Meet Finished Fuel Specifications: Multicomponent Separation Systems

The Exion™ MC, Multicomponent Separation systems is a novel technology that provides a unique and highly improved extraction and separation process of emulsified, entrained and dissolved contaminants that is significantly superior to any other conventional device or process. The Exion™ MC, Multicomponent Separation systems can be used in a wide range of applications, and provides a new and innovative approach to finished fuels treatment. As finished fuel specifications including water, sulfur contaminant content, haze and conductivity become increasingly stringent, processors are searching for effective methods to ensure their products meet specifications consistently.

Conventional approaches to water washing or de-hazing are often limited by contact efficiency and subsequent separation efficiency, resulting in limited performance, high water use (or scrubbing media), lengthy washing and decanting steps, carryover of salts and other impurities and large capital investments. The Exion™ MC Multicomponent Separation system was developed utilizing advanced separation principles specifically designed to perform in a single stage (using a proprietary process), removing multiple contaminants quickly and efficiently. The Exion™ MC contaminant removal/extraction process proceeds in-line during product transfer, allowing other treating steps to be totally eliminated.

The Exion™ MC Multicomponent Separation system can be applied to the removal of a wide range of components from liquid hydrocarbon streams for as low as 30% of the capital costs of conventional systems. Exion™ can be used for the removal of contaminants including:

- Water (Haze)
- H₂S & Mercaptans
- Salts (Conductivity)
- Chemical Additives
- Reaction By-products
- Suspended Matter and Surfactants
- Gas Oils
- Fuel Oils
- Petrochemicals

The Exion™ MC Multicomponent Separation system is often used in combination with specialized chemical technologies for applications such as H₂S or mercaptans removal (Intellichem HR). The upstream injection is followed by a high efficiency contactor/extractor stage, mixing and phase separation of the extract phase. This provides a unique hybrid treating solution that removes unwanted by-products and liquids. Exion™ can be utilized in a variety of streams such as:

- Gasoline
- Jet Fuel
- Diesel
- Petrochemicals

For additional information about Exion™ systems, please contact us at info@NexoSolutions.com