

## **Filters with MYCELX Chemistry**

Initial Contact with Oily Water



## **MYCELX Element**

- > Oil droplets begin to coalesce on the filter surface upon contacting the MYCELX chemistry.
- > The oil then contracts in MYCELX chemistry so as not to contribute to a pressure drop.

## **Untreated Filter**

- > The oil collects, wicks inward through the media fibers and begins to form an oil film on the surface of the filter media.
- > As oil collection continues, the typical filter media will begin to swell due to the oil collection and begin to form a differential pressure.



# 50% Saturation with Oily Water



#### **MYCELX Element**

- > Oil continues to 'Glop" on the exterior of the filter while contacting the MYCELX chemistry. Differential pressure remains less than 1 psid due to contracting chemistry properties.
- > The outlet will be oil free with no premature oil re-entrainment.

## **Untreated Filter**

- > As oil wicks into the center of the filter, it will not be held to the filter media if parts of the filter are saturated to the core.
- > The outlet will begin to show re-entrained oil in the outlet with potential sheen.
- > Differential pressure will continue to rise while loading with oil.



## 100% Saturation with Oily Water



#### **MYCELX Element**

- > At 100% saturation, all the MYCELX chemistry will be integrated into the oil 'Glop'. No oil will pass to the outlet until 100% saturated.
- > Even at 100% saturation, differential pressure remains at less than 1 psid.
- > The outlet will start to show coalesced oil. In the designed 2 stage system, this oil passage will be seen in the Visual Oil Indicator (VOI) after Stage 1 so the operator can identify when the Stage 1 filters are saturated.

## **Untreated Filter**

The oil will continue to re-entrain to the outlet from 50% saturation and continue until 100% saturated. The oil in the outlet will continue to rise during the time from 50% to 100% saturation along with the differential pressure.





- > Will identify when stage 1 has reached 100% saturation
- > Oil droplets will appear on exterior of VOI element
- > At this point, system can be taken out of service and oil removed elements replaced
- > Mechanical visualization
- > No electricity required
- > Easy to maintain



North & South America • 1721 Main Street • Pittsburgh, PA 15215 • USA • Tel: 412.963.9200, 1.800.245.6211 • info@megator.com • megator.com

Europe • Hendon • Sunderland, SR1 2NQ • United Kingdom • Tel: +44 (0) 191 5675488 • info@megator.co.uk • megator.co.uk

Australasia • 6-12 Burleigh Street • Toronto 2283 - N.S.W. • Australia • Tel: +61 2 49599400 • sales@megator.com.au • megator.com.au