



MYCELX Polishers

MYCELX Equipment

Specifications

Removal

Capabilities:

Upset conditions:

Up to 300 ppm

Typical Usage:

<10 - <1 ppm

Solids Handling

Capabilities:

Can remove solids but this would increase OPEX. Often the first vessel in a train will contain particle filters to protect the MYCELX media.

Applications:

Low Level Oil Removal





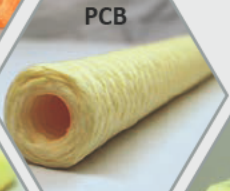

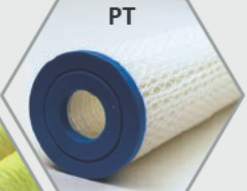
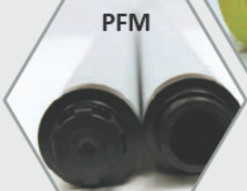

- Last stage of MYCELX treatment train
- Retrofit for existing trains

Level of Maintenance Required:

Manual operator change-out of cartridges. Typically two operators can change a three-vessel train in 30-60 minutes.



MEDIA USED WITHIN POLISHERS

The polisher works by passing water through a train of usually three vessels, skid-mounted in series, which house consumable cartridge filters, typically 40" long and 2.5" in diameter. The vessels are sized according to flow rate and can hold up to 210 filters at the top end of the range.



MYCELX Polisher Unit

The MYCELX Polishers are the tertiary treatment, which consistently provides fail-safe protection against upset conditions. The polishing media instantly and permanently removes oil and grease, never desorbing or saturating with water. MYCELX Polishers achieve critically low discharge levels (less than 1 ppm) or the system can be engineered to achieve various discharge levels depending on the end user requirements.

MYCELX Polishers	Activated Carbon / Clay Filtration
Complete Oil Removal to 0-5 ppm (free, dispersed and emulsified)	Only economical for soluble oils (activated carbon)
2 - 4 MyCelx Polishers fits into space of 1 Carbon/Clay unit	Large footprint and weight
Robust to process upsets – fail safe discharge	Cannot handle process upset conditions
Easy to install and operate. Labor Time required for media replacement on a 10,000 bbl/day system – 45 minutes x 2 operators	Labor time required for carbon/clay media replacement on a 10,000 bbl/day system – 8-12 hrs x 2 operators



Left:
2x3xMX40
Polishing
Skid



Right:
Chevron
Blind Faith
Offshore
Polishing
Vessels -
Very Small
Footprint

Absorbs Oil Without Absorbing Water



Key Benefits

Oil and hydrocarbon removal down to 1 ppm or below, or higher ppm if required.

No oil sheen discharge.

Augment existing systems or as part of a fully customized MYCELX water purification system.

The oil droplets are chemically and permanently bound to the filters as the water passes through each vessel.

Once saturated (signaled by a pressure drop and / or visual indicator / alarm) the filters must be changed.

If solids removal is required at the inlet to the Polisher, the first vessel may contain a simple particle filter rather than the MYCELX oil removal filters.