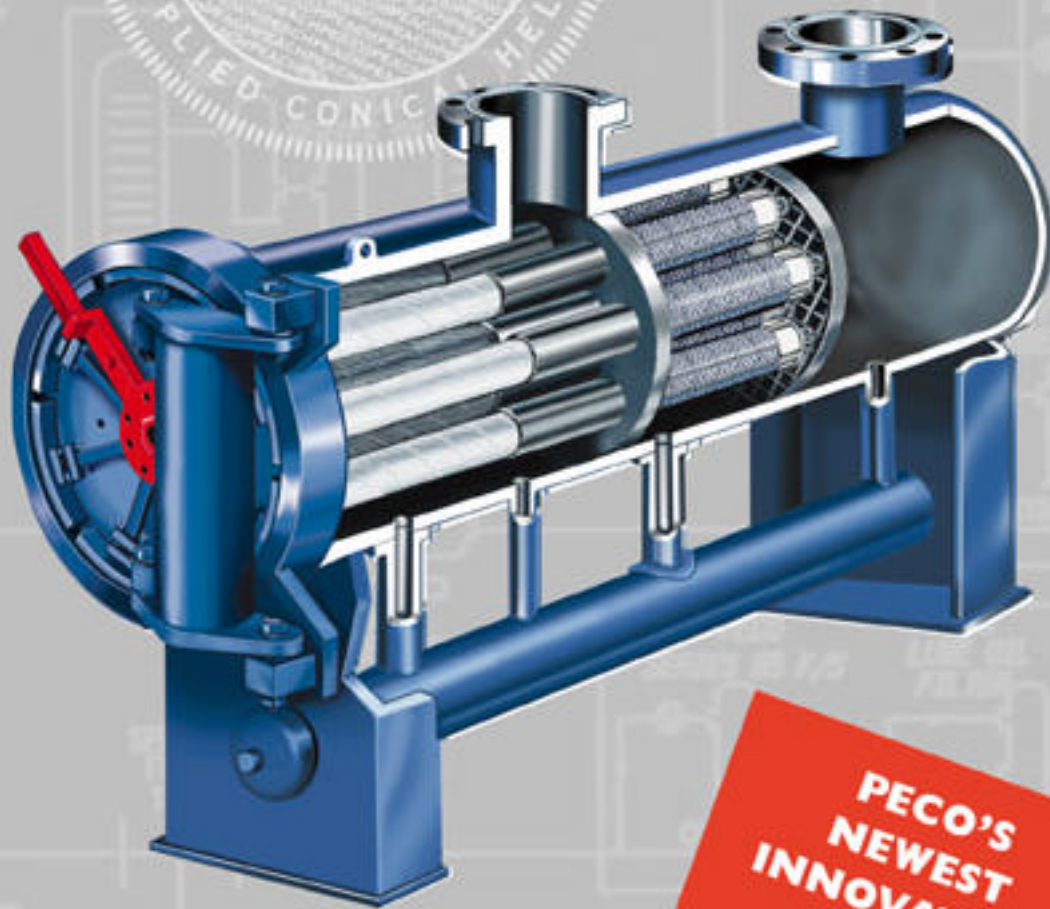




PERRY EQUIPMENT CORPORATION

ISO 9001

PEACH® Gemini PuraSep®



**PECO'S
NEWEST
INNOVATION
IN
COALESCING**

Oil & Gas Vessels

PECO Innovative
Technology for
Gas Coalescing
& Filtration

ENGINEERED FILTRATION TECHNOLOGIES

Protected by USA Patent No. 5,919,284

SPECIFICATIONS

Standard Vessel

Standard Models:

- Horizontal
1 through 96 element units
from 10" to 72" vessel diameter
- Vertical
1 through 55 element units
from 10" to 54" vessel diameter

Standard Design Pressures:

285, 500, 740, 1000, 1250 & 1480 psig

Maximum Operating Temperature:

250° F

Standard Materials of

Construction:

- Pressure Parts: Carbon Steel
- External Attachments:
Carbon Steel

Coalescing Elements:

PGC Series PEACH®,
4" dia. x 77", 86", or 98" lengths,
depending on vessel model

Testing:

Hydrostatic testing at 1.5 x Design
Pressure for fifteen minutes

Options

Design Codes:

BS5500, Stoomwezen, CODAP,
other European codes, via PECO's
United Kingdom offices

Design Pressure:

Up to 5,000 psig

Materials of Construction:

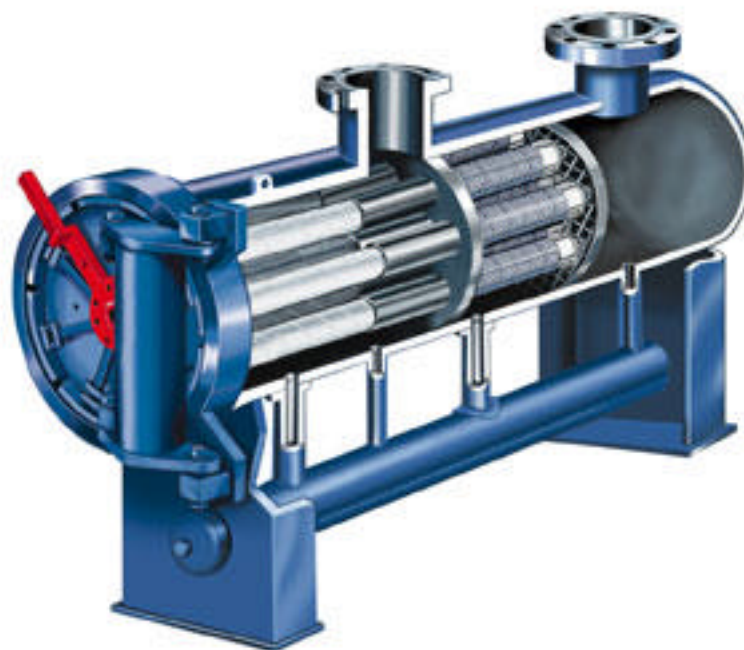
304, 304L, 316, 316L Stainless
Steel, Low Temperature
Materials

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



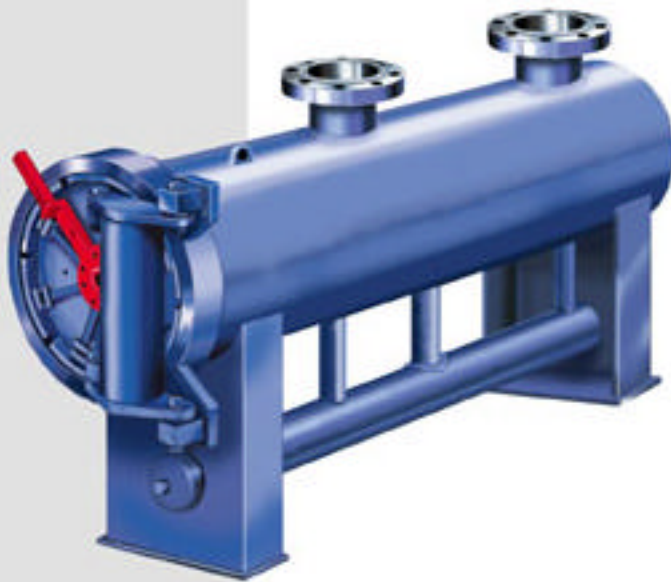
FEATURES

- **ASME Code Design**
All PEACH® Gemini PuraSep® are designed, constructed and tested in accordance with the latest edition of ASME Section VIII, Div. 1 Pressure Vessel Code. Manufacture to various European design codes, such as BS 5500, CODAP, TUV, Stoomwezen, etc., are available through PECO's offices and manufacturing facilities in the United Kingdom.
- **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 & outlet nozzles. Forged steel threaded couplings are provided for all instrument connections.
- **Horizontal & Vertical Configurations**

PECO SERIES PGP product line

an innovation in gas cleaning utilizing PECO's exclusive

[There is nothing like it on
the market today!]



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.

Of course, no 2nd stage means no additional concerns in highly corrosive environments, or plugging. Two stages of coalescing and separating are contained in a single, replaceable PEACH® Gemini element.

With the introduction of the PEACH® Gemini PuraSep® (PGP), PECO ushers in another innovative product for the oil & gas industry. Specifically designed around patented PEACH® technology. The PGP Series has been developed to offer superior performance, flexibility, and a remarkably trouble-free design unlike any filter/coalescing equipment currently available.

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 coalesced liquids then pass 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 inner surface where they drop out due to gravity.

The louvered impingement baffle directs the gas flow to yield a final scrubbing effect, further coalescing small particles exiting the element.

Liquids drain through the bottom of each louvered impingement baffle and are collected in the 2nd stage sump compartment. The clean gas exits the louvered impingement baffle, and leaves the vessel through the Gemini's outlet nozzle.

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

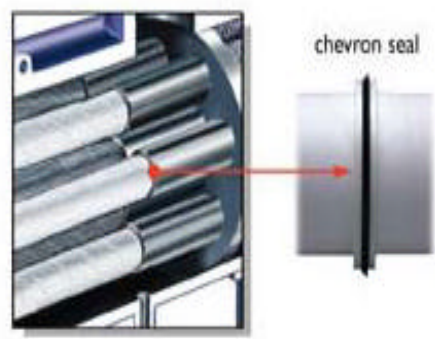
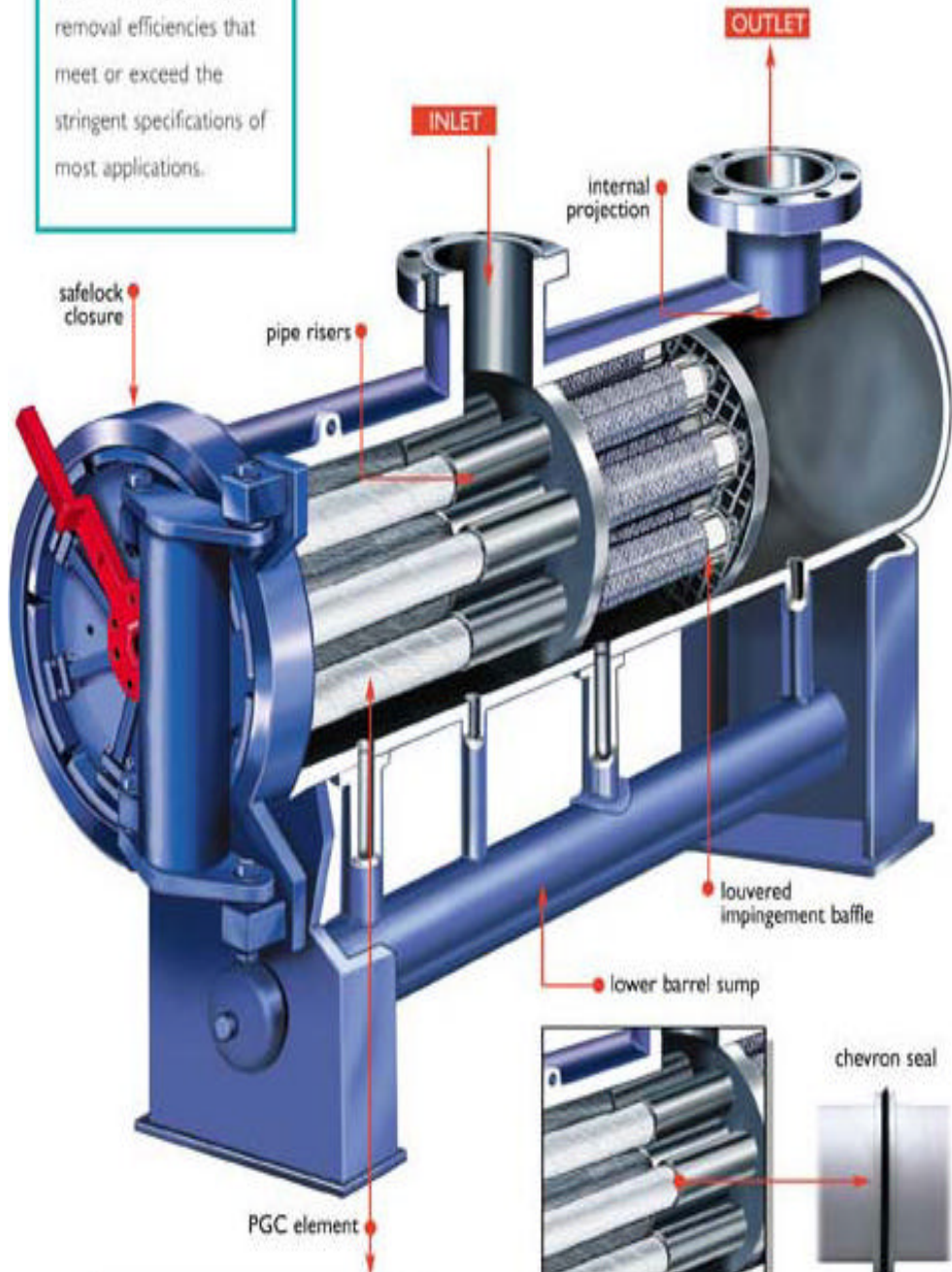
Droplets in the range of 1,000 to 100 μ are removed by simple impingement against the pipe risers located at the gas entrance.

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

Liquids from 1 to 0.5 μ are coalesced and removed via the 2nd stage of the PGC element.

Finally, liquids 0.3 μ and smaller are removed within the louvered impingement baffle.

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.



POSITIVE SEALING

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

User Friendly Design

In designing the PEACH® Gemini PuraSep® a primary goal was to ensure that the operation of these units was simple and trouble-free. Major consideration was given to the priority today's users place on minimizing their operating and maintenance costs.

- PGC elements have fixed bayonet ends. There are no nuts to remove and reinstall when changing out elements. Once the end closure 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 single light weight mounting plate with handle that easily fits over the bayonet end caps of the element
- There are no rigid element support assembly to maneuver the elements over, or to hinder removal. The PGC element easily slides into place via the self-centering riser pipes mount in the tubesheet.
- There are fewer elements to replace. The gas flow capacity of each PGC element is higher than conventional Filter Separators or coalescers.
- Because the 1st stage section of the PGC element flows outside to inside, the Gemini offers high dirt holding capacity.



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

MODEL DESIGNATION

