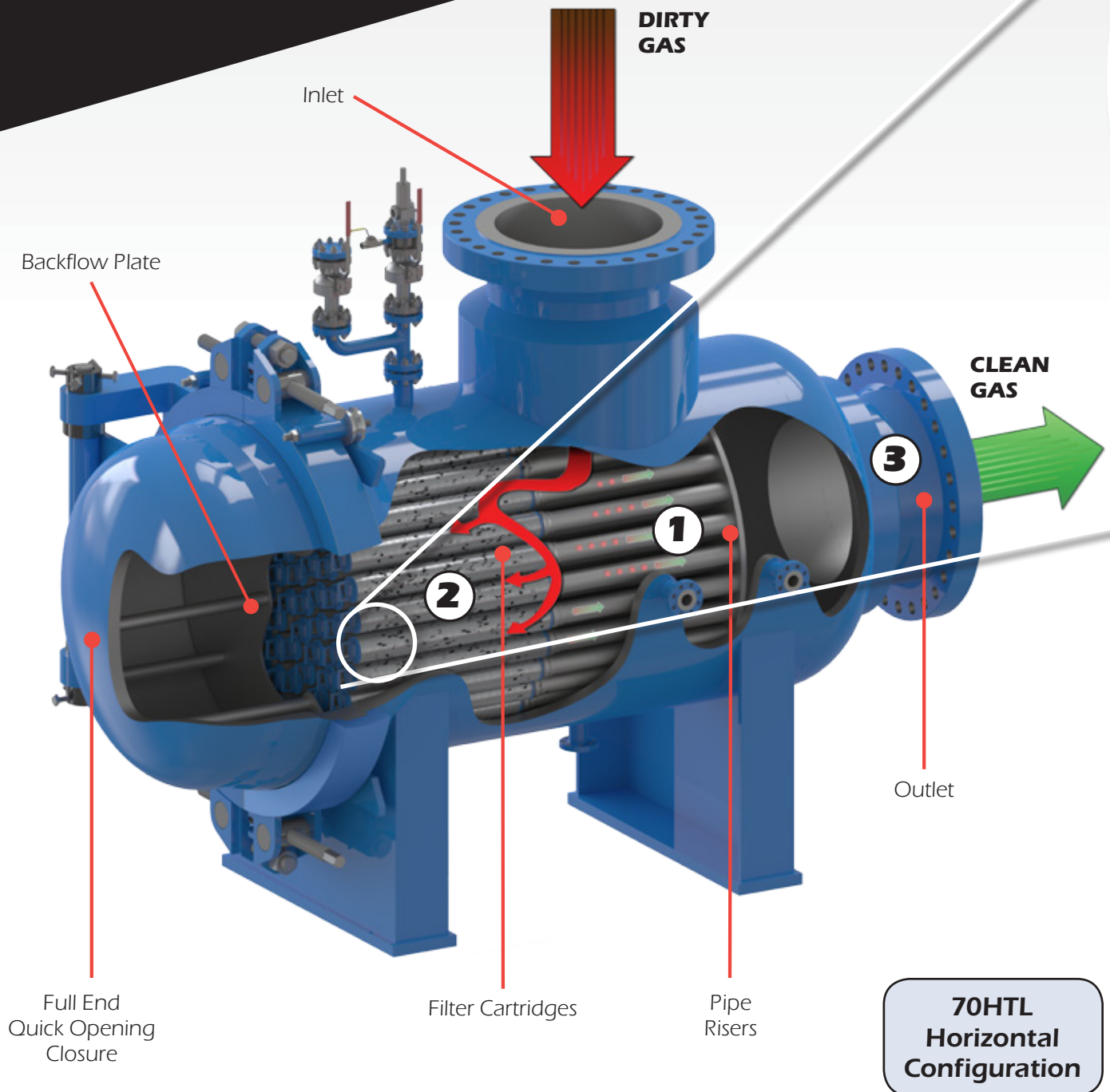
### Standard Housing

- Horizontal and Vertical Units
- 6" to 84" diameter
- ASME Code Section VIII, Div. 1
- Design temperature from -20°F to 550°F
- Quick Opening Closure
- Pressure Parts: Carbon Steel
- External Attachments: Carbon Steel
- Hydrostatic testing at 1.3 x design pressure
- 1st stage PEACH® DynaSep™ (Model EZ-PCHG) filter/coalescer cartridges, 1 micron, polyester
- 2nd stage vane style mist extraction device

### Options

- Other design codes available based on local code requirements
- Design Pressure up to 5,000 psig
- Materials of Construction
  - 304 Stainless Steel
  - 304L Stainless Steel
  - 316 Stainless Steel
  - 316L Stainless Steel
  - Low Temperature Materials
- Non-Destructive Testing (NDT)
  - Radiography
  - Magnetic Particle
  - Liquid Penetrant
  - Ultrasonic
  - Brinell Hardness
  - Charpy Impact
- Coating options
  - Sandblast: commercial, near white and white metal
  - Paint: 2 & 3 coat corrosion resistant
- PECOFacet SafeLock Closure
- Auxiliary packages in stock
- Flanged connections & sump
- PEACH® DynaSep™ filter/coalescer cartridge options
  - Polyester or Polypropylene media
  - Metal hardware
  - Seal materials
  - Various micron ratings
    - 0.1 (includes nano-technology)
    - 0.3
    - 0.5
    - 1
    - 5
    - 10
- Mist extraction options available

# 70HTL & 70VTL DRY GAS



## TYPICAL APPLICATIONS

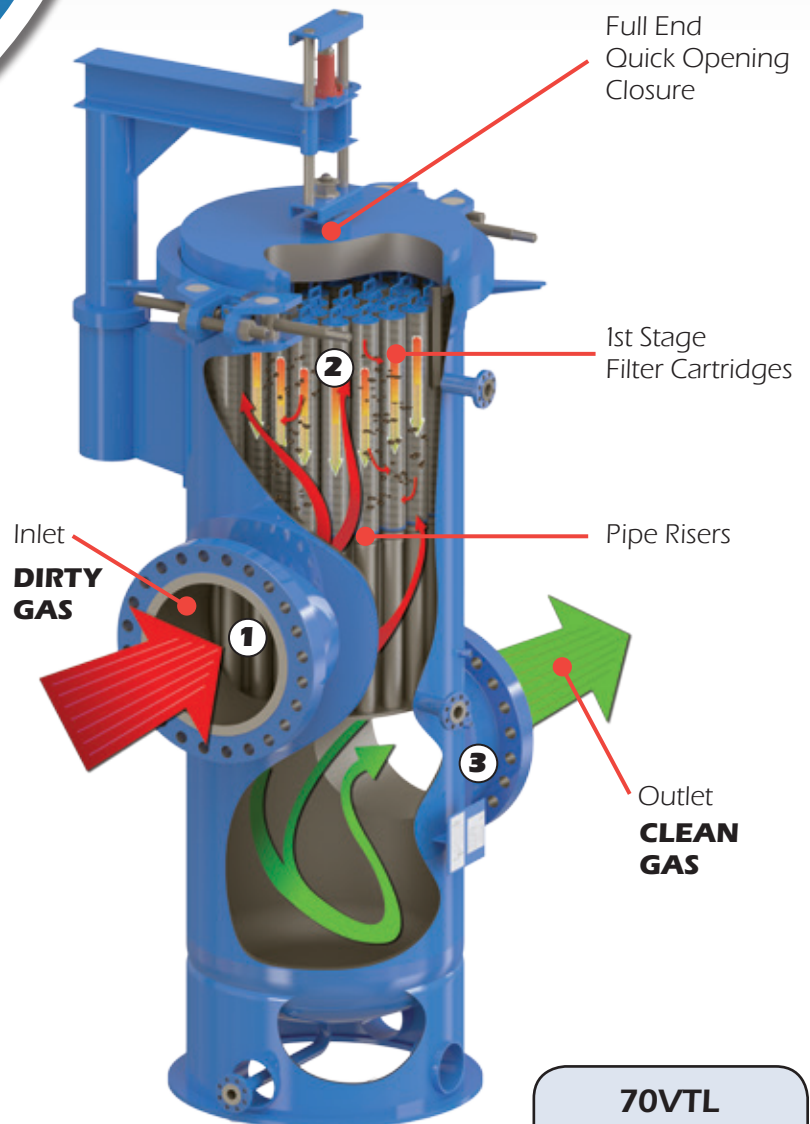
**Aluminum Oxide Removal • City Gate • Fuel Gas • Gas Metering/Regulators  
Instrument Gas • Iron Sulfide Removal • Mercury Guard Beds  
Pipeline Scale/Corrosion Removal • Post Mole Sieve/Desiccant/Catalyst Beds**

# Efficient Removal of Dry Solid Pipeline Contaminants



## HOW IT WORKS

- 1** Contaminated gas enters and impinges on the pipe risers
  - Risers also serve to evenly distribute the gas through the cartridges
- 2** Gas flows through the cartridges from outside-to-inside
  - Solid contaminants are trapped and removed from the gas stream
- 3** Dry, clean gas exits the housing

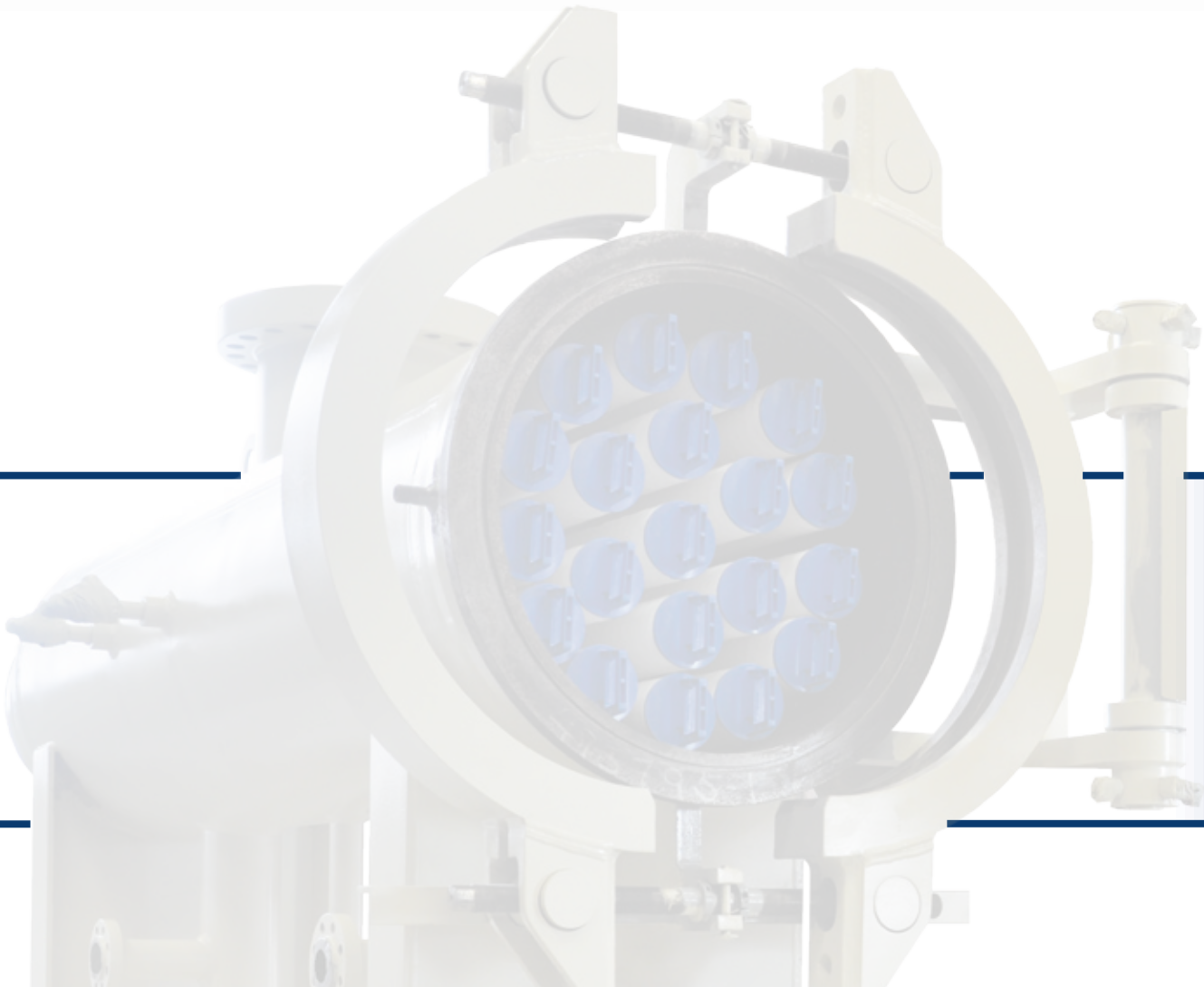
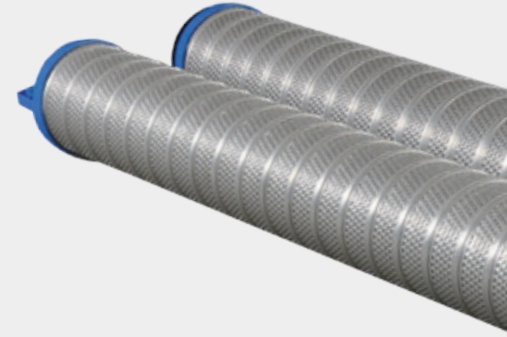


**70VTL  
Vertical  
Configuration**

# 70HTL & 70VTL INTERNALS

## Advanced Technology Cartridges

- **TruGard™ Cartridge**
  - Pleated cartridge design provides high surface area for solid, rigid contaminant to load
  - Absolute rated synthetic media
  - Heavy duty steel outer support protects media from abrasion or tear
- **Newly designed end caps**
  - No tools required to install or remove cartridge from housing
  - Top cap handle allows for easy holding of the cartridge
  - Closed top cap means no need for washer/nut assembly
  - Bottom cap has patented pressure loading gasket seal that fits firmly inside support riser seal cup to ensure no gas bypass
- **Newly designed cartridge support riser**
  - Decreases turbulent gas entry into housing versus housings with baffle design
  - Seal cup provides complete engagement of cartridge gasket
  - Z-bar design provides full support to cartridge internal diameter
- **EZ-Align™**
  - Holds cartridge concentric to riser
  - Prevents cartridge sagging
  - Allows for quick change-out of cartridges
  - Ensures cartridge sealing



## HOUSING SPECIFICATIONS

### Standard Housing

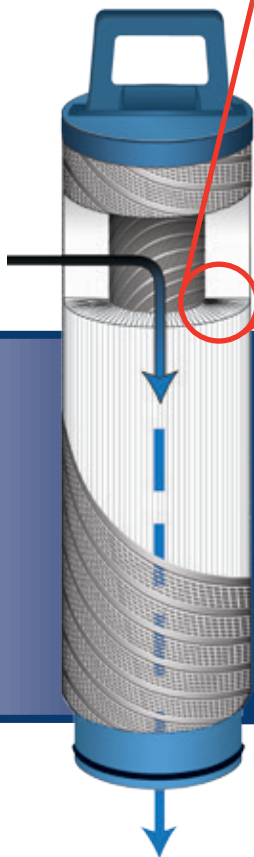
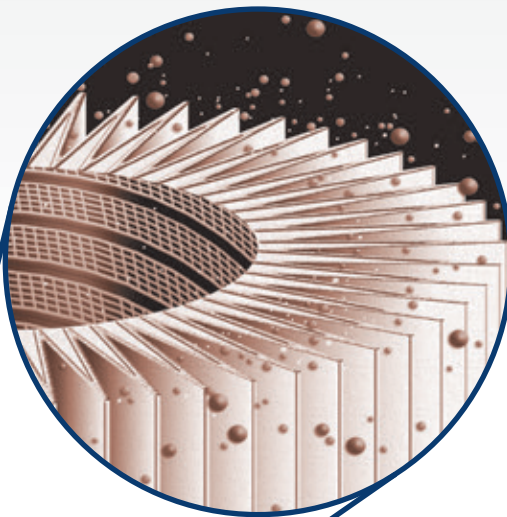
- Horizontal and Vertical Units
- 6" to 84" diameter
- ASME Code Section VIII, Div. 1
- Design temperature from -20°F to 550°F
- Quick Opening Closure
- Pressure Parts: Carbon Steel
- External Attachments: Carbon Steel
- Hydrostatic testing at 1.3 x design pressure
- TruGard™ (Model EZ-PSFG) filter/coalescer cartridges, 1 micron, polyester

### Options

- Other design codes available based on local code requirements
- Design Pressure up to 5,000 psig
- Materials of Construction
  - 304 Stainless Steel
  - 304L Stainless Steel
  - 316 Stainless Steel
  - 316L Stainless Steel
  - Low Temperature Materials
- Non-Destructive Testing (NDT)
  - Radiography
  - Magnetic Particle
  - Liquid Penetrant
  - Ultrasonic
  - Brinell Hardness
  - Charpy Impact
- Coating options
  - Sandblast: commercial, near white and white metal
  - Paint: 2 & 3 coat corrosion resistant
- PECOFacet SafeLock Closure
- Auxiliary packages in stock
- Flanged connections & sump
- TruGard™ filter cartridge options
  - Polyester or Polypropylene media
  - Metal hardware
  - Seal materials
  - Various micron ratings
    - 0.5
    - 1
    - 5
    - 10
    - 20
    - 50



**TruGard™**  
**Cartridge Model EZ-PSFG**  
Available in polyester or polypropylene media and micron ratings of 0.5, 1, 5, 10, 20 and 50.



### Optimized Surface Area for High Contaminant Removal

TruGard™ has an optimized pleat design which provides a high surface area for contaminant removal. Rigid, solid particles form a cake on the upstream side of the pleats. As the cake builds up it begins to contribute to the filtration and increases removal efficiency over time. The permeability of the cake determines the filters' service life.



### World Headquarters

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PECOFacet has offices worldwide. Visit [www.pecofacet.com/About-Us/Locations](http://www.pecofacet.com/About-Us/Locations) to find an office near you.

For inquiries email:  
[sales@pecofacet.com](mailto:sales@pecofacet.com)

- Visit our website to find:
- Installation & Operating Instructions
  - Housing Registration Form
  - Associated cartridge information
  - Most current literature editions

## YOUR CONTAMINANT MANAGEMENT PARTNER<sup>SM</sup>

[pecofacet.com](http://pecofacet.com)

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PECOFacet has a policy of continuous product research and development and reserves the right to change design and specifications without notice.

OG-70/75-SL-01 (PFMW-201608)

# PECOFacet Reinvents the Filter-Separator

Filter-Separator technology was introduced by PECOFacet in 1953 and has been an integral part of the industry ever since.

PECOFacet now takes the design to a whole new level, once again demonstrating our commitment to provide the best possible technology to our customers.

The TITAN PuraSep™ is the first of its kind quick change filter-separator or dry gas filter. It is a revolutionary design that continues to improve in areas such as safety, speed and ease.

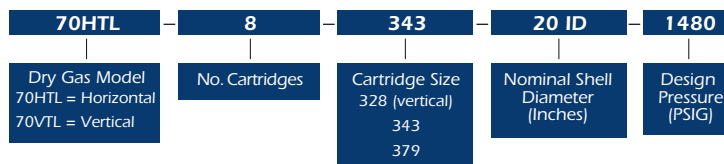
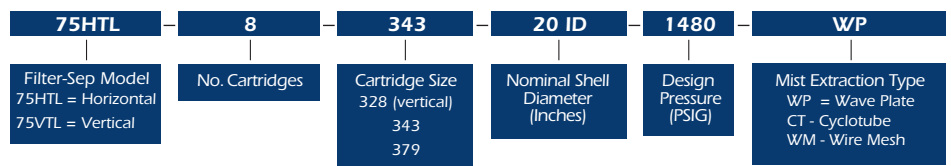


### Marney Dunman Perry Jr. Technology Center

PECOFacet operates one of the best oil & gas filtration research centers in the world. The center is dedicated to the continued development of innovative filtration and separation technology for the oil & gas industry. It employs scientists and engineers and includes PECOFacet Engineered Media (PEM) production, PEACH®

cartridge manufacturing, numerous laboratories, testing units, training equipment and a training classroom.

## HOUSING NOMENCLATURE



PECOFacet, TITAN PuraSep, EZ-Align, PEACH, DynaSep, TruGard and Cyclotube are trademarks of PECOFacet. ® indicates a PECOFacet trademark registered in the USA and various other countries.

Patent(s) and/or patent(s) pending detailed at: [www.pecofacet.com/About-Us/Legal/Patents](http://www.pecofacet.com/About-Us/Legal/Patents)