**Series PCHG Gas Filtration Products** 



# PERRY EQUIPMENT CORPORATION

MINIMATERINA ENGINE ERIT E CO CONI MINING ONICAL HEMINING

ENGINEERED FILTRATION TECHNOLOGIES

USA Patent No. 5827430 and 5893856 (International Patents Granted)

# PEACH® FILTRATION TECHNOLOGY

gives you consistent, predictable performance, high contaminant loading, and high efficiency.

# PECO® ENGINEERED MEDIA

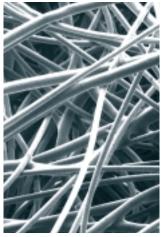
PEM, specifically designed for filtration coalescing, is the key component in the production of the PEACH® gas element. The PEM is designed with an assigned micron rating and efficiency. Raw fibers of various denier are weighed, blended and thermally bonded, then formed into a compressed filter media sheet. Various layers of PEM are then used in the manufacture of the PEACH® gas element.

### THE PEACH®

The PEACH® consists of several lateral sections of PEM formed into a conical helix pattern. Each section consists of multiple helicaly wrapped layers. Through thermal bonding, these spiral layers are applied to conform and overlap the previous layer, forming a cone...the conical helix structure. This structure results in a graded density pattern that yields high contaminant loading, structural strength, maximum efficiency, and excellent reproducibility.

# **GRADED DENSITY**

Each layer of the PEACH® filter performs a particular function. While all layers are designed to a specific micron rating, each lateral section removes contaminants. The outer layer typically removes the bulk solids. As contaminants move through the depth of the cone, the filter densities increase to meet the required micron rating. The inner layers of the filter provide structural strength.



Peach Media 150X SEM Photo by Southwest Research Institute

# PECO® ENGINEERED APPLIED CONICAL HELIX TECHNOLOGY

PEACH® is the manufacturing process incorporating PEM to form an element into a conical helix. This innovative patented process makes possible a graded density pattern which yields outstanding filtration.



### PEACH® FILTRATION TECHNOLOGY

- A performance engineered cartridge
- Predictable performance
- Performance assured from start-up
- No unloading
- High dirt holding capacity
- No media migration

# **ENVIRONMENTAL FEATURES**

- 100% synthetic
- Incinerable (CO<sub>2</sub> + Water) Trace ash & no plastic residue
- Ease of disposal: crush, shred, chop, etc.
- Coreless, no metal parts
- No fiberglass media

# PEACH® GAS ELEMENTS

# CONSTRUCTION

Media
Polyester or Polypropylene

• Gaskets/End Cap Integral thermally bonded

polyester or polypropylene. Optional buna-n or viton with

metal end caps.

• Core None in standard construction.

If required — louvered,

carbon steel.

# **OPERATIONAL DATA**

• Recommended Element Change Out: 12 - 14 PSID / .83 - .97 bar:

• See chart below for collapse strengths

Maximum Operating Temp:
 Polyester 240° F / 116° C
 Polypropylene 180° F / 82° C
 Note: Temps from 200° - 240°F require a core for 4.5" & 5.5" O.D. filters.

Micron Ratings: 0.5, 1, 5, 10 SCW=0.3

 Recommended Torque to Seal Filters: 5-10 ft-lbs NOTE: This Torque should not be exceeded.

# **CORE COLLAPSE STRENGTHS: PSID**

Size	Temp °F	No Core	STD Core	High Pressure Core
3"	100	40	N/A	N/A
	150	35	N/A	N/A
	200	20	N/A	N/A
4.5''	100	30	50	145
	150	25	50	145
	200	N/R	50	145
5.5''	100	N/A	35	N/A
	150	N/A	35	N/A
	200	N/A	35	N/A

N/R = Not RecommendedN/A = Not Applicable

#### Notes:

- 1. Polypropylene is recommended in filter/separators which are downstream of an amine processing plant due to possible contact with carryover amine fluids.
- 2. It is recommended that a core be used in the PCHG elements when retrofitting into some vessels other than PECO®. PECO® vessels incorporate a full length element z-bar carrier to support the element and therefore do not require a core in the standard 4.5" O.D. filters.
- 3. Refer to "Core Reference Chart" on back page to determine if cores are available as standard.

# **PRODUCT ADVANTAGES**

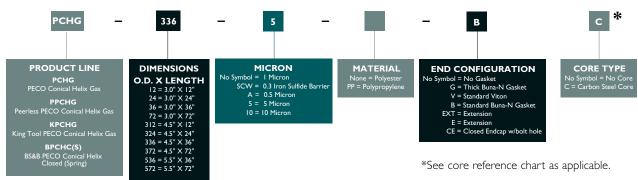
- PEACH° element has a high density tube with tolerances of +/- 5%, as compared to fiber glass tubes with tolerances of +/- 15%
- Integral end cap serves as gasket =60 Durometer
- Long shelf life on elements without cores
- Resistant to erosion at high velocities
- Direct replacement to standard Fiberglass element
- Cylindrical elasticity eliminates collapsing on element carrier
- Multiple bonded layers for strength and rigidity
- Graded density for higher dirt loading and coalescing efficiencies
- Hydrophilic and oliophilic materials means greater coalescing efficiencies at higher rates
- No binders or glues for more direct chemical compatibility

#### ISO 9001 CERTIFICATION

PECO® Filtration Elements are manufactured under a quality management system certified to ISO 9001. This assures that each PECO® Filter is engineered and manufactured to the highest level of quality standards therefore assuring you consistent tolerances and quality...filter after filter!



# PCHG NOMENCLATURE CHART



#### AVAILABLE MODELS The PCHG is a direct replacement to the PECO® FG gas element. \*Comparisons illustrated for I Micron Elements

Model	OD (in/mm)	ID (in/mm)	Length (in/mm)	PCHG Dirt Loading * (lbs/gms)	FG Dirt Loading* (lbs/gms)
PCHG-12	3/76	2.08/53	12/304	.71/323	.70/319
PCHG-24	3/76	2.08/53	24/609	1.50/684	1.45/661
PCHG-36	3/76	2.08/53	36/914	2.24/1021	2.2/1003
PCHG-72	3/76	2.08/53	72/1828	4.43/2020	4.4/2006
PCHG-312	4.5/114	3.125/79.38	12/304	1.17/533	1.05/478
PCHG-324	4.5/114	3.125/79.38	24/609	2.33/1062	2.09/953
PCHG-336	4.5/114	3.125/79.38	36/914	3.50/1596	3.14/1431
PCHG-372	4.5/114	3.125/79.38	72/1828	7.00/3192	6.28/2863
PCHG-536	5.5/139	4.25/108	36/914	4.27/1947	3.83/1748
PCHG-572	5.5/139	4.25/108	72/1828	8.11/3698	7.67/3496

<sup>\*</sup>Above results are based on standard PECO® testing protocol.

CORE REFERENCE CI	HART				
Style	W/Core	W/O Core	Style	W/Core	W/O Core
PCHG 3" O.D.	N/A	Standard	All KPCHG	Standard	N/A
PCHG SCW 3" O.D.	N/A	Standard	All PPCHG	Standard	N/A
PCHG 4.5" O.D.	Optional	Standard	All BPCHC (S)	Standard	N/A
PCHG 4.5" O.D., 5 & 10μ	Standard	N/A			
PCHG 5.5" O.D., 5 & 10μ	Standard	N/A	Your loca	Your local distributor	
PCHG 5 5" O.D.	Standard	N/A	1001 100	ii distiit	ditor.

N/A N/A = Not Applicable

N/A



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Standard

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