



A NEW ERA IN

**FILTRATION PERFORMANCE & INNOVATION** 

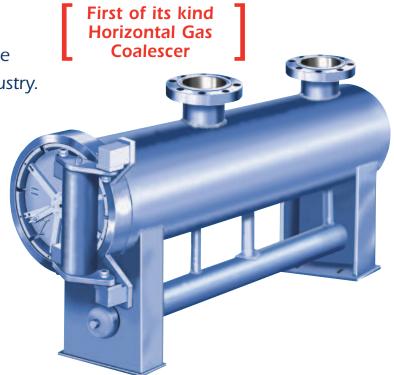


ISO 9001

**Innovative Technology for Gas Coalescing** 

# **IMPROVE RELIABILITY** with PEACH® Gemini PuraSep®

The PEACH® Gemini PuraSep® is another PECOFacet Innovative product for the oil and gas industry. Specifically designed around patented PEACH® technology, the PGP Series was developed to offer superior performance, flexibility, and a remarkably trouble-free design - unlike any filter/coalescing equipment currently available.



# **INNOVATIVE TECHNOLOGY**



The PEACH® Gemini PuraSep® utilizes two stages of coalescence in a single PEACH® element. Gone is the conventional 2nd stage mist eliminator along with the worries about the type of 2nd stage needed for various liquid contaminants. The PEACH® Gemini coalescing element is compatible with, and efficiently coalesces, liquid contaminants encountered in the oil & gas industry, including low surface tension liquids.

The PEACH® Gemini PuraSep® delivers ultraclean gas with high efficiency removal of solid and liquid contaminants, while effectively handling higher inlet solid and liquid loads than conventional gas coalescers. Two stages of coalescing and separating are contained in a single, replaceable PEACH® Gemini element.

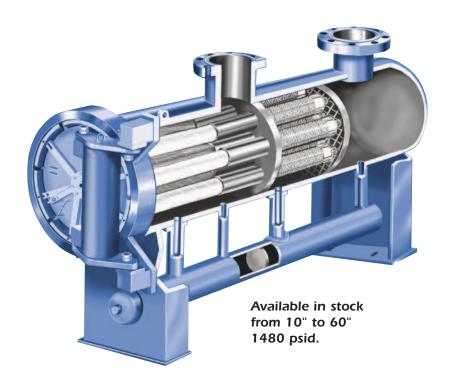
#### **SPECIFICATIONS**

#### Standard Vessel

- Standard Models:
  - Horizontal
     1 through 96 element units
     from 10" to 72" vessel diameter
- Standard Design Pressures:
   285, 500, 740, 1000, 1250 & 1480 psig
- Maximum Operating Temperature:
   220° F
- Standard Materials of Construction:
  - Pressure Parts: Carbon Steel
  - External Attachments: Carbon Steel
- Coalescing Elements:
   PGC Series PEACH®,
   4.5" dia. x 73", 82", or 94" lengths,
   depending on vessel model
- Design Code:
   ASME Boiler & Pressure Vessel
   Code Section VIII.

## **Options**

- Design Codes:
   Pressure Equipment Directive 97/23/EC (PED), PD500, EN13445, GB150, and AS1210
- Design Pressure: Up to 5,000 psig
- Materials of Construction: 304, 304L, 316, 316L Stainless
   Steel, Low Temperature Materials
- Non-destructive Test (NDT):
  - Radiography
  - Magnetic Particle Examination
  - Liquid Penetration Examination
  - Ultrasonic Examination
  - Brinell Hardness
  - Charpy Impact
- Coating Options:
  - Sandblast: commercial, near white and white metal
  - Paint: 2 & 3 coat corrosion resistant
- Closure Options:
  - PECOFacet Safelock
  - Quick Opening Closure



# FEATURES

 High Efficiency Coalescing (0.3 Micron)

The PEACH Gemini PuraSep provides the high filtration efficiency of a vertical gas coalescer while effectively handling liquid and contaminant loads that would overwhelm standard vertical gas coalescers.

- Quick Opening Closures
   Easy and quick access to all internal parts is
  - made available via Quick Opening Closures.
- Flanged Inlet & Outlet Connections
  Flanged connections conforming to ASME/ANSI
  B16.5 are provided for gas inlet and outlet
  nozzles. Forged steel threaded couplings are
  provided for all instrument connections.
- Horizontal Configuration

# Gemini PuraSep® Operation

A single PGC coalescing element separated in the tubesheet by a chevron seal forms the two primary stages of coalescing.

Incoming liquids pass outside-in through the first section of the PGC elements where the solids are filtered and 1st stage coalescing takes place.

The gas with coalesced liquids then passes to the 2nd stage area of the PGC element, where they flow from inside to outside, causing them to be coalesced for a second time.

A specially designed louvered impingement baffle built over the 2nd stage section of the PGC element captures the larger coalesced liquids along its surface where they drop out due to gravity.

The louvered impingement baffle directs the gas flow to yield a final scrubbing effect. The clean gas exits the louvered impingement baffle and leaves the vessel through the Gemini's outlet nozzle.

Liquids drain through the bottom of each louvered impingement baffle and are collected in the 2nd stage sump compartment.

A total of four mist extraction areas within the Gemini act on entrained liquid contaminants.

Droplets in the range of 100 to 1,000 microns are removed by simple impingement against the pipe risers located at the gas entrance.

The 1st stage of the PGC element removes liquids from 1 to 100 microns in size.

Liquids one micron and smaller are coalesced and removed via the 2nd stage of the PGC element.

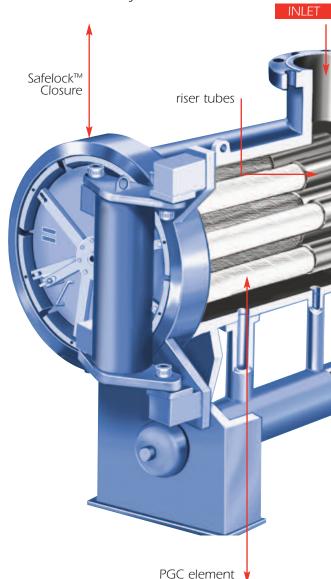
Finally, these coalesced liquids are separated and removed within the louvered impingement baffle leaving a very clean gas effluent stream.

### FIELD PROVEN RESULTS



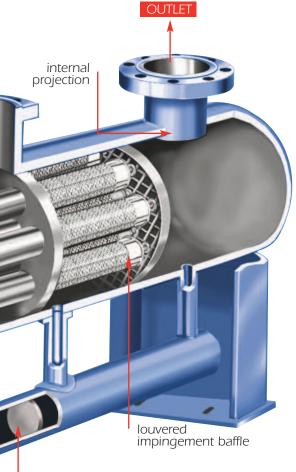
## NO WRENCHES REQUIRED

The Safelock™ Closure allows access to the vessel without the use of any tools.

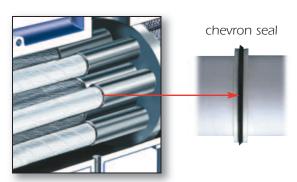




Utilizing the PGC Element for two stages of coalescing, the PEACH® Gemini
PuraSep® offers removal efficiencies that meet or exceed the stringent specifications of most applications.



lower barrel sump



## POSITIVE SEALING

Each PGC contains an integral sealing ring with a built-in chevron seal, which seals within the 1st stage riser tube. Differential pressure between the 1st and 2nd stage compartments assures constant positive sealing, with no bypass.

# **User Friendly Design**

The operation of the PEACH Gemini PuraSep is simple and trouble-free. Thus users minimize their operating and maintenance cost.

- PGC elements have fixed bayonet ends. There are no nuts to remove and reinstall when changing out elements. Once the end closure is opened, no other tools are needed.
- There is no cumbersome spider bar assembly as typically used to mount and support the elements. The Gemini contains a lightweight mounting plate with handle that easily fits over the bayonet end caps of the elements.
- There are no rigid element support assemblies to maneuver the elements over, or to hinder removal. The PGC element easily slides into place via the self-centering riser pipes mounted in the tubesheet.
- There are fewer elements to replace. The gas flow capacity of each PGC element is higher than conventional vertical Gas Coalescers or Filter Separators.
- Because the 1st stage section of the PGC element flows outside to inside, the Gemini offers high dirt holding capacity.





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#### Locations

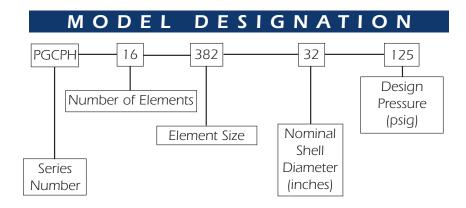
Almere, The Netherlands Cafasse (Torino), Italy Calgary, Canada Evansville (Casper), Wyoming Farmington, New Mexico Greensboro, North Carolina Houston, Texas Kempen, Germany Kuala Lumpur, Malaysia La Coruna, Spain Manama, Bahrain Mid Glamorgan, United Kingdom Perth, Australia Porto Alegre, Brazil Queretaro, Mexico Roissy (Paris), France Sacramento, California Shanghai, China Stilwell, Oklahoma Tulsa, Oklahoma Vernal, Utah Weifang, China

#### Your local distributor:

## ORDERING

The following information is required when requesting sizing and pricing on the PEACH® Gemini PuraSep®.

- Operating pressure range
- Operating temperature range
- Gas molecule weight, or specific gravity
- Type of liquid contaminant
- Liquid density or specific gravity
- Amount of liquid load
- Design pressure
- Design temperature
- Corrosion allowance requirements
- Special design requirements





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