

# UltiDri<sup>®</sup> TLC

## Turbine Lubricant Conditioner

### The Latest Step in the Evolution

Over the last century of steam turbine operations, there has been continual evolution of turbine oil conditioning systems. Technologies historically used to maintain turbine oils include settling tanks, filter presses, centrifuges, vacuum dehydration and coalescing units, which have all played an important role in allowing steam turbines to operate with clean, dry oil. However, these technologies have been shown to be maintenance intensive, unreliable and limited in performance. As a consequence, they often end up gathering dust in the corner of the plant rather than maintaining your turbine oil.

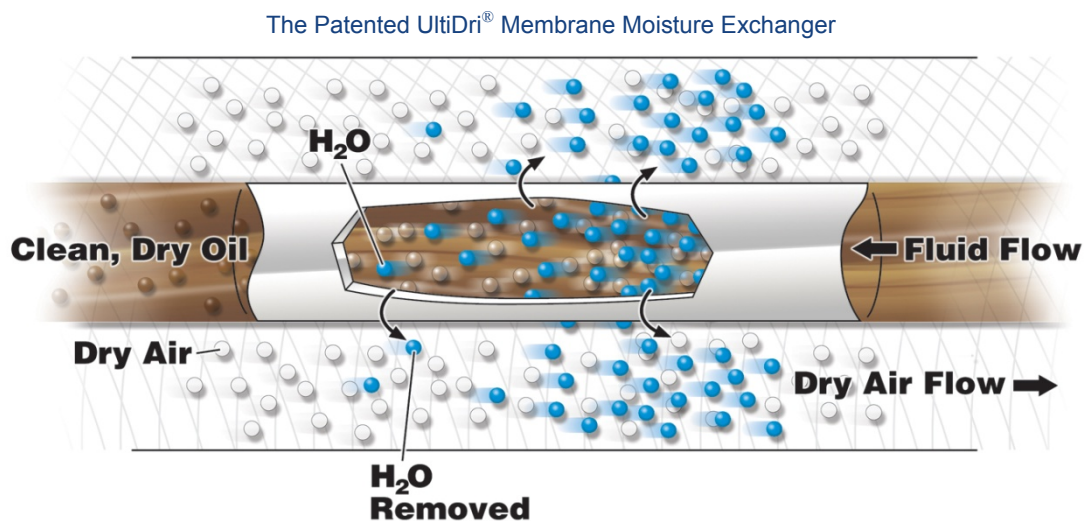
Fluitec is pleased to introduce the latest step in the turbine oil maintenance evolution - the **UltiDri<sup>®</sup> TLC** System. The **UltiDri<sup>®</sup> TLC** continues to keep your fluid clean and dry under the most extreme conditions, utilizing Porous Media's patented UltiDri<sup>®</sup> technology. The **UltiDri<sup>®</sup> TLC** removes free, emulsified and dissolved water, and is the first system in the world to also remove both hard and soft contaminants. Best of all, the **UltiDri<sup>®</sup> TLC** is virtually maintenance free since a gear pump is the only moving part. The **UltiDri<sup>®</sup> TLC** represents a significant evolutionary step in cost, performance and reliability.

### The UltiDri<sup>®</sup> TLC Technology

The **UltiDri<sup>®</sup> TLC** is the first turbine lubricant conditioner designed to remove all types of contamination. As the fluid enters the **UltiDri<sup>®</sup> TLC**, it flows through an absolute-rated Genesis<sup>®</sup> coreless 3- $\mu$ m prefilter to remove hard contaminants. This is followed by a patented membrane moisture exchanging contactor to remove all types of water contamination. Finally, the fluid has the option of flowing through our patent-pending ESP varnish control technology for the ultimate in turbine oil maintenance.

The **UltiDri<sup>®</sup> TLC** removes all types of contamination, including:

Moisture	Hard Contaminants	Soft Contaminants
<ul style="list-style-type: none"> <li>• Free</li> <li>• Emulsified</li> <li>• Dissolved</li> </ul>	<ul style="list-style-type: none"> <li>• Dirt</li> <li>• Debris</li> <li>• Wear Metals</li> </ul>	<ul style="list-style-type: none"> <li>• Dissolved and Suspended oxidation by-products</li> </ul>



## UltiDri®TLC – Customized for your System

### SYSTEM SIZING

Model	System Sizing (gals)	Pump Rating
UltiDri® <sub>TLC</sub> 3	0-3,500	16 GPM
UltiDri® <sub>TLC</sub> 7	3,500-7,000	32 GPM
UltiDri® <sub>TLC</sub> 14	>7,000	48 GPM

### TECHNICAL DATA

Materials of Construction	Wetted Materials – Carbon Steel, Aluminum
	Pump – Steel, Cast Iron
	Seals – Viton
Design Ratings	Maximum Operating Pressure – 150 PSIG
	Maximum Operating Temperature – 180°F
Electrical	240/480 V TEFC
Inline Sensors	Water Sensor with Remote
	Control Room Monitoring
	Particle Counter (Optional)
	Data Recorder (Optional)
Particulate Filters	Genesis® Coreless Filter Technology
	3µm, Absolute Rated
Varnish Protection (Optional)	Electrochemical Separation Process

