H₂O SPECTRUM® PLATFORM
Real Options for Produced and Flowback Water to Enable Project Viability

AFFORDABLE RECYCLE AND REUSE

Monarch Separator’s H₂O Spectrum®-Lite is a proven, cost effective water treatment scheme designed to handle the most challenging produced and flowback water qualities.

• Removes solids to less than 1-3 NTU
• Oil in Water to less than 2 mg/L
• Iron to less than 1 mg/L
• Handles varying and extremely challenging water qualities
• Tailored chemical blending to improve system performance and project economics

SURFACE DISCHARGE

Our advanced H₂O Spectrum®+Plus system continues the treatment process to meet the more stringent regulatory requirements for safe surface discharge.

• 100% BTEX and TOC removal
• 100% ammonia removal
• 99.7% H₂S removal
• 99+% salinity reduction
• Pass Whole Effluent Toxicity (WET) tests for surface discharge

Oil & Solids Separation Smart Controls H₂O Floc™ Alginate Flocculant Salinity Removal or Reduction BTEX, Ammonia and/or Other Constituents Removal
H₂O SPECTRUM® PLATFORM MOBILE RENTAL UNIT

COMPACT AND READY TO INSTALL

Ready for deployment now, our compact and environmentally friendly, H₂O Spectrum® rental unit consists of a uniquely designed, micro flotation unit with an alginate flocculant and smart controls in just two 20 ft mobile containers.

- Available for short or long term rental
- Ideal for project and technology validation
- Consistently produces targeted water quality
- Single power hook up
- Automated controls and HMI screen complete with shut down alarms
- Chemical dosing skids included in chemical utility container
- Capable of utilizing a variety of chemical combinations

H₂O SPECTRUM® +PLUS PLATFORM

Our H₂O Spectrum® +Plus option is available to provide the ability to treat produced and flowback water for safe surface discharge.

MOBILE DESIGN SPECIFICATIONS

Designed with mobility in mind, our H₂O Spectrum® platform rental unit is a complete, turnkey solution to treat water near a well site or to move from site to site to reduce overall costs.

<table>
<thead>
<tr>
<th>Description</th>
<th>Specs</th>
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</thead>
<tbody>
<tr>
<td>Flow rate</td>
<td>1,500 bpd</td>
</tr>
<tr>
<td>Process Temperature</td>
<td>40° F to 110° F</td>
</tr>
<tr>
<td>Dimensions - Treatment Skid</td>
<td>20’ L x 8’ W x 8.6’ H</td>
</tr>
<tr>
<td>Dimensions - Chemical Utility Container</td>
<td>20’ L x 8’ W x 8.6’ H</td>
</tr>
<tr>
<td>Weight - Treatment Skid</td>
<td>25,000 lbs</td>
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<tr>
<td>Weight - Chemical Utility Container</td>
<td>12,000 lbs</td>
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<tr>
<td>Power Requirements</td>
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</tr>
<tr>
<td>Voltage</td>
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<tr>
<td>Amps</td>
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<td>kVA</td>
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