



High Temperature (HT) Cartridges

MYCELX Polishing Filters

Specifications

Filtration Media

Material of

Construction:

Natural Cotton

with MYCELX

Proprietary

Chemistry

Filter Core Material

of Construction:

Stainless Steel

(SS 304)

Max Operating

Temperature:

210°F (99°C)

Max Operating

Differential

Pressure:

35 psid

Minimum

Operating Pressure

Required:

2 psi

Operating pH

Range:

5 - 10

Operating Pressure

Drop Across Media

Upon Oil Removal:

1 psi

Typical Flow

Capacities of HT

Based Systems:

1 - 10,000 gpm



DOE
Double
Open End

HT PART NUMBER CONFIGURATOR

MYCELX
Treated
Filter Type



Cartridge
Length
(Inches)



5
10
20
30
40

Nominal Outside
Diameter
(1" ID)



S = 2.5"

Raw/Untreated
Nominal Filter
Micron Size (µm)



0.5
1
5
10
20

Filter
Core



SS = SS 304

Part Number Examples:

MCW40S1SS (HT 40" Long, 2.5" OD, Double Open End Option, 1 Micron Untreated, Stainless Steel Core)

MCW5S0.5SS (HT 5" Long, 2.5" OD, Double Open End Option, 0.5 Micron Untreated, Stainless Steel Core)

High Temperature (HT) Cartridges

MYCELX Polishing Filters

HT

Comparison to ALTERNATIVE Technologies	MYCELX HT Cartridge	Clay/Carbon	OWS/Coalescers	Hydrocyclones
Mechanism of oil removal	Instant, permanent and complete oil removal upon contact. True and Broad phase affinity. No desorption. Required contact time for oil removal: < 1 sec	Adsorption Desorption isotherms apply. Required contact time for hydrocarbon removal: 5 min	Gravity or media assisted enhanced gravity based separation. Required contact time for oil removal (30-50 microns): 10-15 min	Centrifugal or enhanced gravity based separation.
Robustness to handle variable oil loading	Effectively handle high to low oil loading to same effectiveness and < 1 psi pressure drop	Fouls and plugs even with medium oil loading	Can remove oil only up to 30-50 microns oil droplet size	Can remove oil only up to 15-20 microns oil droplet size
Oil Removal Capacity to greater than 90% removal effectiveness	4-6 lbs./ lb. of MYCELX media	0.03-0.3 lbs/lb of adsorbent media	Cannot remove less than 30 micron oil droplets.	Cannot remove less than 20 micron oil droplets.
Ability to handle mixed oily water streams	Yes. Instant, permanent and complete removal	No. Desorption occurs	No, only free phase or > 50 micron droplets will be removed	No, only free phase or > 50 micron droplets will be removed
Footprint of system per flow requirements	1 X	5-6 X	15-20 X	2-3 X
Cost to remove oil at smallest footprint, lowest waste generation and sustained effectiveness	1 X Environmentally Benign Concentrated dry oily waste	5-10 X	2-3 X 90% effective only for oil droplets > 30 microns	4-8 X 90% effective only for oil droplets > 20 microns

Absorbs Oil Without Absorbing Water



Key Benefits

Oil removal from boiler condensate and blow down.

Delivered as dry cartridge – no liquid or chemicals.

Permanent immobilization of the oil in the MYCELX cartridge. No desorption.

High flow capacity at smallest footprint compared to any alternate technology.

Safe and easy to handle. No hazardous components. Certified by EPA and Fish and Wildlife Department for safe handling and discharge into aquatic environment.