



PEACH Gemini PuraSep[®] 2

PECO Series GEM2 Horizontal Gas Filter-Coalescer

ISO 9001



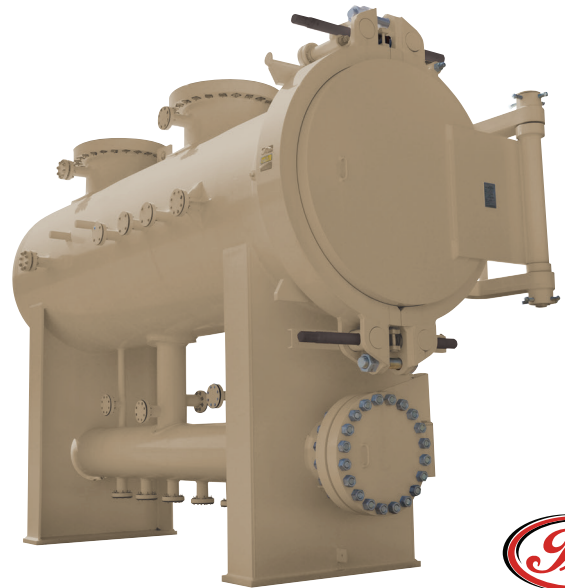
ENGINEERING YOUR SUCCESS.

IMPROVE RELIABILITY with PEACH Gemini PuraSep 2

The PEACH Gemini PuraSep is a horizontal gas filter-coalescer that provides superior performance in a remarkable trouble-free design. It is widely used for protecting critical equipment from solid and liquid contaminants that can cause damage and costly repairs.

The Gemini is a proven winner in the field, doing the work of a gas filter-separator and vertical gas coalescer combined, by delivering ultra-clean gas with high efficiency removal of solid and liquid contaminants, while effectively handling higher inlet solids and liquid loads than conventional gas coalescers.

It can lower capital investment spend by eliminating the need to buy two pieces of equipment in instances where a gas filter-separator is required to protect a gas vertical coalescer from becoming plugged with solid contaminant.



DOING THE WORK OF A GAS FILTER-SEPARATOR AND VERTICAL GAS COALESCER COMBINED

TYPICAL APPLICATIONS

- Compressor Suction and Discharge • Pre/Post Contactor • Fired Reboilers • Gas Analyzer
- Gas Injection System • Landfill Gas • Line Heaters • Propane Refrigeration System
- Solid Desiccant or Molecular Sieve Beds • Turbine Fuel Gas • Metering Stations • Plant Feed
- Low NOx Burner Tip Protection • Storage Withdrawal



Low NOx Fuel Gas Systems

- Reduce fuel tip problems
- Reduce emission problems

Compressor Suction

- Protect compressor components & valves
- Removes salts & iron sulfides

Compressor Discharge

- Excellent lube oil recovery
- Enhance pipeline efficiency

Contactor Inlet

- Protect contactor internals from fouling
- Improve plant performance

Meter Station

- Improve accuracy of meters
- Eliminate shut-in's

VESSEL SPECIFICATIONS

STANDARD

- 10" to 72" diameter
- ASME Code Section VIII, Div.1
- Design temperature from -20°F to 220°F
- Quick Opening Closure
- Pressure Parts: Carbon Steel
- External Attachments: Carbon Steel
- Hydrostatic testing at 1.3 or 1.5 x design pressure
- Full diameter flanged sump clean-outs on stock units

OPTIONS

- Other Design Codes
- Design Pressure up to 10,000 psig
- Materials of Construction
 - 304 Stainless Steel
 - 304L Stainless Steel
 - 316 Stainless Steel
 - 316L Stainless Steel
 - Overlay and Clad Options
- Non-Destructive Testing (NDT)
 - Radiography
 - Magnetic Particle
 - Liquid Penetration
 - Ultrasonic
 - Brinell Hardness
 - Charpy Impact
- Coating options
 - Sandblast: commercial, near white and white metal
 - Paint: 2 & 3 coat corrosion resistant
- Optional PECO SafeLock Closure
- Auxiliary Packages in Stock

The most advanced natural gas filter-coalescing system available just got better!

FEATURES

New! Handled End Cap

New end cap design provides a handle for easy removal and quicker change-out. The handle limits confined space entry keeping safety a priority.

New! Improved Cartridge Drain Layer

New helically wrapped drain layer recipe increases capacity and enhances coalescing.

New! PEACH Sleeve

Easy replacement pre-filter option now available to extend cartridge life and change-out service intervals. The patented PEACH Sleeve option allows customers to reuse base cartridges lowering operational and maintenance costs. Great for extreme, high volume solids contaminant environments.

New! Roll-out Seal System (ROSS)

A patent pending Roll-Out Seal System features an easy roll-out chevron gasket that helps to prevent a swollen seal from lodging or wedging the cartridge inside the riser pipe during extraction. The new seal system reduces the extraction force by 400% compared to the previous seal design.

New! Liquid Drainage Device (LIB)

The patented LIB has been completely redesigned to increase gas flow capacity and improve liquid removal efficiency over the previous design.

Safe, User Friendly Design

Designed to provide trouble-free maintenance, the PEACH Gemini PuraSep internals are easy to remove and replace. The LIB's are removable to make 2nd stage inspection and replacement effortless. The PGC2 cartridge design eliminates the need for hand tools when sealing.

0.3 Micron High Efficiency Coalescing

The PEACH Gemini PuraSep provides liquid removal efficiency in the parts per billion (PPB) range.

Horizontal Configuration

Provides easy ground access to auxiliary controls and cartridges without the need for ladders and platforms.

100% Turndown

PEACH Gemini PuraSep can be operated from 0% to 100% of its rated capacity without any effect on performance.

Quick Opening Closures

Easy and quick access to all internal parts is made available via a yoke/clamp style Quick Opening Closure or internal door style PECO SafeLock Closure.

PEACH GEMINI PURASEP® 2 OPERATION

The PEACH Gemini PuraSep 2 utilizes PEACH® Series PGC2 cartridges made with patented helically wound saturated depth coalescing technology. The first stage is designed to work like a gas filter-separator to maximize solids capacity removal and coalesce large liquid droplets. The second stage is designed to work like a vertical gas coalescer and coalesces fine aerosol mist. Overall the filter performance is an industry work horse with its large solids and liquid handling capacity while removing particles down to 0.3 microns.

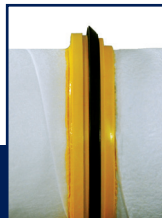
- Incoming liquids pass outside-to-inside through the first section of the PGC2 cartridge where solids are filtered and 1st stage liquid coalescing takes place. Large liquid droplets are removed in the 1st stage and collected in the 1st stage sump compartment.
- The gas, along with lighter coalesced liquids, then passes into the 2nd stage of the PGC2 cartridge where they flow from inside-to-outside, causing the liquid to be coalesced for a second time.
- A specially designed Liquid Impingement Baffle (LIB), placed over the 2nd stage of the PGC2 cartridge, captures the coalesced liquids along its surface where the liquid will drop out, due to gravity, and is collected in the 2nd stage sump compartment.
- The patented LIB design equalizes media flux rates throughout the coalescer section of the cartridge, promoting smooth liquid drainage. The unique 2nd stage LIB design, combined with the Parker PGC2 cartridge technology, creates a system that allows the GEM2 to handle a larger volume of gas than other like designs while providing a cleaner gas stream.

High efficiency removal of solids and aerosolized liquid contaminants
0.3 micron and larger



Handled End Cap

New end cap design provides a handle for easy removal and quicker change-out. The handle limits confined space entry keeping safety a priority.



Roll-out Seal System (ROSS)

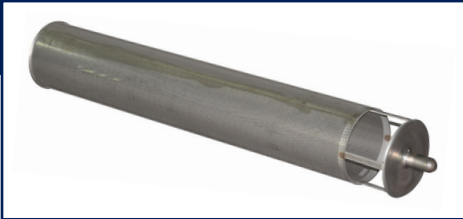
A patent pending Roll-Out Seal System features an easy roll-out chevron gasket that helps to prevent a swollen seal from lodging or wedging the cartridge inside the riser pipe during extraction. The new seal system reduces the extraction force by 400% compared to the previous seal design.

CARTRIDGE PERFORMANCE LEVEL	SERVICE	EFFICIENCY*
PGC2 PL-01	Normal to heavy contaminant loading conditions	99.99% of 0.3 micron & larger solid particles 99.8% of 0.3 micron & larger liquid droplets ≤ 50 PPB (wt) effluent
PGC2 PL-20	Polishing; protection of critical equipment such as gas turbines	99.99% of 0.3 micron & larger solid particles 99.99% of 0.3 micron & larger liquid droplets ≤ 8 PPB (wt) effluent
PGC2 PL-23	Ultra-high effluent applications	99.99% of 0.3 micron & larger solid particles 99.98% of 0.1 micron & larger liquid droplets 99.99% of 0.3 micron & larger liquid droplets ≤ 2 PPB (wt) effluent

* Efficiency data based on Parker testing protocols.

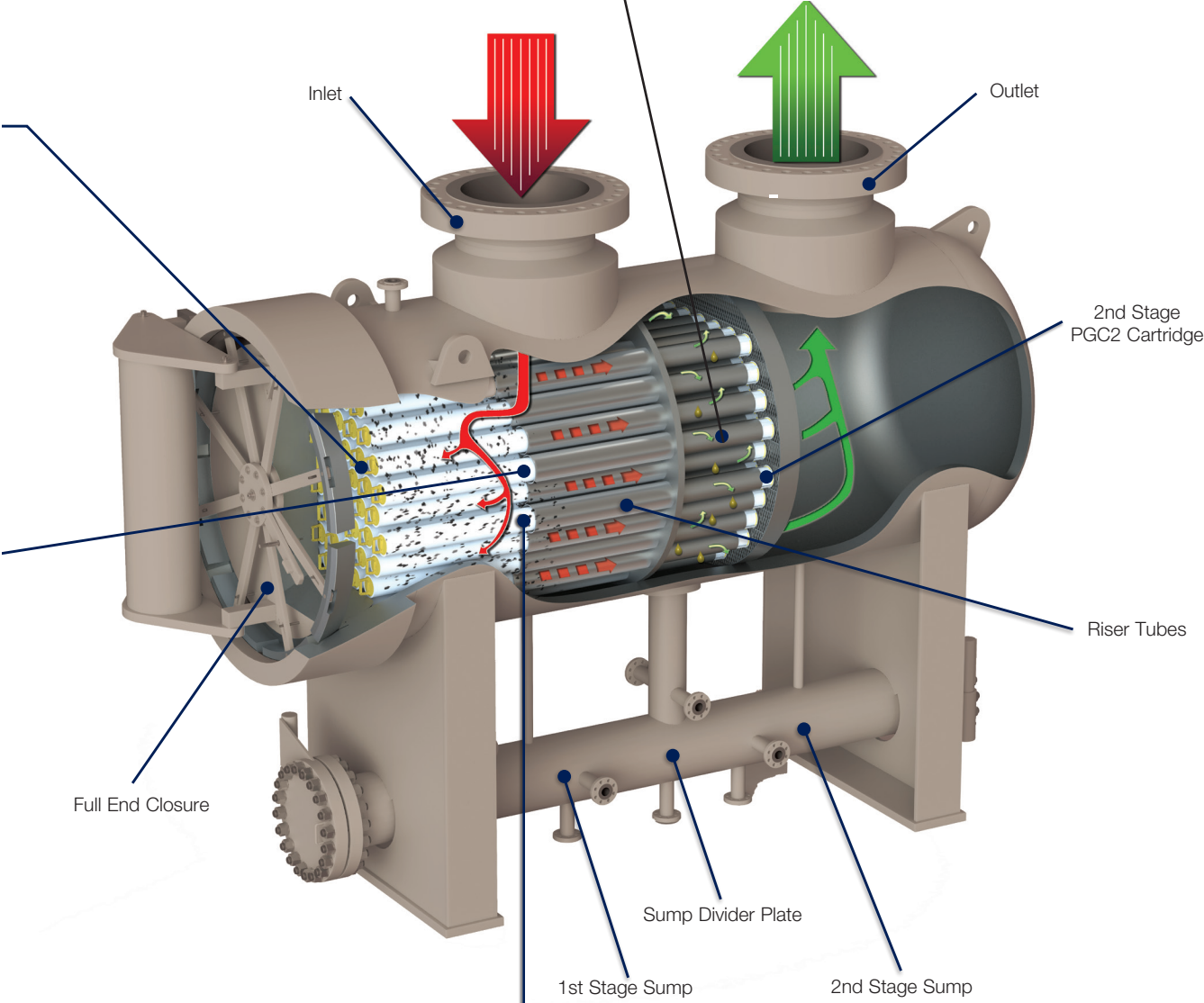


DEMAND PERFORMANCE TEST DATA
WHEN SPECING COALESCER EQUIPMENT.



Liquid Impingement Baffle (LIB)

The patented LIB has been completely redesigned to increase gas flow capacity and improve liquid removal efficiency over the previous design.



Cartridge Series PGC2
PEACH® technology cartridges available in polyester or polypropylene media with various performance level recipes at 0.3 micron rating.



GLOBAL OIL & GAS FILTRATION OFFICES

North America

USA Oil & Gas Filtration
Mineral Wells, TX
940-325-2575
industrialprocess.na@parker.com

Canada Oil & Gas Filtration
Calgary, Canada
403-717-2891
industrialprocess.na@parker.com

Europe & Middle East

Europe Oil & Gas Filtration
United Kingdom
+44 (0)191-402-9200
peco.emea@parker.com

Middle East Oil & Gas Filtration
Dubai, UAE
+971-4-812-7100
peco.emea@parker.com

Asia Pacific

Malaysia Oil & Gas Filtration
Kuala Lumpur, Malaysia
+603-8941-2366
IPF_Malaysia@parker.com

Korea Oil & Gas Filtration
Gyeonggi-do, Korea
+82-31-359-0782
KFDsales@parker.com

Latin America

Latin America Oil & Gas Filtration
São José dos Campos, Brazil
+55-12-4009-3500
falecom@parker.com

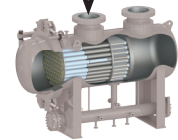
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BR-OG-GEMINI-GEM2-190717

LIQUID HANDLING CAPACITY COMPARISON BASED ON 48" DIAMETER



Horizontal
Filter-Coalescer



Vertical
Coalescer

VESSEL ORDERING INFORMATION

GEM2	18	382	34	285
Series	No. Cartridges	Cartridge Size 373 382 394	Nominal Shell Diameter (Inches)	Design Pressure (PSIG)

Stock Units available from 10" through 60" diameter in 600# ANSI rating.
Refer to data sheet DS-OG-PEACHGEMINI-PGC2 for detailed cartridge information.

The following information is required when requesting a quote for a 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

For quick delivery needs Parker has a filter vessel stocking program with various diameter PEACH Gemini PuraSep vessels.

Consult factory for availability and pricing.

PEACH Gemini PuraSep® 2 products protected by USA Patent Nos. 10,343,096 B2, 9,815,012, and other patents pending.

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