

**EB
3.0**

Emulsion Breaker 3.0 (EB 3.0) Cartridges

MYCELX Polishing Filters

Specifications

*Filtration Media
Material of*

Construction:
**Patented Media
with MYCELX
Proprietary
Chemistry**

*222FEC End Cap
Material and
Dimensions:*
**DOE: 2.78" OD
222FEC: 2.5" OD
Polypropylene,
Buna-N O-Ring**

*Max Operating
Temperature:*
**135°F (57°C) and
190°F (88°C) for
High Temp**

*Max Operating
Differential
Pressure:*
30 psid

*Min Operating
Pressure Required:*
2.2 psi

*Operating pH
Range:*
3 - 11

*Operating Pressure
Drop Across Media
Upon Oil Removal:*
2 - 25 psi

*Typical Flow
Capacities of EB 3.0
Based Systems:*
1 - 10,000 gpm



EB 3.0 PART NUMBER CONFIGURATOR

MYCELX Treated Filter Type	Cartridge Length (Inches)	Nominal Outside Diameter (1" ID)	Raw/Untreated Nominal Filter Micron Size (µm)	End Cap	Temperature Rating
MN					
Add a "U" in front of MN for Untreated EB 3.0 (Example: UMN)	5 10* 20* 30 40 50	S = 2.5" (222FEC) 2.78" (DOE) LD* = 4.5" (LD Options are 10" or 20" Length Only)	2 8	DOE (Leave Blank) 222FEC LD (Leave Blank)	HT = High Temp High Temp only available for 2.5" diameter. Leave blank for regular.

Part Number Examples:

MN40S2-HT (EB 3.0 40" Long, 2.78" OD, Double Open End Option, High Temperature)

MN10LD8 (EB 3.0 10" Long, 4.5" OD, Big Blue LD Option)

MN30S8222FEC (EB 3.0 30" Long, 2.5" OD, 222 Flat End Cap Option)

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Comparison to ALTERNATIVE Technologies	MYCELX EB 3.0 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 Cartridge - Emulsions

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.

Spent oily cartridge holds very little water; therefore saturated cartridge has high BTU residual fuel value due to high oil content and very low water content.